



An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Market Review

**Wholesale Local Access (WLA) provided
at a Fixed Location**

**Wholesale Central Access (WCA)
provided at a Fixed Location for Mass
Market Products**

Response to Consultation and Decision

Reference:	ComReg 18/94
Decision:	D10/18
Date:	19 November 2018

Redacted Information

Please note that this is a non-confidential version of the Response to Consultation and Decision. Certain information within the Response to Consultation and Decision has been redacted from the public version for reasons of confidentiality and commercial sensitivity, with such redactions indicated by the symbol ✂ and highlighted in BLACK. In some cases, ComReg has presented information in an aggregated form in order to strike a balance between preserving the confidentiality of operator-specific information whilst enabling interested parties to understand, in a meaningful way, the conclusions set out in the Response to Consultation and Decision.

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Glossary of Frequently Used Terms

Acronym	Full Title
ADSL	Asymmetric Digital Subscriber Line
ARO	Access Reference Offer
BECS	Bitstream Ethernet Connection Services
BEREC	Body of European Regulators for Electronic Communications
BMB	Bitstream Managed Backhaul
BU-LRAIC	Bottom Up-Long Run Average Incremental Cost
CAM	Copper Access Model
CATI	Computer Aided Telephone Interview
CATV	Cable Access Television Network
CBP	Countervailing Buyer Power
CCPC	Competition and Consumer Protection Commission
CEI	Civil Engineering Infrastructure
CG	Current Generation
CGA	Current Generation Access
CID	EU Civil Infrastructure Directive
CLFMP	Copper Loop Frequency Management Plan
CLT	Critical Loss Test
CoS	Class of Service
CPE	Customer Premises Equipment
CSH	Customer Sited Handover
CVDSL	Cabinet based VDSL
DOCSIS	Data Over Cable Service Interface Specification
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexers
DUG	Direct Underground
ECN	Electronic Communications Networks
ECS	Electronic Communications Services
EEO	Equally Efficient Operator
EFM	Ethernet First Mile
ENH	Edge Node Handover
EoI	Equivalence of Inputs
EoO	Equivalence of Outputs
EU	European Union
EVDSL	Exchange launched VDSL
FA	Fixed Access
FACO	Fixed Access and Call Origination
FHS	Fault Handling System
FLU	Fibre Loop Unbundling
FSP	Fixed Service Provider
FTTC	Fibre to the Cabinet

FTTH	Fibre to the Home
FVCT	Fixed Voice Call Termination
FWA	Fixed Wireless Access
GLUMP	GNP (Geographic Number Portability) and ULMP (Unbundled Local Metallic Path)
GNP	Geographic Number Portability
GPON	Gigabit Passive Optical Networking
HCA	Historic Cost Accounting
HM	Hypothetical Monopolist
HMT	Hypothetical Monopolist Test
IBH	In-Building Handover
ICT	Information and Communications Technology
IP	Internet Protocol
IPM	Industry Process Manual
IPTV	Internet Protocol Television
ISDN	Integrated Services Digital Network
ISH	In-Span Handover
ISP	Internet Service Provider
KPI	Key Performance Indicator
LEA	Large Exchange Area
LL	Leased Line
LLU	Local Loop Unbundling
LS	Line Share
MC	Marginal Cost
MDF	Main Distribution Frame
MGA	Modified Greenfield Approach
MNO	Mobile Network Operator
MOV	Multi-Operator Vectoring
MPoP	Metropolitan Point of Presence
MSP	Mobile Service Provider(s)
MVCT	Mobile Voice Call Termination
MVNO	Mobile Virtual Network Operator
NBP	National Broadband Plan
NBS	National Broadband Scheme
NG	Next Generation
NGA	Next Generation Access
NRA	National Regulatory Authority
NRT	Net Revenue Test
NTP	Network Termination Point
NTU	Network Termination Unit
OAO	Other Authorised Operator
ODF	Optical Distribution Frame
ONT	Optical Network Terminal

OSS	Operational Support Systems
OTT	Over the Top
PAR	Passive Access Records
PoH	Point of Handover
POI	Point of Interconnection
PoP	Point of Presence
PRS	Premium Rate Service(s)
PSTN	Public Switched Telephone Network
QKDR	Quarterly Key Data Report
QoS	Quality of Service
RFO	Ready for Order
RFTS	Retail Fixed Telephony Service(s)
RGM	Regulatory Governance Model
RIA	Regulatory Impact Assessment
RIO	Reference Interconnect Offer
RSPG	Radio Spectrum Policy Group
SAB	Service Access Bandwidth
SABB	Standalone Broadband
SB-WLR	Single-Billing via Wholesale Line Rental
SIR	Statutory Information Requirement
SLA	Service Level Agreement
SLU	Sub-Loop Unbundling
SMP	Significant Market Power
SoC	Statement of Compliance
SP	Service Provider
SSNIP	Small but Significant Non-transitory Increase in Price
TFEU	Treaty on the Functioning of the European Union
TWDM GPON	Time Wavelength Division Multiplexing GPON
ULMP	Unbundled Local Metallic Path
USO	Universal Service Obligations
VDSL	Very-high-bit-rate Digital Subscriber Line
VEA	VDSL Ethernet Access
VOB	Voice over Broadband
VoD	Video on Demand
VoIP	Voice over Internet Protocol
VUA	Virtual Unbundled Access
VULA	Virtual Unbundled Local Access
WACC	Weighted Average Cost of Capital
WBA	Wholesale Broadband Access
WBARO	Wholesale Bitstream Access Reference Offer
WCA	Wholesale Central Access
WDM	Wavelength Division Multiplexing
WEIL	Wholesale Ethernet Interconnection Links

WHQA	Wholesale High Quality Access
WLA	Wholesale Local Access
WPNIA	Wholesale Physical Network Infrastructure Access

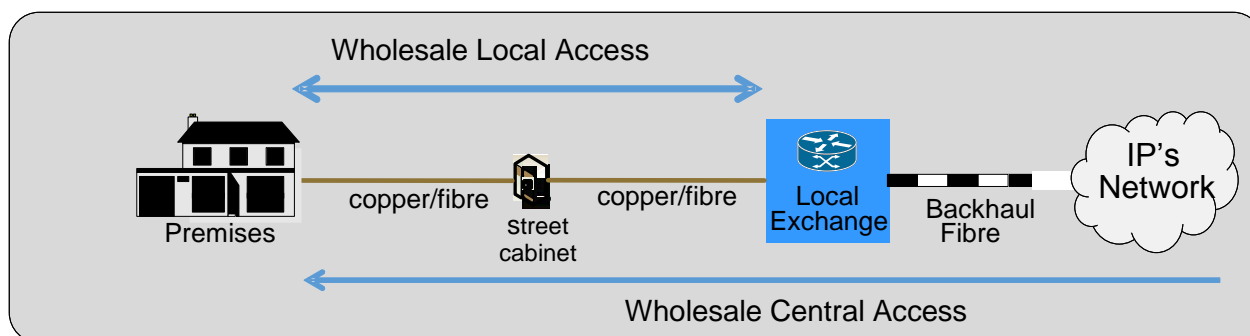
1 Executive Summary

Overview

- 1.1 This Response to Consultation and Decision (**'Decision'**) sets out ComReg's final position regarding its review of competition within the markets for the provision of:
- (a) Wholesale local access provided at a fixed location (**'WLA'**); and
 - (b) Wholesale central access provided at a fixed location for mass-market products (**'WCA'**).
- 1.2 These markets correspond to Markets 3(a) and 3(b) respectively of the European Commission's (**'EC'**) 2014 Recommendation.¹ The Decision also sets out what role regulation will play in promoting effective competition within these markets for the coming years.
- 1.3 WLA and WCA services are wholesale inputs used in the supply of a range of downstream wholesale and retail telecommunications services such as broadband internet connectivity, television (**'TV'**) services, and the provision of fixed telephony to residential and business consumers (collectively, **'End Users'**). WLA inputs can also be utilised by Service Providers (**'SP(s)'**) to supply downstream WCA or other wholesale services.
- 1.4 WLA generally encompasses the connection in the access network between the local exchange or access node (the **'Point of Presence'** or **'PoP'**) and the End User. SPs may provide this connection themselves, purchase or rent it from another SP by means of a wholesale arrangement. A SP availing of WLA must build or rent backhaul connectivity from its core network to the PoP on the WLA SP's access network to allow traffic to be carried onto its own network.
- 1.5 The WCA market lies downstream from the WLA market, but upstream from the retail broadband (and other) markets (noting that WCA services may support services other than broadband).² WCA involves the rental of an active broadband connection from an End User's premises to an aggregation point further up in a network. WCA therefore also requires backhaul connectivity across the WCA SP's network, although typically less than in the case of WLA, given the lower number of PoPs at which connectivity is required. The stylised illustration in Figure 1 below illustrates the operation of the WLA and WCA markets, and the interrelationship between them.

¹ COMMISSION RECOMMENDATION of 9.10.2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (hereafter, the **'2014 Recommendation'**).

² For example, products sold in the WCA market can be used to provide Multicast TV services and Managed Voice over Broadband (**'VOB'**) services, in addition to Bitstream and other services.

Figure 1: Example of Typical WLA and WCA Provision

- 1.6 At the wholesale level, Access Seekers³ purchase WLA inputs, such as Local Loop Unbundling ('**LLU**') or Virtual Unbundled Local Access ('**VULA**') and WCA inputs such as Bitstream, to provide retail services to End Users (or wholesale services to other SPs). In the case of LLU, an Access Seeker takes (full or partial) control of the copper loop between the local exchange and the End User's premises. Similarly, in the case of VULA, an Access Seeker gains control of the fibre or hybrid copper/fibre path from the local exchange or aggregation node to the End User's premises. The Access Seeker can then supply retail services to the End User, or sell wholesale services, such as those sold in the WCA market, to other Access Seekers.
- 1.7 In November 2016 ComReg issued a Consultation⁴ (the '**Consultation**') which set out its preliminary analysis of competition in the WLA market and WCA market (collectively, the '**Relevant Markets**'). For each Relevant Market, ComReg set out its proposals on market definition, on its assessment of Significant Market Power ('**SMP**'), and on the remedies it proposed to impose on any SP identified as having SMP, in order to address potential competition problems to the ultimate benefit of End Users. The Consultation period closed on 30 January 2017.
- 1.8 8 industry stakeholders ('**Respondent(s)**'),⁵ provided responses ('**Submission(s)**') to the Consultation, namely:
- (a) Alternative Operators in the Communications Market ('**ALTO**');
 - (b) BT Communication Ireland Limited ('**BT**');
 - (c) Colt Technology Services Limited ('**Colt**');

³ An Access Seeker is a Service Provider ('**SP**') that purchases wholesale services from another SP. In this Decision, ComReg refers to SPs seeking to purchase services in the WLA and/or WCA Markets as '**Access Seekers**'.

⁴ Market Reviews - Wholesale Local Access (WLA) provided at a Fixed Location and Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products. [ComReg Document 16/96](#), 11 November 2016 (the '**Consultation**').

⁵ ComReg published non-confidential versions of Respondents' Submissions in March 2017. See ComReg Document 16/96sR, Market Reviews - Wholesale Local Access (WLA) provided at a Fixed Location and Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products - Submissions to Consultation 16/96 ('**Respondents' Submissions**').

- (d) Eircom Limited ('**Eircom**');⁶
- (e) enet, a business name of enasc éireann teoranta ('**enet**');
- (f) Sky Ireland Limited ('**Sky**');
- (g) Virgin Media Ireland Limited ('**Virgin Media**'); and
- (h) Vodafone Ireland Limited ('**Vodafone**').

1.9 Separately, ComReg issued a Consultation in April 2017 (the '**2017 Pricing Consultation**') which further specified the price control obligations proposed in the Consultation, and which ComReg proposed to apply (as appropriate) on the Relevant Markets.⁷ Responses to the 2017 Pricing Consultation fall to be considered in the 2018 Pricing Decision,⁸ which is issued alongside this Decision.

1.10 Additionally, ComReg issued a Consultation in June 2017 in respect of the specification of pricing obligations on bundles in the WLA, WCA and FACO ('Fixed Access Call Origination') Markets (the '**2017 Bundles Consultation**').⁹ The consideration by ComReg of responses to the 2017 Bundles Consultation falls to be set out in the 2018 Bundles Decision.¹⁰

1.11 The functions of the 2018 Pricing Decision and the 2018 Bundles Decision are, *inter alia*, to further specify the detailed nature of the pricing remedies set out in this Decision.

1.12 Having considered Respondents' Submissions to the Consultation and having regard to the additional information and analysis obtained as referenced throughout this Decision, ComReg, consistent with its preliminary views set out in the Consultation, has decided to define the following three separate wholesale markets (together, the '**Relevant Markets**')

- (a) A market for Wholesale Local Access ('**Relevant WLA Market**') provided at a fixed location, which is national in its geographic scope, and includes LLU, Line Share and VULA products (ComReg includes Eircom's self-supply of its services in this market);

⁶ Eircom also separately sent a letter to ComReg dated 14 February 2018, which fell outside the Consultation period, but which is considered in this Decision. The letter is reproduced at Appendix: 4.

⁷ Pricing of wholesale services in the Wholesale Local Access (WLA) market and in the Wholesale Central Access (WCA) markets: Further specification of price control obligations in Market 3a (WLA) and Market 3b (WCA). [ComReg Document 17/26](#), 7 April 2017 (the '**2017 Pricing Consultation**').

⁸ Pricing of wholesale broadband services: Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets - Response to Consultation Document 17/26 and Final Decision. ComReg Document 18/95, 19 November 2018 (the '**2018 Pricing Decision**').

⁹ Consultation on Price control obligations relating to Bundles: Further specification of the price control obligation not to cause a margin squeeze: FACO and WLA (Market 3a) and WCA (Market 3b): Consultation and Draft Decision. ComReg Document 17/51, 9 June 2017 (the '**2017 Bundles Consultation**').

¹⁰ Response to Consultation and Decision on price control obligations relating to retail bundles: Further specification of the wholesale price control obligation not to cause a margin squeeze in the WLA, and WCA Markets - Response to Consultation and Decision. ComReg Document 18/96, 19 November 2018 (the '**2018 Bundles Decision**').

- (b) An Urban Wholesale Central Access Market ('**Urban WCA Market**') consisting of Wholesale Central Access for mass-market products provided at a fixed location, which includes Bitstream products provided over a copper-only network and Bitstream products provided over Fibre to the Cabinet ('**FTTC**') and Fibre to the Home ('**FTTH**') networks (together '**FTTx**'). ComReg also includes the self-supply of retail broadband products provided over a Cable Access Television ('**CATV**') network, as well as retail broadband products supplied by certain SPs using purchased upstream WLA inputs. This market is sub-national in its geographic scope and equates to 154 identified Exchange Areas; and
 - (c) A Regional Wholesale Central Access Market ('**Regional WCA Market**') consisting of Wholesale Central Access for mass-market products provided at a fixed location, which includes Bitstream products provided over a copper-only network and Bitstream products provided over FTTx networks. ComReg also includes retail broadband products supplied by certain SPs using purchased upstream WLA inputs. This market is sub-national in its geographic scope and equates to a unique set of 1,049 identified Exchange Areas which exhibit sufficiently different characteristics of competition relative to the Urban WCA Market.
- 1.13 Having defined each of the Relevant Markets, ComReg has assessed the extent of competition within each of the Relevant Markets in order to identify whether any SP has SMP. Where SMP is found in a Relevant Market, ComReg imposes regulatory obligations on the SMP SP in order to address competition problems that would be likely to arise absent regulatory invention.
- 1.14 In this Decision, and following its assessment of Respondents' Submissions and other relevant information, ComReg has decided to maintain the position it set out in the Consultation in respect of SMP on each of the Relevant Markets. ComReg accordingly concludes in this Decision that:
- (a) Eircom has SMP in the Relevant WLA Market;
 - (b) No SP has SMP in the Urban WCA Market; and
 - (c) Eircom has SMP in the Regional WCA Market.
- 1.15 ComReg accordingly imposes regulatory obligations on Eircom in the Relevant WLA Market and Regional WCA Market. These regulatory obligations are intended to address identified potential competition problems arising from Eircom's SMP in these markets, in particular, its ability and incentive to behave in an anti-competitive manner. Ultimately, the regulatory obligations are designed to promote the development of retail and wholesale competition.
- 1.16 ComReg maintains its preliminary view as set out in the Consultation that regulation of the Urban WCA Market is no longer warranted, given the absence of SMP, and the existence of sufficient competitive constraints. However, in order to facilitate an orderly transition to de-regulation of the Urban WCA Market, ComReg has imposed a six month sunset period during which access to existing Bitstream services will be maintained at prevailing prices.¹¹

¹¹ ComReg notes that, during this sunset period, Eircom is not obliged to meet new requests for WCA inputs on a regulated basis. Eircom is, of course, free to do so on a purely commercial basis.

- 1.17 In arriving at the above conclusions, ComReg has, in accordance with its relevant statutory obligations:
- (a) consulted with the Competition and Consumer Protection Commission ('**CCPC**'). The CCPC is in agreement¹² with ComReg's analysis; and
 - (b) notified the European Commission ('**EC**'), BEREC,¹³ and other National Regulatory Authorities ('**NRAs**') regarding the measures which it proposes to take (the '**Notified Draft Measures**').¹⁴ On 13 July 2018 the EC issued its response to ComReg (the '**EC Response**'), in which it commented on market definition and pricing issues, as further set out in Appendix: 3 below.¹⁵
- 1.18 In arriving at the positions set out in this Decision, ComReg has taken utmost account of the EC's comments. ComReg's consideration of the EC's comments is set out in Appendix: 3 and elsewhere throughout this Decision, as appropriate.

Background to the Reviews

- 1.19 The WLA market and WCA markets have been identified by the European Commission in the 2014 Recommendation as being susceptible to *ex ante* regulation at an EU level. Prior to the adoption of the 2014 Recommendation, the WLA and WCA markets were broadly identified in the previous 2007 Recommendation¹⁶ as the market for Wholesale Physical Network Infrastructure Access¹⁷ ('**WPNIA**') and the market for Wholesale Broadband Access¹⁸ ('**WBA**') respectively.

¹² A copy of the CCPC's correspondence ('**CCPC Response**') is set out at Appendix: 1 of this Decision. The CCPC indicated that it is satisfied that there are no compelling grounds for altering the market definitions proposed by ComReg, and that the CCPC is satisfied that there are no compelling grounds to disagree with ComReg's conclusion that Eircom should be designated as having significant market power in each of the Relevant Markets identified.

¹³ Body of European Regulators for Electronic Communications ('**BEREC**') as established by Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications and the Office.

¹⁴ A non-confidential version of the Notified Draft Measures is available online at [https://circabc.europa.eu/sd/a/e7c0fb89-f4eb-460b-a777-1c868c32ae4f/Appendix%20A%20%25e2%80%93%20WLA%20and%20WCA%20Market%20Analysis%20Draft%20Decision%20NON-CONFIDENTIAL%20-%2015%20June%202018%20REDACTED\(0\).pdf](https://circabc.europa.eu/sd/a/e7c0fb89-f4eb-460b-a777-1c868c32ae4f/Appendix%20A%20%25e2%80%93%20WLA%20and%20WCA%20Market%20Analysis%20Draft%20Decision%20NON-CONFIDENTIAL%20-%2015%20June%202018%20REDACTED(0).pdf)

¹⁵ A copy of the European Commission's correspondence of 13 July 2018 is set out in Appendix: 2 of this Decision ('**EC Response**').

¹⁶ European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (the '**2007 Recommendation**').

¹⁷ Market 4 under the 2007 Recommendation.

¹⁸ Market 5 under the 2007 Recommendation.

- 1.20 To date the WBA and WPNIA markets have been regulated by ComReg pursuant to the 2010 WPNIA Decision¹⁹ and the 2011 WBA Decision.²⁰
- 1.21 In the previous reviews of the WBA and WPNIA markets, it was concluded that both markets were not effectively competitive and Eircom was designated as having SMP in each of these markets. Eircom was required, amongst other things, to provide wholesale access to various broadband products and services at regulated prices. A number of obligations were subsequently amended/imposed in the period following the 2010 WPNIA Decision and 2011 WBA Decision.
- 1.22 Given the time that has elapsed since ComReg's previous analysis of the WPNIA market and WBA market and, having regard to market developments, including the publication by the EC of the 2014 Recommendation and the 2018 SMP Guidelines, it is now considered appropriate to update the review of these markets.
- 1.23 ComReg now sets out an overview of the main conclusions set out in this Decision.

Summary of Overall Conclusions

- 1.24 The following is a summary of ComReg's main conclusions arising from its analysis of the Relevant Markets. This summary should be read in the overall context of this Decision (and the Consultation), which sets out in detail the reasoning underpinning these conclusions.

Summary of Retail Market Assessment

Retail Market Trends and Developments

- 1.25 In Section 3 of this Decision, ComReg considers the main trends and developments in retail markets and assesses them insofar as they inform ComReg's subsequent assessment of the Relevant Markets. This is in line with the 'Modified Greenfield Approach' ('MGA') recommended by the EC.²¹
- 1.26 The most notable trends and developments in the supply of and demand for broadband and other related retail services include:

¹⁹ ComReg Document No. 10/39 (ComReg Decision D05/10); Response to Consultation and Decision Document: Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4); 20 May 2010 ('**2010 WPNIA Decision**').

²⁰ ComReg Document No. 11/49 (ComReg Decision D06/11); Response to Consultation and Decision Document: Market Review: Wholesale Broadband Access (Market 5); 8 July 2011 ('**2011 WBA Decision**').

²¹ See page 8 of the Explanatory Note to the 2014 Recommendation. The Modified Greenfield Approach begins by looking at the retail market before working up the value chain to the wholesale market. The analysis of the competitive nature of these markets assumes that no SMP-derived regulations are in place in the market under consideration, in order to avoid circularity in the analysis.

- (a) **Increases in download speeds on broadband subscriptions.** Since the publication of the Consultation, growth in broadband subscriptions has been primarily in the $\geq 30\text{Mb}$ category, which has increased from 58% to 72% of all broadband subscriptions;²²
- (b) **Increases in download traffic on broadband subscriptions.** The availability of increased broadband speeds has allowed End Users to download greater volumes of data. Data volumes have increased from 403,936 Terabytes of data in the first three months of 2016 (averaging 116.6 GB of data per month by cable subscribers and 115.9 GB of data per month by VDSL (FTTC) subscribers), to 613,351 Terabytes of data in Q4 2017 (averaging 211.2 GB of data per month by cable subscribers and 150.89 GB of data per month by VDSL (FTTC) subscribers). The average volume of data used was shown to have increased on platforms offering higher download speed products, including cable and VDSL platforms;²³
- (c) **Retail bundling of services and associated patterns.** The Consultation noted a strong tendency for broadband services and telephone services to be purchased from a single retail SP, and also noted that broadband and telephone services are often bundled with television services at the retail level. This tendency continues to be evident. Between Q1 2016 and Q3 2017, fixed market retail subscriptions had declined slightly from an estimated 1.82 million to 1.79 million. Over that time period, single play subscriptions declined from 38.7% to 36.1% of the total, double play had increased slightly from 35.8% to 36%, and triple play and quadruple play had increased from 25.4% to 27.9%;²⁴
- (d) **Continued rollout of high-speed broadband networks.** The continuing rollout by Eircom of its FTTC (VDSL) and FTTH networks provides broadband access with download speeds up to 100Mb/s and 1Gbps respectively. Since the 2010 WPNIA Decision and 2011 WBA Decision, Eircom has undertaken the rollout of its FTTC network, passing 1.8 million premises.²⁵

²² This is illustrated by Figure 10 in the Consultation, and by page 33 of ComReg's Irish Communications Market Quarterly Key Data Report Data as of Q4 2017 (Reference: ComReg 18/20) (the 'Q4 2017 QKDR').

²³ This is illustrated by Figure 13 in the Consultation, and by Figure 3.4.3 of the Q4 2017 QKDR.

²⁴ This is illustrated by Figure 14 in the Consultation. Comparative data are used for Q3 2017, rather than Q4 2017, as different data collection rules have been implemented as of Q4 2017.

²⁵ See <https://www.eir.ie/pressroom/eir-announce-3rd-quarter-results-to-31-March-2018/>.

- (e) **Vodafone and ESB SIRO Joint Venture.** In July 2014, ESB and Vodafone Ireland, announced a full-function 50:50 Joint Venture ('**SIRO**'), to build an FTTH network across 50 towns, reaching potentially 500,000 customers, with download speeds up to 1Gbps. Deployed on ESB's existing overhead and underground infrastructure, SIRO's network offers a VULA-based service at the wholesale level only, requiring Access Seekers who wish to use the SIRO network to build their own backhaul to SIRO's various points of interconnect. In September 2016, SIRO announced its rollout was gathering pace, with its network rollout passing 10,000 premises per month.

Retail Market Definition

- 1.27 ComReg considers that the retail broadband market (hereafter, the '**Retail Market**')²⁶ consists of the provision of broadband to End Users by means of the following technologies:
- (a) broadband provided over a copper network;
 - (b) broadband provided over FTTx networks; and
 - (c) broadband provided over a CATV²⁷ network.
- 1.28 ComReg has identified that broadband provided over a copper network constitutes the 'focal product' for the Retail Market, that is, the candidate product against which potential substitute products should be assessed.²⁸
- 1.29 While recognising the presence of some differences in competitive conditions due to the presence of regional network operators such as SIRO or Virgin Media, ComReg considers that the lack of differentiated pricing and limited differences in demand characteristics across regions suggests that the geographic scope of the retail broadband market is likely to be national, absent regulation.
- 1.30 ComReg considers that the following services fall outside the Retail Market, due to differences in product characteristics, prices and intended use, which prevent these services from exercising a sufficient competitive constraint on retail broadband provided by means of copper, FTTx or CATV networks:
- (a) narrowband provided over a copper network;
 - (b) broadband provided over a 3G/4G mobile network;
 - (c) broadband provided over satellite;

²⁶ The Consultation (at paragraph 4.296) indicated that the Retail Market likely includes all broadband products provided over copper, FTTC, FTTH and CATV networks.

²⁷ 'CATV' refers to the provision of broadband by means of the cable access TV network. In Ireland, Virgin Media is the sole operator of a CATV network, which runs on the DOCSIS 3.0 standard.

²⁸ The European Commission describes the 'focal product' concept in the following terms at paragraph 30 of its 2018 *Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services* (the '**2018 SMP Guidelines**'): "As a starting point, the NRA should first identify an electronic communications service or product that is offered in a given geographical area and may be subject to the imposition of regulatory obligations. Subsequently, the NRA may add additional products or areas depending on whether competition from these constrains the price of the main product or service in question."

- (d) broadband provided over a FWA network; and
- (e) leased lines.

1.31 ComReg does not conclude on whether broadband sold in a bundle constitutes a separate retail market to broadband sold on a standalone basis, as, ultimately, this does not significantly impact the assessment of the Relevant Markets.

Summary of WLA Market Assessment

Market Definition, Competition Assessment and SMP Designation

- 1.32 In Sections 4 and 5 of this Decision, ComReg defines the WLA market from both product and geographic perspectives, and assesses the level of competition to determine whether any SP(s) hold SMP on the Relevant WLA Market. This analysis has regard to the assessment of the main retail trends and developments set out in Section 3 of this Decision.
- 1.33 In defining the WLA product market, ComReg has taken account of the Explanatory Note to the 2014 Recommendation,²⁹ which indicates that non-physical or virtual unbundled access products potentially fall within the WLA product market where the following criteria are cumulatively met:
- (a) Access occurs locally;
 - (b) Access is generic and provides Access Seekers with a service-agnostic transmission capacity uncontended in practice; and
 - (c) Access Seekers have sufficient control over the transmission network.
- 1.34 On this basis, and having assessed substitutability in Section 4, ComReg considers that VUA products (including those offered by Eircom and SIRO) share a sufficient number of the product characteristics of LLU products, such that they should be included in the same WLA product market.
- 1.35 Accordingly, ComReg concludes that the WLA product market consists of:
- (a) Current Generation ('**CG**') WLA products provided over copper networks, including Local Loop Unbundling ('**LLU**'), Line Share and Sub-Loop Unbundling ('**SLU**') products; and
 - (b) Next Generation ('**NG**') WLA products provided over FTTx networks, including Virtual Unbundled Local Access ('**VULA**') products.
- 1.36 ComReg's position is also that broadband provided over CATV, FWA, Mobile (3G/4G) and Leased Line networks should not be included in the Relevant WLA Market. Specifically, with respect to CATV, ComReg identified that it is not possible, nor will it likely be possible over the lifetime of this review, to provide a VUA-type service over a CATV network.

²⁹ COMMISSION STAFF WORKING DOCUMENT - EXPLANATORY NOTE Accompanying the document Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services ('**Explanatory Note to the 2014 Recommendation**'), from page 43 onwards.

- 1.37 Notwithstanding the emergence of some localised competitive pressure, ComReg considers that the general lack of direct demand-side and supply-side constraints or indirect constraints in the Relevant WLA Market implies that the conditions of competition are sufficiently homogeneous such that there are insufficient grounds to define sub-national geographic markets. Accordingly, ComReg concludes that WLA is offered on a single geographic market, which is national in scope.
- 1.38 In assessing competition within the Relevant WLA Market, ComReg has considered a range of factors before concluding that the market is not effectively competitive, including:
- (a) Existing competition;
 - (b) Potential competition; and
 - (c) Countervailing buyer power ('**CBP**').
- 1.39 ComReg considers that Eircom has the ability to act, to an appreciable extent, independently of its competitors, customers and consumers in the Relevant WLA Market. ComReg therefore designates Eircom as having SMP in the Relevant WLA Market.
- 1.40 This is due to the consideration of a number of factors, including Eircom's high and stable market share, its control of infrastructure not easily duplicated, the lack of existing and potential competition, and the absence of effective CBP. Eircom had a market share of over 96% in Q4 2017, with there being one other SP active in the Relevant WLA Market, namely SIRO.
- 1.41 The National Broadband Plan³⁰ ('**NBP**') is the Government initiative to ensure the provision of high-speed broadband services throughout the State through commercial and State led investment. The Department of Communications, Climate Action and Environment ('**DCCA**E') remains engaged in a procurement process to select a provider which will roll-out a new high-speed broadband network in the NBP intervention area. ComReg notes that SIRO and Eircom have withdrawn from the tendering process, leaving enet as the sole remaining bidder. ComReg's position is that there remains too much uncertainty at this time regarding the award of tender and the timing of the subsequent rollout for ComReg to draw any firm conclusions on the potential impact of the NBP on the Relevant WLA Market at this stage. ComReg intends to keep this under review within the lifetime of this market review.

Imposition of Remedies to Address Competition Problems

- 1.42 In Section 7 of this Decision ComReg describes the range of remedies (or obligations) which it has decided to impose on Eircom in the Relevant WLA Market. The WLA Decision Instrument at Appendix: 20 gives effect to the implementation of these remedies. The remedies, which in ComReg's view are reasonable and proportionate, are designed to address the potential competition problems identified in Section 6, which might arise absent regulation in the Relevant WLA Market.

³⁰ See <https://www.dccae.gov.ie/en-ie/communications/topics/Broadband/national-broadband-plan/Pages/National-Broadband-Plan.aspx>.

- 1.43 In many cases, ComReg is continuing existing obligations that had been imposed on Eircom. However, in order to better address identified competition problems, ComReg has also specified some new obligations, as well as more detailed refinements to existing obligations.
- 1.44 In summary, ComReg is imposing the following remedies on Eircom in the Relevant WLA Market:
- (a) Access Obligations;
 - (b) Non-Discrimination Obligations;
 - (c) Transparency Obligations;
 - (d) Price Control and Cost Accounting Obligations; and
 - (e) Accounting Separation Obligations.
- 1.45 A summary of some of these obligations is described below. Overall, apart from amendments to some obligations, the obligations now being imposed largely reflect what was proposed by ComReg in the original Consultation and include:
- (a) Requirements to make a range of specific WLA products, services and facilities available to Access Seekers. This includes a more detailed specification of obligations governing how SPs can more effectively access Eircom's Civil Engineering Infrastructure ('**CEI**'), including its ducts and poles, ultimately aimed at promoting the development of more sustainable and independent competition. Where CEI is not available, Eircom is to be required to provide access to Dark Fibre; where reasonably available.
 - (b) Enhanced requirements with respect to Eircom's obligation to negotiate in good faith with Access Seekers concerning Service Level Agreements ('**SLAs**'). Such SLA requirements are also to apply to the provision of access to the Eircom Unified Gateway;³¹
 - (c) Specific timelines within which Eircom must respond to an Access Seeker request for a new product, service or facility or a non-pricing amendment to an existing product, service or facility;

³¹ This is the interface into Eircom's OSS used by Access Seekers in order to avail of regulated wholesale services, including WLA and WCA products, services and facilities.

- (d) Enhanced non-discrimination obligations requiring Eircom to provide access to pre-ordering, ordering, provisioning, fault reporting and repair for VUA-based WLA (and associated facilities) and CEI on an Equivalence of Inputs ('**EoI**')³² basis. Other WLA access is to be provided on an Equivalence of Outputs³³ ('**EoO**') basis;³⁴
- (e) Requirements for Eircom to make available on its publicly available wholesale website in advance of implementation, information regarding its NGA rollout plans, and information relating to wholesale products, services, and facilities such as the expected time for service availability;
- (f) The continuation of existing cost orientation obligations with respect to LLU, Line Share and CEI products, the imposition of a new cost orientation obligation for FTTC-based VUA & Exchange launched VUA products and updating of obligations not to cause a margin squeeze. Existing price control obligations for FTTH-based VUA are maintained. The detailed nature of the cost orientation obligations for FTTC-based VUA, the margin squeeze obligations and the pricing obligations relating to bundles are set out in the 2018 Pricing Decision³⁵ and the 2018 Bundles Decision; and
- (g) Enhanced Statement of Compliance requirements which now not only require Eircom to demonstrate its compliance with its non-discrimination obligations, but to all other obligations.

1.46 The detail of these obligations, which are ultimately designed to ensure effective competition in downstream retail and wholesale markets, is set out in Section 7 of this Decision (and Section 8 of the Consultation).

³² 'Equivalence of Inputs' means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers within the same timescales, at the same price, functionality, service and quality levels and on the same terms and conditions and by means of the same systems and processes as the SMP Undertaking provides to itself. The systems and processes shall operate in the same way and with the same degree of reliability and performance as between Access Seekers and the SMP Undertaking's provision to itself.

³³ 'Equivalence of Outputs' means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers in a manner which achieves the same standards in terms of functionality, price, terms and conditions, service and quality levels as the SMP Undertaking provides to itself, albeit potentially using different systems and processes.

³⁴ EoI and EoO are explained further in Section 7, paragraph 7.769 and paragraphs 7.829 to 7.934.

³⁵ The Notified Draft Measures contained a drafting error. Section 12.2 of the WLA Decision Instrument indicated that Eircom's cost orientation obligations applied only to "*products, services or facilities referred to in Section 7.2*" of the Decision Instrument. This reference was incorrect and did not accurately reflect the analysis set out at paragraphs 7.1228 to 7.1232, and 7.1370 to 7.1382 below. Accordingly, the text at Section 12.2 of the WLA Decision Instrument set out at Appendix: 20 of this Decision has been amended to read "*products, services or facilities referred to in Section 7*".

Assessment of Retail Market in the presence of WLA Regulation

- 1.47 Having set out its position that Eircom has SMP in the Relevant WLA Market and having imposed obligations on Eircom in that market, ComReg then considered the retail broadband market, in the presence of regulation in the Relevant WLA Market, but absent any regulation in the Relevant WCA Market(s) (referred to as the '**Modified Retail Broadband Market**'). This assessment is carried out in the context of the existence of the obligations that ComReg has imposed upon Eircom in the Relevant WLA Market.
- 1.48 Overall, ComReg's position is that the Modified Retail Broadband Market covers all broadband speeds, provided over copper, FTTx and CATV networks. ComReg's position is that mobile, satellite and FWA broadband do not fall within the Modified Retail Broadband Market having regard to the assessment of a range of demand-side and supply-side factors. By virtue of their use of wholesale inputs via the Relevant WLA Market, BT, Digiweb (through both Eircom and SIRO), Magnet, Sky (through BT Ireland and SIRO), 3Play Plus, Colt Telecom and Vodafone (through Eircom, BT Ireland and SIRO inputs) can provide retail (and in some cases wholesale) broadband services, absent regulation in the Relevant WCA Markets. Virgin Media and SIRO maintain broadband networks independent of Eircom. ComReg notes that enet currently offers WCA services³⁶ (through Eircom and SIRO and own network inputs), although its coverage is extremely limited in geographic terms.
- 1.49 In relation to the geographic scope of the Modified Retail Market, based on an assessment of geographic variation in entry conditions, market shares and products and pricing, it is ComReg's position that it is possible that there may be two sub-national geographic markets. These areas are as follows:
- (a) Mostly urban areas where there is a significant presence of alternative platforms using own network inputs and inputs provided via the Relevant WLA Market; and
 - (b) Mostly rural areas where there is typically little or no presence of alternative networks.
- 1.50 However, ComReg does not conclude on the precise geographic scope of the Modified Retail Broadband Market, but rather examines the issue of sub-geographic markets in the upstream WCA Market(s), examined in Section 10 of this Decision.

Summary of WCA Market Assessment

Market Definition, Competition Assessment and SMP Designation

- 1.51 In Sections 9 and 10 of this Decision, ComReg defines the Relevant WCA Markets from both product and geographic perspectives, and assesses the level of competition within these markets to determine whether any SP(s) hold SMP. This analysis has regard to the assessments of the main retail trends and developments and market assessments set out in Sections 3 and 8 of this Decision.

³⁶ See paragraphs 10.90 to 10.93.

- 1.52 ComReg concludes that the relevant WCA product market is comprised of:
- (a) Bitstream products provided over copper and FTTx networks, including Bitstream products provided using upstream WLA inputs;
 - (b) Self-supply of Bitstream by Eircom and BT Ireland;
 - (c) Bitstream products that may potentially be offered by SIRO;³⁷
 - (d) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone);³⁸ and
 - (e) Self-supply of CATV retail broadband products offered by Virgin Media in areas where its network is present.
- 1.53 ComReg concludes that the relevant WCA product market excludes:
- (a) Hypothetical Bitstream products provided over localised alternative FTTH networks;³⁹
 - (b) Indirect constraints arising from retail broadband offered by alternative FWA, mobile and leased lines SPs are not considered likely to be sufficiently effective to justify their inclusion in the relevant WCA product market over the period of this review.
- 1.54 In respect of the geographic scope of the WCA market, ComReg concludes in Section 9,⁴⁰ based on the evidence available to it, that competitive conditions appear to be sufficiently different between certain urban areas and non-urban (regional) areas to warrant the delineation of two separate geographic WCA markets.

³⁷ Note SIRO does not currently offer Bitstream type WCA products, but ComReg's conclusion is that it could ultimately do so on the basis of supply-side substitution considerations.

³⁸ ComReg refers to the requirement to have widespread coverage, as some SPs use WLA inputs to self-supply retail services within very small geographic areas. It is ComReg's preliminary view that such products would not impose an effective indirect constraint upon a HM supplier of WCA services.

³⁹ Localised alternative FTTH networks only account for [§< ██████████] FTTH subscriptions as at Q4 2017. Given the small numbers involved, ComReg considers that, even if these networks were included in its analysis, they would not alter ComReg's conclusions in respect of the Relevant WCA Market.

⁴⁰ See also Appendix: 10 of this Decision.

- 1.55 ComReg has examined a range of objective and cumulative criteria⁴¹ that an Exchange Area⁴² must meet for consideration as to whether or not there are differences in competitive conditions between areas. Such differences include evidence of different demand and supply conditions including from BT Ireland (which uses WLA inputs to supply WCA services to Sky, Vodafone and others), Virgin Media (self-supply using its own CATV network) and Vodafone (based on its use of WLA inputs purchased from Eircom and SIRO). Accordingly, ComReg has defined two separate WCA markets from a geographic perspective, as follows:
- (a) The '**Urban WCA Market**', being those 154 Exchange Areas where the objective criteria (as set out in Table A10.54) have been cumulatively met, and which consists of each of the products described at paragraph 1.52(a) to (d) above. The Urban WCA Market has approximately 1 million premises located within it.
 - (b) The '**Regional WCA Market**' being those 1,049 Exchange Areas where the objective criteria (as set out in Table A10.54) have not been cumulatively met, and which consists of each of the products described at paragraph 1.52 (a) to (d) above. The Regional WCA Market has approximately 1.1 million premises located within it.
- 1.56 Together these markets are referred to as the Relevant WCA Markets. The number of Exchange Areas falling into the Urban WCA Market has increased from 96⁴³ at the time of the Consultation to 154. This increase results, *inter alia*, from the network rollout and expansion programmes of Virgin Media and SIRO (both of whom operate their own networks independently of Eircom), and also from the increase in the footprints of Access Seekers' WLA footprints, bearing in mind that such WLA access is predominantly purchased from Eircom.
- 1.57 In Section 10 of this Decision, ComReg assesses the current and likely future extent of competition within the Relevant WCA Markets, absent regulation.

⁴¹ In general, such criteria include an examination of network coverage and market shares.

⁴² An '**Exchange Area**' is the geographic area served by a particular Eircom exchange. Each location in the State falls within one Exchange Area only. The Eircom network consists of 1,203 exchanges located nationwide. It should be noted that the initial Number of Exchange Areas identified in the Consultation (1,217) has fallen to 1,203, a decline of 14 Exchange Areas. This is because these 14 Exchange Areas have been identified as not being relevant for the assessment of the Relevant Markets, as they do not relate to the provision of WLA and/or WCA services. For example, they relate to test exchanges or data centre nodes.

⁴³ In the Consultation, 88 Exchange Areas were identified as falling into the Urban WCA Market and 1,129 Exchange Areas falling into the Regional WCA Market. A small retrospective change was made to this assessment in light of data clarifications from Eircom and a small number of calculation errors identified by ComReg in applying the five criteria. The effect of this is that the 88 Exchange Areas at the time of Consultation is rebased to 96 Exchange Areas.

- 1.58 It is ComReg's position that existing and potential competition in the Urban WCA Market are likely, within the lifetime of this market review, to prevent any SP from behaving in a manner consistent with the holding of Significant Market Power ('SMP'), that is, to an appreciable extent, independently of its competitors, customers and consumers. In particular, taking Primary Operator⁴⁴ ('PO') market share as a leading edge indicator of the possibility of a PO having a position of SMP, no PO has a market share in excess of 45%, and the difference in market shares between the top two POs is 10%. Therefore, no SP has been designated with SMP in the Urban WCA Market.
- 1.59 On the other hand, neither existing competition, potential competition nor CBP are likely, within the lifetime of this market review, to prevent Eircom from behaving, to an appreciable extent, independently of its competitors, customers and consumers on the Regional WCA Market. In contrast to the situation pertaining in the Urban WCA Market, one SP has a market share in excess of 70%, and the difference in market shares between the top two POs is in excess of 60%. ComReg has therefore designated Eircom with SMP, as the Regional WCA Market is not likely to be effectively competitive.

Imposition of Remedies to Address Competition Problems

- 1.60 In Section 12 of this Decision ComReg describes the range of remedies (or obligations) which it has decided to impose on Eircom in the Regional WCA Market. The WCA Decision Instrument at Appendix: 21Appendix: 20 gives effect to the implementation of these remedies. The remedies, which in ComReg's view are reasonable and proportionate, are designed to address the potential competition problems identified in Section 11 and 12 that might arise, absent regulation in the Regional WCA Market.⁴⁵
- 1.61 In many cases, ComReg is continuing existing obligations that had been imposed on Eircom. However, in order to better address identified competition problems, ComReg has also specified some new obligations, and has also added more detailed refinements to existing obligations.
- 1.62 In summary, ComReg has decided to impose the following remedies on Eircom in the Regional WCA Market:
- (a) Access Obligations;
 - (b) Non-Discrimination Obligations;
 - (c) Transparency Obligations;
 - (d) Price Control and Cost Accounting Obligations; and
 - (e) Accounting Separation.

⁴⁴ ComReg has, given the analysis in this Decision, classed the following Service Provider as Primary Operators: BT Ireland, Eircom, SIRO, Virgin Media and Vodafone.

⁴⁵ Such competition problems are discussed in Section 11 and Section 12 of this Decision, where ComReg considers that Eircom has the potential ability and incentive to influence a range of parameters of competition.

- 1.63 A summary of some of these obligations is described below. Overall, apart from amendments to some obligations, the obligations now being imposed largely reflect what was proposed by ComReg in the original Consultation and include:
- (a) Requirements to make a range of specific WCA products, services and facilities available to Access Seekers;
 - (b) Enhanced requirements with respect to Eircom's obligation to negotiate in good faith with Access Seekers concerning Service Level Agreements ('SLAs'). Such SLA requirements are also to apply to the provision of access to the Eircom Unified Gateway;
 - (c) Enhanced non-discrimination obligations requiring Eircom:
 - (i) to provide provisioning (including pre-provisioning, provisioning, fault reporting and fault repair) of new access requests from its downstream arm for CG copper-based WCA and its associated facilities, that will be used as an input for the delivery of retail services to consumers, through the Unified Gateway and in doing so must provide such services on an EoI basis;
 - (ii) subject to certain exceptions, to provide fault logging for CG copper-based WCA on an EoI basis;
 - (iii) provide pre-ordering, ordering, provisioning fault reporting and repair for NG FTTx WCA on an EoI basis; and
 - (iv) Provide WCA access other than the above on an EoO basis.
 - (d) Enhanced Statement of Compliance requirements which now not only require Eircom to demonstrate its compliance with its non-discrimination obligations, but to all other obligations as well;
 - (e) Enhanced requirements relating to product development and associated timelines; and
 - (f) Requirements regarding the cost orientation of CG copper-based Bitstream and NG FTTC-based Bitstream & Exchange launched Bitstream as well as obligations not to cause a margin squeeze. The detailed nature of the cost orientation obligations for FTTC-based Bitstream, the margin squeeze obligations and the pricing obligations relating to bundles fall to be set out in the 2018 Pricing Decision⁴⁶ and the 2018 Bundles Decision.
- 1.64 The detail of these obligations, which are ultimately designed to ensure effective downstream competition, is set out in Section 12 of this Decision.

⁴⁶ The Notified Draft Measures contained a drafting error. Section 12.2 of the WCA Decision Instrument indicated that Eircom's cost orientation obligations applied only to "*products, services or facilities referred to in Section 7.2*" of the Decision Instrument. This reference was incorrect and did not accurately reflect the analysis set out at paragraphs 12.255 to 12.260, and 12.343 to 12.354 below. Accordingly, the text at Section 12.2 of the WCA Decision Instrument set out at Appendix: 21 of this Decision has been amended to read "*products, services or facilities referred to in Section 7*".

1.65 Given the need for market reviews to be forward-looking (where possible), and the potential dynamic nature of the Regional WCA Market, given the ongoing rollout of the SIRO and Virgin Media networks and the potential for Access Seekers to increase their WLA-based footprints, ComReg intends to reapply⁴⁷ Criteria 1 to 5 during the lifetime of the market review (and to consult within 24 months of the publication of this Decision) in order to examine the appropriateness of the continued imposition of regulatory obligations (the '**Mid-term Assessment**'). This could lead to, for example, the maintenance of existing regulation or its lessening or removal, as appropriate, in those Exchange Areas falling within the Regional WCA Markets. Where regulation is to be lessened or removed, the sunset period discussed in Section 13 of this Decision would be applied.

Withdrawal of Remedies in the Urban WCA Market

1.66 As noted above and in Section 11 of the Decision, ComReg's position is that no undertaking is likely to have SMP in the Urban WCA Market.

1.67 In view of this ComReg has decided that certain existing obligations should, in the presence of obligations imposed in the Relevant WLA Market, be withdrawn.

1.68 However, in order to facilitate an orderly transition to de-regulation of the Urban WCA Market, ComReg has decided to impose a six month sunset period during which access to existing Bitstream services⁴⁸ would be maintained at prevailing prices. At the end of this six month sunset period, these remaining obligations are being withdrawn. In this context, ComReg has decided that a sunset period of six months is considered appropriate, as set out in Section 13 of this Decision.

Regulatory Impact Assessment ('RIA')

1.69 In Section 14 and Appendix: 19 ComReg sets out its final Regulatory Impact Assessment for the Relevant WLA Market and Relevant WCA Markets.

Next Steps

1.70 ComReg intends to monitor the extent of any constraints from retail services provided over alternative networks over the period of this market review. As set out at paragraph 1.65 above, ComReg intends, within 24 months of the publication of this Decision, to publish a consultation carrying out a further review of the prevailing conditions of competition at Exchange Areas in the Regional WCA Market – the Mid-term Assessment - in order to determine whether it is appropriate to remove some or all regulatory obligations from Exchange Areas falling within the Regional WCA Market, using the criteria set out in this Decision.

⁴⁷ See paragraphs 9.15 and 9.326 to 9.335 in Section 9 of this Decision.

⁴⁸ ComReg notes that, during this 6 month sunset period, Eircom should not be obliged to meet new requests for WCA inputs on a regulated basis. Eircom is, of course, free to do so on a purely commercial basis.

2 Introduction

Overview

- 2.1 This Response to Consultation and Decision (hereafter the '**Decision**') presents the final views of the Commission for Communications Regulation (hereafter '**ComReg**') on its market review of the markets for:
- (a) Wholesale local access provided at a fixed location ('**WLA**'); and
 - (b) Wholesale central access for mass-market products provided at a fixed location ('**WCA**').
- 2.2 WLA and WCA are wholesale inputs that are used by Service Providers ('**SP(s)**') in the supply of:
- (a) Retail broadband and/or other services (including but not limited to telephony, television services and leased lines)⁴⁹ to End Users;⁵⁰ and
 - (b) Wholesale services to other Service Providers.
- 2.3 The objective of this Decision is to examine the extent of competition within the above wholesale markets (collectively, the '**Relevant Markets**'). Where ComReg determines on the basis of its analysis, and of the evidence available to it, that any such market is not effectively competitive due to one or more Service Provider(s) having Significant Market Power ('**SMP**'), ComReg must impose such regulatory obligations (or remedies) as it considers appropriate on the SP(s) designated as holding SMP. Such obligations are imposed in order to address identified competition problems which could arise in the Relevant Markets or related markets, absent regulation, ultimately to the detriment of consumers. Similarly, if ComReg forms the view that any of the Relevant Markets are effectively competitive, then it follows that regulatory intervention is not warranted on that market and the imposition of regulatory obligations is not justified (or no longer justified in cases where they have been imposed to date).
- 2.4 This introductory section to the Decision describes the following:
- (a) A general overview of the Relevant Markets (discussed in paragraphs 2.6 to 2.13 below);
 - (b) The legal basis and the regulatory framework under which this market review and Decision has been undertaken (discussed in paragraphs 2.14 to 2.34 below);
 - (c) An overview of the previous reviews of the Relevant Markets and the reasoning underpinning the current market review (discussed in paragraphs 2.35 to 2.48 below);

⁴⁹ WLA and WCA inputs can be used by SPs to deliver a broad range of services and hence, the services identified here are non-exhaustive.

⁵⁰ In this Decision, the term 'End User' refers generally to both business and residential customers/consumers, unless otherwise specified.

- (d) An outline of the information sources relied upon for the analysis set out in the Decision (discussed in paragraphs 2.50 to 2.53 below);
 - (e) The procedure for the Decision process. This includes the consultation process, including ComReg's consultations with the Competition and Consumer Protection Commission ('**CCPC**'), the European Commission, and the Body of European Regulators for Electronic Communications ('**BEREC**') (discussed in paragraphs 2.54 to 2.56 below);
 - (f) An overview of the consultation process (discussed in paragraphs 2.57 to 2.58 below); and
 - (g) An overview of the structure of the Decision (set out at paragraph 2.60 below).
- 2.5 Section 1 of this Decision contains an Executive Summary of the overall conclusions reached by ComReg, as set out in this Decision. A glossary of terms used frequently throughout this Decision is also set out after the Table of Contents.⁵¹

What are WLA and WCA?

- 2.6 At the wholesale level, SPs purchase WLA and WCA inputs to provide retail services to End Users, or to provide wholesale services to other Service Providers. WLA and WCA are used both directly and indirectly in the supply of a range of downstream wholesale and retail services, including (but not limited to) fixed telephony, broadband internet connectivity, leased lines and television services, to both residential and business consumers (collectively, '**End Users**').
- 2.7 In general, WLA encompasses the connection between the local serving exchange or access node(s) (the '**Point of Presence**' or '**PoP**') and the End User's premises. This connection can be provided by the SP itself, or purchased/rented from another SP.
- 2.8 WLA provided over full copper current generation ('**CG**') networks is described as Local Loop Unbundling ('**LLU**'), while WLA provided over full or partial fibre⁵² next generation ('**NG**') networks is described as Virtual Unbundled Local Access ('**VULA**'). Using LLU, an Access Seeker⁵³ takes (full or partial) control of the copper loop from the PoP (in this case, the local exchange) to the End User's premises. Similarly, using VULA, an Access Seeker gains control of the fibre path from the local exchange (or equivalent PoP) to the End User's premises. The Access Seeker can then use WLA to supply retail services to the End User, or as an input into the provision of WCA services, such as Bitstream, which it sells to other SPs.

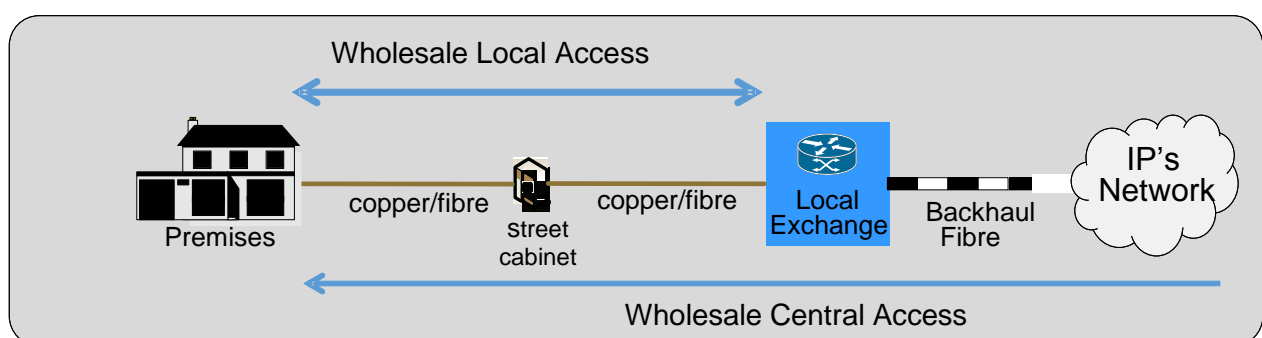
⁵¹ See page 11 of this Decision.

⁵² Fibre is described as being provided 'to the ...'. 'FTTx' refers to the provision of broadband by means of fibre optic cable, either as Fibre to the Home ('**FTTH**'), Fibre to the Premises ('**FTTP**'), or Fibre to the Cabinet ('**FTTC**'). FTTH, FTTP and FTTC are collectively referred to as **FTTx**.

⁵³ An Access Seeker is a Service Provider ('**SP**') that seeks to purchase WLA and/or WCA services from another SP.

- 2.9 The WCA market lies downstream from the WLA market, but upstream from the retail broadband (and other retail) markets where End Users buy broadband access (although WCA services can be used to support services other than broadband).⁵⁴
- 2.10 WCA involves the rental of an active broadband connection between an End User's premises and an aggregation point in a network. WCA therefore also encompasses backhaul connectivity from the PoP across the WCA SP's network. The WCA market concerns wholesale Bitstream products that SPs either self-provide on their own networks, or do so on the basis of the purchase of upstream WLA inputs which are combined with backhaul, and then sell to other SPs.
- 2.11 Typically, the Point of Handover ('**PoH**') for access to products within the WLA Market is provided locally (i.e. the traffic is handed over at a level close to the End User), whereas the PoH for access to products in the WCA market is at a higher aggregation level in the network (national or regional). Furthermore, products in the WLA Market give the Access Seeker a greater degree of flexibility (e.g. VULA products can be offered at various profiles, download speeds etc.), which allows the Access Seeker to differentiate its retail offerings.⁵⁵ In contrast, products in the WCA market are typically characterised by standardised network elements and ancillary inputs (e.g. customer premises equipment) that an Access Seeker has little ability to customise or control.
- 2.12 The WLA market therefore includes access products that afford Access Seekers more flexible control over the products that can be provided over the access path, while the products within WCA markets include access products that provide Access Seekers with relatively less direct and more standardised control.
- 2.13 Figure 2 below explains the WLA Market and WCA market, and how they are related. The WLA Market typically comprises the connection between the local exchange/access node and the End User's premise, while the WCA market relates to the full connection from a SP's network to the End User's premise.

Figure 2: Example of Typical WLA and WCA Provision



⁵⁴ For example, products sold in the WCA market can be used to provide Multicast TV services and Managed VOB services, as well as Bitstream services.

⁵⁵ As further detailed in Section 3 below.

Legal Basis and Regulatory Framework

- 2.14 This market review is undertaken by ComReg in accordance with the obligation set out in the **Framework Directive**⁵⁶ (transposed into Irish law as the **Framework Regulations**)⁵⁷ that National Regulatory Authorities ('NRAs') should analyse relevant markets, taking utmost account of the European Commission's ('EC's') 2014 Recommendation⁵⁸ and the SMP Guidelines.⁵⁹
- 2.15 This market review was predominantly carried out during the currency of the 2002 SMP Guidelines. On 26 April 2018,⁶⁰ the European Commission announced the adoption of an updated set of 2018 SMP Guidelines, which were published in the Official Journal of the EU on 7 May 2018. Accordingly, while the Consultation had regard to the 2002 SMP Guidelines, the Decision has regard to the 2018 SMP Guidelines. ComReg has taken care to ensure that its analysis is consistent with the recommendations set out in the 2018 SMP Guidelines.
- 2.16 As set out in the Staff Working Paper which accompanies the 2018 SMP Guidelines,
- “Given that the Guidelines continue to be based on competition law principles, if an NRA had already carried out a public consultation in line with the 2002 Guidelines, the mere adoption of these Guidelines should not per se require that NRA to conduct a new public consultation.”*⁶¹
- 2.17 Accordingly, it is not necessary for ComReg to conduct a new public consultation, pursuant to the issuing of the 2018 SMP Guidelines.

⁵⁶ Article 16 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC (the '**Framework Directive**').

⁵⁷ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011) (the '**Framework Regulations**'). The Framework Regulations transpose the Framework Directive.

⁵⁸ European Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation (hereafter, the '**2014 Recommendation**').

⁵⁹ European Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic networks and services, OJ 2002 C 165/3 (hereafter, the '**2002 SMP Guidelines**'), and the updated European Commission Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services, C(2018) 2374 {SWD(2018) 124} (the '**2018 SMP Guidelines**', collectively, the '**SMP Guidelines**').

⁶⁰ <https://ec.europa.eu/digital-single-market/en/news/communication-smp-guidelines>.

⁶¹ COMMISSION STAFF WORKING DOCUMENT Accompanying the document COMMUNICATION FROM THE COMMISSION Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (Text with EEA relevance) {C(2018) 2374 final}, ('**Staff Working Document**') at p.7.

2.18 Regulation 26 of the Framework Regulations requires that ComReg, taking the utmost account of the 2014 Recommendation and of the 2018 SMP Guidelines, define relevant markets appropriate to national circumstances, in accordance with the principles of competition law. These market include, *inter alia*, WLA and WCA.

2.19 The EC describes WLA in the 2014 Recommendation as:

*“Wholesale local access provided at a fixed location”*⁶²

2.20 The Explanatory Note to the 2014 Recommendation is also informative as to the nature of the WLA Market and in this respect notes:

“At present the WLA Market primarily consists of physical or passive access products enabling transmission of internet and related data services. Copper loop unbundling (LLU) and copper sub-loop unbundling (SLU) – although on a limited scale – are still the most relevant access products used throughout the Union.

*.....it appears appropriate also to include access based on non-physical or virtual products in the Relevant WLA Market when they exhibit functionalities equivalent or comparable to the key features of physical unbundling.”*⁶³

2.21 The EC describes WCA in the 2014 Recommendation as:

*“Wholesale central access provided at a fixed location for mass-market products”*⁶⁴

2.22 The Explanatory Note to the 2014 Recommendation is also informative as to the nature of the Relevant WCA Market and in this respect notes:

“WCA access products are typically provided to the access seekers at a higher and more central layer in the network architecture, and can be used to provide best-effort retail services to both residential and non-residential customers. It remains likely that there is a chain of substitution between copper DSL-based bitstream services and fibre-based bitstream services provided over FTTH and FTTC/VDSL networks in the near- to medium-term future.

...

⁶² Annex to the 2014 Recommendation, Market 3a, page 42 onwards.

⁶³ Explanatory Note accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation, dated 9.10.2014 (the '**Explanatory Note to the 2014 Recommendation**'), at page 42. The Explanatory Note to the 2014 Recommendation is available at <https://ec.europa.eu/digital-agenda/en/news/explanatory-noteaccompanying-commission-recommendation-relevant-product-and-service-markets>.

⁶⁴ Annex to the 2014 Recommendation, Market 3b, page 45 onwards.

Further on, the question arises whether access provided over other network platforms should be included in the relevant WCA Market. In this regard, NRAs should assess in particular potential constraints stemming from CATV and mobile networks (particularly LTE, whose coverage is expected to increase rapidly in the Union), if retail services and bundles provided over these infrastructures have been found substitutable at retail level.”⁶⁵

- 2.23 Prior to the adoption of the 2014 Recommendation, the WLA market and the WCA market were broadly identified in the 2007 Recommendation⁶⁶ as the market for Wholesale Physical Network Infrastructure Access⁶⁷ (**‘WPNIA’**) and the market for Wholesale Broadband Access⁶⁸ (**‘WBA’**) respectively. ComReg has to date identified the WBA and WPNIA markets as being susceptible to *ex ante* regulation. These markets are thus regulated by ComReg pursuant to the 2010 WPNIA Decision⁶⁹ and the 2011 WBA Decision.⁷⁰ Given that the 2007 Recommendation has been replaced by the 2014 Recommendation, ComReg carries out this current market review in accordance with the 2014 Recommendation.
- 2.24 Regulation 25 of the Framework Regulations allows ComReg to determine, on the basis of a market analysis carried out by it in accordance with Regulation 27 of the Framework Regulations, that a given market identified in accordance with Regulation 26 of the Framework Regulations is not effectively competitive. In such cases, ComReg is obliged under Regulation 27(4) of the Framework Regulations to designate an undertaking(s) with SMP in that market and impose on such undertaking(s) such specific obligations as it considers appropriate, or maintain or amend such obligations where they already exist.

⁶⁵ Explanatory Note to the 2014 Recommendation, at page 45.

⁶⁶ European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services OJ L 344 (the **‘2007 Recommendation’**).

⁶⁷ Market 4 under the 2007 Recommendation.

⁶⁸ Market 5 under the 2007 Recommendation.

⁶⁹ Response to Consultation and Decision Document entitled ‘Wholesale (Physical) Network Infrastructure Access (Market 4)’ (Document No.10/39). (the **‘2010 WPNIA Decision’**).

⁷⁰ ComReg Document No 11/49 (ComReg Decision D06/11); Response to Consultation and Decision Document: Market Review: Wholesale Broadband Access (Market 5); 8 July 2011. (the **‘2011 WBA Decision’**).

- 2.25 In line with the Modified Greenfield Approach ('MGA'),⁷¹ ComReg's assessment of a market starts with the presumption that SMP regulation is not present in the specific market under consideration. However, regulation present in other related markets or through the general regulatory framework is considered. This presumption is made in order to ensure that ComReg avoids circular reasoning, whereby it draws conclusions regarding the competitive structure of a particular market which may be influenced by, or indeed premised on, existing regulation on that market. Considering how markets may function absent regulation helps to ensure that SMP-based regulation is only applied (or withdrawn) in those circumstances where it is justified and proportionate to do so.
- 2.26 Given that ComReg analyses both the WLA market and the WCA market in this Decision, it adopts the following approach with respect to the application of the MGA. The WLA Market lies upstream from the WCA market.
- 2.27 ComReg, therefore, first analyses the WLA market and, in so doing, in accordance with the MGA, assumes that regulation is absent in this and downstream markets (and related retail markets). ComReg's subsequent examination of the WCA market then has regard to the likely impact of any regulation imposed in the (upstream) WLA Market, but absent regulation in the WCA market itself.
- 2.28 Where an SP is designated as having SMP in a market, ComReg is obliged, under Regulation 8(1) of the Access Regulations,⁷² to impose on such an SP (or maintain where already present) as many of the regulatory obligations set out in Regulations 9 to 13 of the Access Regulations as it considers appropriate. The regulatory obligations which are imposed must:
- (a) Be based on the nature of the problem identified;
 - (b) Be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended),⁷³ and Regulation 16 of the Framework Regulations; and
 - (c) Only be imposed following consultation in accordance with Regulations 12 and 13 of the Framework Regulations.
- 2.29 Section 12(1)(a) of the Communications Regulation Act 2002 (as amended) sets out ComReg's objectives in exercising its functions in relation to the provision of electronic communications networks, electronic communications services and associated facilities, namely to:
- (a) Promote competition;
 - (b) Contribute to the development of the internal market; and
 - (c) Promote the interests of users within the European Union.

⁷¹ As set out in the Explanatory Note to the 2014 Recommendation, at page 13.

⁷² European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the '**Access Regulations**').

⁷³ Communications Regulation Act 2002 (No. 20 of 2002), as amended (the '**Communications Regulation Act 2002 (as amended)**').

- 2.30 Apart from conducting a public consultation in accordance with Regulation 12 of the Framework Regulations, ComReg is also obliged to make its draft Decision available to the EC, BEREC,⁷⁴ and the NRAs in other Member States pursuant to Regulation 13(3) of the Framework Regulations.
- 2.31 Pursuant to Regulation 27(1) of the Framework Regulations, ComReg is required to carry out an analysis of the Relevant Markets, where appropriate, after consulting with the CCPC under section 34 or 47(G) of the Competition Act 2002 (as amended).⁷⁵
- 2.32 Overall, in preparing this Decision, ComReg has taken account of its functions and objectives under the Communications Regulation Act 2002 (as amended), in addition to requirements under the Framework Regulations and the Access Regulations.
- 2.33 The analysis undertaken in this Decision also takes the utmost account of, *inter alia*, the following documents:
- (a) The 2014 Recommendation and the Explanatory Note to the 2014 Recommendation on relevant product and service markets susceptible to *ex ante* regulation within the electronic communications sector;
 - (b) The 2018 SMP Guidelines;⁷⁶
 - (c) The 2005 Accounting Separation and Cost Accounting Recommendation;⁷⁷
 - (d) The 2010 NGA Recommendation;⁷⁸ and
 - (e) The 2013 Non-Discrimination Recommendation.⁷⁹
- 2.34 ComReg also takes utmost account of:
- (a) The 1997 Notice on Market Definition⁸⁰ for the purposes of Community competition law;

⁷⁴ Body of European Regulators for Electronic Communications ('**BEREC**') as established by Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 the Body of European Regulators for Electronic Communications (BEREC) and the Office.

⁷⁵ Competition Act 2002 (No. 14 of 2002), as amended (the '**Competition Act 2002 (as amended)**').

⁷⁶ European Commission Communication of 7 May 2018 on Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C159/01) (the '**2018 SMP Guidelines**').

⁷⁷ European Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC) (the '**2005 Accounting Separation and Cost Accounting Recommendation**').

⁷⁸ European Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (2010/572/EU) (the '**2010 NGA Recommendation**').

⁷⁹ European Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU) (the '**2013 Non-Discrimination Recommendation**').

⁸⁰ Commission notice on the definition of relevant market for the purposes of Community competition law, (the '**Notice on Market Definition**'), Official Journal C 372, 09/12/1997 P. 0005 – 0013.

- (b) Any relevant common positions adopted by BEREC;⁸¹ and
- (c) Any relevant European Commission comments made, pursuant to Article 7 and 7a of the Framework Directive, with respect to NRAs' market analyses.

Previous Review of the WLA and WCA Markets

Previous Review of the WLA (formerly WPNIA) Market

- 2.35 ComReg's 2010 WPNIA Decision identified a national WPNIA market (now a WLA Market)⁸² consisting of:
- (a) Wholesale physical network infrastructure access products provided over current generation copper-only network⁸³ infrastructure and its associated facilities at a fixed location;
 - (b) Wholesale physical network infrastructure access products provided over next generation fibre network infrastructure and its associated facilities at a fixed location; and
 - (c) Self-supplied physical network infrastructure access, where certain conditions are satisfied. The self-provision of network access by Eircom Limited ('**Eircom**') fell within the scope of the WPNIA Product Market.
- 2.36 In 2010, ComReg assessed the WPNIA market and concluded that it was not effectively competitive, and was unlikely to become competitive over the lifetime of the market review. On the basis of its analysis, ComReg then designated Eircom with SMP in the WPNIA Market.
- 2.37 ComReg adopted a differentiated approach in imposing remedies on Eircom in relation to next generation ('**NG**') WPNIA (fibre infrastructure and associated facilities) and current generation ('**CG**') WPNIA (copper infrastructure and associated facilities). In this respect, ComReg imposed detailed remedies with respect to CG WPNIA and high-level remedies for NGA WPNIA. ComReg subsequently specified further NG WPNIA remedies in the 2013 NGA Decision.⁸⁴

⁸¹ BEREC [Common Position on Best Practice in Remedies on the market for Wholesale Broadband Access \(including Bitstream Access\) imposed as a consequence of a position of Significant Market Power in the Relevant Market](#) BoR (12) 128, 08.12.2012 and BEREC [Common Position on Geographic Aspects of Market Analysis](#), BoR (14) 73, 05.06.2014.

⁸² As considered and renamed by the EC in its 2014 Recommendation.

⁸³ In this Decision, where ComReg refers to a copper network or a copper-only network, it is referring to a network that does not include fibre in the access path (i.e. an access path consisting exclusively of copper). A copper network is typically used to supply, amongst other things, ADSL and ADSL2+ based broadband services. Eircom's legacy copper-based network is an example of a copper-only network.

⁸⁴ ComReg Decision D03/13, Document number 13/11, dated 31/01/2013 (the '**2013 NGA Decision**').

Previous Review of the WCA (formerly WBA) Market

- 2.38 ComReg's 2011 WBA Decision identified a national WBA Market (now the WCA market)⁸⁵ consisting of WBA products provided over CG and NG infrastructure. ComReg also concluded that the WBA market included WBA supplied by a WPNIA purchaser.⁸⁶ ComReg held that the WBA market included the following products/services:
- (a) CG and NG Bitstream; and
 - (b) Virtual Unbundled Access ('**VUA**').⁸⁷
- 2.39 On the basis of its then analysis, ComReg designated Eircom with SMP in the Relevant WBA Market.
- 2.40 The 2011 WBA Decision imposed a number of regulatory remedies in respect of the provision by Eircom of both CG and NG⁸⁸ WBA services. ComReg further specified remedies relating to NGA products and services provided in the WBA Market in the 2013 NGA Decision.

Current Review of the Relevant Markets

- 2.41 Given the time that has elapsed since the previous analyses of these markets, and having regard to market developments in the supervening period, including the publication of the 2014 Recommendation, ComReg considered it appropriate to update its review of the Relevant Markets.
- 2.42 To inform these market reviews, ComReg obtained qualitative and quantitative information from SPs through the consultation period, which lasted from November 2016 to January 2017, together with a series of formal Statutory Information Requests ('**SIRs**'), as well as informal information requests and follow-up clarifications through meetings or correspondence, where appropriate.
- 2.43 The above information supplements information which is provided to ComReg in the performance of its regular operations (e.g. for the Irish Communications Market Quarterly Key Data Report ('**Quarterly Key Data Report**' or '**QKDR**')), or its ongoing regulatory activities.
- 2.44 ComReg has also reviewed in detail the experiences of NRAs in regulating wholesale broadband markets in other European jurisdictions, and has carefully analysed guidance available from the EC, BEREC and other relevant commentators before arriving at the views set out in this Decision.

⁸⁵ As considered and renamed by the EC in its 2014 Recommendation.

⁸⁶ At the time of the 2011 WBA Decision, BT Ireland was the only purchaser of WPNIA to supply downstream WBA services.

⁸⁷ In the 2013 NGA Decision, ComReg concluded that Eircom's VUA product fell within the WBA Market (as defined in the 2011 WBA Decision).

⁸⁸ ComReg imposed only high-level NGA WBA remedies in the 2011 Decision.

- 2.45 ComReg also carried out market research (conducted via surveys carried out by RedC Research & Marketing) to inform its understanding of End User attitudes and behaviours in the retail broadband (and related) markets. Two surveys were undertaken in 2014, a survey of End Users and a survey of businesses (collectively, the '**2014 WLA/WCA Market Research**'). These surveys were published by ComReg alongside the Consultation at Appendix: 4. ComReg also engaged RedC to conduct further market research in 2017 to update the 2014 WLA/WCA Market Research, in order to better inform its analysis with more up-to-date responses. This updated research – the '**2017 WLA/WCA Market Research**' is appended to this Decision at Appendix: 5.
- 2.46 In addition, other market research commissioned by ComReg (conducted via surveys carried out by Ipsos MRBI) in November and December 2017 is also relevant as it provides insights into developments in the telecommunications (and other sectors). The Ireland Communicates Survey 2017 examined, amongst other things, fixed and mobile telephony, fixed and mobile broadband, and TV usage patterns of both residential and SME End Users (hereafter, '**Ireland Communicates 2017 – Residential Survey**' and '**Ireland Communicates 2017 – SME Survey**', together the '**2017 Ireland Communicates Surveys**').⁸⁹
- 2.47 ComReg is mindful that such surveys, while a useful practical means of gathering information on End User preferences/behaviours, need to be interpreted with care and that stated preferences of survey respondents can overestimate what they will actually do in practice (known as 'stated preference bias').
- 2.48 Therefore, ComReg does not solely or overly rely on the 2017 WLA/WCA Market Research or the 2017 Ireland Communicates Surveys in forming its conclusions as set out in this Decision. ComReg considers all the relevant information available to it at the time of publishing this Decision.
- 2.49 ComReg notes that, in correspondence from Eircom⁹⁰ in February 2018, Eircom called on ComReg to re-consult on the WLA and WCA markets, in view of a number of recent market developments. ComReg has considered the grounds on which Eircom has made its request, specifically the various market developments to which it alludes in its letter. Having considered the matter, ComReg's position is that the analysis set out in this Decision takes adequate account of relevant market developments, and is appropriately forward-looking in nature. ComReg therefore concludes that, having accounted for the various market developments set out by Eircom in its letter in the course of this Decision, it is not necessary to re-consult on its review of the WLA and WCA markets.

⁸⁹ Available online at *Ireland Communicates 2017*: <https://www.comreg.ie/publication-download/ireland-communicates-survey-2017>.

⁹⁰ This letter is reproduced at Appendix: 4.

Information sources relied upon

- 2.50 In conducting its analysis, ComReg has drawn on data from a number of sources, including:
- (a) The 2017 WLA/WCA Market Research. This included attitudinal surveys of retail users of broadband and other services. This research is being published alongside this Decision in Appendix: 5;
 - (b) The Ireland Communicates Surveys;
 - (c) Information provided by Service Providers in response to detailed SIRs⁹¹ issued by ComReg in which both quantitative and qualitative information on the retail broadband market, other markets and the Relevant Markets was sought;
 - (d) Information provided to ComReg in subsequent follow-up correspondence and discussions in relation to the above;
 - (e) Information provided to ComReg by Service Providers for the purpose of its Quarterly Key Data Reports ('**QKDR**'); and
 - (f) Other information in the public domain.
- 2.51 The 2017 WLA/WCA Market Research referred to in paragraph 2.45 above was undertaken by ComReg to inform its WLA and WCA market reviews and examined residential and business attitudes to various issues related to the provision of broadband (and other) services on the basis of the most up-to-date data available. The fieldwork supporting the 2017 WLA/WCA Market Research took place in the period April to June 2017 with the results finalised and provided to ComReg in August 2017. As part of the 2017 WLA/WCA Market Research, 1,800 residential households were surveyed through face-to-face interviews, and 301 SMEs were surveyed *via* computer aided telephone interview ('**CATI**'), with the person interviewed being the individual responsible for selecting the relevant business's telecommunications providers.
- 2.52 ComReg refers to the outputs from the 2017 WLA/WCA Market Research, along with the other data sources referred to above, throughout the remainder of the analysis in this Decision.
- 2.53 It should be noted that, rather than being definitive, the 2017 WLA/WCA Market Research informs the analysis throughout this Decision, and its outputs are considered alongside empirical data/evidence, where available, in particular, alongside data presented in the QKDR and in responses to Statutory Information Requirements.

⁹¹ Pursuant to its powers under section 13D(1) of the Communications Regulation Act 2002 (as amended), ComReg issued a series of Statutory Information Requirements to Service Providers in February 2015, September 2015, February 2016, November 2016, June 2017, July 2017, November 2017 and on other dates as referred to throughout this Decision.

Liaison with other bodies

- 2.54 In accordance with Regulation 27(1) of the Framework Regulations, ComReg has consulted with the Competition and Consumer Protection Commission ('**CCPC**') on the Relevant Markets set out in this Decision. The CCPC is in agreement⁹² with ComReg's analysis. A copy of correspondence from the CCPC (the '**CCPC Response**') is set out at Appendix: 1.
- 2.55 On 15 June 2018 ComReg made its Notified Draft Measures accessible to the EC, BEREC and NRAs in other Member States pursuant to Regulation 13(3) of the Framework Regulations. The EC provided its response to ComReg ('**EC Response**') on 13 July 2018, a copy of which is set out in Appendix: 2. As is required, ComReg has taken utmost account of the EC Response throughout this Decision, including as referred to in Appendix: 3 of this Decision.
- 2.56 This is a non-confidential version of the Decision. Certain information within the Decision has been redacted for reasons of confidentiality, with such redactions indicated by the symbol ✖. Should an individual SP wish to review its own redacted information, it should make a request for such in writing to ComReg and indicate, where possible, the specific paragraph numbers within which the redacted information being requested is contained. ComReg will consider requests for redacted information and will, subject to the protection of confidential information, respond accordingly.

Consultation Process

- 2.57 ComReg conducted a public consultation in accordance with Regulation 12 of the Framework Regulations, issuing a Consultation in November 2016. Eight Submissions to the Consultation were received from a range of industry stakeholders (together referred to as the '**Respondent(s)**'), namely:
- (a) Vodafone (the Vodafone Submission included a report which it commissioned from Compass Lexecon economic consultants);
 - (b) enet;
 - (c) Colt,
 - (d) Virgin Media;
 - (e) BT Ireland Communications;
 - (f) ALTO;
 - (g) Sky Ireland; and
 - (h) Eircom.
- 2.58 Throughout this Decision, ComReg has summarised Respondents' main views and has carefully considered them before setting out its final position.

⁹² The CCPC indicated that it is satisfied that there are no compelling grounds for altering the market definitions proposed by ComReg, and that the CCPC is satisfied that there are no compelling grounds to disagree with ComReg's conclusion that Eircom should be designated as having significant market power in each of the Relevant Markets identified.

Structure of this Decision

2.59 The remainder of this Decision is structured as follows:

- **Section 3** assesses the retail market, including defining the retail Product Market and the retail geographic markets;
- **Section 4** assesses the Relevant Wholesale Local Access (WLA) Market by defining the relevant product and geographic markets;
- **Section 5** assesses competition in the Relevant WLA Market and examines whether any SP has Significant Market Power (SMP);
- **Section 6** outlines the competition problems which may arise in the Relevant WLA Market in the presence of SMP, but absent regulation;
- **Section 7** sets out the remedies to be applied on the Relevant WLA Market;
- **Section 8** assesses the retail broadband market in the presence of regulation in the upstream Relevant WLA Market (the '**Modified Retail Broadband Market**');
- **Section 9** assesses the Relevant Wholesale Central Access (WCA) Markets by defining the relevant product and geographic markets;
- **Section 10** assesses competition in the Relevant WCA Markets and determines whether any SP has SMP on the Urban Relevant WCA Market or the Regional Relevant WCA Market;
- **Section 11** outlines the competition problems which may arise in the Regional WCA Market in the presence of SMP, but absent regulation;
- **Section 12** sets out remedies to be applied on the Regional WCA Market;
- **Section 13** withdraws remedies on the Urban WCA Market, subject to the implementation of a sunset period;
- **Section 14** presents a Regulatory Impact Assessment ('**RIA**') of the regulation of the Relevant WLA Market and the Regional WCA Market, respectively; and
- **Section 15** outlines the next steps.

2.60 A number of Appendices to this Decision give additional supporting analysis and, in some cases, outline the approach and findings in more detail, where they have been condensed for reasons of brevity in the main text.

- **Appendix: 1** contains the formal Competition and Consumer Protection Commission ('**CCPC**') response to ComReg's draft Decision;
- **Appendix: 2** contains the formal European Commission ('**EC**') response to ComReg's draft Decision;
- **Appendix: 3** sets out ComReg's response to the views of the European Commission set out in Appendix: 2;

- **Appendix: 4** includes copies of a letter, dated 15 February 2018, from Eircom to ComReg, and ComReg's response, dated 16 February 2018;
- **Appendix: 5** sets out the updated market research carried out by RedC on behalf of ComReg (the '**2017 WLA/WCA Market Research**');
- **Appendix: 6** sets out ComReg's assessment of the 2017 WLA/WCA Market Research set out in Appendix: 5;
- **Appendix: 7** summarises the fixed and mobile retail broadband products currently offered for sale to End Users in Ireland;
- **Appendix: 8** outlines the theory and practice of the Chain of Substitution analysis which ComReg carries out in this Decision;
- **Appendix: 9** outlines the computation of the Critical Loss Test which ComReg carries out in this Decision;
- **Appendix: 10** is the geographic assessment of the Relevant WCA Market;
- **Appendix: 11** sets out those exchanges which comprise the Urban WCA Market and the Regional WCA Market, respectively;
- **Appendix: 12** is a report drafted by Geocible on behalf of ComReg, "*Overview of Methodology for Estimating SIRO and Virgin Media market shares and network coverage within Eircom Exchange Area boundaries Tranche 3: January 2018*";
- **Appendix: 13** is two reports drafted by Cartesian on behalf of ComReg, "*CEI Service Delivery Process Equivalence Options - Review of additional information provided by Eircom*", and "*CEI Service Delivery Process Equivalence Options - Accelerated MARTIS Provisioning Data Services Tool ('AMP DST')*" (together, the '**2018 Cartesian Reports**');
- **Appendix: 14** reports uptake of duct access in France, Spain and Portugal;
- **Appendix: 15** reports on Differences between Eircom Duct and Pole Product and Eircom internal self-supply of CEI;
- **Appendix: 16** compares the provision of Eircom duct access and NGN Ethernet;
- **Appendix: 17** reports Colt Network's Investment Plans based on CEI access;
- **Appendix: 18** reports certain selected Eircom views on Passive Access Records ('**PAR**');
- **Appendix: 19** contains the Regulatory Impact Assessment ('**RIA**');
- **Appendix: 20** is the Decision Instrument for the Relevant WLA Market; and
- **Appendix: 21** is the Decision Instrument for the Regional WCA Market.

3 Retail Market Trends and Retail Market Assessment

3.1 Given the overlap in comments and issues raised in their Submissions by Respondents to Section 3 (Retail Market Trends and Developments) and Section 4 (Retail Market Assessment) of the Consultation, ComReg considers responses to both of these sets of issues together in this Section.

Position set out in the Consultation

3.2 In Sections 3 and 4 of the Consultation, ComReg set out its preliminary view on recent trends/developments in the supply of, and demand for, broadband and other related retail services, along with an assessment of the dynamics of the retail market and whether and how these dynamics materially impact at a wholesale level. These preliminary views are summarised below.

Retail Trends and Developments

3.3 The most notable trends and developments in the supply of and demand for broadband and other related retail services as discussed in Section 3 of the Consultation,⁹³ include:

- (a) **Increases in download speeds on broadband subscriptions.**⁹⁴ The Consultation noted that in the two year period to Q1 2016, growth in broadband subscriptions was primarily in the $\geq 30\text{Mb}$ category, which increased from 37.8% to 58.1% as a share of all broadband subscriptions;⁹⁵
- (b) **Increases in download traffic on broadband subscriptions.**⁹⁶ It was noted in the Consultation that the availability of increased broadband speeds has allowed End Users to download greater volumes of data i.e. 403,936 Terabytes of data in the first three months of 2016, averaging 116.6 GB of data per month by cable subscribers and 115.9 GB of data per month by VDSL (FTTC) subscribers. The average volume of data used was shown to have increased on platforms offering higher download speed products, including cable and VDSL platforms;⁹⁷

⁹³ See paragraphs 3.13 to 3.46 of the Consultation.

⁹⁴ See paragraph 3.26 of the Consultation.

⁹⁵ This is illustrated by Figure 10 in the Consultation.

⁹⁶ See paragraph 3.35 of the Consultation.

⁹⁷ This is illustrated by Figure 13 in the Consultation.

- (c) **Retail bundling of services and associated patterns.**⁹⁸ The Consultation noted a strong tendency for broadband services and telephone services to be purchased from a single retail SP, and also noted that broadband and telephone services are often bundled with television services at the retail level. It showed that by Q1 2016, there were an estimated 1.82 million fixed market retail subscriptions, of which 38.7% were single play, 35.8% were double play and 25.4% were triple play and quadruple play;⁹⁹
- (d) **Continued rollout of high-speed broadband networks.**¹⁰⁰ The continuing rollout by Eircom of its FTTC (VDSL) and FTTH networks provides broadband access with download speeds up to 100Mb/s and 1Gbps respectively.¹⁰¹ The Consultation noted that, since the 2010 WPNIA Decision and 2011 WBA Decision, Eircom had undertaken the rollout of its FTTC network, passing 1.6 million premises. The Consultation also noted an announcement by Eircom in October 2014, which set out plans to rollout FTTH to 300,000 premises, mostly in urban areas, offering speeds of up to 1Gbps. Regarding subscriptions, subscribers using a broadband service provided over a FTTC Network accounted for 22.9% of total broadband subscriptions in Q1 2016, up from 14% in Q1 2015. Between Q1 of 2015 and Q1 of 2016, FTTC Network based subscriptions increased by 64%;
- (e) **Vodafone and ESB Joint Venture.**¹⁰² In July 2014, ESB and Vodafone Ireland, announced a fully functioning 50:50 Joint Venture ('**SIRO**'), to build an FTTH network across 50 towns, reaching potentially 500,000 customers, with download speeds up to 1Gbps. Deployed on ESB's existing overhead and underground infrastructure, SIRO's network offers a VULA based service at the wholesale level only, requiring Access Seekers who wish to use the SIRO network to build their own backhaul to SIRO's various points of interconnect. In September 2016, SIRO announced its rollout was gathering pace, with its network rollout passing 10,000 premises per month; and
- (f) **National Broadband Plan ('NBP').**¹⁰³ In 2012, the then-Department of Communications, Energy and Natural Resources¹⁰⁴ announced the NBP to rollout broadband of speeds greater than 30MB to less densely populated areas of Ireland. ComReg set out in the Consultation that awarding of the NBP was then expected to take place in 2017 and that the provision of services would take place thereafter.

⁹⁸ See paragraphs 3.36 to 3.38 of the Consultation.

⁹⁹ This is illustrated by Figure 14 in the Consultation.

¹⁰⁰ See paragraphs 3.26 to 3.28 and 3.33 to 3.35 of the Consultation, as well as Figures 10, 11 and 13.

¹⁰¹ See paragraphs 3.14, 3.31, 3.34 and 3.43 of the Consultation.

¹⁰² See paragraph 3.45 of the Consultation.

¹⁰³ See paragraph 3.46 of the Consultation.

¹⁰⁴ Now the Department of Communications, Climate Action and Environment ('**DCCAE**').

Retail Market Assessment

- 3.4 Having set out the most notable trends and developments in the supply of and demand for broadband and other related retail services in Ireland, the Consultation explained that ComReg is not required to conclude on a precise definition of the retail market(s).¹⁰⁵ Rather, the purpose of the retail market assessment is to inform the assessment of the WLA and WCA markets with respect to market definition and competition analysis, as set out in Sections 5 to 7 and 10 to 12 of the Consultation (and subsequently in Sections 4 to 6 and 9 to 11 of this Decision).
- 3.5 ComReg's preliminary view of the market for the provision of broadband and other related retail services was set out in Section 4 of the Consultation and is summarised in paragraphs 3.6 to 3.21 below.

Product Market

- 3.6 As a first step, ComReg sought to identify the focal product at the retail level, which could be used as the basis for assessing potential complementary or substitutable products. ComReg's preliminary view was that the appropriate starting focal point for the assessment of potential retail broadband substitutes was broadband provided over a copper network,¹⁰⁶ as it is the platform over which most broadband services were then provided (29.4% of the total number of broadband subscriptions in Q1 2016).¹⁰⁷
- 3.7 The 2014 WLA/WCA Market Research¹⁰⁸ indicated that 54% of residential broadband respondents and 64% of business broadband respondents availed of broadband services provided over a copper network at home or at work, suggesting that it is the most common form of broadband access.¹⁰⁹

¹⁰⁵ See paragraph 4.2 of the Consultation.

¹⁰⁶ Where ComReg refers to a copper network or a copper-only network, it is referring to a network that does not include any fibre in the access path (i.e. a network that has exclusively copper in the access path). A copper network is typically used to supply, amongst other things, ADSL and ADSL2+ based broadband services.

Broadband provided over a copper network offers advertised download speeds of up to 24Mb/s and upload speeds of up to 2Mb/s. On the other hand, Narrowband (also known as dial-up internet access) generally offers internet access at download speeds up to 56kb over a traditional (copper) telephone line, or up to 128kb using an Integrated Services Digital Network ('ISDN') line.

¹⁰⁷ With total broadband subscriptions then being the sum of copper, FTTC, cable, FWA, other (satellite and FTTH) and mobile broadband.

¹⁰⁸ See Appendix 1 and Appendix 2 of the Consultation.

¹⁰⁹ See paragraph 4.15 of the Consultation.

3.8 ComReg then assessed whether a range of alternative services are likely to be considered by End Users¹¹⁰ as effective demand-side substitutes for an ADSL¹¹¹ broadband service provided over a copper network. In doing so, it was considered whether a sufficient number of End Users would be likely to switch to these potential substitutes in response to a hypothetical 5-10% increase in the retail price of the relevant broadband products.

Internet access via a narrowband network

3.9 ComReg set out its preliminary view that dial-up internet access would not be an effective demand-side substitute for broadband access, which was confirmed by factors such as actual usage patterns. Furthermore, it was not considered that supply-side constraints would be sufficiently immediate or effective for dial-up internet access to be included in the same relevant market as broadband access provided over a copper network.¹¹²

Broadband provided over a FTTC network

3.10 ComReg was of the preliminary view that the product characteristics and pricing of FTTC-based broadband, along with the evolution in observed demand to date, implied that FTTC-based broadband products are likely to be an effective demand-side substitute for copper network-based retail broadband products. It was noted in the Consultation, however, that such substitution is only likely to be the case in geographic areas where FTTC-based broadband is available.¹¹³

Broadband provided over a FTTH/FTTP network

3.11 ComReg considered that the product characteristics, pricing and intended use of FTTH-based retail broadband services are broadly similar to those of copper network-based broadband, and that FTTH can be classified as being in the same relevant market as copper-based broadband. ComReg was, therefore, of the preliminary view that:

“(....) retail broadband offered over alternative FTTH networks would, in principle, make it a good demand-side substitute for FTTC and/or copper network-based retail broadband.”¹¹⁴

3.12 The Consultation noted, however, that such demand-side substitution is likely to be limited by the geographic coverage of FTTH networks. ComReg also noted in the Consultation that the coverage of certain FTTH networks was expected to grow over the period of this review, although that would not change ComReg's overall preliminary view.¹¹⁵ From a supply-side perspective, ComReg also noted that it is unlikely that a potential entrant would rollout a FTTH based network without the aim of providing either retail and/or wholesale broadband access.

¹¹⁰ Unless otherwise stated, End Users refers to both private/personal End Users and business End Users of retail products.

¹¹¹ ADSL means Asymmetric Digital Subscriber Line.

¹¹² See paragraphs 4.54 to 4.67 of the Consultation.

¹¹³ See paragraphs 4.68 to 4.92 of the Consultation.

¹¹⁴ See paragraph 4.115 of the Consultation.

¹¹⁵ See paragraphs 4.95 to 4.116 of the Consultation.

Broadband provided over a CATV network

3.13 ComReg was of the preliminary view that CATV-based broadband access is in the same relevant retail market as copper, FTTC and FTTH-based broadband access.¹¹⁶ This preliminary view was formed having considered that the product characteristics, pricing and intended use of CATV-based retail broadband services and those services offered over copper, FTTC and FTTH networks are sufficiently similar, while acknowledging that download speeds can differ.

Broadband provided over a 3G/4G mobile network

3.14 ComReg's preliminary view in the Consultation was that retail mobile broadband is not likely to be an effective substitute for retail broadband provided over a copper, FTTC, FTTH or CATV network.¹¹⁷ This preliminary view was based on the functional differences between mobile broadband and broadband provided over these alternative networks (copper, FTTx¹¹⁸ and CATV), and specifically that mobile broadband offers the customer mobility but is more limited compared to fixed broadband in terms of actual download speeds, reliability of service and download allowances. It was also noted that evidence exists of differences in intended use.

Satellite broadband

3.15 ComReg was of the preliminary view in the Consultation that retail broadband offered via satellite is not an effective substitute for retail broadband offered over alternative broadband networks such as copper, FTTx or CATV. ComReg formed the view that End Users were more likely to consider satellite broadband as a complement rather than a substitute, due to the higher up-front cost of the satellite product, the substantially different pricing structure and the lack of suitability for all applications (including higher bandwidth applications).¹¹⁹

Broadband provided over a FWA network

3.16 ComReg set out its preliminary view that an insufficient number of End Users are likely to consider FWA services to be an effective substitute for copper, FTTx or CATV network-based broadband.¹²⁰ Notwithstanding this preliminary view, ComReg recognised that FWA-based broadband services are used by End Users in areas where copper, FTTx or CATV network-based broadband services may not be available. It was also noted that certain product characteristics are similar and that the intended use is also likely to be similar in certain instances.

¹¹⁶ See paragraphs 4.117 to 4.144 of the Consultation.

¹¹⁷ See paragraphs 4.145 to 4.180 of the Consultation.

¹¹⁸ FTTx-based broadband access can refer to Fibre to the Home ('FTTH'), Fibre to the Cabinet ('FTTC'), Fibre to the Office ('FTTO') or Fibre to the Premises ('FTTP').

¹¹⁹ See paragraphs 4.181 to 4.205 of the Consultation.

¹²⁰ See paragraphs 4.206 to 4.236 of the Consultation.

3.17 ComReg also noted that, given the relatively low number of subscribers to FWA services, its inclusion or exclusion from the retail broadband market definition is not likely to materially affect the analysis of the WLA or WCA markets. ComReg committed to have due regard to any spectrum auction and subsequent awards which may impact the product characteristics (or other factors) of a FWA-based service when reaching a final position in this Decision.

Broadband provided over a leased line

3.18 In the Consultation, ComReg considered that leased lines are not an effective substitute for broadband services provided over copper, FTTx and CATV networks, based on an assessment of relevant demand and supply-side factors including functionality, price and consumer usage.¹²¹ Regarding price, it was considered that, as leased lines are typically more expensive than business broadband products, business subscribers availing of broadband services via copper, FTTx and CATV networks are unlikely to switch to a leased line service in response to a hypothetical price increase in their broadband service – for example, according to the 2014 WLA/WCA Market Research, the average monthly cost of a standalone broadband service cited by surveyed business broadband purchasers that were aware of their service cost was €235, compared to the €1,129 average monthly cost of a standalone leased line service cited by purchasers of such services.¹²²

Differentiating broadband by means other than technology

Differentiating by customer category

3.19 ComReg was also of the preliminary view that the retail broadband market should not be further differentiated by customer type.¹²³ From a product characteristics perspective, ComReg noted that similar products are offered to residential and business broadband subscribers. Furthermore, ComReg noted a strong trend amongst all users to subscribe to higher speed products. It was shown that at the end of Q1 2016, approximately 31.1% of business users and 62.4% of residential users were subscribing to fixed broadband at speeds above 30Mb, which suggested a similarity in both residential and business demand for higher speeds.¹²⁴

Differentiating by bundles/standalone

3.20 Separately, ComReg did not conclude on whether broadband sold in a bundle constitutes a separate retail market to broadband sold on a standalone basis. ComReg did, however, set out its preliminary view that this would not alter the wholesale WLA and WCA market definitions, as the underlying wholesale products are clearly substitutable between bundled and unbundled offerings, regardless of how the retail service is packaged.¹²⁵

¹²¹ See paragraphs 4.237 to 4.249 of the Consultation.

¹²² See paragraphs 4.244 and 4.245 of the Consultation.

¹²³ See paragraph 4.249 of the Consultation.

¹²⁴ See paragraphs 4.256 to 4.257 of the Consultation.

¹²⁵ See paragraph 4.272 of the Consultation.

Geographic Scope

3.21 Finally, ComReg sought to define the likely geographic scope of the retail broadband market. It was of the preliminary view in the Consultation that, absent regulation in the WLA and WCA Market, there is likely to be a national market for retail broadband.¹²⁶ While recognising that there are likely to be some differences in competitive conditions due to the regional presence of an Alternative Network Operator (i.e. SIRO or Virgin Media), ComReg considered that the lack of differentiated pricing and limited differences in demand characteristics across regions suggests the retail broadband market is likely to be national, absent regulation in the WLA and WCA Markets.¹²⁷ It was noted, however, that it was not ComReg's intention to conclude, nor is it required to conclude on the geographic scope of the retail broadband market, absent regulation in the WLA and WCA markets.

Respondents' Views

Retail Market Trends and Retail Market Assessment

Overview

- 3.22 Seven of the eight Respondents expressed views on ComReg's assessment of the main trends and developments in the provision of retail broadband and other retail services in Ireland. Six Respondents (ALTO, BT, enet, Sky, Virgin Media and Vodafone) agreed with ComReg's overall assessment of trends and developments in the provision of retail broadband and associated services.
- 3.23 Both Sky and Virgin Media provided supplementary views on key developments in the retail market. Sky noted that one of the key trends in the market since the NGA Remedies Decision in 2013 has been the '*reversal of fortunes*' of the two main competing fixed broadband platform providers that provide service to more than 96% of fixed retail broadband customers; namely Eircom and Virgin Media. Virgin Media sought to clarify certain aspects relating to download speeds and the importance of Internet Protocol Television ('IPTV') in retail bundles.
- 3.24 While Eircom agreed in principle with the main developments identified in the provision of retail services that are of relevance to the WLA and WCA markets, it did, however, note certain developments that are, in its view, of greater relevance.
- 3.25 BT noted that it is not active in the retail consumer market in Ireland and therefore did not comment on this aspect of the Consultation. BT did, however, share the views of ALTO, noting that it agrees that the NBP should not be considered to have an impact on this market review. Colt did not provide any views on this part of ComReg's assessment.
- 3.26 Regarding ComReg's retail product and geographic market assessment set out in the Consultation (and summarised in paragraphs 3.6 to 3.21 above), enet, Sky and Vodafone expressly agreed with ComReg's preliminary conclusions.

¹²⁶ See paragraphs 4.274 to 4.295 of the Consultation.

¹²⁷ Notwithstanding this, in the Consultation ComReg did not conclude on the geographic scope of the retail broadband market, absent regulation in the WLA and WCA Markets.

- 3.27 Vodafone also observed that increased bundling of TV services with retail broadband can only be delivered over fibre or CATV networks and that quality wholesale access products are necessary to ensure Vodafone can be a credible supplier of IPTV-based services.
- 3.28 ALTO agreed in general with ComReg's analysis, but also raised a number of concerns. Firstly, ALTO noted that the ComReg analysis at paragraph 4.99 of the Consultation (where ComReg stated that Eircom's FTTC and FTTH networks would not overlap) was technically incorrect. Secondly, ALTO submitted that ComReg overlooked the potentially very high connection costs for FTTH for customers that do not have existing pole access or unbroken duct access. Finally, ALTO considered that ComReg's analysis of leased lines as a substitute for retail broadband services did not highlight that quality of service levels are the key differentiator between these products. BT raised similar issues to ALTO.
- 3.29 Eircom did not agree with ComReg's retail product and geographic market assessment. It considered that FWA and mobile broadband are substitutable for broadband over copper, FTTC, FTTH and CATV networks. It also raised issues with the implementation of the SSNIP test, while also considering that there are sub-geographic retail markets, arguing that the existence of the NBP indicates that competitive conditions differ across the State.
- 3.30 Virgin Media largely agreed with ComReg's approach to the retail product and geographic market assessment while noting that a Herfindahl-Hirschman Index ('**HHI**')¹²⁸ analysis would provide a useful insight into retail competition over time. Virgin Media also considered that a redacted statistic on the number of customers that purchase broadband and TV separately should be published.
- 3.31 Colt did not provide any explicit views on ComReg's assessment of retail trends and developments or its assessment of the retail market.
- 3.32 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the identified themes below, namely:
- (a) Competition from other networks and technologies (see paragraphs 3.34 to 3.43 below);
 - (b) Sub-geographic markets and the impact of the NBP on ComReg's assessment (see paragraphs 3.47 to 3.51 below);
 - (c) Role of bundling of services in the retail market (see paragraphs 3.52 to 3.55 below);
 - (d) Retail Product Market Definition (see paragraphs 3.56 to 3.67 below); and
 - (e) Other key developments affecting retail markets (see paragraphs 3.68 to 3.72 below).
- 3.33 Respondents' additional views regarding ComReg's assessment are detailed in paragraphs 3.73 to 3.76.

¹²⁸ The HHI is a measure of concentration in a market. It is calculated by summing the squares of the market shares of all market participants.

Competition from other networks and technologies

- 3.34 enet and Vodafone noted that they did not consider Mobile Broadband or FWA-based broadband services to be substitutes for copper, FTTC, FTTH or CATV network-based broadband services. Vodafone noted that it does not believe that the rollout of alternative networks (especially CATV and FTTx networks) was likely to have a material impact within the lifetime of the current market review.
- 3.35 Eircom considered that ComReg incorrectly identified the retail Product Market, and that FWA and mobile broadband constrain the focal product in the retail broadband market. Eircom noted that Imagine is rolling out Time Division-Long Term Evolution ('TD-LTE')¹²⁹ technologies nationally, which offer superior FWA broadband services relative to WiMax, and which will make FWA an even more attractive alternative to copper-based ADSL. According to Eircom, "*Imagine have committed to providing a wholesale TD-LTE service*".¹³⁰ Eircom stated that, despite the spread of fibre broadband, wireless technologies are still delivering comparable connectivity in many parts of Ireland, especially in rural areas lacking in NGA coverage. Referring to a survey of broadband speeds by the technology monitoring group, Ookla, Eircom stated that Imagine, with an average speed of 77Mbps, was ranked in terms of download speed second only to Virgin Media and ahead of eir, Vodafone and Sky.¹³¹
- 3.36 Eircom also suggested that, although mobile broadband and broadband provided over FWA and satellite networks may not represent perfect substitutes for broadband provided over FTTC and FTTH networks, ComReg identifies the focal product as broadband provided over a copper network and thus the SSNIP test should assess potential substitutes against the focal product.¹³²

¹²⁹ Time Division-Long Term Evolution ('TD-LTE') is a 4G telecommunications technology that uses a single frequency, alternating between uploading and downloading data through time. The ratio between uploads and downloads on a TD-LTE network can be changed dynamically, depending on whether more data needs to be sent or received.

¹³⁰ See Eircom Submission, at page 8.

¹³¹ *Irish Times* report dated 16 January 2017, as cited by Eircom - <https://www.irishtimes.com/business/technology/wireless-broadband-still-rivalling-fibre-in-rural-areas-1.2937890>.

¹³² ComReg's approach to the SSNIP test did not simply compare responses to a SSNIP of the focal product with potential substitutes, but rather compared responses to a SSNIP of the focal product along with other products which were identified as substitutes due to an unprofitable SSNIP. For example, in the case of mobile Broadband, the assessment looks at whether consumers would switch to Mobile Broadband in response to a SSNIP in Copper, FTTC, FTTH and CATV based broadband. ComReg would note that in paragraph 4.158 of the Consultation, it was stated that in response to a SSNIP of copper-based broadband, just 8% of residential respondents indicated that they would switch to a broadband service provided over a mobile network. Thus, the SSNIP test did, in the first instance, involve assessing potential substitutes against the focal product.

- 3.37 Eircom noted that even though two services may not be considered direct substitutes, they can belong to the same market as long as there is a chain of substitution¹³³ between them - such chains of substitution exist, for instance, where the price of a broadband access service provided over ADSL is constrained by the price of the service provided over a FTTH network. Eircom's view is that such a constraint in turn exists if substitution exists between Mobile Broadband and ADSL, on the one hand, and ADSL and FTTx on the other.
- 3.38 Eircom pointed to ComReg's Quarterly Report figures for Mobile Broadband subscriptions, stating that 21.4% of broadband subscribers received broadband services over a mobile network using a dongle or MiFi device as of Q3 2016. This is only 0.1% less than the 21.5% of subscribers who received broadband services over Virgin Media's DOCSIS 3.0 CATV network in the same period. Eircom also noted that, while the share of FWA subscriptions is relatively small, it has remained stable over time, suggesting that there is a cohort of broadband users for whom this is an effective substitute. Eircom suggested that Imagine's announced substantial investment to upgrade its network to next generation FWA technology is expected to see renewed growth in FWA subscriptions.
- 3.39 In respect of FWA, Eircom further noted in its February 2018 letter to ComReg that Imagine and Huawei had entered into a strategic partnership to launch a national 'Wireless to the x' network, with projected 85% coverage by 2019.
- 3.40 Eircom stated that the level of complementarity among broadband access platforms is low, pointing to the 2014 WLA/WCA Market Research, which showed that only 4.4% of respondents have more than one broadband access platform (See Slide 23 of the 2014 WLA/WCA Market Research). Eircom noted that 80% of those respondents who use more than one broadband access platform at home claim that this is because they are using 3G/4G internet access on their phone.

¹³³ A chain of substitution refers to the substitutability between a number of similar products, which could lead to each of these products being part of the same market. A chain of substitution implies that a product at one end of the chain can potentially exert an indirect constraint on a product at the other end of the chain. For example, if product B is a substitute for products A and C, while A and C may not be direct substitutes, they may be considered to be in the same Product Market since their respective pricing may be constrained by substitution to B. See Appendix: 8 for an analysis of the chain of substitution between retail broadband products.

- 3.41 Eircom also considered that SIRO's FTTH rollout has reached a critical rollout phase, having passed approximately 64,000 homes (as of December 2016) and contracted with four separate SPs (for the provision of wholesale services), and that its planned rollout would reach 500,000 premises by the end of 2018. Eircom supplemented this view by noting that SIRO had reached a network interconnect agreement with BT,¹³⁴ allowing BT to offer its corporate, public sector and wholesale customers access to SIRO's local access network. Eircom noted that BT now has a further external source of supply and presumably Sky, as a BT wholesale customer, can indirectly access SIRO services, which means, in its view, that the retail market will be even more competitive for FTTH offers. Eircom further added that this could create uncertainty for FTTC retail demand in areas covered by FTTH.
- 3.42 Eircom noted that Virgin Media has plans to extend its network footprint by a further 200,000 premises over the next two years¹³⁵ and rollout DOCSIS 3.1 technologies over its entire CATV network.¹³⁶ Eircom also considered that DOCSIS 3.1 is quick to deploy and cost effective and noted that Liberty Global (i.e. the parent company of Virgin Media) said it expects the upgrade to cost only €20 per home.¹³⁷
- 3.43 Sky considered that Eircom now faces a weaker constraint from Virgin Media's CATV network than it did in the past, and that quarterly growth of fixed retail broadband services over Eircom's platform indicates that Eircom's market power is increasing. Sky also considered Eircom's price increases for Standalone and POTS-based¹³⁸ wholesale products such as Bitstream/VUA¹³⁹ as evidence of Eircom's market power.

¹³⁴ BT SIRO Network Agreement announcement 1 December 2016: <http://siro.ie/siro-bt-announce-network-agreement/>.

¹³⁵ Eircom's Response was dated January 2017. In this context ComReg assumes that the two years referred to by Eircom would imply January 2017 to January 2019.

¹³⁶ <http://www.independent.ie/business/technology/virgin-media-digs-in-for-fibre-battle-as-major-network-expansion-beckons-35378463.html>.

¹³⁷ <https://www.libertyglobal.com/pdf/public-policy/Liberty-Global-Policy-Series-Connectivity-for-the-Gigabit-Society.pdf>.

¹³⁸ Fibre access products (including VUA and Bitstream) can be provided with a telephone service (i.e. Plain Ordinary Telephone Service ('POTS') based) or on a standalone ('SA') basis.

¹³⁹ Virtual Unbundled Access ('VUA') is Eircom's Virtual Unbundled Local Access ('VULA') product.

3.44 In the EC Response on ComReg's Notified Draft Measures, the EC noted ComReg's proposed decision to exclude the localised alternative FTTH network infrastructure of certain operators¹⁴⁰ from the relevant market definition (see EC Response in Appendix: 2), however, in doing so the EC noted that:

*".....since the regulatory outcome is not affected given the still very limited coverage of these fibre networks, the Commission does not challenge ComReg's finding but would nevertheless like to stress the need for ComReg to include all access products based on fibre networks, whether or not such network is owned by the incumbent operator, within the relevant market in its final measure."*¹⁴¹

3.45 As set out in Appendix: 3 of this Decision, ComReg reiterates that, at the retail level, the functionality and product characteristics of broadband provided over localised alternative FTTH networks are comparable to larger-scale (though not necessarily national) FTTH networks (such as Eircom and SIRO). The limited geographic coverage of such localised alternative FTTH networks means that the effectiveness of any demand-side constraint is likely to be reduced as a consequence.

3.46 At the wholesale level, ComReg did not include localised alternative FTTH network infrastructure in the definition of the Relevant WLA Market or the Relevant WCA Markets, as such localised alternative FTTH networks do not offer, nor are likely to offer over the lifetime of this market review, wholesale services. Even if wholesale services were, from a supply-side entry perspective, to be made available by such localised alternative FTTH networks, ComReg is not satisfied that such networks would offer a sufficiently immediate and effective demand-side substitution possibilities such that it would effectively constrain a hypothetical monopoly supplier of wholesale FTTH services (in the context of the application of a hypothetical monopolist test ('HMT')).¹⁴² This is so given the coverage of such networks is very localised, relative to other FTTH networks such as Eircom and SIRO. ComReg also similarly concluded that, due to this limited geographic coverage, localised alternative FTTH networks are not likely to generate an effective indirect constraint on wholesale markets to warrant their inclusion in the Relevant WLA Market or Relevant WCA Markets.

¹⁴⁰ 'Localised alternative FTTH network' refers to FTTH networks operated by Service Providers, who provide FTTH services on a small-scale and geographically localised basis. Currently, this definition includes all FTTH network operators other than Eircom and SIRO, both of whom have indicated their intention to roll out FTTH networks on a regional or national basis. The current localised alternative FTTH network operators are Magnet and enet. In contrast, the term 'alternative FTTH network' refers to all FTTH network operators other than Eir, and therefore currently consists of SIRO plus all localised alternative FTTH network operators. While the EC Response did not indicate whether it referred to retail or wholesale markets, ComReg has assumed that the reference is to wholesale markets (as it did not exclude alternative operator retail FTTH services from the retail broadband market assessment), although it has considered the EC's comment in the light of both retail and wholesale markets.

¹⁴¹ See page 11 of the EC Response.

¹⁴² See footnote 145 below.

Sub-geographic markets and the impact of the NBP on ComReg's assessment

- 3.47 As noted in paragraph 3.26 above, Sky and enet agreed with ComReg's retail product and geographic market assessment set out in the Consultation.
- 3.48 As noted in paragraph 3.25, BT and ALTO agreed with ComReg that the NBP should not be considered to have a material impact in this review period. BT and ALTO stated that uncertainty remains around the deployment footprint of the NBP, given the instability in the size of the intervention area.
- 3.49 Eircom considered that ComReg has incorrectly defined the geographic scope of the retail market, noting differences in NGA rollout and means of network access between urban and rural areas, and the extent of LTE¹⁴³ based Mobile Broadband coverage in rural areas. Eircom referenced the European Commission's *Broadband Coverage in Europe 2015* study,¹⁴⁴ noting that LTE coverage in rural areas grew by 8.4% in the first half of 2015, reaching 73% of rural households by mid-2015, greatly above the EU average of 36%, and that with the rollout of LTE, mobile operators are able to offer bandwidths which are frequently above those which can be achieved on copper networks.
- 3.50 Eircom also noted that the NBP indicates that competitive conditions are not homogeneous across the State. Furthermore, Eircom noted that the 2014 WLA/WCA Market Research finds differences in accessing broadband services in urban and rural areas.
- 3.51 Vodafone agreed with ComReg's preliminary conclusion that there was likely to be a single geographic market for retail broadband services. Vodafone considered that geographic areas can differ by the types of technologies available, the download speeds offered and the associated service levels; however, the prevalence of national pricing indicates there is likely to be a single national retail market.

Role of Bundling of services in the retail market

- 3.52 Eircom noted that competition in the retail broadband market is occurring at the bundle level and noted that both Vodafone and itself had launched IPTV offerings. Eircom considered that, as a service provider that is subject to SMP-based regulatory obligations in a number of wholesale markets, Eircom is at a disadvantage relative to other non-SMP service providers, who are able to leverage their experience and existing customer bases in various markets.
- 3.53 Sky agreed with ComReg's preliminary conclusion that bundles with retail broadband formed part of the same market as standalone retail broadband products. Sky noted that, after four years in the retail broadband market in Ireland, less than one quarter of its TV customers also availed of its retail broadband products.

¹⁴³ Long Term Evolution ('LTE') refers to the Long Term Evolution family of standards from the European Telecommunications Standards Institute ('ETSI') and Third Generation Partnership Project ('3GPP'). It is a standard for smooth and efficient transition towards more advanced leading-edge technologies to increase the capacity and speed of wireless data networks.

¹⁴⁴ <https://ec.europa.eu/digital-single-market/en/news/broadband-coverage-europe-2015>.

- 3.54 Vodafone noted that consumers are increasingly bundling TV services with retail broadband, which can only be delivered over fibre or CATV networks. Vodafone considers that quality wholesale access products, with a certain level of control over network elements, are necessary to ensure that Vodafone can be a credible supplier of IPTV-based services.
- 3.55 Virgin Media noted that ComReg's analysis of retail bundles appears to focus primarily on broadband bundled with fixed voice telephony services, when the inclusion of IPTV services in retail bundles by Eircom and Vodafone was a more significant recent milestone in the broadband market. Virgin Media pointed out that the launch of IPTV meant that more choices are available for the sizeable group of consumers who wish to purchase both broadband and TV.

Retail Product Market Definition

- 3.56 As noted in the Consultation and paragraph 3.21 above, ComReg is not required to conclude on the precise scope of the retail market, but has carried out this analysis in order to inform the analysis of the upstream WLA and WCA markets.
- 3.57 enet agreed with ComReg's preliminary view that retail broadband services provided over copper, FTTC, FTTH and CATV networks all reside in the same Product Market. enet noted that, while there is increasing use of mobile broadband services and increasing substitution between 4G mobile and copper-based fixed broadband services, significant functional differences relating to data speeds, reliability/availability of service and download allowance still exist. These are material enough to warrant a finding that mobile broadband services reside in a different Product Market.
- 3.58 enet considered that FWA services have for many years been used by retail customers as a substitute for copper-based broadband for the simple reason that in many regional locations, in particular rural areas, FWA-based broadband offerings were the only ones available. enet stated that, to this extent, FWA-based retail broadband has been used as a substitute of last resort by End Users. Furthermore, enet pointed out that the absolute numbers of customers using FWA-based services is low and falling and so the inclusion or exclusion of broadband services over FWA networks will not influence its market analysis either way.

- 3.59 Eircom disagreed with ComReg's approach to market definition noting that, in its view, ComReg has failed to properly conduct the SSNIP test and that the conclusions reached were inconsistent with the 2014 WLA/WCA Market Research. Eircom considered that if the HMT¹⁴⁵ is to be used for market definition purposes, then a quantitative approach is merited. Eircom stated that there is a *prima facie* case for designing appropriate forms of customer survey and believed that ComReg had not done this in the Consultation.
- 3.60 Eircom considered that ComReg's 2014 WLA/WCA Market Research was not designed correctly, noting that the price increase of €2 was not representative of a SSNIP of 5-10% and therefore likely underestimated the hypothetical switching behaviour of respondents. Eircom noted that the €2 price increase was, in its view, an across-the-board increase (i.e. all respondents on all platforms, whether business or residential users, or purchasers of bundles or standalone products were asked how they would respond to a €2 increase). Eircom stated that applying a SSNIP of 5% and 10% to the average price of broadband provided over a copper network as well as the average price of broadband provided to business customers would yield an absolute increase of €2.25 and €4.50 respectively. Furthermore, Eircom stated that an increase of €2 falls outside of the average pricing range and, were the correct absolute increases based on average price to be applied, the result is still likely to underestimate the number of respondents who would switch.
- 3.61 Eircom suggested that the results of the 2014 WLA/WCA Market Research were not correctly interpreted by ComReg, as it indicated that a larger proportion (33%) of respondents who *would cancel and switch* and *who are very/fairly likely to do so*, would switch to fixed wireless access (FWA), compared to a fibre based service (25%) or even a cable service (20%). In this context, Eircom noted that the latter two are considered by ComReg as being within the retail broadband market, on the basis that they are effective substitutes.
- 3.62 Eircom noted that the conclusions ComReg reached are therefore inconsistent with the results of the market research – noting that, when faced with a generic €2 increase the number of respondents who would potentially switch in the event of a price increase is also likely to be underestimated, meaning a true SSNIP is likely to result in more customers switching to alternative products (including mobile broadband, FWA and satellite).

¹⁴⁵ As noted in paragraph 5.18 of the Consultation, the Hypothetical Monopolist Test ('HMT') is an economic analytical framework for defining a relevant product from a demand-side perspective is an examination of customer behaviour in response to price increases. The HMT consists of observing whether a small but significant non-transitory increase in price ('SSNIP') above the competitive level - taken to be in the range of 5 to 10% - of a candidate product supplied by a Hypothetical Monopolist ('HM') would provoke a sufficient number of customers to switch to an alternative product (a substitute product) such that it would make the price increase unprofitable. If a sufficient number of subscribers switching to the alternative product results in the price increase being unprofitable, then the alternative product is also included in the relevant Product Market. The HMT is carried out for any given number of alternative products which, by their characteristics, prices and intended use, may constitute an effective substitute to the focal/candidate product.

- 3.63 Referring to an assessment of whether a single service is a relevant market under the HMT, Eircom noted that the relevant measure is not of substitution to simply another service, but the totality of all substitution. Eircom also noted that, when focusing purely on another single service, it is possible to significantly underestimate the overall level of sales loss and, thus, overestimate the power an undertaking has to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers.
- 3.64 Finally, Eircom considered that ComReg failed to take account of all the competitive constraints which Eircom faces, and that ComReg has oversimplified the manner in which the retail broadband market works.
- 3.65 Sky agreed with ComReg's preliminary conclusion that broadband provided over copper, FTTC, FTTH and CATV networks constitutes a single market, based on the analysis conducted in Section 4 of the Consultation.
- 3.66 Vodafone agreed with ComReg's inclusion of copper, FTTC, FTTH and CATV in the same retail market on the basis that product characteristics, pricing and intended use of retail broadband services delivered over these networks are similar. Vodafone stated that this conclusion does not apply to retail broadband services provided over FWA, satellite and mobile networks which ComReg proposed to exclude from the market.
- 3.67 Vodafone also agreed that narrowband internet is not in the same market as retail broadband. Vodafone stated that, given the differences in product characteristics, pricing and intended use, End Users would not consider dial-up internet access to be an effective demand-side substitute for broadband access. Dial-up internet is a legacy product, offering much lower functionality (e.g. download speeds) compared to broadband, which is less attractive for both End Users to buy and SPs to sell.

Other key developments affecting retail markets

- 3.68 Respondents to the Consultation also raised a number of additional points relating to retail market trends and the retail market assessment.
- 3.69 Eircom noted that, since the Consultation was published by ComReg, Virgin Media had signed a multi-year agreement with Netflix¹⁴⁶ which, in its view, highlights the level of competition Eircom faces from other SPs.
- 3.70 Eircom also noted that Sky's entry to the retail broadband market in 2013 was a significant development. Eircom considered that Sky had the ability to leverage a substantial and well-established base of existing TV subscribers. Furthermore, Eircom noted that Sky had launched a mobile phone service in the UK and could do so in Ireland, which may further strengthen its market position.
- 3.71 As set out in paragraph 3.23, Virgin Media considered that ComReg failed to capture the magnitude of increased download speeds and data volumes in its assessment of retail trends. Virgin Media also noted that trends in speeds and data volumes reflect the degree of infrastructure investment made by SPs, which is driven by competition in the retail broadband market.

¹⁴⁶ <https://www.virginmedia.ie/about-us/press/2016/virgin-media-launches-netflix-on-horizon-tv/>.

3.72 Vodafone considered that the historic trend in download speeds and data traffic was likely to increase at a faster rate, going forward, and that ComReg should ensure that the new regulatory framework should pave the way for innovative wholesale services.

Other issues raised by Respondents

3.73 While ALTO agreed with ComReg's preliminary view that leased lines are not in the same market as broadband, it did, however, note that industry is concerned that ComReg's analysis of leased lines does not appear to have considered a key differentiator between leased lines and broadband, which is the respective quality of service ('QoS') of each technology. ALTO emphasised the difference in QoS by noting that leased lines services support 24/7 service coverage including a repair time in hours, whereas broadband SLAs are at best a working day SLA to repair.

3.74 ALTO and BT considered that the Consultation had overlooked the cost of FTTH connections for customers that do not have existing pole access or unbroken duct access into their premises. ALTO stated that Eircom indicated that it will not pay the potentially high cost of bringing a service from a curtilage of the property to the actual building. ALTO also stated that Eircom did not know how many customers are exposed to this potentially very high cost, and that this will make switching more expensive for an unknown group of customers.

3.75 As noted in paragraph 3.28 above, ALTO and BT considered that ComReg's analysis in paragraph 4.99 of the Consultation (which stated that Eircom's FTTC and FTTH network rollout will not overlap) was technically incorrect. ALTO and BT considered that these networks are not mutually exclusive.

3.76 Virgin Media considered that the HHI, a measure of market concentration that takes account of the differences in sizes of firms in the market, would provide a useful insight into the extent of competition in the retail broadband market over time. Virgin Media also proposed a correction to paragraph 4.171 of the Consultation,¹⁴⁷ noting that, while Virgin Media does provide a mobile service, it does not operate a mobile radio access network.

ComReg's Assessment of Respondents' Views

3.77 Below, ComReg assesses Respondents' views under each of the key themes identified in paragraph 3.32 above, in particular:

- (a) Competition from other networks and technologies (see paragraphs 3.79 to 3.116 below);
- (b) Sub-geographic markets and the impact of the NBP on ComReg's assessment (see paragraphs 3.117 to 3.123 below);
- (c) Role of Bundling of services in the retail market (see paragraphs 3.124 to 3.131 below);

¹⁴⁷ In which ComReg stated: "ComReg notes that the main retail providers of fixed broadband services (Eircom, Vodafone and Virgin Media) also operate mobile networks and have the ability to provide 3G/4G mobile broadband services."

- (d) Retail Product Market Definition (see paragraphs 3.132 to 3.140 below);
- (e) Other key developments affecting retail markets (see paragraphs 3.141 to 3.148 below); and
- (f) Other issues raised by respondents (see paragraphs 3.149 to 3.156 below).

3.78 Having considered Respondents' views, ComReg's overall position is then set out at paragraphs 3.157 to 3.159 below.

Competition from other networks and technologies

- 3.79 As set out in paragraph 3.35 above, in its Submission, Eircom was of the view that ComReg had failed to correctly define the retail Product Market. ComReg does not agree with Eircom's view that Mobile Broadband and FWA services are likely to be effective substitutes for broadband provided over copper, FTTx and CATV¹⁴⁸ networks. ComReg's position on the retail Product Market definition is based on a consideration of multiple factors and product characteristics,¹⁴⁹ in addition to a range of evidence that has informed the substitution assessment, as set out in paragraphs 3.80 to 3.116 below (and in the Consultation).
- 3.80 With respect to Mobile Broadband, ComReg remains of the view that there are sufficient functional differences between Mobile Broadband and broadband provided over copper, FTTx or CATV networks, such that Mobile Broadband is not likely to be considered an effective substitute by a sufficient number of fixed broadband customers on a forward-looking basis. In particular, Mobile Broadband offers customers mobility, but is limited compared to fixed broadband in terms of actual download speeds, download allowances and reliability of service.

¹⁴⁸ Broadband provided over a copper network as set out in paragraph 4.15 of the Consultation.

¹⁴⁹ Table 2 on page 87 of the Consultation gives a summary of the product characteristics of each of the platforms and the differences between them.

- 3.81 ComReg considers that Mobile Broadband is not an effective substitute for broadband provided over copper, FTTx and CATV. As explained below, download speeds on Mobile Broadband are highly variable, despite advertised Mobile Broadband product speeds of up to 150Mb.¹⁵⁰ Actual download speeds experienced over Mobile Broadband are typically lower due to the mobile nature of broadband provided over this platform and, in particular, the ability of End Users to roam across mobile networks, which may create variance in the number of users within the footprint of a specific mobile base station.¹⁵¹ ComReg presents its Mobile Coverage Assessment in Table 1 below.¹⁵²
- 3.82 The typical speeds experienced in the test were significantly lower than the maximum mobile broadband speeds advertised as being available by Mobile Service Providers ('MSPs'). ComReg's analysis of mobile broadband packages shows that advertised download speeds range from 7.2 Mb/s to 150 Mb/s, with the average being 51Mb/s.¹⁵³ By comparison, broadband services provided over FTTC, CATV and FTTH networks have maximum advertised download capabilities of 100Mb, 360Mb and 1000Mb respectively.¹⁵⁴

Table 1: Extract from ComReg's 2016/2017 Mobile Coverage Assessments

Licensee	Technology	Download Speed (Stationary) (Mb) - Summer 2017	Download Speed (Stationary) (Mb) - Winter 2016	Download Speed (Stationary) (Mb) - Summer 2016	Download Speed (Stationary) (Mb) - Winter 2015
Meteor	3G HSDPA	8.13	6.88	6.6	6.81
	LTE	13.46	15.42	16.35	14.47
3IHL No.1	3G HSDPA	3.16	3.29	3.55	3.67
	LTE	5.05	8.47	16.69	10.60
3IHL No.2	3G HSDPA	4.64	4.14	4.45	
	LTE	11.16	10.47	17.11	
Vodafone	3G HSDPA	11.65	7.91	6.76	8.95
	LTE	22.63	22.32	22.28	20.4

¹⁵⁰ ComReg analysis of mobile broadband suggests that highest advertised attainable download speed is Vodafone's Red Mobile Broadband Ultra package which advertises download speeds of up to 150Mb: <http://shop.vodafone.ie/shop/mobile-broadband/standard-mobile-broadband-sim>.

¹⁵¹ See paragraph 4.149 of the Consultation.

¹⁵² ComReg Information Notice 17/79 Assessment of Mobile Network Operators' Compliance with Licence Obligations (Coverage) – Summer 2017, at p. 28 ('**2017 Mobile Coverage Assessment**'). Three Ireland holds two sets of licences. The original set of 3IHL licences are referred to as '**3IHL No.1**' and the former Three Ireland Services (Hutchison) Limited 2 licences are referred to as '**3IHL No.2**'.

¹⁵³ See Appendix: 7 for ComReg's analysis of fixed and mobile broadband packages.

¹⁵⁴ Despite having a maximum network download capability of 24 Mb ComReg included retail broadband access provided over a copper network in the relevant Product Market in part due to functional differences compared to Mobile Broadband and, in part, due to this platform then accounting for that over which most broadband services were provided. While broadband provided over a copper network is no longer the most popular platform (being surpassed by VDSL in Q3 2016) it is still very popular (with 359,002 users in Q4 2017), and is expected to remain sufficiently prevalent on a forward-looking basis.

- 3.83 The 2017 WLA/WCA Market Research also showed that perceptions of speeds obtained on Mobile Broadband were lower than speeds obtained over copper, fibre and cable broadband respectively. On Mobile Broadband, the average claimed download speed was 20Mb/s, compared with 124Mb/s over FTTx, 64Mb/s over CATV and 48Mb/s over copper.¹⁵⁵
- (a) As noted in the Consultation,¹⁵⁶ Mobile Broadband offerings typically include a download allowance ranging from 2GB to 50GB,¹⁵⁷ compared with unlimited download allowances on broadband provided over copper, FTTx and CATV.
 - (b) In terms of data traffic, Figure 5¹⁵⁸ shows that average monthly traffic on Mobile Broadband subscriptions is between 9.4GB to 10.3GB per month, while it is around 80GB per month for DSL (copper) subscribers, 140GB for VDSL (FTTC) subscribers and 180GB for CATV subscribers. For FTTP subscribers the monthly traffic as of Q4 2017 is 142.8Gb.¹⁵⁹
 - (c) ComReg's analysis of prices for Mobile Broadband packages shows that prices range from €7.50 to €69.99 per month, with an average price of €32.00.¹⁶⁰ The 2017 WLA/WCA Market Research indicated that the average monthly price of Mobile Broadband for residential End Users was €45 as part of a bundle, and €29 on a standalone basis.¹⁶¹

¹⁵⁵ See slide 88 of the 2017 WLA/WCA Market Research.

¹⁵⁶ See paragraph 4.153 of the Consultation.

¹⁵⁷ Three Ireland offer a 4G Mobile Broadband package with a download allowance of 250GB - <http://www.three.ie/plans/mobile-broadband/> and one with an unlimited download allowance - <http://www.three.ie/plans/mobile-broadband/bill-pay/>. Three also offer some business mobile broadband packages with unlimited download allowances. This is an exception; most SPs offer packages with a maximum download limit of 50Gb.

¹⁵⁸ As set out at paragraph 3.145 below.

¹⁵⁹ ComReg Quarterly Key Data Report, Q4 2017. FTTP (fibre to the premises) refers to a range of fibre access installations such as fibre to the home (FTTH), fibre to the premises (FTTP) and fibre to the curb.

¹⁶⁰ ComReg analysis of fixed and mobile broadband packages – see Appendix: 7.

¹⁶¹ See slides 38 and 52 of the 2017 WLA/WCA Market Research.

- (d) In relation to intended use of broadband access, Table 2 below summarises the findings from the 2017 WLA/WCA Market Research. The findings suggest that many applications of broadband access by residential End Users are lower on Mobile Broadband compared with fixed broadband (copper, CATV and FTTx respectively). For example, real-time video calling, downloading, streaming, gaming and working from home receive less usage over Mobile Broadband compared with copper, cable and fibre. The 2017 WLA/WCA Market Research also showed that, in an average day, residential Mobile Broadband End Users spent 3.3 hours accessing the internet, compared with 4.9 hours via FTTx network, 4.8 hours via broadband provided over a copper network and 4.6 hours via CATV broadband.¹⁶² The number of hours spent accessing the internet has increased across all platforms compared with the 2014 WLA/WCA Market Research.

Table 2: Residential Respondent views on Intended Use of Broadband Access¹⁶³

	BB via Copper phone (n=668) %	Cable Network (n=345) %	Fibre Network (n=319) %	Mobile broadband (n=121) %	Other broadband (n=121) %
Browsing the internet	91	92	94	97	93
Social Media	59	61	62	50	69
Using email	54	70	67	45	63
Purchasing goods/ services	50	49	53	47	54
Manage Banking, Pay Bills, Other Services	43	49	53	32	50
Using real-time video/voice calling	33	45	52	24	42
Downloading/ streaming movies music/ TV programmes	36	43	35	20	27
Gaming or interactive gaming	24	26	17	13	25
Working at home/Teleworking	18	27	23	15	17
Study/College	15	12	17	5	20
* Small sample size/base					

3.84 ComReg has updated the 2014 WLA/WCA Market Research and this 2017 Market Research further supports the premise that Mobile Broadband is not likely to be a sufficiently effective competitive constraint on broadband provided over copper, FTTx and CATV networks.

¹⁶² See slide 18 of the 2017 WLA/WCA Market Research.

¹⁶³ See slide 20 of the 2017 WLA/WCA Market Research.

- 3.85 Table 3 and Table 4 below give the SSNIP response for users with standalone broadband. Of those users that would change their behaviour in response to a SSNIP, just 6% would switch to mobile broadband. In contrast, 22% would switch to FTTx broadband and 8% to CATV broadband, while 29% would continue on the same platform with a different SP. As with the 2014 WLA/WCA Market Research, these findings suggest that End Users do not consider Mobile Broadband to be an effective substitute for fixed broadband.
- 3.86 Table 3 below summarises Residential End Users' responses to a SSNIP of €2 in the price of their current broadband platform. For users with broadband provided as part of a bundle with other services, of those that would change their behaviour in response to the SSNIP, just 4% would switch to Mobile Broadband. In contrast, 25% would switch to FTTx broadband, 10% to broadband over copper and 8% to CATV broadband, while 18% would continue with the same broadband platform but provided by a different SP.¹⁶⁴

¹⁶⁴ The platform from which End Users would switch was not provided given the low base size.

Table 3: SSNIP test for Residential End Users with Broadband in a Bundle¹⁶⁵

Response to Question about behavioural change in response to €2 increase in the price of broadband service per month (Slide 55) - Customers with broadband in a bundle		
	%	N
Sample		961
Keep	81%	
Change behaviour	19%	
<i>Of which</i>		
Cancel Completely	3%	
Cancel/switch broadband	2%	
Cancel/switch all	3%	
Don't Know	6%	
Something else	6%	
Very/fairly likely to change behaviour	96%	
Unlikely to change behaviour	4%	
<i>Broadband Likely Switch to*</i>		50*
Broadband service provided by a Fibre supplier	25%	
Continue with the same type of service offered by a different provider	18%	
Broadband service provided over a traditional fixed telephone line	10%	
Broadband service provided by a TV cable supplier	8%	
Solely using my mobile phone for internet access instead (3G/4G data package)	6%	
A Mobile Broadband solution	4%	
Broadband provided by a Satellite network	2%	
Fixed wireless connection, often provided via an aerial/antennae attached to your home	2%	
I/We Would do something else	27%	
*Small sample size		

3.87 Table 4 below gives the SSNIP response for users with standalone broadband. Of those that would change their behaviour in response to the SSNIP, just 6% would switch to Mobile Broadband. In contrast, 22% would switch to FTTx broadband and 8% to CATV broadband, while 29% would continue on the same platform with a different SP. As with the 2014 WLA/WCA Market Research, these findings suggest that End Users do not consider Mobile Broadband to be a substitute for fixed broadband, and it should be noted also that Mobile Broadband (3G/4G) has good national coverage.¹⁶⁶

¹⁶⁵ See slides 55, 58 and 61 of the 2017 WLA/WCA Market Research.

¹⁶⁶ <http://siteviewer.comreg.ie/>.

Table 4: SSNIP test for Residential End Users with Standalone Broadband¹⁶⁷

Response to Question about behavioural change in response to €2 increase in the price of broadband service per month (Slide 66) - Customers with standalone broadband		
	%	N
Sample		579
Keep	76%	
Change behaviour	24%	
<i>Of which</i>		
Cancel Completely	2%	
Cancel/switch	3%	
Cancel/switch all	3%	
Don't Know	10%	
Something else	5%	
Very/fairly likely to change behaviour	96%	
Unlikely to change behaviour	4%	
<i>Broadband Likely Switch to*</i>		34*
Broadband service provided by a Fibre supplier	22%	
Continue with the same type of service offered by a different provider	29%	
Broadband service provided over a traditional fixed telephone line	5%	
Broadband service provided by a TV cable supplier	8%	
Solely using my mobile phone for internet access instead (3G/4G data package)	5%	
A Mobile Broadband solution	6%	
Fixed wireless connection, often provided via an aerial/antennae attached to your home	9%	
I/We Would do something else	15%	
*Small sample size		

3.88 The 2017 WLA/WCA Market Research also elicited business End Users' views on substitutability between broadband platforms by way of a SSNIP test. For business End Users with broadband provided as part of a bundle, of those that would cancel and switch in response to a €2 SSNIP, just 4% stated that they would switch to a Mobile Broadband solution, compared to 10% who stated they would switch to a FTTx network and 49% who stated that they would continue with the same type of service offered by a different SP.¹⁶⁸

¹⁶⁷ See slides 66, 69 and 70 of the 2017 WLA/WCA Market Research.

¹⁶⁸ See slides 36 to 38 of the 2017 WLA/WCA Market Research (Business Market).

- 3.89 For business End Users with standalone broadband, of those that would cancel and switch in response to a €2 SSNIP, 12% stated that they would switch to a Mobile Broadband solution, while 15% stated that they would switch to broadband over copper, 28% would switch to broadband over FTTx, and 22% stated that they would continue with the same type of service offered by a different SP.¹⁶⁹
- 3.90 Having regard to the above, ComReg does not agree with Eircom's view that Mobile Broadband is a substitute for broadband provided over copper, FTTx or CATV-based networks. ComReg takes the view that, where available, consumers are more likely to subscribe to a fixed broadband package over copper, CATV or FTTx networks than a Mobile Broadband package. Furthermore, in the event of an increase in the price of copper, consumers who can access CATV or FTTx networks are unlikely to switch to a package offered over Mobile Broadband in sufficient numbers to make the price increase unprofitable.
- 3.91 ComReg's views in this regard are supported by the results of the *Ireland Communicates Survey 2017*, which was carried out by Ipsos MRBI on behalf of ComReg in November and December 2017, and which investigated usage patterns of both residential and SME End Users (hereafter, '**Ireland Communicates 2017 – Residential**' and '**Ireland Communicates 2017 – SMEs**'). The survey reported that only 13% of SME respondents used mobile broadband, down from 18% in 2015, compared to 92% of SME respondents who use fixed broadband.¹⁷⁰
- 3.92 In respect of residential users, 69% of respondents used fixed broadband, while 25% used mobile broadband.
- 3.93 In relation to Eircom's point (outlined in paragraph 3.59 above) that the SSNIP questions in the market research are not appropriate and do not provide evidence of substitutability between platforms, ComReg addresses this point below in paragraphs 3.131 to 3.139.
- 3.94 In relation to Eircom's point on substitutability with broadband provided over FWA services (paragraphs 3.35 and 3.60 above), ComReg remains of the view that, having regard, amongst other things, to the rate at which FWA subscriber figures are growing compared to broadband as a whole, and due to a lack of suitability for all applications (including higher bandwidth applications), that, on a forward-looking basis, End Users are not likely to view FWA services as effective substitutes for copper, FTTx or CATV-based broadband services.¹⁷¹

¹⁶⁹ See slides 40 to 42 of the 2017 WLA/WCA Market Research (Business Market).

¹⁷⁰ See slide 7 of *Ireland Communicates 2017 – SMEs* (available online at <https://www.comreg.ie/publication-download/ireland-communicates-survey-2017-small-medium-enterprises-sme>).

¹⁷¹ See paragraph 4.205 of the Consultation.

- 3.95 In relation to Eircom's reference to the Imagine-Huawei WTTx strategic partnership, ComReg understands that WTTx is a particular instance of FWA which, according to Huawei, uses LTE and 4.5G technologies¹⁷² to provide broadband at fixed locations, using wireless technology. Given that WTTx is not currently available, ComReg cannot consider it as an effective substitute for broadband provided over copper, FTTx, or CATV. However, in view of Huawei's positioning of WTTx as a direct substitute to FTTx,¹⁷³ and claimed speeds of 200Mbps¹⁷⁴ ComReg notes that, as indicated at paragraph 3.17 above, it will have regard to the product characteristics of FWA-based services on a forward-looking basis.
- 3.96 ComReg does not consider broadband provided over FWA services to be an effective substitute for broadband services provided over copper, FTTx or CATV networks for the following reasons:
- (a) Subscriptions to FWA-based services rose by just 1.8% (844 subscriptions) in the year to Q4 2017, while subscriptions to VDSL services rose by 15.1%. Subscriptions to FWA services still comprise only 3.39% of total fixed broadband¹⁷⁵ subscriptions (i.e. excluding Mobile Broadband).
- (b) ComReg also notes the positioning of FWA products in the retail broadband market. For example, Imagine (a major provider of FWA services) states on its website that it is:

*"Connecting rural Ireland to fibre".*¹⁷⁶

Furthermore, Imagine appears to market its LTE product predominantly at customers residing in rural locations:

*"The internet is amazing, most people in rural Ireland don't have access to internet connections that showcase everything it has to offer. Your internet speed shouldn't be a bottleneck to accessing your lifestyle, education and entertainment."*¹⁷⁷

The above suggests that Imagine's products are targeted at consumers that may not have access to a copper, FTTx or CATV broadband service and so consider Imagine's products to be the only alternative in this case.

¹⁷² <http://www.huawei.com/en/press-events/news/2017/8/WTTxGame-Changer-Superfast-Broadband>.

¹⁷³ <http://www.marketwired.com/press-release/huawei-and-imagine-announce-wttx-game-changer-in-the-delivery-of-superfast-broadband-2229330.htm>.

¹⁷⁴ <http://www.huawei.com/en/press-events/news/2017/8/WTTxGame-Changer-Superfast-Broadband>.

¹⁷⁵ Fixed broadband subscriptions include Narrowband, Cable, DSL, VDSL, Fibre to the Premise (FTTP), Satellite and FWA.

¹⁷⁶ <https://www.imagine.ie/>.

¹⁷⁷ <https://www.imagine.ie/>.

- (c) The currently partial geographical coverage of FWA (which is provided over LTE) in Ireland means that FWA services are not universally available. It is possible that following the conclusion of the 3.6 GHz spectrum assignment process in May 2017 that new information will become available on the deployment of TD-LTE FWA in Ireland.
- (d) Speeds offered over FWA range from 3Mb/s to 70Mb/s, compared with up to 100Mb/s on FTTC, up to 360Mb/s on CATV and 1000Mb/s on FTTH. As with Mobile Broadband (noted in paragraph 3.80(a)), FWA is a shared medium, meaning that it is sensitive to the number of users simultaneously active.
- (e) Figure 5 below shows that monthly traffic on FWA subscriptions is between 49 and 80GB,¹⁷⁸ which is lower than the traffic on FTTx and CATV subscriptions.
- (f) ComReg also notes that Imagine, among other FWA providers of retail broadband, [§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]].¹⁷⁹
- (g) In relation to intended use of broadband access, Table 2 above summarises the findings from the 2017 WLA/WCA Market Research. The number of residential respondents using FWA broadband was low (just 4% of the total sample of respondents with broadband (n=1,616)), and so the results from FWA, 3G/4G on a mobile phone and satellite End Users were aggregated into an 'Other broadband' category. The findings with respect to 'Other broadband' suggest that many usages and applications of broadband access are lower on these platforms (FWA, 3G/4G on a mobile phone and satellite) compared with fixed broadband (copper, CATV and FTTx respectively). For example, downloading, streaming and working from home receive less usage over 'Other broadband' compared with copper, CATV and FTTx.

¹⁷⁸ ComReg Quarterly Key Data Report Q4 2017.

¹⁷⁹ Information obtained from Imagine's response to a July 2017 SIR.

- (h) Table 3 and Table 4 above outline the responses of residential End Users to a SSNIP of €2 in the price of their current broadband service (both as part of a bundle and on a standalone basis). For users with broadband provided as part of a bundle (Table 3) with other services, of those that would change their behaviour in response to a SSNIP, subsequently cancel and switch their broadband package, just 2% would switch to FWA broadband. In contrast, 25% would switch to FTTx broadband, 10% to broadband over copper and 8% to CATV broadband, while 18% would continue with the same broadband platform, but provided by a different SP.
 - (i) Table 4 above gives the SSNIP response for users with standalone broadband. Of those that would change their behaviour in response to a SSNIP, subsequently cancel and switch their broadband package, 9% would switch to FWA broadband. In contrast, 22% would switch to FTTx broadband, while 29% would continue on the same platform with a different SP.
 - (j) For business End Users with broadband provided as part of a bundle, the 2017 WLA/WCA Market Research findings showed that, of respondents that would cancel and switch in response to a €2 SSNIP, just 6% stated that they would switch to FWA, compared with 10% who stated that they would switch to a FTTx network, and 49% who stated that they would continue with the same type of service, but offered by a different SP.¹⁸⁰ For business End Users with standalone broadband, of those that would cancel and switch in response to a €2 SSNIP, 14% stated that they would switch to FWA, while 15% stated that they would switch to broadband over copper, 28% stated that they would switch to broadband over FTTx, and 22% stated that they would continue with the same type of service offered by a different SP.¹⁸¹
- 3.97 Table 5 below details some examples of FWA products available. FWA services tend to be focused only on specific geographic areas and particularly rural areas where broadband over FTTx is unavailable. FWA can require significant set-up costs, typically where some form of specialist receiving equipment must be installed and these services are often accompanied with monthly usage caps.

¹⁸⁰ See slides 36 to 38 of the 2017 WLA/WCA Market Research (Business Market).

¹⁸¹ See slides 40 to 42 of the 2017 WLA/WCA Market Research (Business Market).

Table 5: Imagine's FWA Retail Product¹⁸²

	LTE Fibre Speed Broadband & Call Pack
Contract Length	18 months
Price (incl. VAT) per month	€59.99
Download Speed	70 Mb
Upload Speed	10 Mb
Download Allowance	20GB per day
Line Rental	No
Once-off Charges	€50 activation fee, €100 engineer installation (if outdoor coverage)
Other Services included	Unlimited local and national calls

- 3.98 Having regard to the above, ComReg does not agree with Eircom's view that FWA is an effective substitute for broadband provided over copper, FTTx or CATV networks. ComReg takes the view that, where available, consumers are more likely to subscribe to a fixed broadband package over copper, CATV or FTTx than a FWA package, and that a SSNIP in such broadband products would not likely result in sufficient switching to FWA-based broadband to render a SSNIP unprofitable.
- 3.99 In preparation for the Consultation, ComReg issued a Statutory Information Requirement ('**SIR**') in February 2015¹⁸³ seeking the views of SPs on substitutability across product platforms. Eircom noted in its response that, while it considered FWA to be a substitute for broadband provided over a copper network, and Mobile Broadband not to be a substitute for broadband provided over a copper network,¹⁸⁴ it acknowledged that there were differences in the stability of services provided over FWA and Mobile Broadband. ComReg notes that Eircom has changed its view as now expressed in its submission.

¹⁸² <https://www.imagine.ie/broadband/>.

¹⁸³ ComReg sent a Statutory Information Request ('**SIR**') to 23 SPs in February 2015 seeking a range of quantitative and qualitative information.

¹⁸⁴ See Table 5 of the Consultation.

3.100 ComReg has also examined market research into rural broadband conducted by Behaviour & Attitudes on behalf of Eircom, which it obtained by means of a SIR issued in July 2017 (the '**Rural Broadband Market Research**'). The Rural Broadband Market Research assessed broadband provision in two discrete areas: the 475,000 premises falling within the footprint of the NBP (the '**NBP footprint**') and the 300,000 premises which Eircom is to supply with high-speed broadband, which were removed from the NBP footprint in April 2017 (the '**Rural 300k footprint**').¹⁸⁵ As of June 2017, within the Rural 300k footprint and NBP footprints [§< [REDACTED]]

3.101 Across both footprints, approximately 40% of respondents had switched broadband provider in the last five years, while just under half of respondents had either never switched, or were unable to switch, broadband provider.

3.102 Further market research carried out by B&A on behalf of Eircom (relating to January to March 2017) focussed on the business broadband segment found that awareness of Mobile Broadband packages amongst respondents was low, at 7-9%. There was also limited take-up of Mobile Broadband for business, at a total of 8%, an increase of 1% year-on-year.

Spectrum Award

3.103 On 22 May 2017, ComReg announced the results of the 3.6 GHz Band Spectrum Award. The Award, which was conducted by auction, resulted in the successful assignment of all 350 MHz of spectrum. The spectrum was offered in 594 lots spread over nine regions (four rural and five urban) and assigned on a contiguous basis.¹⁸⁶ It confirmed that Imagine, currently the largest Wireless Internet Service Provider ('**WISP**') obtained spectrum rights of use for 60 MHz in each of the rural regions. Furthermore, Airspan Spectrum Holdings Ltd ('**Airspan**') – a new entrant and the UK arm of a US global provider of 4G broadband wireless systems and solutions – obtained spectrum rights of use for 25 MHz in the rural regions and 60 MHz in the cities. Airspan's products serve operators and markets such as smart utilities, transportation and public safety in both licensed and licence exempt frequency bands.¹⁸⁷

¹⁸⁵ As detailed in the April 2017 agreement between Eircom and the Minister for Communications, Climate Change and Environment, set out at <https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf>.

¹⁸⁶ <https://www.comreg.ie/publication/results-3-6-ghz-band-spectrum-award/>.

¹⁸⁷ Airspan's products serve operators and markets such as smart utilities, transportation and public safety in both licensed and licence exempt frequency bands.

5G Standard

- 3.104 The global 5G standard is still under development by the International Telecommunication Union ('ITU') in a programme known as IMT 2020.¹⁸⁸ Against this backdrop, the 3rd Generation Partnership Project ('3GPP'), which is a partnership between standard bodies across Europe, North America and Asia (China, Japan, Korea, India), is developing the commercial standard based on the IMT 2020 standard, which 3GPP aims to complete by June 2018.¹⁸⁹
- 3.105 The 5G standard being developed by 3GPP will allow manufacturers in the partnership regions to begin manufacturing equipment which will be used for trials and launching of commercial services.¹⁹⁰ The global standard, IMT 2020, being developed within the ITU is not scheduled to be completed until 2020 but a more precise date remains unspecified.¹⁹¹ The 3GPP standard will not be in conflict with the global standard, as IMT 2020 work comes to an end, 3GPP will refine the standard to ensure it complies.
- 3.106 The 5G Infrastructure Public Private Partnership ('5G PPP') launched in 2013 includes the following three phases:¹⁹²
- (a) R&I on basis technologies and subsystems
 - (b) Proof of concepts and early demonstrators
 - (c) Trials and large-scale demonstrations
- 3.107 Phase 3 is currently being prepared for 5G PPP and is to be implemented under the H2020 work programme covering the 2018-2010 timeframe. Accordingly every Member State will commit 5G in at least one major city by the end of 2020. All urban areas and major terrestrial transport paths should in turn have uninterrupted 5G coverage by 2025.¹⁹³

5GHz spectrum

- 3.108 ComReg is aware of reports since the Consultation whereby wireless providers are reported to have begun deploying new technology to bring wireless broadband to rural communities in Longford, Cavan, Roscommon and Leitrim. More specifically, Eurona and Azotel have deployed PMP 450 with cnMedusa technology from global wireless broadband solutions provider Cambium Networks.¹⁹⁴

¹⁸⁸ In this context, IMT refers to International Mobile Telecommunication system.

¹⁸⁹ http://www.3gpp.org/images/articleimages/5g_timeline.jpg.

¹⁹⁰ <https://www.sdxcentral.com/articles/news/5g-nr-specification-gets-fast-tracked-by-3gpp-standards-group/2017/03/>.

¹⁹¹ <http://www.itu.int/en/ITU-R/study-groups/rsg5/rwp5d/imt-2020/Pages/default.aspx>.

¹⁹² <http://www.mlex.com/ITCMedia/DetailView.aspx?cid=897097&siteid=147&rdir=1>.

¹⁹³ <http://www.mlex.com/ITCMedia/DetailView.aspx?cid=897097&siteid=147&rdir=1>.

¹⁹⁴ https://www.siliconrepublic.com/comms/wireless-broadband-rural-ireland?utm_source=Silicon+Republic+news+alerts&utm_campaign=cecb6fc649-9am+News+Alerts5+29+2015&utm_medium=email&utm_term=0_1c0c3c9f35-cecb6fc649-110005401&mc_cid=cecb6fc649&mc_eid=9c34727b49.

- 3.109 ComReg's position is that, for most customers, FWA is unlikely to be a sufficiently close substitute for broadband services provided over copper, fibre or cable over the period of this market review. However, ComReg notes there are innovations that may challenge this assumption and offer stronger substitutes to fixed broadband in the longer term.
- 3.110 ComReg provides further reasoning for its position that FWA and Mobile Broadband are unlikely to fall within the retail Product Market in paragraphs 3.132 to 3.140 below.
- 3.111 Notwithstanding the points raised in paragraphs 3.79 to 3.108, ComReg reiterates that it is not required to conclude on the precise scope of the retail market, but has carried out this analysis in order to inform the analysis of the WLA and WCA markets.¹⁹⁵
- 3.112 With respect to Eircom's comments on SIRO's network coverage and customers, as set out in paragraph 3.41 above, ComReg is aware that SIRO has reached a network agreement with BT, allowing BT to access SIRO's network,¹⁹⁶ and notes that this development took place after the publication date of the Consultation.
- 3.113 Eircom considered that SIRO's planned rollout would reach 500,000 premises by the end of 2018, but ComReg remains of the view that, having regard to progress to date that [§< ██████████ ██████████], this level of coverage is unlikely within this timeframe. Based on rollout projections obtained through a SIR issued to SIRO in November 2017 and submitted to ComReg in January 2018, SIRO's projected number of homes passed is expected to reach [§< ██████████] by end 2018. This is just over [§< ██████████] of the planned [§< ██████████] premises to be passed by end 2018.
- 3.114 ComReg is also aware of Virgin Media's publicly announced plans to expand its footprint to a further 200,000 premises,¹⁹⁷ and to rollout DOCSIS 3.1 technology.¹⁹⁸ Notwithstanding this, while this rollout would extend the coverage of Virgin Media's CATV Network if it materialises, ComReg has already included CATV products in the retail Product Market, and this position would not change with increased coverage. ComReg's position on this is considered in Section 4.
- 3.115 In Sections 4 and 9 of this Decision,¹⁹⁹ ComReg considers whether wholesale services offered over FWA are a potential effective substitute to wholesale services offered over other networks.

¹⁹⁵ See paragraph 4.273 of the Consultation.

¹⁹⁶ <http://siro.ie/siro-bt-announce-network-agreement/>.

¹⁹⁷ <https://www.independent.ie/business/technology/virgin-media-digs-in-for-fibre-battle-as-major-network-expansion-beckons-35378463.html>.

¹⁹⁸ <http://vmbiz.ie/blog/what-docsis-means-for-high-speed-broadband-in-ireland/>.

¹⁹⁹ At paragraphs 4.8 and 9.9 below.

3.116 As outlined in paragraph 3.43 above, in its response to the Consultation Sky considered that Eircom faces a weaker constraint from Virgin Media's CATV network than in the past, basing its view on Eircom price increases for Standalone and POTS-based Bitstream/VUA, with this being evidence of Eircom's market power. ComReg's view is that Eircom is likely to face a degree of competitive constraint from Virgin Media in areas where Virgin Media has a network presence. The extent of this constraint and its impact on the WLA and WCA markets is considered in Sections 4 and 9 (paragraphs 4.128 to 4.133 and 9.221 to 9.222 respectively).

Existence of sub-geographic markets and the impact of the NBP on ComReg's assessment

3.117 ComReg considers below Respondents' views on the existence of sub-geographic markets and the impact of the NBP, as summarised in paragraphs 3.47 to 3.51 above. As noted in paragraph 3.21 above,²⁰⁰ ComReg is not required to conclude on the precise geographic scope of the retail broadband market, absent regulation in the WLA and WCA Markets.

3.118 As noted in paragraph 3.47, Sky and enet agreed with ComReg's retail and Product Market assessments. As outlined in paragraph 3.48 above, BT and ALTO agreed with ComReg that the NBP should not be considered to have a material impact in this review period, while Vodafone agreed with ComReg's preliminary conclusion that there was likely to be single geographic market for retail broadband services.

3.119 In its response (see paragraphs 3.49 to 3.50 above), Eircom considered that ComReg has incorrectly defined the retail geographic market and noted that the existence of the NBP indicates that competitive conditions are not sufficiently homogeneous across the country, such that separate geographic markets exist. Eircom also referred to the 2014 WLA/WCA Market Research, which shows differences in broadband access between urban and rural areas.

3.120 It is ComReg's view that, despite certain differences in competitive conditions (mainly relating to supply), the existence of national pricing and limited differences in demand characteristics across regions, means that the retail broadband market is likely to be national, absent regulation in the WLA and WCA markets. While the ability to switch between platforms may be constrained by the limited coverage of certain platforms, on a forward-looking basis coverage is likely to grow somewhat, particularly with respect to NGA services. For example, while CGA services are offered on a near-ubiquitous basis, NGA FTTC-based services currently cover about 73% of premises (Eircom's NGA FTTC footprint extends to 1.6 million premises),²⁰¹ while CATV broadband services currently cover 855,300 premises - including Virgin Media FTTP (36% of total premises).²⁰²

²⁰⁰ See also paragraph 4.294 of the Consultation.

²⁰¹ <http://fiberrollout.ie/%20where-and-when/>.

²⁰² Liberty Global Q4 2017 and full year results - <http://www.libertyglobal.com/pdf/press-release/Liberty-Global-Q4-2017-Press-Release.pdf>.

Role of Bundling of services in the retail market

- 3.124 As noted in paragraphs 3.52 to 3.55 above, Eircom, Virgin Media and Vodafone expressed views in relation to the bundling of retail broadband services with other retail services including TV, with Respondents emphasising the significance of IPTV in various contexts, as detailed below.
- 3.125 As noted in paragraph 3.52 above, Eircom considered that, as competition is occurring in the provision of bundles, Eircom is at a disadvantage to unregulated SPs. ComReg notes, however, that Eircom maintains a ubiquitous CGA network and an NGA footprint that will ultimately extend to 1.9 million premises²¹⁰ (approximately 86% of all premises in the country). This NGA network coverage surpasses that of any other network operator and generates considerable economies of scale and scope. Furthermore, ComReg notes that at the end of 2015 Eircom acquired Setanta Sports Channel Ireland Limited and certain assets and the business of Setanta Sports Hibernia S.à.r.l., from Setanta Sports Broadcasting Limited (the acquisition of which was approved by the CCPC in January 2016).²¹¹ Eircom also acquired BT's Sports rights,²¹² which gives Eircom the rights to broadcast certain popular sporting events, such as the Rugby World Cup and Premier League matches (amongst others). ComReg notes also that Eircom has offered free access to eir sport for customers that switch to eir Mobile.²¹³
- 3.126 The Ireland Communicates 2017 surveys indicate that a majority of End Users in Ireland purchase bundles. 67% of SMEs avail of bundles, an increase of 3% since 2015.²¹⁴ In comparison, 56% of residential consumers purchase bundled services, a decrease of 6% since 2015.²¹⁵ ComReg's preliminary finding in the Consultation was that Eircom should be designated with SMP²¹⁶ and ComReg therefore proposed a number of obligations to address identified competition problems.²¹⁷ While ComReg acknowledges that other SPs in the fixed broadband market are experiencing growth in market shares, with some of this growth attributed to offering a range of services, including TV services alongside broadband, some SPs (including, for example, BT and Vodafone) could not offer broadband or TV in the absence of regulation in the WLA and WCA markets. For example, while Sky operates a satellite TV network,²¹⁸ Sky would be unable to offer broadband in the absence of wholesale inputs bought from BT (with BT provision of such services enabled by regulation of the WLA and WCA markets).

²¹⁰ <http://fibrerollout.ie/%20where-and-when/>.

²¹¹ <http://ccpc.ie/enforcement/mergers/merger-notices/m15074-eir-setanta>.

²¹² <https://www.eir.ie/opencms/export/sites/default/pressroom/eir-Acquires-Setanta-Sports-Ireland-Including-BT-Sports-Irish-Rights/>.

²¹³ <https://www.eir.ie/sport/>.

²¹⁴ See slide 16, Ireland Communicates 2017 – SMEs.

²¹⁵ See slide 14, Ireland Communicates 2017 – Residential.

²¹⁶ See Section 6 of the Consultation.

²¹⁷ See Section 7 of the Consultation.

²¹⁸ Sky has publicly announced plans to switch its TV service from satellite to fibre broadband based - <https://corporate.sky.com/media-centre/news-page/2017/award-winning-sky-g-to-launch-without-a-satellite-dish-%E2%80%93-bringing-sky-tv-to-millions-more-homes>, initially taking place in the UK.

- 3.127 While Vodafone's sale of bundled products also relies on access to wholesale inputs provided by Eircom's (pursuant to existing regulation), ComReg notes that, over the course of the market review period, SIRO may play a more substantial role in supplying Vodafone, albeit in those areas where SIRO will have network coverage.
- 3.128 It is ComReg's view that the presence of both Sky and Vodafone at the retail level, particularly in the context of selling bundled services, is likely to continue to be reliant on having access to Eircom's regulated wholesale products. Absent such access, the extent of the competitive constraint imposed by these companies would not likely exist in the same manner as is currently manifested.
- 3.129 For the reasons outlined in paragraphs 3.125 to 3.128 above, ComReg does not agree with Eircom's claim that as competition is occurring at the bundles level, Eircom is at a disadvantage against other unregulated SPs, who are "*...able to leverage their experience and existing customer bases in various markets.*"²¹⁹ ComReg's view is that, while other Service Providers engage with media content providers (e.g. the provision of Netflix on Virgin Media's set-top box), Eircom is also well placed to compete with other unregulated SPs on the basis of network coverage, its TV service offering and the reliance of competitors on Eircom's access network.
- 3.130 Vodafone considered that having access to quality wholesale products with a certain level of control over network elements is necessary to ensure that it can be a credible supplier of IPTV services (detailed in paragraph 3.54). In this respect, ComReg considers the quality and nature of wholesale access products in Sections 4 to 7 of this Decision.
- 3.131 As outlined in paragraph 3.55 above, Virgin Media considered that the inclusion of IPTV services in retail bundles by Eircom and Vodafone was a more significant milestone in the broadband market than other trends highlighted by ComReg. ComReg acknowledges that the inclusion of IPTV in retail broadband bundles is an important development, as noted in paragraph 8.174 of the Consultation. ComReg notes, however, that IPTV provision is predicated on the existence of a broadband service and, in this regard, is sold only alongside fibre broadband, with Multicast²²⁰ being available over VUA and NGA Bitstream. ComReg also notes that double-play subscription bundles combining broadband and fixed voice telephony are still the most popular bundle offerings, with such services also enabled by existing regulation.

Retail Product Market Definition

- 3.132 As outlined in paragraphs 3.57 to 3.67, enet, Sky and Vodafone agreed with ComReg's retail Product Market definition.

²¹⁹ See Eircom Submission, at page 8.

²²⁰ Multicast means a service that accepts a single copy of a designated data stream from the Access Seeker and distributes these data streams within the Eircom network to multiple End Users.

- 3.133 As noted in paragraphs 3.59 to 3.64, Eircom disagreed with ComReg's approach to market definition, questioning the application of the SSNIP test and the inconsistency of conclusions derived from the 2014 WLA/WCA Market Research. In arriving at conclusions on the retail Product Market definition, ComReg's position on the retail Product Market definition is based on multiple factors and product characteristics, in addition to a range of evidence that has informed the substitution assessment, as set out in paragraphs 3.134 to 3.139 below.
- 3.134 With respect to Eircom's view that a quantitative approach is merited in applying the HMT, ComReg notes that, in conducting the SSNIP, it has followed best practice as set out in the European Commission Notice on Market Definition²²¹ while relying, amongst other things, on the views of a nationally representative sample of retail consumers (residential and business) in order to help inform the market definition.
- 3.135 ComReg also notes that the 2017 WLA/WCA Market Research is not considered definitive in itself, but is considered alongside empirical data/evidence, where available, in particular, alongside data presented in ComReg's QKDR and in response to SIRs.
- 3.136 As outlined in paragraph 3.60, Eircom considered that a price increase of €2 was not representative of a SSNIP of 5-10% and therefore likely underestimated the hypothetical switching behaviour of respondents. ComReg notes that the retail assessment is being carried out to inform the subsequent assessment of the WLA and WCA markets. ComReg notes that the SSNIP analysis at the retail level is conducted on the basis of a pass through of a SSNIP of the relevant wholesale input, with the intention of assessing the likely retail response to a SSNIP on the wholesale product upon which the retail broadband product is based. As further outlined in Section 4,²²² ComReg considered a €2 SSNIP to be reflective of a 5-10% increase in underlying wholesale prices. ComReg also notes that, insofar as retail bundles are concerned, only the increase in the retail price of the broadband component is considered, rather than a 5%-10% increase in the overall price of the bundle, which would contain other services.

²²¹ European Commission Notice on the definition of relevant market for the purposes of Community competition law (hereafter, the '**Notice on Market Definition**'), page 3: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209(01)&from=EN).

The Explanatory Note to the 2014 Recommendation is available at <https://ec.europa.eu/digital-agenda/en/news/explanatory-noteaccompanying-commission-recommendation-relevant-product-and-service-markets>.

²²² See paragraphs 4.140 to 4.148 below.

- 3.137 As noted in paragraph 3.61 above, Eircom suggested that the results of the 2014 WLA/WCA Market Research were not correctly interpreted, referring to the proportion (33%) of Respondents (on a copper network) who stated that they would either *cancel and switch* or *are very/fairly likely* to do so, would switch to fixed wireless access (FWA) rather than to a fibre based service (25%) or cable service (20%).²²³ ComReg notes that the response to this particular question is based on a small base size, where a total of 11 respondents on a copper network indicated that they would ultimately switch in response to a €2 SSNIP. ComReg therefore does not consider the findings from this sample size to be sufficiently robust to draw any firm conclusions from this individual result.
- 3.138 The 2017 WLA/WCA Market Research (see Appendix: 5 and Appendix: 6) shows that, for residential End Users in a bundle (see Table 3 above), 5% of respondents would cancel and switch in response to a SSNIP of €2.²²⁴ Of this group, 96% are very or fairly likely to follow through and switch.²²⁵ Of those that would actually switch SP in response to the SSNIP, just 2% indicated that they would switch to FWA, while 2% and 4% indicated that they would switch to satellite and Mobile Broadband, respectively.²²⁶ This is based on a low base size of 50. Similarly, Table 4 above outlines the findings for standalone residential End Users. The findings suggest that, in response to a SSNIP of €2, 6% would switch, with 96% very or fairly likely to follow through.²²⁷ Of those that would actually switch SP in response to the SSNIP, 9% indicated that they would switch to FWA. As with the 2014 WLA/WCA Market Research, this is based on a low base size.
- 3.139 As outlined in paragraph 3.63 above, Eircom noted that in an assessment of whether a single service is a relevant market under the HMT, the relevant measure is not that of substitution to simply another service, but the totality of all substitution. ComReg notes that the HMT is an iterative test which involves starting from the focal product (Product A) and testing (by way of a SSNIP) whether the next closest product (Product B) should be included in the same market as Product A. Where the SSNIP is unprofitable (i.e. sufficient customers would switch to Product B in response to a SSNIP of Product A), the market now encompasses both Product A and Product B. When then assessing whether the next closest product to Products A and B (i.e. Product C) should be included in the market, the response to a SSNIP in Products A and B is considered.

²²³ Slide 130 of the 2014 WLA/WCA Market Research.

²²⁴ See slide 54 of the 2017 WLA/WCA Market Research (Residential).

²²⁵ See slide 57 of the 2017 WLA/WCA Market Research (Residential).

²²⁶ See slide 60 of the 2017 WLA/WCA Market Research (Residential).

²²⁷ See slides 65 and 68 of the 2017 WLA/WCA Market Research (Residential).

3.140 In the Consultation,²²⁸ ComReg considered switching from the products in the candidate market (copper, FTTx and CATV) to FWA and, in this regard, reached a conclusion on the totality of substitution to FWA. The 2017 WLA/WCA Market Research shows that, for both residential and business customers currently accessing broadband via copper, FTTx and CATV platforms, a significant number of respondents would not consider switching to FWA in response to a 5-10% SSNIP of copper, FTTx or CATV.²²⁹ ComReg notes that the 2017 WLA/WCA Market Research is based on a representative national sample.

Other key developments affecting retail markets

3.141 As noted in paragraphs 3.69 and 3.70 above, Eircom raised a number of points relating to other key developments in the retail markets, including the signing of a multi-year agreement between Virgin Media and Netflix²³⁰ and the entry of Sky to the retail broadband market.

3.142 ComReg notes that from 12 December 2016 Virgin Media customers were able to benefit from the agreement with Netflix.²³¹ While Virgin Media differs from Eircom by offering Netflix, it is not unique in its strategy of combining media content with its services. Virgin Media's offering of Netflix is not exclusive and can therefore be replicated by Eircom. The partnership with Netflix is representative of recent trends in the market, with multiple broadband providers following a similar strategy of providing exclusive media content,²³² coupled with Sky entering the retail broadband market.

3.143 In relation to the entry of Sky to the retail broadband market, ComReg notes that this is via BT Ireland offering a wholesale broadband service, which in turn depends on existing SMP regulation imposed on Eircom in the WLA and WCA markets. While Eircom noted that Sky had the ability to leverage a substantial and well-established base of existing TV subscribers, ComReg notes that without a wholesale broadband service being made available by BT Ireland it is unlikely that Sky would have been in a position to enter the retail broadband market (and other related markets such as telephony). ComReg's view is that Sky's entry has been enabled by regulation and this has served to strengthen competition in the provision of retail broadband (and other) services. In this respect, and as noted in paragraph 3.24 of the Consultation, Sky's market share in the retail broadband market as of Q1 2016 was 10.8% and as shown in Figure 3 below, has increased to 13.1% in Q4 2017 (albeit in the presence of regulation).

²²⁸ See paragraphs 4.216 to 4.217 of the Consultation.

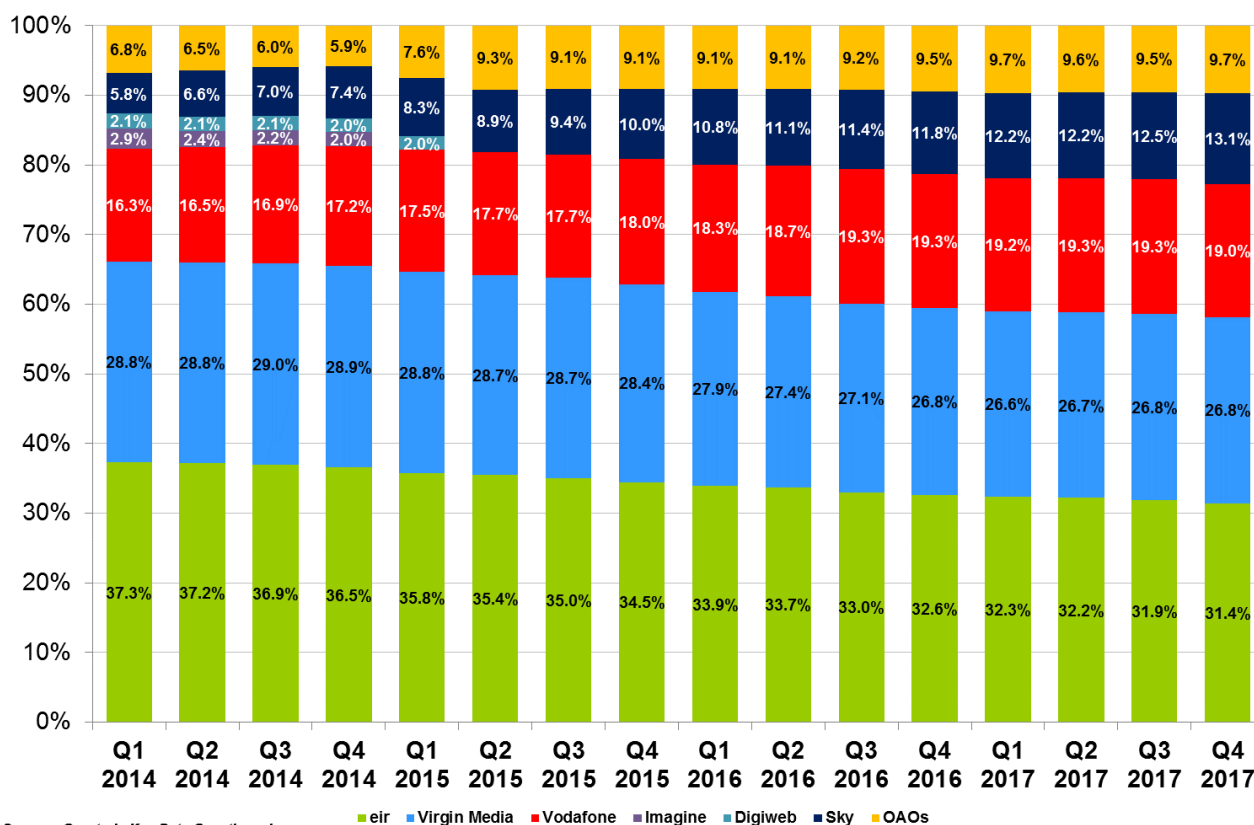
²²⁹ See paragraphs 3.84 to 3.89 and 3.96(g) above.

²³⁰ <https://www.libertyglobal.com/pdf/press-release/2016-09-14-Liberty-Global-Lights-Up-TV-Screens-with-Global-Netflix-Partnership-FINAL.pdf>.

²³¹ <https://www.virginmedia.ie/about-us/press/2016/virgin-media-launches-netflix-on-horizon-tv/>.

²³² For example, Sky signed an agreement with Netflix in March 2018 which will allow Sky Q customers to access Netflix content through a new subscription pack under a partnership agreement - <https://news.sky.com/story/sky-and-netflix-agree-european-partnership-deal-11271587>.

Figure 3: Subscription Market Share of Fixed Broadband Market



3.144 As noted in paragraph 3.71 above, Virgin Media considered that ComReg failed to capture the magnitude of increased download speeds and data volumes in its assessment of retail trends. In Section 3 of the Consultation,²³³ ComReg presented an analysis of broadband download speeds and data volumes. ComReg summarised these points in paragraphs 3.3(a) to 3.3(b) above. Furthermore, Figure 4 and Figure 5 below, which include updated data, show that download speeds and data volumes have continued to grow since the reported Q1 2016 figures. Similarly, Figure 6 also shows that broadband subscriptions, as categorised by download speeds, continue to show an increasing move by End Users towards higher speed broadband products.

3.145 Figure 9 shows that data traffic continues to grow, with residential fixed broadband subscribers being the highest consumers of data. In the year from Q4 2016 and Q4 2017, average monthly data traffic usage by residential subscribers grew by 25% from 125.1GB per month to 155.9GB per month. Similarly, for fixed broadband subscribers overall (i.e. residential and business subscribers), data consumption also increased by 25% over this same period.

²³³ See paragraphs 3.26 to 3.28 and 3.35 of the Consultation.

Figure 4: Monthly Data Traffic by Subscription Type – Q4 2016 – Q4 2017

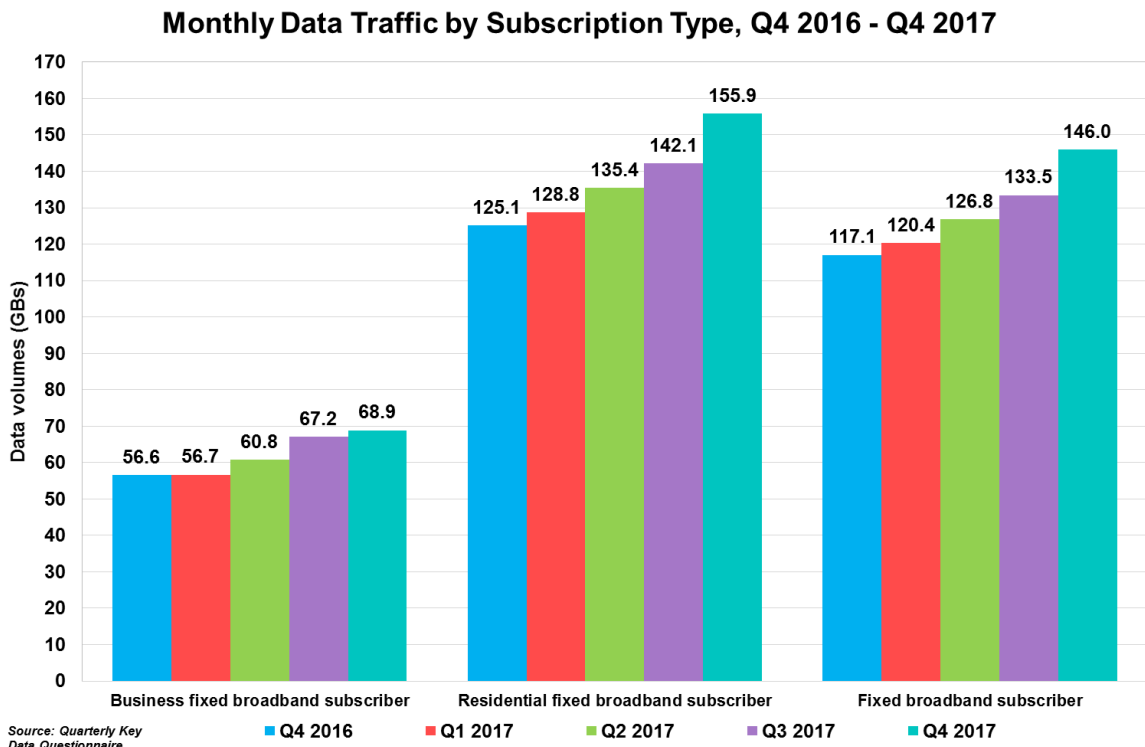
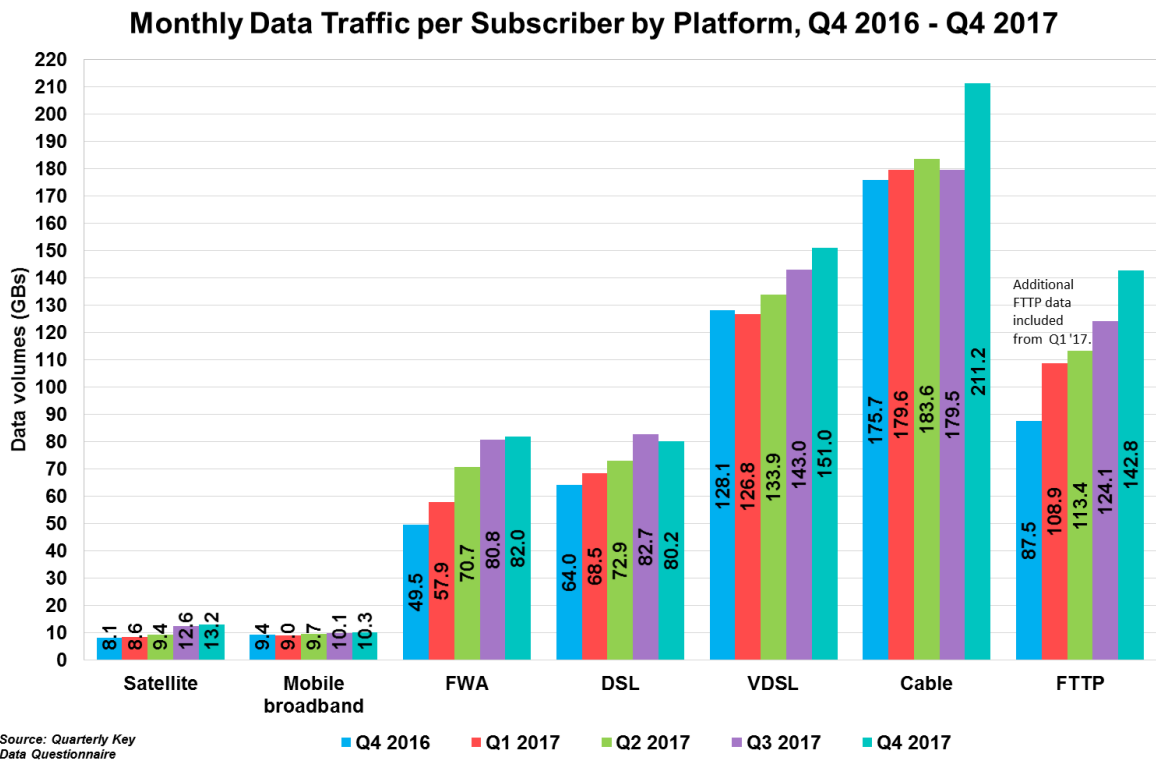


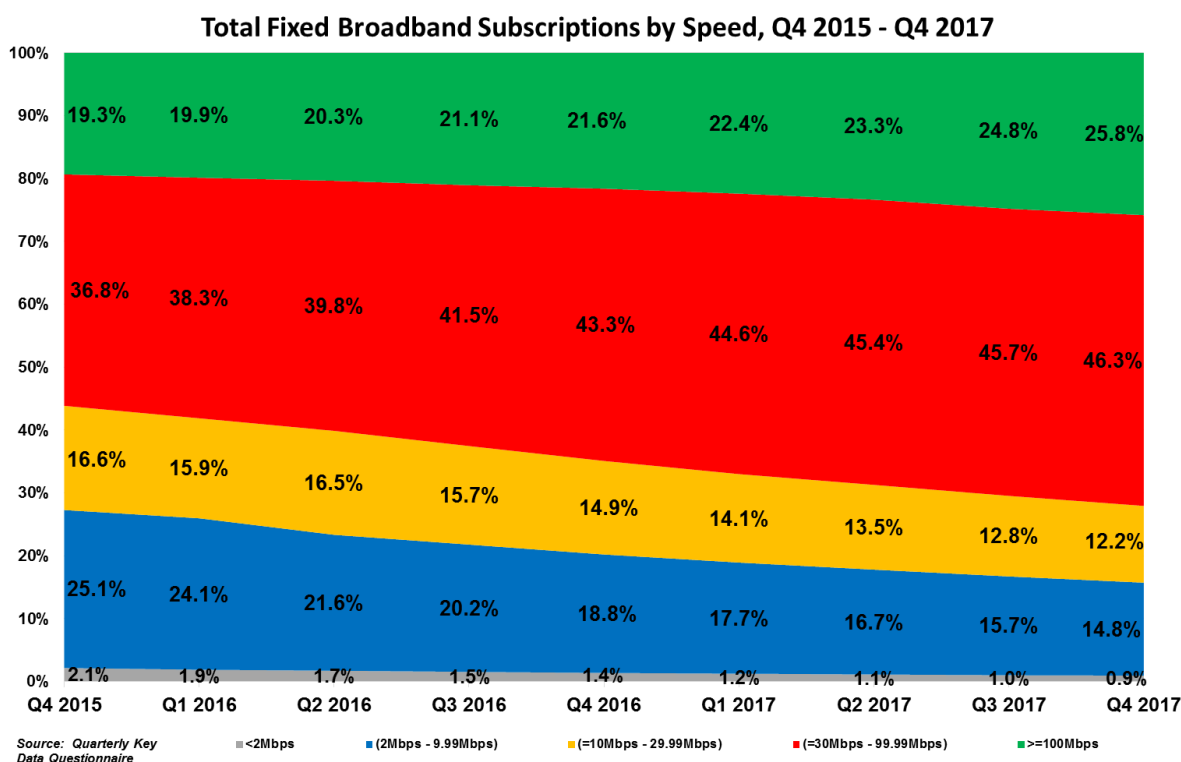
Figure 5: Monthly Data Traffic per Subscriber by Platform – Q4 2016 – Q4 2017



3.146 Figure 5 illustrates monthly data consumption by platform. The highest recorded data traffic is provided over CATV and VDSL (FTTC) subscriptions, followed by FTTP and DSL.²³⁴ As noted in ComReg’s Quarterly Key Data Report,²³⁵ in Q4 2017 the average CATV broadband subscriber used 211.2 GB of data per month, followed by FTTP subscribers (142.8 GB) and VDSL subscribers (151.0 GB). It can be observed that the average volume of data used increases with download speed as cable, VDSL and FTTP broadband platforms have the highest proportion of high-speed broadband subscriptions. As noted in paragraphs 3.80(d) to 3.96(d), monthly data traffic on Mobile Broadband and FWA ranges from 9GB to 10GB, and 49GB to 82GB respectively.

3.147 Figure 6 below gives an overview of fixed broadband subscriptions by speed. It can be seen that subscriptions of less than 2Mb/s comprise just 0.9% of subscriptions in Q4 2017, while subscriptions of 30Mb/s to 99.99Mb/s comprised the highest proportion of fixed subscriptions. Approximately one fifth of subscriptions obtain speeds greater than 100Mb/s.

Figure 6: Total Fixed Broadband Subscriptions by Speed – Q4 2015 – Q4 2016



3.148 In paragraph 3.72 ComReg noted Vodafone’s view that trends in download speeds and data traffic were likely to increase at a faster rate in future, and that ComReg should ensure that the new regulatory framework should pave the way for innovative wholesale services. ComReg has addressed this point in Section 7 of this Decision.²³⁶

²³⁴ FTTP (fibre to the premises) refers to a range of fibre access installations such as fibre to the curb.

²³⁵ ComReg Quarterly Key Data Report Q4 2017, page 41. <https://www.comreg.ie/publication/irish-communications-market-quarterly-key-data-report-data-q4-2017/>.

²³⁶ See Section 7, at paragraphs 7.368 to 7.375 below.

Other issues raised by Respondents

- 3.149 As noted in paragraph 3.73 above, ALTO considered that ComReg's analysis in which it discounted leased lines as a substitute for retail broadband services, failed to adequately consider QoS levels as a key differentiator between such products. ComReg notes that this was explicitly acknowledged in the Consultation²³⁷ where it was stated that the Service Level Agreements ('SLAs'), if any, that are provided by SPs for retail broadband services are generally of a lower standard than for Leased Line ('LL') services.
- 3.150 Regarding differences in speeds reported by business broadband purchasers and leased lines purchasers, ComReg also stated in the Consultation²³⁸ that this suggests that bandwidth provided by broadband services is sufficiently different to the identified bandwidth requirements of the majority of businesses currently purchasing retail LLs. Furthermore, the average upload speeds cited by LL purchasers are almost symmetrical with download speeds.
- 3.151 ComReg remains of the view that there are sufficient differences in SLAs provided to broadband customers compared with leased line customers, and this is one factor underpinning ComReg's reasoning that such products do not fall within the same Product Market.
- 3.152 In paragraph 3.74 above, it was noted that both BT and ALTO considered that ComReg had overlooked the cost of FTTH connections for customers that do not have existing pole access or unbroken duct access to their premises. In Section 7 of this Decision,²³⁹ ComReg considers wholesale access products and their pricing. ComReg notes that, as of Q4 2017, the take-up of FTTH services was 39,612 subscribers, having risen by 31,989 since Q4 2016.²⁴⁰
- 3.153 As set out in paragraph 3.75 above, BT and ALTO were of the view that Eircom's FTTC and FTTH network rollout overlap with each other based on their interpretation of the pre-qualification file which Eircom regularly issues to industry.²⁴¹ ComReg's view is that Eircom's rollout of FTTC and FTTH are mutually exclusive for investment reasons in the near future.²⁴² ComReg understands that Eircom is not planning to rollout parallel networks in the same area. However, Eircom may in some scenarios deploy a localised FTTH network in areas that are predominantly FTTC, because the level of investment required to upgrade the existing infrastructure to offer FTTC may not be economically and/or technically feasible.

²³⁷ See in paragraph 4.240 of the Consultation.

²³⁸ See paragraph 4.243 of the Consultation.

²³⁹ See Section 7, at paragraphs 7.848 to 7.872 below.

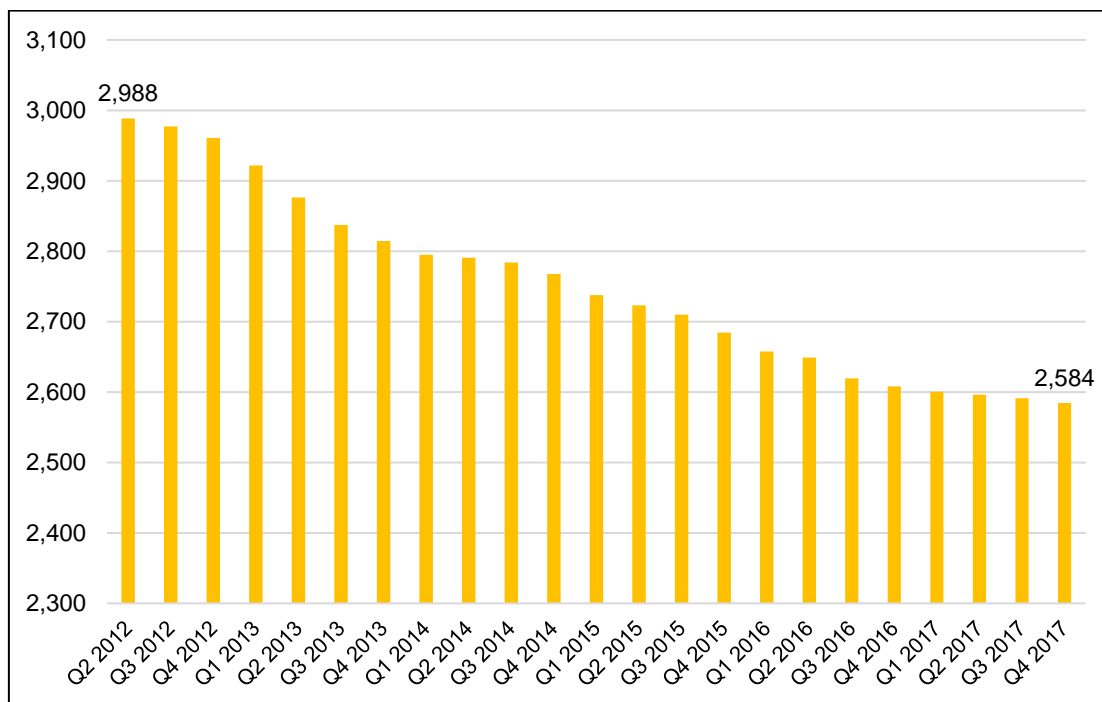
²⁴⁰ ComReg Quarterly Key Data Report Q4 2017.

²⁴¹ The industry pre-qualification file gives the maximum data-rate attainable for an Access Path based on its electrical characteristics, as well as the premises that are capable of receiving FTTC. See paragraph 8.534 of the Consultation for an overview of the pre-qualification file under the transparency requirement with respect to network rollout.

²⁴² However, ComReg note that an FTTC network can be upgraded to an FTTP network.

3.154 In paragraph 3.76 Virgin Media’s point that an analysis of the HHI would provide a useful insight into the extent of competition in the retail broadband market was noted. Figure 7 below presents the HHI from Q2 2012 to Q4 2017.²⁴³

Figure 7: Herfindahl-Hirschman Index (HHI) – Q2 2012 – Q4 2017



3.155 The index shows that market concentration, as measured by the HHI and in the presence of regulation, has fallen from close to 3,000 in 2012 to 2,584 at the end of 2017. The Competition and Consumer Protection Commission (‘CCPC’) merger guidelines suggests that a HHI in excess of 2,000 indicates a highly concentrated market.²⁴⁴ Notwithstanding this, ComReg notes that HHIs are typically employed to assess changes in market concentration post-merger and are a useful screening device in such assessments. HHIs alone are, however, insufficient to draw firm conclusions about the extent of competition within markets and, therefore, need to be considered alongside other factors.

3.156 In paragraph 3.76 ComReg noted Virgin Media’s clarification to paragraph 4.171 of the Consultation that Virgin Media does not operate a mobile radio access network. ComReg is aware of its wholesale arrangement with Three and notes that the point remains that Virgin Media offers a retail mobile service.

²⁴³ The HHI is computed based on data from ComReg’s Quarterly Key Data Report, where the index is the sum of the squared market share of each firm in the market, i.e. $HHI = \sum_{i=1}^n s_i^2$. This is a 4 firm HHI and the market shares include Eircom, Virgin Media, Vodafone and OAOs (about 9% of the market). For example, the shares for Q4 2017 are given in Figure 3.1.4 in ComReg’s Quarterly Key Data Report for Q4 2017. The shares for Q4 2017 give an index of 2,584.

²⁴⁴ http://ccpc.ie/sites/default/files/CCPC%20Merger%20Guidelines_1.pdf.

ComReg's Position

3.157 Having considered Respondents' views in paragraphs 3.22 to 3.76 above, and considered developments in the market since the Consultation was published in November 2016, ComReg considers that its assessment of the retail market as set out in the Consultation remains appropriate (insofar as it informs the subsequent analysis of the WLA and WCA markets).

3.158 In summary, ComReg has concluded that:

- (a) Retail broadband and narrowband internet access constitute separate markets. All broadband products provided over copper, FTTx and CATV networks have the same intended use. The analysis of product speed, packages and prices outlined above provides evidence that these products are positioned as alternative methods of accessing the internet.
- (b) There is a chain of substitution between broadband products provided over copper, FTTC, FTTH and CATV networks. The evidence at ComReg's disposal indicates that it is possible for a broadband subscriber to switch to a faster broadband service for a similar or cheaper price. However, the availability of FTTC, FTTH and cable broadband products may limit the ability of customers to switch between platforms in response to a hypothetical price increase.
- (c) Retail Mobile broadband and broadband products provided over Fixed Wireless Access networks and Satellite networks are not effective substitutes for retail fixed broadband provided over copper, FTTC, FTTH and CATV networks. This is primarily due to functional differences, customer usage and difference in pricing. Retail broadband provided over copper, FTTC, FTTH and CATV networks is in a separate market to broadband provided over satellite, FWA and 3G/4G networks.
- (d) The retail broadband market should not be segmented either by customer type (i.e. residential or business) or by whether the broadband access is sold as part of a bundle or on a stand-alone basis.
- (e) There is likely to be a national market for retail broadband, absent regulation in the WLA and WCA Market. While ComReg recognises that there are likely to be some differences in competitive conditions due to the regional presence of an Alternative Network Operator (i.e. SIRO or Virgin Media), the lack of differentiated pricing and limited differences in demand characteristics across regions suggests the retail broadband market is likely to be national, absent regulation in the WLA and WCA Markets. However, it is not ComReg's intention, in this Decision, to conclude definitively on the geographic scope of the retail broadband market, absent regulation in the WLA and WCA Markets.

3.159 ComReg intends to monitor the situation with respect to any variances in trends, developments and competition, which may emerge in the retail broadband market, and to keep the position under review during the lifetime of this market analysis.

4 Assessment of the WLA Market

4.1 In this section, ComReg outlines its assessment of Respondents' views to Questions 3 and 4 in the Consultation, which related to the WLA product and geographic market assessment.

Position set out in the Consultation

4.2 ComReg considered the boundaries of the relevant WLA Market(s) from a product and geographic perspective in Section 5 of the Consultation. This involved assessing demand-side, supply-side and indirect constraints. In so doing, ComReg considered the following issues:

- (a) The relevant focal product i.e. the initial product against which potential wholesale substitute products were then considered;²⁴⁵
- (b) Whether any alternative WLA products should be included in the relevant wholesale market, having regard to the effectiveness of any direct constraints from wholesale demand-side substitutes and/or supply-side substitutes (including self-supplied inputs);²⁴⁶
- (c) Whether any retail products should be included in the relevant wholesale markets, having regard to the effectiveness of any indirect constraints from the retail market;²⁴⁷ and
- (d) The geographic scope of the relevant WLA Market.²⁴⁸

WLA Product Market Definition

4.3 In identifying the focal product, ComReg set out its preliminary view in the Consultation that Eircom's LLU product, provided over Eircom's copper network, is the most appropriate focal product in the WLA Market.²⁴⁹ ComReg also set out its preliminary view that it considered the self-supply by SPs active in the WLA Market to their respective retail businesses to be part of the WLA Market because, typically, such supply is readily divertible to the wholesale merchant market.²⁵⁰

4.4 ComReg subsequently set out its preliminary view that Eircom's VUA products share a sufficient number of the product characteristics with LLU products, along with similarities of actual and intended use, such that they should be included in the WLA Product Market.²⁵¹

²⁴⁵ See paragraphs 5.8 to 5.13 of the Consultation.

²⁴⁶ See paragraphs 5.16 to 5.97 of the Consultation.

²⁴⁷ See paragraphs 5.98 to 5.170 of the Consultation.

²⁴⁸ See paragraphs 5.174 to 5.199 of the Consultation.

²⁴⁹ See paragraph 5.13 of the Consultation.

²⁵⁰ See paragraphs 5.14 to 5.15 of the Consultation.

²⁵¹ See paragraph 5.40 of the Consultation.

- 4.5 ComReg also recognised in the Consultation that SIRO's network presence has the potential to impose a degree of competitive constraint on Eircom in the WLA Market and set out its intention, on a forward-looking basis, to include SIRO's VULA products within the WLA Product Market.²⁵²
- 4.6 ComReg considered the potential for WLA supply-side substitution by SPs (including the issue of self-supply, where relevant) and was of the preliminary view that the WLA Product Market does not include retail services provided over the following networks.

CATV

- 4.7 ComReg set out its preliminary view²⁵³ that self-supply by a vertically integrated CATV SP should not be included in the WLA Product Market having, amongst other things, considered a report by independent consultants WIK (the '**WIK CATV Report**')²⁵⁴ which examined from a technical perspective why it will not likely be possible to provide a VULA-type service over Virgin Media's CATV network, within the lifetime of this market review.

FWA

- 4.8 ComReg's preliminary view in the Consultation²⁵⁵ was that there is unlikely to be sufficient demand from Access Seekers for any hypothetical FWA-based WLA product and such products should not, therefore, be included within the WLA Product Market. The Consultation also noted that self-supply of local access by an FWA SP should not be included within the WLA Product Market because, for example, it is unlikely that an FWA SP could provide a WLA product to third parties in the short term without incurring significant additional costs or risks, and also because there is unlikely to be sufficient demand from third parties for a WLA product over FWA networks (and therefore a lack of effective direct demand-side constraint).

²⁵² See paragraphs 5.53 and 5.54 of the Consultation.

²⁵³ See paragraphs 5.59 to 5.72 of the Consultation.

²⁵⁴ The Report is contained in Appendix 8 of the Consultation and [ComReg Document 16/96b](#).

²⁵⁵ See paragraphs 5.73 to 5.79 of the Consultation.

Localised Alternative FTTH

- 4.9 ComReg set out its preliminary view in the Consultation²⁵⁶ that localised alternative FTTH networks that are not active sellers in the wholesale market should not be included in the WLA Product Market because it is unlikely that there will be sufficient demand from Access Seekers for this type of WLA product.²⁵⁷ Furthermore, ComReg considered that this notional type of WLA product is unlikely to be provided to third parties in the short term (without significant additional costs or risks being incurred). The coverage of localised alternative FTTH networks is so small in any event, at 2% of total premises (currently 15,000)²⁵⁸ that even if it was included in the WLA Product Market definition, ComReg's overall conclusions are unlikely to be affected.
- 4.10 ComReg notes that, in April 2017, enet announced the planned rollout of WLA fibre broadband to 10 towns, largely in the north west of Ireland.²⁵⁹ In September 2017, enet announced a joint venture with SSE to bring fibre broadband to 115,000 premises in rural Ireland.²⁶⁰ Some of this proposed investment was intended to leverage enet's Metropolitan Area Networks ('MANs'). In responding to a SIR,²⁶¹ enet considered that [redacted]. Following discussions with enet in April 2018, ComReg was made aware that [redacted]. To date, enet has FTTP²⁶² coverage of [redacted] as at end March 2018. enet currently has [redacted] active subscribers across both residential and commercial premises passed. These are currently (as at April 2018), sold to [redacted] as a WCA Bitstream service, with handoff in Dublin.

²⁵⁶ See paragraphs 5.80 to 5.87 of the Consultation.

²⁵⁷ ComReg notes that such localised alternative FTTH networks are localised networks which do not provide WLA services. The total coverage of alternative fibre networks and the take-up of FTTH-based retail products (either broadband, TV or fixed telephony) in Ireland is currently very limited. According to figures presented in the Q4 2017, QKDR 39,612 subscribers have a FTTH connection, with [redacted] and [redacted] from a localised alternative FTTH network, representing 0.18% of total (fixed and mobile) subscriptions and 0.22% of total fixed subscriptions. ComReg further considers that it is unlikely that a hypothetical WLA service offered over localised alternative FTTH networks would meet the expectations of Access Seekers, given issues including the very limited geographic coverage of these networks.

²⁵⁸ Magnet's FTTH coverage is 15,000 premises (<https://www.magnet.ie/residential/home-broadband/>).

²⁵⁹ <https://www.enet.ie/news/167/138/enet-to-bring-high-speed-fibre-networks-to-ten-regional-towns.html>.

²⁶⁰ <https://www.enet.ie/news/177/138/Minister-launches-enet-SSE-100M-fibre-plan-for-regional-Ireland.html>.

²⁶¹ enet response to SIR issued in July 2017.

²⁶² enet uses the expression Fibre to the Premises ('FTTP'); this includes both residential and commercial premises and is therefore equivalent to the construction of the term 'FTTH', which, in practice, also refers to the provision of service to both residential and commercial premises.

4.11 In the EC Response to the Notified Draft Measures, the EC noted ComReg's decision to exclude the FTTH network infrastructure of localised alternative operators from the wholesale market definitions (see EC Response in Appendix: 2). ComReg includes both Eircom and SIRO's FTTH based VULA products in the Relevant WLA Market. In Appendix: 3, ComReg reiterates that, while the functionality and product characteristics of broadband provided over localised alternative FTTH networks are comparable to larger-scale, up to and including national, FTTH networks, the limited geographic coverage of localised alternative FTTH networks means that any indirect demand-side constraint on upstream wholesale markets is likely to be reduced as a consequence of such limited geographic coverage. Accordingly, ComReg's decision to exclude localised alternative retail FTTH networks from the relevant wholesale market definitions arises not from differences in product characteristics, but from the lack of evidence that any localised alternative FTTH network intends to (or could), through supply-side substitution, offer a wholesale product which would act as a sufficiently effective and immediate demand-side wholesale substitute (as set out at paragraph 4.9 above). In this respect, ComReg noted that, from an Access Seeker perspective, purchasing wholesale FTTH services provided over localised alternative FTTH networks having limited geographic reach, would raise transaction costs (given the Access Seeker would have to continue to purchase services from other networks in order to fulfil its overall demand).

Mobile

4.12 In the Consultation, ComReg did not consider hypothetical WLA over 3G/4G networks to be in the WLA Product Market.²⁶³ ComReg examined, amongst other things, functional differences and demand patterns and noted that the three Irish MNOs (Vodafone, Three and eir) self-supply 3G/4G data services, but that Vodafone also separately purchases WLA (and WCA) services from third party suppliers in order to offer retail services, which suggests that mobile broadband provided over a 3G/4G network is a complementary product rather than a substitute for services provided in the WLA Market.

NBP Network

4.13 ComReg noted in the Consultation²⁶⁴ that the NBP contract will likely involve the provision of VULA-type products, which may be a functional and technical substitute for WLA products provided by Eircom. ComReg noted that it was too early to conclude whether (and to what extent) the NBP SPs might act as an effective constraint on Eircom's WLA products, particularly as it is possible that the NBP winner may have an effective monopoly in the NBP footprint.

Leased Lines

4.14 ComReg set out its preliminary view²⁶⁵ that wholesale leased lines are not likely to fall within the WLA Product Market due, *inter alia*, to substantial differences in the cost of these services and the likely lack of demand-side substitutability.

²⁶³ See paragraphs 5.89 to 5.92 of the Consultation.

²⁶⁴ See paragraph 5.88 of the Consultation.

²⁶⁵ See paragraphs 5.93 to 5.95 of the Consultation.

4.15 Having considered demand-side and supply-side substitution, ComReg then went on to consider the extent of any indirect constraints.²⁶⁶ ComReg set out its intention to monitor the extent and effectiveness of any constraints from downstream retail services provided over alternative networks over the period of this market review, having regard to the extent of any such indirect constraints. It was noted that, if downstream retail services provided over alternative networks develop in such a manner that they represent an indirect constraint (i.e. such that they are effective in constraining the price setting behaviour of a HM supplier of WLA-based LLU and VULA products), then it would be prudent to initiate a further analysis to update the definition of the WLA Market, competition assessment and/or remedies.²⁶⁷

Preliminary conclusions on WLA Product Market

4.16 In summary, ComReg was of the preliminary view in the Consultation that the WLA Product Market comprised of (i) CG WLA Products, (ii) NG WLA Products and (iii) Eircom's self-supply of these products via its copper, FTTC and FTTH networks.

4.17 Having regard to the likely lack of effective indirect constraints, ComReg's preliminary view was that the WLA Product Market does not include retail services provided over the following networks:²⁶⁸

- (a) CATV networks;
- (b) Localised Alternative FTTH networks;
- (c) FWA;
- (d) Satellite broadband; and
- (e) Mobile broadband.

WLA Geographic Market Definition

4.18 In the Consultation ComReg set out its preliminary view that the WLA Product Market is likely to be national in scope.²⁶⁹ This view was based on the existence of a small number of competitors in the WLA Market, with Eircom having a high and relatively static market share nationally, a lack of differentiated pricing nationally and limited differences in demand characteristics across regions.

4.19 ComReg considered that there is a lack of direct and indirect constraints in the WLA Market generally, with conditions of competition sufficiently homogeneous to suggest that there are no sub-geographic markets. Notwithstanding this preliminary view, ComReg noted the emergence of some localised competitive pressure, and proposed to continue to monitor the situation and to revisit its market definition, competition analysis and/or remedies, if appropriate.

²⁶⁶ See paragraphs 5.98 to 5.170 of the Consultation.

²⁶⁷ See paragraph 5.170 of the Consultation.

²⁶⁸ See paragraphs 5.171 to 5.173 of the Consultation.

²⁶⁹ See paragraphs 5.174 to 5.199 of the Consultation.

Respondents' Views

WLA Product Market Definition

- 4.20 Seven of the eight Respondents to the Consultation expressed views with respect to ComReg's preliminary views surrounding the WLA Product Market definition.
- 4.21 Six respondents (ALTO, BT, enet, Sky, Virgin Media and Vodafone) agreed or broadly agreed with ComReg's preliminary views surrounding the WLA Product Market definition. Eircom was the only respondent to disagree with ComReg's preliminary views surrounding the WLA Product Market definition, raising a number of issues with ComReg's assessment. Colt did not provide any explicit views in its submission on the WLA Product Market assessment.
- 4.22 ComReg has summarised the Respondents' main views, grouping the key issues raised into the themes identified below, namely:
- (a) CG LLU-based WLA as the appropriate focal product for the assessment, and whether separate CG and NG WLA Markets exist (see paragraphs 4.23 to 4.31 below);
 - (b) The impact of the NBP on the WLA Market has not been adequately considered (see paragraphs 4.32 to 4.33 below);
 - (c) Direct and indirect constraints from alternative networks suggest a broader market definition (see paragraphs 4.36 to 4.55 below); and
 - (d) Bitstream Regional Handover should be included in the WLA Market and other issues (see paragraphs 4.56 to 4.57 below).

CG LLU-based WLA as the appropriate focal product for the WLA Product Market assessment, and whether separate CG and NG WLA Markets exist

- 4.23 ALTO agreed with ComReg's preliminary conclusions on the WLA Product Market assessment that the geographic market is national in scope.
- 4.24 BT agreed with ComReg's preliminary conclusions on the WLA Product Market assessment, stating that it aligns with its experience of the market.

- 4.25 Eircom noted that ComReg had identified LLU as the focal product in its WLA Product Market assessment. Eircom noted that, due to the steady decline in both LLU and Line Share products (illustrated by a table presenting LLU and Line Share volumes from Q1 2015 to Q3 2016),²⁷⁰ it may be more appropriate to delineate the market on the basis of legacy and next generation technologies. Eircom also emphasised that demand for legacy copper-based products is likely to decline further over the lifetime of this market review as retail (and, consequently, wholesale) demand migrates to next generation access. It presented statistics from ComReg's Quarterly Key Data Report ('**QKDR**') on the numbers of DSL and VDSL lines,²⁷¹ noting that demand for NG WLA continues to grow, and also noting that SIRO's continuing network rollout, in addition to the future awarding of the NBP contract, means that there will continue to be increasing infrastructure-based competition.
- 4.26 Eircom expressed the view that, in general, products are substitutes where the bandwidth achievable is greater than or equal to the substituted bandwidth, which, in Eircom's view, indicates that the separation of markets is logical according to whether the access is provided on the basis of legacy or next generation technologies.²⁷²
- 4.27 Eircom also considered that ComReg has not paid due consideration to the nature of the market, which, it stated, is characterised by declining demand for legacy technologies and an increasing demand for NGA.
- 4.28 enet agreed with ComReg's preliminary conclusions on its assessment of the WLA Product Market, stating that it shares ComReg's view that the relevant market comprises both current generation (LLU and Line Share products offered over copper networks) and next generation (VULA products provided over FTTx networks) WLA services.
- 4.29 Sky broadly agreed with ComReg's preliminary conclusions on the relevant WLA product and geographic market, noting that the assessment is supported by outcomes evident in the market based on the relatively low number of competitors, Eircom's static/rising market share, the lack of differentiated pricing, and limited differences in demand characteristics.
- 4.30 Vodafone agreed with ComReg's preliminary conclusion that the WLA Product Market includes CG WLA (e.g. LLU and Line Share products) and NG WLA products (e.g. VULA products over FTTx networks) for both business and residential users. Vodafone agreed that WLA provided over Eircom's copper network (Local Loop Unbundling, or LLU), is the narrowest focal product to start the analysis from, and that the focal product should not distinguish between wholesale local access that is used to provide business services and residential services. It also noted that, at the access level, connections used to supply business and residential end users are essentially identical, even if the downstream services (such as quality of service guarantees) may differ.

²⁷⁰ Table 1 in Eircom's confidential Submission details its LLU and Line Share volumes.

²⁷¹ See page 15 of Eircom's Submission.

²⁷² The chain of substitution analysis carried out by ComReg is detailed in paragraphs A3.62 to A3.89 of the Consultation and paragraph 4.94 and Appendix: 8 of this Decision.

- 4.31 Virgin Media broadly agreed with ComReg's preliminary view on definition of the WLA Product Market, which encompassed both current and next generation products. Virgin Media noted that substitution will occur over time towards network infrastructure that is capable of delivering higher speeds, and that the rate at which this substitution takes place over time in a given location will depend on population density, the relative price of the services, and the willingness of customers to pay for additional speed.

The impact of the NBP on the WLA Market has not been adequately considered

- 4.32 Eircom considered that the NBP procurement process and the subsequent award of the NBP contract will impact the WLA Market. It suggested that, as ComReg is an advisor to the DCCAE, it should discuss with the DCCAE the continuing plans on products which would be required to be offered under the NBP. Eircom noted in its response that the NBP contract was still due to be announced in 2017 and the successful bidder(s) would therefore be rolling out its network during the market review period and, contrary to ComReg's position in the Consultation, there was not, therefore, complete uncertainty.
- 4.33 Eircom was also of the view that ComReg needs to provide assurances that it will be in a position to review the situation when the NBP contract is awarded and not a number of years after this, with Eircom suggesting that ComReg should commit to commence a review, including public consultation, immediately upon conclusion of the NBP tender process, given its view that the NBP would have a definitive impact on the WLA Market.
- 4.34 Eircom considered that ComReg should commit to consult and conclude a review within a 6-12 month period after the NBP contract award.
- 4.35 In its subsequent February 2018 letter to ComReg, Eircom stated that it would no longer be the *de facto* provider of wholesale services in the NBP footprint area and that, accordingly, it was neither accurate nor appropriate to define a national WLA Market. Eircom added that developments in the NBP tendering process which have led to enet emerging as the sole remaining bidder have dissipated any uncertainty on the impact of the NBP market on both the WLA and WCA markets.

Direct constraints and indirect constraints from alternative networks suggest a broader market definition

- 4.36 Eircom disagreed with ComReg's market definition and considered that there are a number of issues with ComReg's approach to assessing indirect constraints in the WLA Market, including the assessment of dilution ratios,²⁷³ the critical loss test ('CLT')²⁷⁴ and the likely extent of switching to Eircom's retail arm in response to the pass-through into retail prices of a SSNIP in WLA products.

²⁷³ In this context dilution ratios are a measure of the percentage increase in retail prices that would occur in response to the pass-through of a SSNIP in WLA.

²⁷⁴ The CLT seeks to support a SSNIP analysis by providing an estimate of the percentage of customers that would have to divert away from the focal product in response to a SSNIP (in this case the pass-through of a wholesale SSNIP) to make the increase in the price of the focal product unprofitable.

- 4.37 Eircom considered that, in ComReg's assessment of dilution ratios, it would be more appropriate to use a weighted average of prices for Eircom's FTTC and FTTH VUA products instead of solely using the price for FTTC-based VUA. It noted that a weighted average wholesale price of VUA is likely to be higher than that of Eircom's FTTC VUA product and, as a consequence, the price-cost ratio and subsequent percentage retail price increase from the SSNIP pass-through will also be higher. In Eircom's view, this implies that, in the case of NGA, price increases at the wholesale level will ultimately result in greater increases at the retail level and increased consumer switching behaviour as a consequence. This could have the effect of potentially including the relevant products to which switching has occurred in the WLA Market.
- 4.38 Furthermore, Eircom noted that NGA has, to a large extent, been rolled out in urban and semi-urban areas where competition from Virgin Media is most likely to be present, which implies that the indirect constraint that Virgin Media provides at the wholesale level cannot be simply dismissed by ComReg.
- 4.39 In relation to the CLT, Eircom expressed its view that ComReg's estimates of Marginal Costs were overestimated. Eircom considered that marginal costs may differ between current customers and potential customers. To emphasise this view it provided an example of a new customer, in which the Customer Premise Equipment ('CPE') will be classified as a marginal cost; however, in the case of an existing customer, CPE is considered to be a sunk cost.²⁷⁵ Eircom noted that ComReg's estimates of marginal costs appear to be based on the Discounted Cash Flow ('DCF') model and, having regard to this, Eircom defined the retail broadband DCF costs for an existing customer broadly as either sunk or incremental, as detailed in Table 6 below.

Table 6: Retail Broadband Costs for existing customers - extract from Eircom Submission²⁷⁶

Sales	Sunk
Modem	Sunk
Delivery	Sunk
Backhaul	Sunk
IP connectivity	Incremental
Connection	Sunk
Billing	Incremental
Marketing and Product Development	Sunk
Accommodation	Sunk
Helpdesk	Incremental
Order handling	Sunk
Servers	Sunk
Corporate overheads	Sunk

²⁷⁵ 'Sunk' costs refer to costs which cannot be recovered once incurred. Incremental costs typically vary with respect to consumer demand. Eircom also noted that backhaul in this case is the cost of interconnect paths and that as this is only likely to be flexible in a case where customer decline is catastrophic, which is classed as a 'sunk' cost.

²⁷⁶ Eircom Submission, page 17.

4.40 Table 7 below sets out the estimated costs for the LEA²⁷⁷ by access type, as provided by Eircom.

Table 7: Incremental and Sunk Costs for the LEA – extract from Eircom Submission

[REDACTED]²⁷⁸

[REDACTED] LEA	Incremental	Sunk	Totals
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- 4.41 Eircom considered that the marginal costs estimated by ComReg underestimated the margin associated with existing customers and therefore will overestimate the Critical Loss Value ('CLV'), i.e. the threshold at which changes in retail demand would potentially undermine the profitability of a SSNIP (with the consequence being that a broader Product Market definition was warranted). Eircom also presented figures from Ofcom's calculations of marginal costs for comparison purposes, where marginal costs were in the range of £0.50 to £2.50 for LLU and £7.00 to £10.00 for IPStream/WBC;²⁷⁹ on the basis of these estimates of marginal costs, Ofcom's calculations of the margin were 3.33% to 16.67% for LLU and 31.83% to 45.45% for IPStream/WBC.
- 4.42 Eircom suggested that, in this context, ComReg has most likely overestimated CLVs in the Consultation, and it is of the view that Virgin Media provides an indirect constraint at the wholesale level. In addition, Eircom considered that the relevant retail market should be extended to include mobile broadband, FWA and satellite, as these may also provide indirect constraints at the wholesale level. Eircom queried why ComReg has excluded mobile broadband, FWA and satellite from the retail broadband market, without any analysis regarding the level of indirect constraint arising from these potential substitutes.

²⁷⁷ Larger Exchange Area ('LEA') means the total geographic area comprising individual exchange areas, each of which satisfies at least one of several criteria. The full definition is outlined in Section 2.1 of the Decision Instrument at Annex 3 of ComReg Decision D04/13 ('2013 Bundles Decision').

²⁷⁸ Eircom Submission, page 17.

²⁷⁹ IPStream is BT's (UK) legacy Bitstream product, which was superseded by the 21CN-based Wholesale Broadband Connect (WBC) product. WBC supports ADSL2+ which delivers a theoretical maximum throughput of 24Mbit/s rather than the 8Mbit/s offered by IPstream (based on ADSL1).

- 4.43 Eircom set out concerns in relation to the retail market definition with specific regard to the application of the SSNIP test and the way in which consumers' responses to such a hypothetical price increase were estimated. Eircom referred to respondents being asked how they would respond to a €2 increase in the price of their broadband package and noted that this is an across-the-board price increase. Put differently, it expressed concern that respondents on all platforms, whether business or residential users, or purchasers of bundles or standalone products, were asked how they would respond to the €2 increase. In Eircom's view, this is therefore not representative of a SSNIP for all customers, as this should be related to a 5% or 10% increase in the particular price they pay for the service they use and, therefore, is likely to skew the response in terms of under-estimating hypothetical switching behaviour.
- 4.44 Further to paragraph 4.43 above, Eircom noted that it would be more appropriate if ComReg considered a lower increase in the retail price in the context of indirect constraints in the wholesale market, and on the basis of the dilution ratio.²⁸⁰ It questioned the estimated switching behaviour that ComReg reported in response to a 10% notional retail price increase, and noted that the approach taken by ComReg in the Consultation is likely to significantly overestimate retail customers' behavioural responses.
- 4.45 Eircom considered that the manner in which ComReg conducted the CLT is not robust in terms of estimates of both marginal costs and CLVs in addition to the appropriate estimates of customers' behavioural responses against which to compare these CLVs. These responses inform the extent to which various retail services may provide indirect constraints at the wholesale level.
- 4.46 Eircom noted ComReg's preliminary conclusion that any loss of Eircom's wholesale revenue from a SSNIP in WLA services would be mitigated by Access Seekers switching to retail products from Eircom.²⁸¹ In Eircom's view, ComReg has not performed sufficient analysis on the extent of this trade-off and it considers that, in the absence of regulation, Eircom would still be constrained in its behaviour by *ex post* competition law, adding that, if Eircom held a position of dominance in the WLA Market, a margin squeeze would be considered an abuse of such dominance.

²⁸⁰ See page 18 of Eircom's Submission which notes that, in the context of indirect constraints in the wholesale market where it would be appropriate to consider a lower increase in the retail price on the basis of the dilution ratio, the estimated switching behaviour that ComReg claims is in response to a "10% notional retail price increase" and that "would likely significantly overestimate retail customers' behavioural responses" may in actuality be more representative of the pass through of a SSNIP at the wholesale level.

²⁸¹ As set out in paragraph 5.161 of the Consultation, ComReg's view was, in fact, that any loss of Eircom's wholesale revenue from a SSNIP in WLA services would be mitigated by retail customers of the Access Seekers purchasing WLA switching to retail products from Eircom.

- 4.47 In relation to alternative FTTH networks, Eircom stated that, in a scenario where there are two different successful bidders for the NBP, there could potentially be four different FTTH providers:²⁸² Eircom Wholesale commercial FTTH, SIRO commercial FTTH, NBPCo 1A services and NBPCo 1B services. Eircom expressed the view that the two NBPCOs would be entering the market during the period of this market review and, as a result of having to deal with four different FTTH providers, it would expect aggregators to emerge, or for existing wholesale providers, including BT and Eircom Wholesale, to provide such services. Eircom also noted that, in addition to the established wholesale SPs, other market participants such as Digiweb have the capability to provide such a platform, and that access seekers are not as limited in the access they are seeking as ComReg assumes.
- 4.48 Eircom noted that it is already the case that Vodafone has integrated with Eircom Wholesale, BT, and SIRO to purchase their respective wholesale offerings, and that various smaller SPs have signalled their intention to establish relationships with SIRO, which in its view strongly suggests that integrating with more than one wholesale provider is not a technical or economic barrier.
- 4.49 Sky noted [§< [REDACTED]
[REDACTED]
[REDACTED]
- 4.50 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- 4.51 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]
- 4.52 Vodafone agreed with the principle that self-supply of SPs' WLA to their retail businesses should be part of the WLA Market, since SPs can readily divert such supply to serve the wholesale market. Vodafone stated that, in this context, it is Eircom's own self-supply that is relevant, given ComReg's preliminary conclusion that, on an analysis of supply-side and indirect substitution, WLA products delivered over alternative networks are not part of the WLA Market.

²⁸² Eircom's proposed scenario assumes that such NBPCOs are independent of the successful bidders.

- 4.53 Vodafone agreed in principle with ComReg's preliminary view that Eircom's fibre-based WLA products (e.g. Eircom's VUA products provided over FTTH and FTTC networks) should be included in the WLA Market, on the basis that they have sufficiently similar product characteristics, intended use and pricing. Vodafone also agreed in principle that on a forward-looking basis, WLA provided over SIRO's FTTH network could be included in the WLA Market, but stressed that, in practice, due to its limited coverage, the SIRO network is unlikely to impose an immediate and effective constraint on Eircom during the lifetime of this market review.
- 4.54 Vodafone agreed that based on an assessment of supply-side constraints, hypothetical WLA services supplied over alternative network infrastructures (including CATV, FWA, localised alternative FTTH networks, mobile 3G/4G networks and leased lines) should not be included in the WLA Product Market, noting that ComReg had set out its preliminary views in the Consultation that retail broadband services provided over FWA, satellite and mobile networks do not likely fall within the relevant retail broadband market. Vodafone is of the view that this therefore implies that it would not have been relevant for the WLA Product Market assessment to include hypothetical WLA products provided over these alternative network infrastructures. Vodafone noted the high entry barriers to establishing a substantial new fixed network (or the low probability and the high cost implications associated with gaining wholesale access to the Virgin Media network) means that supply-side substitution over alternative networks would not be plausible.
- 4.55 Regarding the assessment of indirect constraints, Vodafone noted that retail services supplied over alternative network infrastructures (including CATV, FWA, localised alternative FTTH networks, satellite and mobile broadband) are not included in the WLA Market and agreed that retail services provided by Virgin Media do not constrain Eircom's prices in the WLA Market. It continued by noting that Virgin Media's network coverage is limited (to 45% of households in Ireland, mainly in urban areas, and with minimal provision to business users) which would severely constrain consumers' ability to switch. Vodafone also noted that Eircom has recently implemented a number of VUA price increases, by up to €3.50 in the case of FTTC-based VUA, and by up to €3 in the case of FTTH-based VUA products, effective from 1 September 2016.

Bitstream Regional Handover should be included in the WLA Market and other issues

- 4.56 BT considered that the Bitstream Regional Handover²⁸³ product forms part of this market as it is a national product and depends on interconnects throughout the country to achieve its maximum discount. BT considered that, in many parts of the country, it is the only realistic way to interconnect with the Eircom network, as getting to the local VUA interconnection points is uneconomic. BT also noted that ComReg's proposed de-regulation of the leased lines market²⁸⁴ further increases the need for this handover service to be included within the WLA Market, as leased line and Ethernet backhaul from Eircom may not continue to be made available or be available on an economically viable basis in the future, should the leased line/WHQA market be de-regulated.
- 4.57 While agreeing with the WLA Market definition set out by ComReg, Sky referenced ComReg's statement in the Consultation that:

*"Eircom's VUA products are currently priced at €23 per month (with higher prices for higher speeds)..."*²⁸⁵

noting that Eircom's primary VUA product is its FTTC POTS-based NG VUA service with current port rental charges of €8.09 a month (a 35% price increase from €5.98 as notified in May 2016). Sky further noted that Eircom's standalone FTTC-based VUA product accounts for less than 20% of Eircom's NGA customer base (wholesale and retail) and that, in Sky's view, it is important that ComReg references this as it bolsters the majority of ComReg's proposals.

WLA Geographic Market Definition

- 4.58 Seven of the eight Respondents to the Consultation referred to ComReg's preliminary views on the WLA geographic market definition.²⁸⁶ Six respondents (ALTO, BT, enet, Sky, Virgin Media and Vodafone) agreed with ComReg's proposed WLA geographic market definition, and in some cases commented on particular aspects of the analysis below. Eircom was the sole respondent that disagreed with ComReg's preliminary conclusions on the WLA geographic market definition, and raised a number of issues in this regard (as set out in paragraphs 4.65 to 4.67 below).
- 4.59 ALTO agreed with ComReg's preliminary conclusions on the geographic market assessment, noting that the market is unlikely to change over the period of the review, given the slow pace of development regarding new market entry, and uncertainty surrounding the NBP.
- 4.60 BT agreed with ComReg's preliminary conclusions, noting that the balance of market shares is unlikely to change over the period of the review, given that SIRO had only 1% market share (at the time of responding to the Consultation).

²⁸³ Regional Handover is the handover of Bitstream Plus traffic to a SP's Wholesale Ethernet Interconnect Link ('WEIL') in the same region. Regional Handover is offered at a discounted rate to the standard Bitstream Plus Handoff given that this traffic does not traverse Eircom's Core NGN Network.

²⁸⁴ Market Review: Wholesale High Quality Access at a Fixed Location Consultation, [ComReg Document No. 16/69](#), August 2016 ('WHQA Consultation').

²⁸⁵ See paragraph 5.41 of the Consultation.

²⁸⁶ See paragraphs 5.174 to 5.199 of the Consultation.

- 4.61 Colt did not provide any explicit views on ComReg's assessment of the geographic scope of the WLA Market.
- 4.62 enet and Virgin Media agreed with ComReg's preliminary view that the WLA Market is national.
- 4.63 Sky agreed that, given the lack of direct and indirect constraints in the WLA Market generally, the conditions of competition are sufficiently homogeneous such that there are no sub-geographic markets. Sky noted that evidence of localised competition is no longer as prevalent as was the case following the 2013 NGA Decision,²⁸⁷ due to substantial net growth in Virgin Media subscribers, which has been reversed since that Decision in 2013.
- 4.64 Vodafone agreed with ComReg's preliminary conclusion that the WLA Product Market is national in scope on the basis that there is insufficient evidence to suggest clear differences in geographic entry conditions, insufficient differences in the number and size of potential competitors, the distribution of market shares not being suggestive of differences in competitive conditions across different geographic areas, and given that Eircom's pricing of WLA products is national,²⁸⁸ which points to the existence of common pricing constraints. Furthermore, Vodafone highlighted ComReg's view in the Consultation that Virgin Media, as the main Alternative Network Operator, covers only 38% of the 2 million premises in Ireland and that it does not provide wholesale products in the WLA Market (which, in any case, would not be technologically feasible), nor does it wish to do so.
- 4.65 Eircom disagreed with ComReg's preliminary views that the WLA Market is national in scope, with Eircom noting that, in the context of sub-national retail broadband markets and the patterns of network rollout, the WLA Market is likely to be sufficiently differentiated on a regional basis, such as to warrant the delineation of separate urban and rural geographic markets.
- 4.66 Eircom considered that SIRO's entry to the WLA Market is very relevant to this market review and, where Eircom Wholesale and SIRO overlap, it would seem to indicate some geographical distinction in the provision of WLA. Eircom also considered that the NBP is also suggestive that the WLA Market is not sufficiently homogeneous on a national level and serves to justify the delineation of separate geographic markets.
- 4.67 Eircom also considered that ComReg is incorrect in its assessment of indirect constraints in the WLA Market on the basis that the retail broadband market is sufficiently differentiated in urban and rural areas and given its view that Virgin Media poses an effective indirect competitive constraint in the WLA Market.²⁸⁹
- 4.68 In its February 2018 letter to ComReg, Eircom suggested that a number of market developments had occurred since the publication of the Consultation, which should be taken into account by ComReg. These include:

²⁸⁷ ComReg Decision D03/13, Document number 13/11, dated 31/01/2013 (the '**2013 NGA Decision**').

²⁸⁸ ComReg notes that the national pricing of WLA products occurs in the presence of regulation.

²⁸⁹ In paragraphs 3.49 and 3.50 above, ComReg noted Eircom's view that ComReg has incorrectly defined the geographic scope of the retail broadband market due to differences in NGA rollout and means of network access between urban and rural areas, the extent of LTE-based Mobile Broadband coverage in rural areas, and the existence of the NBP.

- (a) The continuing rollout of SIRO's network, and the conclusion of contracts between SIRO and various retail providers of broadband;
- (b) The announcement of a joint venture between enet and SSE to roll fibre out to 115,000 premises by 2019;
- (c) The incremental rollout of its network by Virgin Media;
- (d) The formation of a strategic partnership between Imagine and Huawei to rollout a 'Wireless to the x' network, with 85% coverage by 2019; and
- (e) The partnership between enet and SIRO, whereby enet will become a SIRO aggregator.

4.69 In the same letter, Eircom advocated that, in view of such developments:

*"ComReg engage in the process of re-consulting on the Wholesale Local Access (WLA) and Wholesale Central Access (WCA) markets."*²⁹⁰

4.70 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following identified themes:

- (a) WLA Market is national in scope and this is unlikely to change within the review period (paragraphs 4.71 to 4.82 below); and
- (b) Evidence suggests sub-geographic WLA Markets exist (paragraphs 4.83 to 4.87 below).

WLA Market is national in scope and this is unlikely to change within the review period

4.71 ALTO agreed with ComReg's preliminary conclusions on the geographic market assessment for the WLA Market and stated that it is clear that Eircom (including its wholesale arm) has a ubiquitous network/network access. ALTO also agreed that the market is unlikely to change over the period of the review, given that certain new entrants have developed and progressed more slowly and face certain technological complications, in addition to the uncertainty surrounding the NBP.

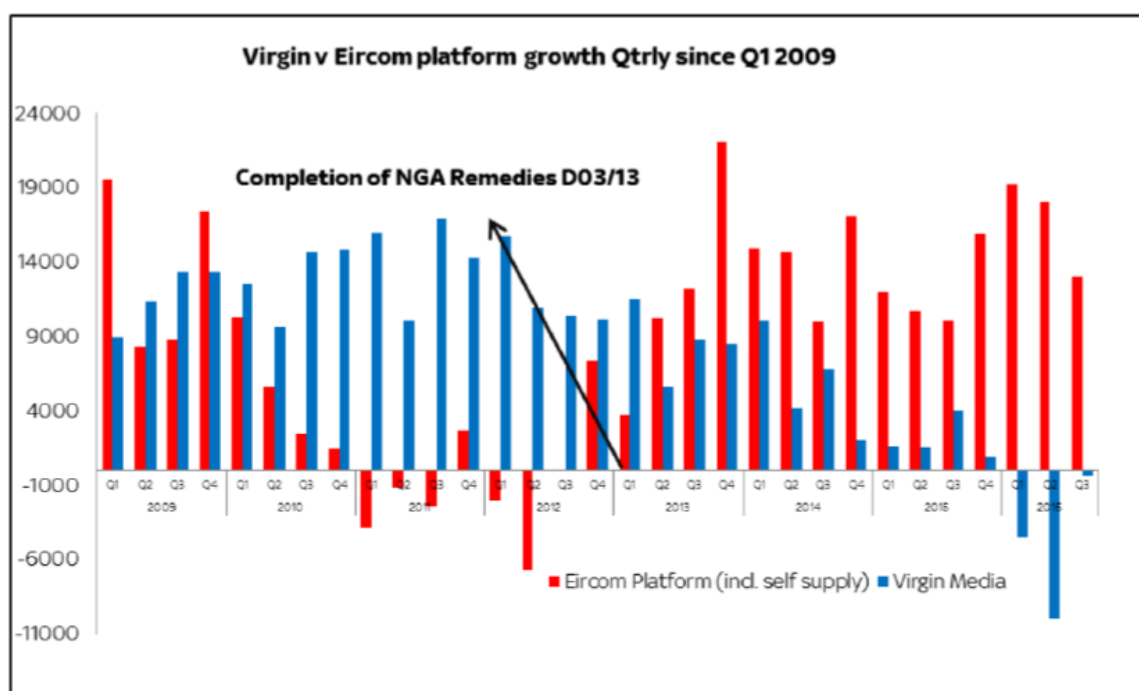
4.72 BT also agreed with ComReg's preliminary conclusions on the WLA geographic market assessment, noting that Eircom has national ubiquitous network access to premises in Ireland. BT also noted that the balance of market shares is unlikely to change over the period of the review, given that SIRO had only 1% market share (at the time of BT's submission to the Consultation in January 2017) and because the installation of FTTH services faces additional installation complexity irrespective of whether it is SIRO or Eircom.

4.73 In its response to the Consultation, enet also agreed that the relevant geographic market for WLA is national in scope.

²⁹⁰ Eircom letter to ComReg dated 15 February 15 2018, at page 1.

4.74 Sky agreed that, given the direct and indirect constraints in the WLA Market generally, the conditions of competition are sufficiently homogeneous such that there are no sub-geographic markets. Sky noted that, relative to the timeframe of the 2013 NGA Decision, the evidence now suggested there was less localised competition. Sky noted that the then-substantial net growth in Virgin Media subscribers coupled with declining Eircom subscribers has been reversed. Sky presented a chart (set out at Figure 8 below) showing Virgin Media growth compared to Eircom's platform growth since Q1 2009.

Figure 8: Virgin Media v Eircom quarterly platform growth since Q1 2009 – extract from Sky's Submission²⁹¹



4.75 Sky noted that this showed that Eircom's net subscriber growth in WLA (including self-supply) and WCA has significantly out-performed Virgin Media's subscriber net growth since Q2 2013, with Virgin Media's market share and subscriber base having declined for the last three consecutive quarters.²⁹²

4.76 Vodafone agreed with ComReg's preliminary conclusion that the WLA Product Market is national in scope.

²⁹¹ See page 4 of Sky's Submission.

²⁹² ComReg considers that the last three quarters relate to Q1 to Q3 2016.

- 4.77 In Vodafone's view, local access networks, and telecommunications networks more generally, have a fixed and pre-defined geographic presence, implying that a wholesale buyer of a WLA product would only be able to switch its demand to an alternative area if the retail customer is willing to move to that area. Vodafone considered that this would only be possible if a sufficient number of downstream customers would move location in response to the hypothetical price rise at the wholesale level, such as to make the price rise unprofitable. Vodafone considered that, given that the cost associated with moving location is likely to be significant, it would be reasonable to conclude that geographic demand-side substitution is either a very weak or non-existent constraint.
- 4.78 Vodafone considered that supply-side substitution is likely to be limited by the need for a SP in a different geographic area to invest in new infrastructure and that, in the case of local access networks, this would involve significant sunk costs and therefore make it very unlikely that, in response to a hypothetical increase in the price of WLA services, supply-side substitution would occur.
- 4.79 Vodafone considered that demand and supply-side substitution would generally lead to the definition of very narrow geographic markets, which are unlikely to be practical to analyse or to be representative of the competitive constraints that exist. In its view, this is why the geographic scope of local access markets is usually based on an assessment of other relevant factors, such as the presence of common pricing constraints between different geographic areas.
- 4.80 Vodafone referred to ComReg's analysis in the Consultation, noting that it demonstrates that there is a lack of direct and indirect constraints in the WLA Market, despite the emergence of some local competitive constraints. Vodafone agreed with ComReg's preliminary conclusions that the WLA Market is national in scope on the basis that:
- (a) There is insufficient evidence to suggest clear differences in geographic entry conditions;
 - (b) The number and size of potential competitors is insufficient. In particular, as noted in the Consultation, SIRO's rollout of its FTTH network has been slower than expected;
 - (c) The distribution of market shares is not suggestive of differences in competitive conditions across different geographic areas – given SIRO's limited network rollout and Virgin Media's static retail market share (self-supply)²⁹³ Eircom is likely to maintain its relatively high market share; and
 - (d) Eircom's pricing of WLA products is national (pointing to the existence of common pricing constraints) and, having regard to network coverage, any geographic differences arise as a result of the availability of different WLA products, rather than price.

²⁹³ For the avoidance of doubt, ComReg did not include Virgin Media's self-supply in the relevant WLA Product Market definition.

- 4.81 Furthermore, Vodafone agreed with ComReg's view in the Consultation that Virgin Media, as the main Alternative Network Operator, covered only 38% of the 2 million premises in Ireland and that it does not provide any wholesale products in the WLA Market (which, in any case, would not be technologically feasible), nor does it wish to do so.
- 4.82 Virgin Media broadly agreed with ComReg's preliminary view that there is a national WLA Market.

Evidence suggests that sub-geographic WLA Markets exist

- 4.83 Eircom disagreed with ComReg's preliminary conclusions on the geographic market assessment for the WLA Market. It disagreed that the WLA Product Market is national in scope stating that, although there are a small number of competitors in the WLA Market, in the context of its view that sub-national retail broadband markets exist, and given the patterns of network rollout, the WLA Market is likely to be sufficiently differentiated on a regional basis to indicate the presence of separate geographic markets based on an urban / rural distinction.
- 4.84 Eircom considered that SIRO's entry to the market is very relevant in this scenario and leaving aside the NBP, SIRO is only rolling out in urban areas. Eircom noted that, at the time of its Submission to the Consultation (January 2017), SIRO had launched services in nine towns and Eircom was of the view that SIRO would launch in a further eight towns over the course of 2017. Eircom noted that its wholesale arm provides FTTC-based VUA in all of these towns, while Eircom Wholesale FTTH-based VUA overlaps with SIRO in seven of those nine towns where SIRO is currently present. Together, Eircom considered that this would seem to indicate a geographic distinction in the provision of WLA.
- 4.85 In relation to the NBP, Eircom considered that the NBP is aimed at addressing a market failure i.e. the fact that, due to economics of density, commercially-based rollout is not viable, and such a market failure is necessary to justify the provision of State Aid. Eircom noted that the NBP intervention area will not cover those areas where services have already been commercially deployed. In the intervention areas, the successful NBP bidder will be required to provide wholesale network access. Eircom considered that NBP intervention is inconsistent with the conclusion that the WLA Market is sufficiently homogeneous nationally to justify a defining a geographic market that is national in scope.
- 4.86 Eircom noted ComReg's statement in paragraph 5.199 of the Consultation that:
- "...given the lack of direct and indirect constraints in the WLA Market generally, the conditions of competition appear to be sufficiently homogenous such that there are no sub-geographic markets. This is notwithstanding the emergence of some localised competitive pressure."*
- 4.87 Eircom expressed the view that ComReg is incorrect in its assessment of indirect constraints in the WLA Market on the basis that the retail broadband market is sufficiently differentiated in urban and rural areas and its view that Virgin Media acts as an effective indirect constraint in the WLA Market (with Eircom citing Virgin Media's market share in urban areas at around 45%-55%). Therefore, in light of these points, Eircom suggested that ComReg needs to reassess the geographic scope of the WLA Market.

ComReg's Assessment of Respondents' Views

WLA Product Market Definition

- 4.88 In this section, ComReg assesses Respondents' views under each of the key themes identified in paragraph 4.22 above, as follows:
- (a) CG LLU-based WLA as the appropriate focal product for the WLA Product Market assessment and whether separate CG and NG WLA Markets exist (see paragraphs 4.89 to 4.107 below);
 - (b) The impact of the NBP on the WLA Market has not been adequately considered (see paragraphs 4.108 to 4.112 below);
 - (c) Direct and indirect constraints from alternative networks suggest a broader market definition (see paragraphs 4.113 to 4.157 below); and
 - (d) Bitstream Regional Handover should be included in the WLA Market, and other issues (see paragraphs 4.158 to 4.167 below).

CG LLU-based WLA as the appropriate focal product for the WLA Product Market assessment, and whether separate CG and NG WLA Markets exist

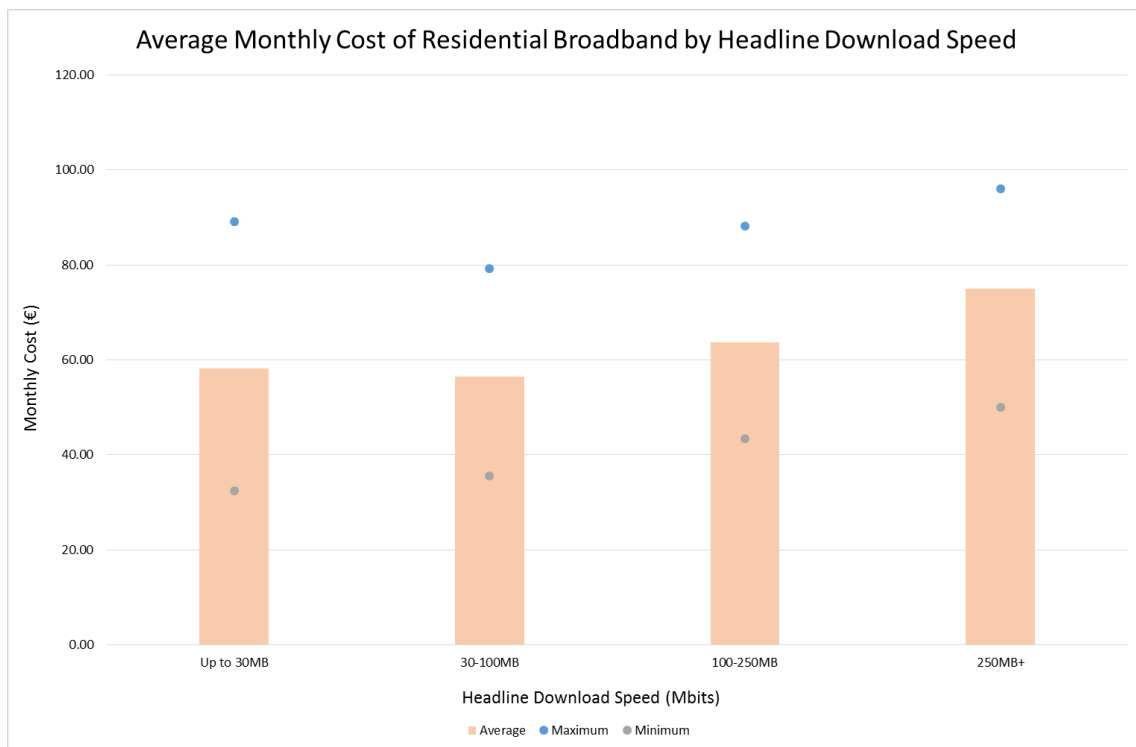
- 4.89 In paragraphs 4.23 to 4.31 above, ComReg summarised the main views of Respondents regarding the proposed focal product and likely substitution in the WLA Market. Six respondents (ALTO, BT, enet, Sky, Vodafone and Virgin Media) agreed broadly or entirely with ComReg's preliminary view that Eircom's LLU products, provided over its copper network, represent the most appropriate focal product in the WLA Market and that Eircom's VUA products share a sufficient number of the product characteristics with LLU products, such that they should be included in the WLA Product Market.
- 4.90 ALTO and BT agreed with ComReg's preliminary conclusions on the WLA Product Market assessment, with BT further noting that this position is consistent with BT's experience of the market. As noted in paragraph 4.28, enet stated that it shares ComReg's view that the relevant market comprises both current generation (LLU and Line Share products offered over copper networks) and next generation (VULA products provided over FTTx networks) WLA services. In paragraph 4.29, ComReg noted Sky's agreement and view that ComReg's position is supported by outcomes evident in the market based on the relatively low number of competitors, Eircom's static/rising market share, the lack of differentiated pricing and limited differences in demand characteristics.
- 4.91 Vodafone agreed that the WLA Product Market includes CG and NG WLA products, for both business and residential users. Vodafone also agreed that WLA provided over Eircom's copper network (LLU), is the narrowest focal product to start the analysis from (see paragraph 4.30 above). Virgin Media also agreed with ComReg's assessment and specifically the inclusion of current and next generation products in the same Product Market (see paragraph 4.31 above).

- 4.92 As noted in paragraphs 4.25 and 4.26, Eircom considered that it was more appropriate to identify separate CG and NG WLA Markets. ComReg does not agree with Eircom and cannot find sufficient reasoning or justification on a forward-looking basis for defining differentiated WLA Markets on the basis of technology (i.e. one market for CGA products and another market for NGA products) over the lifetime of this market review. ComReg notes that Eircom's suggestion somewhat contradicts its view set out in paragraph 4.26 above that, in general, products are substitutes where the bandwidth achievable is greater than, or equal to, the substituted bandwidth.
- 4.93 ComReg acknowledges there has been a decline in demand for CGA products in recent years, but does not consider that this decline is sufficient to justify the delineation of the WLA Market on the basis of technology for the reasons set out in paragraph 4.94 below.
- 4.94 In Appendix: 8, ComReg presents an updated analysis of the chain of substitution²⁹⁴ between products, similar to Appendix 3 of the Consultation. Figure 9 below shows the average monthly cost of broadband for 91 residential tariffs by 'headline' download speed.²⁹⁵ Figure 9 shows that, for each broadband speed, there is an overlap with the range of costs associated with other similar headline speeds. For example, the monthly cost of broadband offered at speeds 'up to 30MB' falls within the range of the average cost of broadband offered at speeds of 30-100MB and 100-250MB. This result indicates that it is possible for a subscriber to switch to a faster broadband service for a similar or cheaper price. There is also a positive relationship between speed and price, meaning broadband services offering higher speeds have a higher average cost per month. These factors also indicate that if the price of a broadband product offered at one speed was to increase by a small but significant amount, customers would be able to switch to an alternative product to retain the original price, or switch to an alternative product to receive a higher broadband speed at the same (higher) price. On this basis, ComReg does not consider it appropriate to delineate the retail market for broadband into CG and NG components as the analysis of retail tariffs suggests that there is a chain of substitution between CG and NG products.

²⁹⁴ A chain of substitution refers to the substitutability between a number of similar products, which could lead to each of these products being part of the same market. A chain of substitution implies that a product at one end of the chain can potentially exert an indirect constraint on a product at the other end of the chain. For example, if product B is a substitute for products A and C, while A and C may not be direct substitutes, they may be considered to be in the same Product Market since their respective pricing may be constrained by substitution to B.

²⁹⁵ An overview of the methodology is outlined in Appendix: 8.

Figure 9: Average Monthly Cost of Residential Broadband by Headline Download Speed – Q4 2017



- 4.95 ComReg has previously set out and justified why Eircom’s VUA products are likely to be an effective substitute for physical unbundled services, such as LLU, which should therefore be included in the WLA Product Market.²⁹⁶ With both CG and NG WLA products serving similar purposes in providing access, ComReg remains of the view that VULA is likely to be an effective substitute for LLU. ComReg considers that VULA products, which are active Layer 2 products with local hand off, have the potential to mimic an unbundled copper access path insofar as is practical, and can allow SPs to have a high level of control over their product offerings. VULA products allow SPs to replicate the potential that LLU affords as it is ‘virtual unbundled access’ and can allow the Access Seeker the ability to differentiate products and services to those offered by the incumbent, in addition to affording End Users with higher speeds over VULA products, compared to LLU.
- 4.96 Furthermore, in the Consultation ComReg examined a range of criteria to assess whether Eircom’s VUA product should be included in the WLA Market.²⁹⁷ Notwithstanding the decline in demand for CG WLA products in recent years, it remains the case that NG WLA products are sufficiently similar to CG WLA products from a technical and functional perspective. In this context, ComReg notes that the following criteria are relevant:

²⁹⁶ See paragraphs 5.18 to 5.47 of the Consultation.

²⁹⁷ Explanatory Note to the 2014 Recommendation, page 43 onwards.

- (a) *Access occurs locally*: in the case of Eircom's Local VUA product the customer traffic handover point is at the same point in the network hierarchy as a physical LLU product (i.e. at the local exchange); for the Remote VUA product, the local condition can be fulfilled for Eircom's VUA products even if the point of interconnection is not at the local exchange, but at a suitable location.²⁹⁸
- (b) *Guaranteed bandwidth and uncontended access is available*: the Access Seeker manages the bandwidth requirements of their customers as the VULA product supports a range of data speed profiles that the Access Seeker can select (both rate adaptive and stable) and so the potential data rate that can be offered to an End User by the Access Seeker is not curtailed whether they are using Eircom's Local VUA or Remote VUA product; the fibre connection between the cabinet DSLAM and the Aggregation Node is shared - however, the fibre path will have more than sufficient bandwidth capacity to match customer demands, and should a capacity limit be reached in terms of bandwidth, then additional capacity can be added, if required. This effectively provides a dedicated logical uncontended path between the customer's premises and the customer traffic handover point.
- (c) *Access Seeker maintains control over transmission network*: in paragraph 5.38 of the Consultation, ComReg outlined the features of Eircom's VUA product. An Access Seeker making use of VUA has sufficient control over broadband (and other) service offerings available to the End User, in terms of product specification and the quality of service parameters. This is achieved because an Access Seeker has control of the CPE and the core network elements and has indirect control of the Access Path by means of a flexible and configurable virtual access product. This combination of direct and indirect control facilitates innovation and product differentiation comparable to that of LLU.

4.97 ComReg set out its position in Section 4 of the Consultation²⁹⁹ that, at the retail level, CGA and NGA technologies are considered to be substitutes on the basis of the consideration of factors which include product characteristics, pricing, intended use, and Service Providers' views on substitutability. On this basis, and as set out in paragraphs 4.95 to 4.96 ComReg remains of the view that copper-based broadband (DSL) is a substitute for next generation broadband (VDSL – FTTx).

²⁹⁸ Paragraph 5.23 of the Consultation explains Local and Remote VUA. With Local VUA, the Eircom MDF/ODF and the customer traffic handover point are co-located in the same exchange. With Remote VUA, the Eircom MDF/ODF and the customer traffic handover point are not co-located in the same exchange but are served by the same Aggregation Node.

²⁹⁹ ComReg's preliminary view of substitutability between CGA and NGA (FTTC and FTTH) products is outlined in paragraphs 4.95 to 4.116 of the Consultation.

- 4.98 Evidence from both the 2014 WLA/WCA Market Research³⁰⁰ and updated 2017 WLA/WCA Market Research³⁰¹ indicates that consumer and business Respondent's view copper-based broadband and FTTx broadband to be substitutes. The 2014 WLA/WCA Market Research showed that, of those residential respondents with broadband purchased as part of a bundle, 24% of residential respondents on a copper network said that they would definitely or maybe change their behaviour in response to a hypothetical price increase. 57% of these respondents indicated that they would cancel their subscription and switch to an alternative network. 76% of these respondents reported that they would be very likely or fairly likely to follow through on this change. Of those residential respondents who indicated that they would cancel and switch in response to the hypothetical price increase and were likely or fairly likely to do so, 22% indicated they would switch to a broadband service provided over a fibre network. The 2014 WLA/WCA Market Research showed that, for business respondents whose broadband is part of a bundle, if the price of broadband increased by €2 per month, 32% of businesses on a copper network would definitely or maybe change their behaviour in response to a hypothetical price increase. 66% of these respondents indicated that they would cancel their subscription and switch to an alternative network. Of these respondents, 86% said they were fairly likely or very likely to do so in response to a €2 increase in the price of their FTTC-based broadband service. Of those that said that they would switch, 28% said that they would switch to a broadband service provided over a Fibre Network. The outcomes for businesses whose copper-based broadband service is not part of a bundle were similar.
- 4.99 Similarly, the 2014 WLA/WCA Market Research showed that respondents also considered copper-based broadband to be a substitute for fibre-based broadband. 25% of residential respondents on an FTTC network said that they would definitely or maybe change their behaviour in response to a hypothetical price increase. 47% of these respondents indicated that they would cancel their subscription and switch to an alternative network. 76% of these respondents reported that they would be very likely or fairly likely to follow through on this change. Of those residential respondents who indicated that they would cancel and switch in response to the hypothetical price increase and were likely or fairly likely to do so, 49% indicated they would switch to a broadband service provided over a copper network. The 2014 WLA/WCA Market Research showed that, for business respondents, 24% on an FTTC network indicated that they would definitely or maybe change their behaviour in response to a hypothetical price increase. 79% of these respondents indicated that they would cancel their subscription and switch to an alternative network. Of these respondents, 77% said they were fairly likely or very likely to do so in response to a €2 increase in the price of their FTTC-based broadband service. Of those that said that they would switch, 39% said that they would switch to a broadband service provided over a copper network. The outcomes for businesses whose FTTC-based broadband service is not part of a bundle were similar.

³⁰⁰ See paragraphs 4.78 to 4.81 of the Consultation.

³⁰¹ See Appendix: 5 of this Decision.

- 4.100 The 2017 WLA/WCA Market Research presented similar findings. For residential End Users that purchase broadband as part of a bundle, of those that would switch in response to a SSNIP of €2 (5% of respondents)³⁰² and would follow through (96%),³⁰³ 25% of users would switch to fibre broadband, while 10% would switch to copper-based broadband.³⁰⁴ For residential End Users that purchase broadband on a standalone basis, of those that would switch in response to a SSNIP of €2 (6% of respondents)³⁰⁵ and would follow through (96%),³⁰⁶ 22% of users would switch to fibre broadband, while 5% would switch to copper-based broadband.³⁰⁷
- 4.101 For business End Users that purchase broadband as part of a bundle, of those that would switch in response to a SSNIP of €2 (15% of respondents)³⁰⁸ and would follow through (85%),³⁰⁹ 10% of users would switch to fibre broadband.³¹⁰ For business End Users that purchase broadband on a standalone basis, of those would switch in response to a SSNIP of €2 (17% of respondents)³¹¹ and would follow through (85%),³¹² 28% of users would switch to fibre broadband, while 15% would switch to copper-based broadband.³¹³
- 4.102 ComReg notes that no other SP disagreed with ComReg's preliminary view set out in the Consultation that CGA and NGA technologies are considered to be substitutes at the retail level and that in a February 2015 SIR,³¹⁴ the majority of SPs were of the view that FTTC and FTTH platforms were substitutes for copper-based broadband. ComReg therefore remains of the view that NG WLA products (i.e. VULA) should be included in the WLA Product Market along with CGA products (i.e. LLU).

³⁰² Slide 55 of the 2017 WLA/WCA Consumer Market Research.

³⁰³ Slide 57 of the 2017 WLA/WCA Consumer Market Research.

³⁰⁴ Slide 60 of the 2017 WLA/WCA Consumer Market Research.

³⁰⁵ Slide 65 of the 2017 WLA/WCA Consumer Market Research.

³⁰⁶ Slide 69 of the 2017 WLA/WCA Consumer Market Research.

³⁰⁷ Slide 71 of the 2017 WLA/WCA Consumer Market Research.

³⁰⁸ Slide 36 of the 2017 WLA/WCA Business Market Research.

³⁰⁹ Slide 36 of the 2017 WLA/WCA Business Market Research.

³¹⁰ Slide 38 of the 2017 WLA/WCA Business Market Research.

³¹¹ Slide 40 of the 2017 WLA/WCA Business Market Research.

³¹² Slide 41 of the 2017 WLA/WCA Business Market Research.

³¹³ Slide 42 of the 2017 WLA/WCA Business Market Research.

³¹⁴ ComReg sent a SIR to 23 SPs in February 2015 seeking a range of quantitative and qualitative information. See paragraph 4.91 and Table 5 of the Consultation.

- 4.103 Further to Eircom's view that, generally, products are substitutes where the bandwidth achievable is greater than or equal to the substituted bandwidth, ComReg does not agree with this position, because download speeds are only one aspect which customers consider when choosing a supplier. Reliability of connection, contention, download allowances, fault resolution, customer service and pricing are other such considerations. For example, the updated 2017 WLA/WCA Market Research showed that residential End Users switched for reasons of cost, contract specification, bundling options and speed/download limits.³¹⁵ For business End Users, factors in the decision to switch included cost, speed/download limits, reliability of service, signal/coverage and problem solving/repair service.³¹⁶
- 4.104 ComReg also notes that Eircom did not raise this point in respect of the retail market definition, nor did it suggest that copper-based retail products should fall into a different market. Eircom also suggested that broadband provided via Mobile Broadband, FWA and Satellite should be included in the relevant market. ComReg does not agree from either a retail or wholesale perspective and notes that bandwidth on these products is often lower, can be constrained and is more variable compared to bandwidth provision via copper, FTTx and CATV platforms.
- 4.105 Eircom further considered that ComReg has not paid due consideration to the nature of the market, which is characterised by declining demand for legacy technologies and increasing demand for NGA. ComReg does not agree and in Section 3 of the Consultation, ComReg outlined these trends in the retail market for broadband, noting the decline in demand for copper-based products.³¹⁷ At the time of publishing the Consultation in November 2016, DSL subscriptions outnumbered VDSL subscriptions (presenting the QKDR as of Q1 2016).
- 4.106 Furthermore, in Figure 10³¹⁸ below, ComReg presents updated broadband subscriptions by platform.³¹⁹ As noted in Section 3 of the Consultation,³²⁰ there had been a decline in ADSL-based broadband subscriptions and a rise in VDSL-based broadband subscriptions, such that VDSL subscriptions now outstrip DSL subscriptions. Of total broadband subscriptions in Q4 2017,³²¹ VDSL accounted for 33.9% of subscriptions, whereas DSL accounted for 21.2%.

³¹⁵ Slide 81 of the 2017 WLA/WCA Consumer Market Research.

³¹⁶ Slide 34 of the 2017 WLA/WCA Business Market Research.

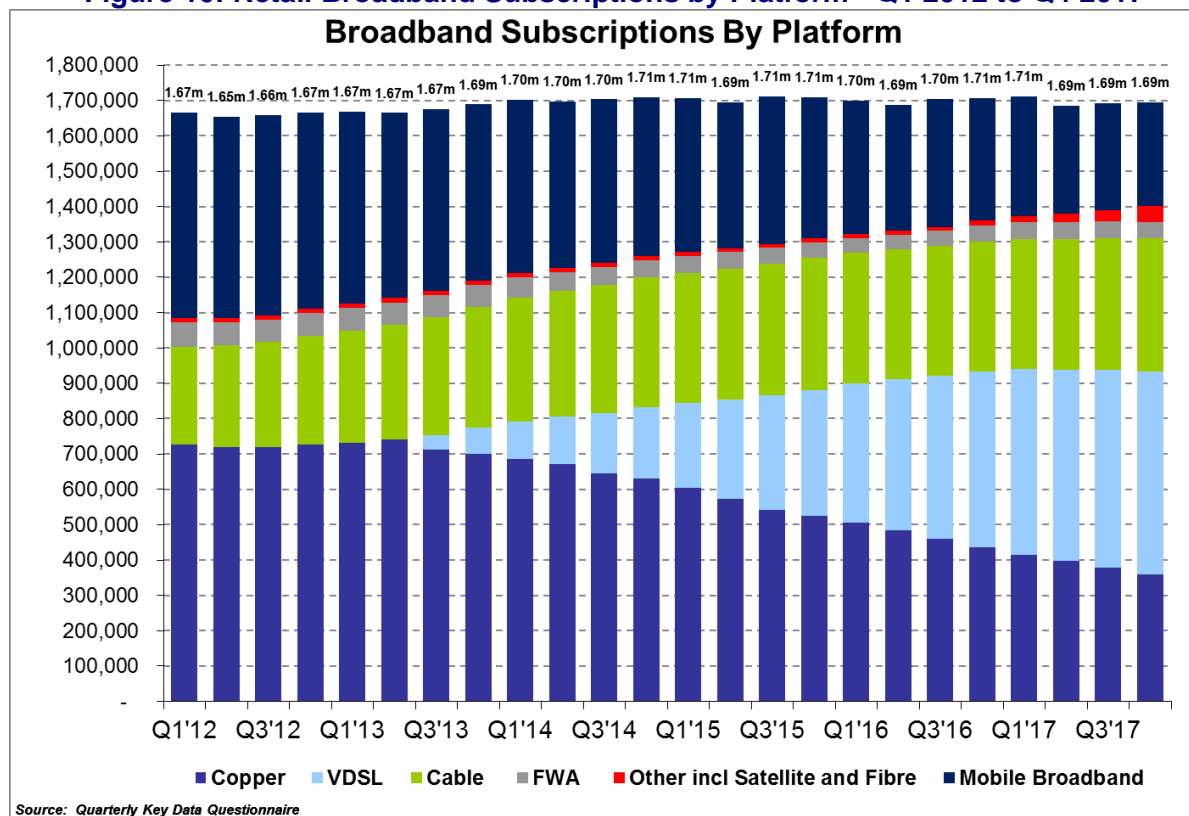
³¹⁷ See paragraphs 3.13 to 3.16, 3.31, 3.34 and 3.43 to 3.45 (NGA rollout) of the Consultation.

³¹⁸ Figure 10 is an update of Figure 7 on page 57 of the Consultation.

³¹⁹ ComReg QKDR Q4 2017.

³²⁰ See paragraph 3.16 of the Consultation.

³²¹ Consisting of DSL, VDSL (FTTC), CATV, FWA, Mobile Broadband, Satellite and FTTP.

Figure 10: Retail Broadband Subscriptions by Platform - Q1 2012 to Q4 2017

4.107 ComReg has also considered recent developments in broadband infrastructure deployments, which have led to an increase in the number of premises passed by FTTx.³²² ComReg considers that, over the period of this market review, VDSL subscriptions will continue to surpass ADSL subscriptions, but the continuation of this trend would not alter ComReg's assessment of the focal product and substitutability between VULA and LLA, due to the technical and functional similarities of these products, as set out in paragraphs 4.89 to 4.106. ComReg further notes that ComReg's chain of substitution analysis locates the focal product in a continuum of products which are closer substitutes to their immediate neighbours, and less close substitutes to other products included in the chain of substitution.

The impact of the NBP on the WLA Market has not been adequately considered

4.108 Further to paragraph 4.21 several Respondents to the Consultation agreed with ComReg's view that the uncertainty surrounding the impact of the NBP was such that ComReg is not yet in a position to determine its impact on the WLA (and WCA) Market. BT and ALTO stated that there remains uncertainty around the deployment footprint of the NBP and agreed with ComReg that the NBP should not be considered to have a material impact in this review period.

³²² As at Q4 2017, Eircom had passed 1.6 million premises passed for VDSL services and 170,000 premises passed for FTTH. <https://www.eir.ie/pressroom/eir-announces-second-quarter-results-to-31-December-2017/>.

- 4.109 As noted in paragraphs 4.32 and 4.33 above, Eircom was of the view that ComReg should conclude a market review within 6-12 months following completion of the NBP tender process as this will have a definitive impact on the market analysis. In its February 2018 letter, Eircom considered that any uncertainty regarding the NBP process having a bearing on ComReg's analysis has dissipated.
- 4.110 ComReg's position is that, given the timing and uncertainty of the NBP (noting, *inter alia*, the withdrawal from the tender of both Eircom and SIRO, leaving enet as the sole remaining bidder as of April 2018), specifics surrounding the eventual contract award and the timing of the subsequent rollout, it is not yet possible to draw any firm conclusions on the potential impact of the NBP on the WLA Market. ComReg does not necessarily agree with Eircom that a subsequent market analysis should be undertaken immediately following completion of the NBP tender process, because the impact of the NBP may not be observed for a number of years after contract award, which would be towards the end of the lifetime of this market review.
- 4.111 At the time of publishing the Consultation (November 2016) ComReg's expectation was that the NBP would have commenced by the end of 2017 at the earliest, following the awarding of the contract. However, the NBP contract has not yet been awarded and ComReg's understanding is that the NBP sponsored network rollout is not expected to commence until – at the earliest - later in 2018, with completion due in 2021.
- 4.112 ComReg recognises that the NBP may, in due course, have potential implications for the WLA Market once the rollout in the intervention area has progressed and evidence of competitive impact emerges. ComReg will, therefore, closely monitor developments as they unfold and will review its position where warranted.³²³

Indirect constraints from alternative networks suggest a broader market definition

- 4.113 In paragraphs 4.36 to 4.55 above, ComReg noted a number of Respondents' views in relation to ComReg's assessment of direct and indirect constraints from alternative networks. Eircom raised issues regarding ComReg's assessment of indirect constraints, specifically with respect to dilution ratios, the CLT and the extent of switching to Eircom's retail arm in response to a SSNIP in WLA products.
- 4.114 ComReg has considered Eircom's suggestion that the CLT should apply a weighted average of the prices for Eircom's FTTC and FTTH VUA products, i.e. a weighting based on the number of lines purchased/used for each type of VUA product.

³²³ The new European Electronic Communications Code proposes to extend the market review period from three to five years. [http://europa.eu/rapid/press-release MEMO-16-3009 en.htm](http://europa.eu/rapid/press-release_MEMO-16-3009_en.htm).

4.115 In Table 8, the prices of both standalone ('SA') and Plain Old Telephony Service ('POTS')-based VUA are given for FTTC (i.e. connections offering 100Mbps) and for FTTH (i.e. connections offering speeds from 150Mbps to 1000Mbps). For POTS-based VUA, a wholesale phone connection is purchased alongside the wholesale broadband connection. It is important to note that these prices are currently regulated by ComReg, subject to a Margin Squeeze Test, and are currently under review by ComReg as part of the 2017 Pricing Consultation.

Table 8: Eircom Prices of VUA (FTTC and FTTH)³²⁴

Eircom Prices of VUA (FTTC and FTTH)	
NGA VUA Standalone – FTTC	€23.00
NGA VUA Standalone – FTTH 150Mbps	€23.50
NGA VUA Standalone – FTTH 300Mbps	€28.50
NGA VUA Standalone – FTTH 1000Mbps	€38.50
NGA VUA POTS ³²⁵ based – FTTC	€31.09
NGA VUA POTS-based – FTTH 150Mbps	€32.59
NGA VUA POTS-based – FTTH 300Mbps	€42.59
NGA VUA POTS-based – FTTH 1000Mbps	€62.59

4.116 As set out in Table 9 below, ComReg takes a weighted average of the prices for FTTC and FTTH, which compute to €27.66. ComReg takes the number of subscribers on VUA FTTC and FTTH services as at Q4 2017, where VUA FTTC relates to VDSL (EVDSL and CVDSL). As at Q4 2017, there were 190,936 VUA FTTC wholesale lines (both 81,356 SA and 110,631 POTS) and 59 wholesale FTTH VUA lines (SA and POTS).³²⁶ This implies that FTTC VUA comprised 100% of total VUA lines, while FTTH VUA comprised less than 1% of total VUA lines. The weighted average price, using the average FTTC and FTTH prices and the weights, is estimated by ComReg to be €27.66.

Table 9: ComReg's calculation of weighted average price of VUA (FTTC and FTTH)

Weighted Average Price of VUA (FTTC and FTTH)	
Price FTTC - SA	€23.00
Price FTTC - POTS	€31.09
Average price FTTH (150Mbps, 300Mbps, 1000Mbps)	€38.05
	Q4 2017
Subscribers FTTC VUA (SA)	81,356
Subscribers FTTC VUA (POTS)	110,631
Subscribers FTTH	59
Total VUA lines	192,046
Weighted average price VUA (FTTC and FTTH)	€27.66

³²⁴ http://www.openeir.ie/Reference_Offers/?selectedtab=wbaro.

³²⁵ POTS prices include Standalone price plus the incremental cost of POTS.

³²⁶ Eircom has not provided detailed information on wholesale subscribers by VUA download speed (i.e. FTTH from 150Mb/s to 1000Mb/s).

- 4.117 In ComReg’s view, the significantly lower number of subscribers on FTTH-based VUA (59) compared to FTTC-based VUA weakens Eircom’s case for using FTTH in the SSNIP assessment. ComReg is of the view that there is insufficient merit in considering a weighted average wholesale price of VUA, as suggested by Eircom. As indicated in the 2017 Pricing Consultation, ComReg has proposed a cost oriented price for FTTC-based VUA in which the regulated price would be €16.50 (pursuant to the 2013 NGA Decision, Eircom’s FTTC VUA is subject to a margin squeeze obligation, with an associated price of €23).³²⁷ The 2018 Pricing Decision further specifies cost-oriented monthly prices for FTTC based NGA services annually over the time period 2018 to 2024.³²⁸
- 4.118 ComReg applied the weighted average price of VUA (€27.66) to compute the dilution ratios³²⁹ for residential and business retail broadband packages. It did not have any material impact on the preliminary Consultation findings.
- 4.119 As noted in the Consultation,³³⁰ while it is uncertain whether the entire notional WLA price increase will be passed through to the price of retail services or other associated prices (or if it is passed through at all), ComReg makes the assumption that it is passed through in full for the purpose of market definition, since this will prevent underestimation of indirect retail constraints on the WLA Market arising from the pass-through of a WLA price increase into retail prices.
- 4.120 Table 10 and Table 11 below outline dilution ratios using Eircom’s suggested weighted average price of VUA. The price of VUA is just one element of the total cost of providing broadband to an End User, and an increase in this price may not lead to a one to one increase in the retail price. The VULA Price Cost Ratio (55%) effectively reflects the proportion of the total bill for a bundle containing retail services that would likely be affected by a SSNIP in such WLA products. These data are used to derive the ‘dilution effect’ - the percentage increase in retail prices that would occur in response to pass-through of a SSNIP in WLA.

Table 10: Dilution Ratios: increase in residential retail prices from SSNIP in WLA

WLA Product	Wholesale Price	SSNIP Level %	Wholesale Price Increase	Price-Cost Ratio	Pre-SSNIP Average Retail Price ³³¹	Effective Retail Price Increase €	% Retail Price Increase from SSNIP pass-through
VULA	€27.66 ³³²	5%	€1.38	54%	€51.02	€52.40	2.7%
		10%	€2.77			€53.79	5.4%

³²⁷ Eircom has increased the price of FTTC VUA, as noted in Table 14 of the Consultation. In July 2015 the price rose 11.4% from €17.50 to €19.50, and by a further 17.9% in September 2016. This suggests that any indirect constraint in the retail broadband market may not be sufficiently effective to constrain Eircom from increasing prices in the WLA Market.

³²⁸ Please see Table 1 of Annex 7 to the 2018 Pricing Decision for further details.

³²⁹ See paragraphs 5.119 to 5.126 of the Consultation.

³³⁰ See paragraph 5.134 of the Consultation.

³³¹ Estimates of retail prices are outlined in Table 8 of the Consultation. For comparison purposes, these are the same retail prices as used in the Consultation, as it is necessary to compare the dilution ratio using the weighted average price of VUA suggested by Eircom with that presented in the Consultation.

³³² Ex-Vat weighted average wholesale price of VUA as outlined in Table 9.

4.121 In the Consultation ComReg had estimated that, for residential customers, a SSNIP in VULA would translate into approximate retail price increases of 2.2% and 4.5% for a SSNIP of 5% and 10% respectively.³³³

4.122 This implies that, were a 5% SSNIP of VULA imposed, the retail price would increase by approximately 2.2%. Similarly, if a 10% SSNIP of VULA were imposed, the retail price would increase by approximately 4.5%.

4.123 Having updated the analysis in light of the weighted average price of VUA (€27.66), outlined in Table 8, ComReg estimates for residential customers that a SSNIP in VULA would translate into approximate retail price increases of 2.7% and 5.4% for a SSNIP of 5% and 10% respectively.

Table 11: Dilution Ratios: increase in business retail prices from SSNIP in WLA

WLA Product	Wholesale Price €	SSNIP Level %	Wholesale Price Increase €	Price-Cost Ratio	Pre-SSNIP Average Retail Price ³³⁴	Effective Retail Price Increase €	% Retail Price Increase SSNIP through
VUA	€27.66 ³³⁵	5%	€1.38	53%	€52.32	€53.70	2.6%
		10%	€2.77			€55.09	5.3%

4.124 Similarly, in the Consultation, ComReg estimated for business customers that a SSNIP in VULA would translate into approximate retail price increases of 2.2% and 4.4% for a SSNIP of 5% and 10% respectively.³³⁶

4.125 This implies that were a 5% SSNIP of VULA imposed, the retail price would increase by approximately 2.2%. Similarly, if a 10% SSNIP of VULA were imposed, the retail price would increase by approximately 4.4%.

4.126 Having updated the analysis in light of the weighted average price of VUA (€27.66), ComReg estimates for business customers (Table 9) that a SSNIP in VULA would translate into approximate retail price increases of 2.6% and 5.3% for a SSNIP of 5% and 10% respectively.

4.127 ComReg does not consider that its preliminary conclusions set out in the Consultation would be materially impacted were it to use Eircom's suggestion of using a weighted price for VUA.

4.128 As noted in paragraph 4.38 above, Eircom also considered that Virgin Media provides a sufficient indirect competitive constraint in the WLA Market, having regard to its rollout of its NGA network in many urban and semi-urban areas.

³³³ See paragraph 5.122 of the Consultation.

³³⁴ The estimation of these retail prices is outlined in Table 10 on page 186 of the Consultation. The Pre-SSNIP average retail price is an average of NGA retail broadband packages. Note that ComReg uses the same retail prices as used in the Consultation for comparison purposes.

³³⁵ Weighted average wholesale price of VUA as outlined in Table 9.

³³⁶ See paragraph 5.124 of the Consultation.

- 4.129 In the Consultation ComReg considered the strength of any indirect constraint posed by Virgin Media in the WLA Market,³³⁷ in particular, the extent to which End Users would switch to a CATV network in response to a SSNIP in WLA prices. Firstly, switching to a CATV network will be somewhat constrained by the availability of CATV services. Virgin Media's network presence extends to about 45% of residential premises in the country. In addition, Virgin Media's network provides predominantly retail services to the residential customer segment, with minimal provision of retail services to businesses, meaning that many business customers are unable to switch to Virgin Media.³³⁸
- 4.130 ComReg demonstrated in the Consultation that if Virgin Media's subscribers were to be included in the WLA Market, Eircom (wholesale and self-supplied WLA), at 68%, had the highest market share in this hypothetical market scenario.³³⁹ Having updated the position in light of more recent figures, Eircom's market share at 67% remains significantly high in this hypothetical market scenario.³⁴⁰
- 4.131 As noted in paragraph 3.42 above, Eircom commented on Virgin Media's network expansion plans. ComReg is aware of Virgin Media's announced rollout expansion of 200,000 premises and rollout of DOCSIS 3.1 technology. However, subsequent to this announcement by Virgin Media, ComReg notes that Virgin Media's network expansion plans (referred to as *Project Lightning*) may not materialise as previously expected.³⁴¹ Virgin Media has indicated to ComReg via SIR³⁴² that [redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]]. Subsequently, Virgin Media indicated to ComReg via a SIR³⁴³ that [redacted]
[redacted]
[redacted]
[redacted]].

³³⁷ See paragraphs 5.143 to 5.151 of the Consultation.

³³⁸ ComReg's QKDR for Q4 2016 showed that businesses accounted for 2.9% of cable broadband subscriptions.

³³⁹ See paragraphs 5.146 and 5.147 of the Consultation.

³⁴⁰ See paragraph 5.59 below where ComReg outlines hypothetical market shares.

³⁴¹ <http://eurocomms.com/industry-news/12283-virgin-s-project-lightning-set-to-stall-as-liberty-takes-operating-income-hit> and <https://marketexclusive.com/liberty-global-plc-nasdaqlbtya-files-an-8-k-results-of-operations-and-financial-condition-4/86893/>.

³⁴² SIR issued to Virgin Media in July 2017.

³⁴³ SIR issued to Virgin Media in November 2017.

- 4.132 ComReg also notes that CATV subscriptions have remained relatively constant over recent quarters (Figure 10 above) while subscriptions to VDSL (FTTC and FTTH) have increased substantially. CATV subscriptions currently stand at 375,546 as at Q4 2017, having increased from 366,699 in Q4 2016, while VDSL subscriptions have risen 15% from 498,844 in Q4 2016 to 574,768 in Q4 2017. As noted in footnote 327 above, ComReg also points to recent increases in the price of FTTC VUA which Eircom has imposed (31% since 2015) which do not appear to have led to a drop in wholesale subscriptions of FTTC VUA.
- 4.133 Having considered Respondents' views on the effectiveness of indirect constraints from Virgin Media on the WLA Market, and having regard to the analyses set out in the Consultation and above, ComReg remains of the view that it is unlikely that, in response to the pass-through of a SSNIP of WLA into retail prices there would be sufficient demand-side substitution from WLA-based retail broadband services to CATV-based retail services such as to render the WLA price increase unprofitable. In other words, ComReg's position is that Virgin Media's CATV network is not a sufficiently strong indirect constraint to warrant the inclusion of CATV-based retail services in the WLA Market.
- 4.134 As noted in paragraphs 4.39 to 4.41 above, Eircom also considered that ComReg's marginal cost estimates were overestimated in deriving the CLT (the percentage level of switching at which a SSNIP would become unprofitable).³⁴⁴ ComReg considers alternative CLVs below, using the estimated costs provided by Eircom in its response.³⁴⁵
- 4.135 In the Consultation, ComReg estimated CLVs associated with a 5% and 10% SSNIP in Eircom's WLA products,³⁴⁶ as follows:³⁴⁷
- (a) For a 5% SSNIP of the price of WLA, the CLV was considered likely to be approximately 8.5% for residential retail subscriptions;
 - (b) For a 10% SSNIP of the price of WLA, the CLV was considered likely to be approximately 15.7% for residential retail subscriptions;
 - (c) For a 5% SSNIP of the price of WLA, the CLV is likely to be approximately 7.8% for business retail subscriptions; and

³⁴⁴ The CLT supports a SSNIP analysis by providing an estimate of the percentage of customers that would have to divert away from the focal product in response to a SSNIP (in this case, the pass-through of a wholesale SSNIP) to make the increase in the price of the focal product unprofitable. The CLT is outlined in more formally in Appendix: 9 of this Decision.

³⁴⁵ Eircom Submission, page 17. See also Table 5 and Table 6 above.

³⁴⁶ See paragraph 5.131 to 5.132 of the Consultation.

³⁴⁷ As set out in paragraph 5.162 of the Consultation and in the context of Eircom's supply of WLA, if customers switched to Eircom in response to a SSNIP of WLA, Eircom could benefit from increased retail revenue which may act to off-set any lost wholesale revenue from a reduction in wholesale demand for WLA products. As set out in paragraph 5.166 of the Consultation, ComReg considers it likely that, in response to a SSNIP in LLU or VULA products, Access Seekers who offer retail services based on such wholesale inputs would be likely to switch to retail products offered by Eircom's retail arm. This would have the effect of mitigating any loss of Eircom's wholesale revenue. This effect further diminishes the potential for alternative platforms to act as an effective indirect constraint on a vertically integrated HM supplier of WLA.

- (d) For a 10% SSNIP of the price of WLA, the CLV is likely to be approximately 14.5% for business retail subscriptions.

4.136 In Table 12 to Table 15 below, ComReg updates the CLVs for residential and business customers using the marginal costs supplied by Eircom (see Table 6 and Table 7 above).³⁴⁸ The retail prices are averaged across broadband packages that utilise CGA inputs and NGA inputs.³⁴⁹ The marginal costs relate to the costs of serving each individual End User (e.g. sales, billing, CPE). In the tables below, ComReg uses Eircom's supplied marginal costs for servicing a customer, which results in higher marginal costs and, hence, a change in the ratio of costs to prices (α) and, thus, the CLVs. The combined figures are a weighted average of LLU and VUA prices using subscriber figures.

4.137 For example, in Table 12 below, the first column outlines the CLV for LLU (CGA) products. The average of CGA retail products (both standalone and bundled) is €45.26. The marginal costs associated with CGA products (in this case supplied by Eircom) come to [€< >],³⁵⁰ representing [€< >] of the retail price (i.e. [€< >]/€45.26). Applying a SSNIP of 5% to the retail price of €45.26 leads to a CLV of [€< >] of sales. This is based on the formula for the CLV.³⁵¹

Table 12: Estimates of Critical Loss for 5% SSNIP of WLA using Eircom supplied costs - Residential

	CLV for LLU products	CLV for VUA products	Combined ³⁵²
Retail prices (average) (residential incl. VAT)	€45.26	€73.54	€55.23
Marginal costs	[€< >] ³⁵³	[€< >] ³⁵⁴	[€< >] ³⁵⁵
Ratio costs to prices (α)	[< >] ³⁵⁶	[< >] ³⁵⁷	[< >] ³⁵⁸
SSNIP (s)	5%	5%	5%
Critical loss	[< >] ³⁵⁹	[< >] ³⁶⁰	[< >] ³⁶¹

³⁴⁸ The detail underlying the calculations is outlined in Appendix 7 (A.7.10 to A7.30) of the Consultation and in Appendix: 9 below.

³⁴⁹ For comparison purposes, these retail prices are the same as those in the Consultation. ComReg has however updated the critical loss analysis with retail prices as of Q4 2017 in Appendix: 9 below.

³⁵⁰ In the range of €15-€20.

³⁵¹ $SSNIP/(1+SSNIP-\alpha)$. This is outlined in Appendix: 9 below and Appendix 7 of the Consultation.

³⁵² This is a weighted average of LLU and VUA-based on the numbers of residential subscribers on ADSL, FTTC and FTTH as at Q4 2017.

³⁵³ In the range of €15-€20.

³⁵⁴ In the range of €30-35.

³⁵⁵ In the range of €20-€25.

³⁵⁶ In the range of 35-40%.

³⁵⁷ In the range of 40-45%.

³⁵⁸ In the range of 40-45%.

³⁵⁹ In the range of 5-10%.

³⁶⁰ In the range of 5-10%.

³⁶¹ In the range of 5-10%.

Table 13: Estimates of Critical Loss for 10% SSNIP of WLA using Eircom supplied costs - Residential

	CLV for LLU products	CLV for VUA products	Combined
Retail prices (average) (residential incl. VAT)	€45.26	€73.54	€55.23
Estimated Marginal costs	[< █████]	[< █████]	[< █████]
Ratio of costs to prices (α)	[< █████]	[< █████]	[< █████]
SSNIP (s)	10%	10%	10%
Critical loss	[< █████] ³⁶²	[< █████] ³⁶³	[< █████] ³⁶⁴

Table 14: Estimates of Critical Loss for 5% SSNIP of WLA using Eircom supplied costs - Business

	CLV for LLU products	CLV for VUA products	Combined
Retail prices (average) (business incl. VAT)	€56.09	€72.53	€55.94
Marginal costs	[< █████]	[< █████]	[< █████]
Ratio costs to prices (α)	[< █████] ³⁶⁵	[< █████] ³⁶⁶	[< █████] ³⁶⁷
SSNIP (s)	5%	5%	5%
Critical loss	[< █████] ³⁶⁸	[< █████] ³⁶⁹	[< █████] ³⁷⁰

Table 15: Estimates of Critical Loss for 10% SSNIP of WLA using Eircom supplied costs - Business

	CLV for LLU products	CLV for VUA products	Combined ³⁷¹
Retail prices (average) (business incl. VAT)	€56.09	€72.53	€55.94
Marginal costs	[< █████]	[< █████]	[< █████]
Ratio costs to prices (α)	[< █████]	[< █████]	[< █████]
SSNIP (s)	10%	10%	10%
Critical loss	[< █████] ³⁷²	[< █████] ³⁷³	[< █████] ³⁷⁴

³⁶² In the range of 10-15%.³⁶³ In the range of 10-15%.³⁶⁴ In the range of 10-15%.³⁶⁵ In the range of 30-35%.³⁶⁶ In the range of 40-45%.³⁶⁷ In the range of 35-40%.³⁶⁸ In the range of 5-10%.³⁶⁹ In the range of 5-10%.³⁷⁰ In the range of 5-10%.³⁷¹ This is a weighted average of LLU and VUA-based on the numbers of business subscribers on ADSL, FTTC and FTTH as at Q1 2016.³⁷² In the range of €15-€20.³⁷³ In the range of €15-€20.³⁷⁴ In the range of €15-€20.

4.138 ComReg has taken the MC estimates provided by Eircom and has used these to estimate alternative the CLVs as follows (see Table 12 to Table 15 above):³⁷⁵

- (a) For a 5% SSNIP of the price of WLA, the CLV is likely to be approximately [3< [REDACTED]] for residential retail subscriptions;
- (b) For a 10% SSNIP of the price of WLA, the CLV is likely to be approximately [3< [REDACTED]] for residential retail subscriptions;
- (c) For a 5% SSNIP of the price of WLA, the CLV is likely to be approximately [3< [REDACTED]] for business retail subscriptions; and
- (d) For a 10% SSNIP of the price of WLA, the CLV is likely to be approximately [3< [REDACTED]] for business retail subscriptions.

Table 16: Change in CLV – Decision compared to Consultation

Changes in CLV	LLU	VUA	Combined
Residential SSNIP 5%	5%	5%	5%
Consultation	8.0%	8.2%	8.5%
Decision	[3< [REDACTED]]	[3< [REDACTED]]	[3< [REDACTED]]
<i>Difference</i>	[3< [REDACTED]] ³⁷⁶	[3< [REDACTED]] ³⁷⁷	[3< [REDACTED]] ³⁷⁸
Residential SSNIP 10%	10%	10%	10%
Consultation	14.8%	15.2%	15.7%
Decision	[3< [REDACTED]]	[3< [REDACTED]]	[3< [REDACTED]]
<i>Difference</i>	[3< [REDACTED]] ³⁷⁹	[3< [REDACTED]] ³⁸⁰	[3< [REDACTED]] ³⁸¹
Business SSNIP 5%	5%	5%	5%
Consultation	7.1%	8.3%	7.8%
Decision	[3< [REDACTED]]	[3< [REDACTED]]	[3< [REDACTED]]
<i>Difference</i>	[3< [REDACTED]] ³⁸²	[3< [REDACTED]] ³⁸³	[3< [REDACTED]] ³⁸⁴
Business SSNIP 10%	10%	10%	10%
Consultation	13.2%	15.3%	14.5%
Decision	[3< [REDACTED]]	[3< [REDACTED]]	[3< [REDACTED]]
<i>Difference</i>	[3< [REDACTED]] ³⁸⁵	[3< [REDACTED]] ³⁸⁶	[3< [REDACTED]] ³⁸⁷

³⁷⁵ ComReg also examined CLVs using Eircom's suggested price of VUA (weighted average of FTTC and FTTH) but has not presented these results for the reasons set out at paragraphs 4.114 to 4.124.

³⁷⁶ In the range of 0-2%.

³⁷⁷ In the range of 0-2%.

³⁷⁸ In the range of 0-2%.

³⁷⁹ In the range of 0-2%.

³⁸⁰ In the range of 0-2%.

³⁸¹ In the range of 0-2%.

³⁸² In the range of 0-2%.

³⁸³ In the range of 0-2%.

³⁸⁴ In the range of 0-2%.

³⁸⁵ In the range of 0-2%.

³⁸⁶ In the range of 0-2%.

³⁸⁷ In the range of 0-2%.

- 4.139 ComReg's position is that, despite small percentage differences (Table 16) in the updated CLVs compared to what was presented in the Consultation, these updates are not sufficient to warrant ComReg changing its view that CATV is unlikely to impose an effective indirect competitive constraint on the WLA Market and, therefore, should not be included within the Product Market.
- 4.140 Referring to the retail market definition proposed by ComReg, Eircom did not consider the €2 SSNIP increase in the retail price to be reflective of differences in consumer type (for example, residential consumers compared to business consumers), platform type and whether the service is purchased as part of a bundled or as a standalone product.³⁸⁸
- 4.141 Regarding the monetary amount chosen by ComReg as being representative of a SSNIP,³⁸⁹ ComReg selected the nominal amount of €2 for a number of reasons. Firstly, ComReg considers it best practice when designing these surveys to use the actual change in the price level rather than the percentage change. This approach is taken because consumers are more likely to make an informed choice about any potential switching behaviour in light of nominal price increases compared to potential behavioural responses with respect to percentage changes in price.
- 4.142 A second reason for using an absolute price change (i.e. €2) compared to a relative price change (i.e. 5-10%) is because many respondents do not know the actual cost of their broadband, implying that a 5-10% increase in a cost they are unaware of may not be indicative in such instances. Evidence of this cost awareness is provided in the 2014 WLAWCA Market Research which showed that, for respondents purchasing a bundle, 23% do not know the monthly cost of their broadband bundle with a further 23% stating that they "*maybe know*".³⁹⁰ For non-bundle respondents, 18% of respondents stated that they do not know the cost of their broadband, with a further 14% stating that they "*maybe know*".³⁹¹ The updated 2017 WLAWCA Market Research has revealed similar findings, with 20% of residential respondents purchasing a bundle stating that they do not know the monthly cost of their broadband bundle, with a further 29% stating that they "*maybe know*".³⁹² For non-bundle respondents, 26% of respondents stated that they do not know the cost of their broadband, with a further 32% stating that they "*maybe know*".³⁹³ ComReg therefore favours the use of an indicative absolute monetary increase in monthly broadband costs to overcome this issue of low cost awareness.

³⁸⁸ See paragraphs 4.43 to 4.44 above.

³⁸⁹ See paragraphs 3.132 to 3.139 above.

³⁹⁰ See paragraph A2.22 of the Consultation.

³⁹¹ See paragraph A2.24 of the Consultation.

³⁹² See slide 34 of the 2017 WLAWCA Market Research (Residential).

³⁹³ See slide 49 of the 2017 WLAWCA Market Research (Residential).

- 4.143 Furthermore, with respect to consumers who receive broadband as part of a bundle, ComReg is interested in respondents' behaviour following an increase in the broadband element of the bundle only, and considers that a hypothetical percentage increase of 5-10% might be interpreted by respondents purchasing a bundle as a 5-10% increase in the cost of the overall bundle. ComReg therefore favours an absolute monetary increase in monthly broadband costs, and specifically the broadband element of the bundle, to overcome this issue of low cost awareness, and provide more meaningful and comparable responses.
- 4.144 With respect to Eircom's comments regarding the €2 value selected for the SSNIP, ComReg notes that, for the purpose of its analysis, it is interested in retail consumers' responses to a SSNIP in the price of the underlying WLA wholesale product, and the nominal €2 amount was chosen as it is reflective of the pass-through of such a SSNIP. As noted in paragraph 4.119 above, ComReg has also assumed that there would be a full pass-through of the wholesale SSNIP amount into retail prices.
- 4.145 Regarding Eircom's view that it would be more appropriate if ComReg considered a lower increase in the retail price, given its view that ComReg's approach is likely to significantly overestimate retail customers' behavioural responses, ComReg considers that it can be reasonably assumed that a SSNIP of less than €2 would likely lead to diminished behavioural responses, relative to those responses at the €2 level, and potentially to lower levels of substitution across platforms (particularly for price sensitive customers). ComReg is of the view that €2 is a reasonable threshold from which to implement the SSNIP, and that adopting a lower rate is not likely to materially alter ComReg's findings.
- 4.146 ComReg also notes that, in the 2017 Pricing Consultation, the proposed cost oriented prices of €16.50 for certain NG products (namely FTTC-based VUA), are significantly lower than current FTTC-based VUA price levels (noting that such WLA products are currently subject to a margin squeeze obligation and are set by reference to Eircom's retail prices with appropriate adjustments). In the current circumstances, ComReg considers that a cost-based wholesale price is more likely to be a better proxy for a competitive market outcome price (relative to a margin squeeze-based price). Taking a margin squeeze price as a proxy for a competitive price may not be appropriate, given that they are derived from retail prices and retail market conditions themselves, and may not therefore be competitive. In this context, a 5% and 10% SSNIP applied to the proposed cost oriented FTTC VUA-based price would amount to increases of €0.83 and €1.65 respectively. Even allowing for potential movements in the proposed cost oriented prices, such SSNIP amounts nonetheless remain lower than the €2 amount employed by ComReg in the Consultation (and in the 2014 WLA/WCA Market Research). ComReg therefore remains of the view that a €2 SSNIP is appropriate for the assessment of indirect constraints in the WLA Market.³⁹⁴

³⁹⁴ Please see Table 1 of Annex 7 to the 2018 Pricing Decision for further details of Monthly prices for FTTC based VUA.

4.147 In relation to Eircom's view that the €2 SSNIP amount should be varied having regard to product and customer types, ComReg notes that an indirect constraints assessment seeks to examine the impact of the pass-through of a wholesale price increase to retail prices and, in this respect, WLA product prices do not vary depending on whether the consumer is a residential or business consumer. For business products such as Vodafone's Office Professional (100 Mb/s) broadband,³⁹⁵ wholesale inputs are the same as those for residential packages.³⁹⁶ Furthermore, ComReg notes that WLA inputs are the same regardless of whether the retail consumer purchases a standalone or bundled broadband offering. Table 17 presents a 5% and 10% SSNIP applied to average prices for standalone broadband packages offering speeds above and below 100Mb/s. The 5% SSNIP applied to the average price of packages with speeds less than 100Mb/s is lower than the €2 amount applied in the 2017 WLA/WCA Market Research, while the average of the 5% SSNIP is slightly over €2.

Table 17: 5% and 10% SSNIP in Residential Retail prices including VAT (Q4 2017)

Standalone broadband average speed	Average Monthly Retail Price incl. VAT	5% SSNIP	10% SSNIP
<100MB	€52.37	€2.62	€5.24
≥100MB	€55.21	€2.76	€5.52
Average SSNIP		€2.69	€5.38

4.148 As noted in paragraph 4.46 above, Eircom noted ComReg's preliminary views in the Consultation that any loss of Eircom's wholesale revenue from a SSNIP in WLA services would be mitigated by Access Seekers switching to retail products from Eircom.³⁹⁷ In Eircom's view, ComReg has not performed sufficient analysis on the extent of this trade-off.

4.149 ComReg maintains its position³⁹⁸ that, absent regulation, Eircom would be in a position to maintain its retail prices at existing levels whilst applying a SSNIP to the price of WLA, and that this mitigating factor is likely to remain of relevance when assessing the effectiveness and impact of any constraints arising from existing competition in the WLA Market, including indirect constraints. Under such circumstances, ComReg considers that Eircom would be likely to gain a significant proportion of any retail customers that switch away from Access Seekers offering Eircom WLA-based retail services.

³⁹⁵ <http://www.vodafone.ie/small-business/fixed/single-line/>.

³⁹⁶ There are often differences between retail and business products in terms of service level agreements and technical support.

³⁹⁷ As set out in paragraph 5.161 of the Consultation, ComReg's view was in fact that any loss of Eircom's wholesale revenue from a SSNIP in WLA services would be mitigated by retail customers of the Access Seekers purchasing WLA switching to retail products from Eircom.

³⁹⁸ See paragraph 6.27 of the Consultation.

- 4.150 The increased revenue accruing to Eircom from such switching by retail customers would contribute to offsetting any loss in wholesale revenue, thereby mitigating the effects of any indirect retail constraint that otherwise may have been present.³⁹⁹
- 4.151 As noted in paragraph 4.46, Eircom also noted that, in the absence of regulation, it would still be constrained in its behaviour by *ex post* competition law. Consistent with ComReg's regulatory role to review certain electronic communications markets, the objective of this review is to examine the extent of competition within the WLA/WCA markets (together referred to as the 'Relevant Markets'). Regarding the list of European Markets not designated as being susceptible to *ex ante* regulation, ComReg applies the Three Criteria Test ('3CT').⁴⁰⁰ If the 3CT is met in a market, ComReg will assess the market to determine whether any SP has Significant Market Power ('SMP') in that market. ComReg does not consider competition law to be an adequate substitute for SMP regulation in this context. Where ComReg has applied the 3CT, it has consistently held that competition law is not adequate to address market power issues. For example, *ex post* competition law occurs after the fact, and cannot lead to a remedy to prevent the exercise of market power *ex ante*.
- 4.152 With respect to issues regarding SMP analysis and appropriate remedies, ComReg considers these issues in Sections 5 to 7 of this Decision.
- 4.153 As noted in paragraph 4.47, Eircom does not consider that ComReg has duly accounted for the NBP process. However, as set out in paragraph 4.110, ComReg's position is that, given the timing and uncertainty of the NBP, specifics surrounding the eventual contract award and the timing of the subsequent rollout, it is not yet possible to draw any firm conclusions on the potential impact of the NBP on the WLA Market.

³⁹⁹ As set out in paragraph 5.162 of the Consultation in the context of Eircom's supply of WLA, if customers switched to Eircom in response to a SSNIP of WLA, Eircom could benefit from increased retail revenue which may off-set any lost wholesale revenue from a reduction in wholesale demand for WLA. As set out in paragraph 5.166 of the Consultation, ComReg considers it likely that, in response to a SSNIP in LLU or VULA, Access Seekers who offer retail services based on such wholesale inputs would be likely to switch to retail products offered by Eircom's retail arm. This would have the effect of mitigating any loss of Eircom's wholesale revenue. This effect further diminishes the potential for alternative platforms to act as effective indirect constraints on a vertically-integrated HM supplier of WLA.

⁴⁰⁰ The 3CT test ensures that markets not identified in the EC's recommended list can only be regulated on an *ex ante* basis where it can be shown that (1) entry barriers are high and non-transitory, (2) the market is not likely to tend towards effective competition, and (3) *ex post* competition law remedies on their own are unsuitable for resolving the identified competition concerns. If any one of these criteria is not met, then *ex ante* regulation is not justified.

- 4.154 As noted in paragraphs 4.49 to 4.51, Sky raised issues in relation to [§< [REDACTED]]. ComReg acknowledges these points from Sky and notes that it has obtained detailed information on SIRO's rollout plans by way of SIRs,⁴⁰¹ and that on a forward-looking basis, due consideration has been given to the likely impact of SIRO's rollout on the market. In Section 5 below, ComReg assesses SIRO's network rollout (in terms of premises passed) relative to detailed projections of network rollout provided to ComReg in SIRs.⁴⁰² SIRO's rollout is expected to reach [§< [REDACTED]].
- 4.155 However, ComReg notes that as of the end of 2017, SIRO had rolled out to 120,000 premises⁴⁰³ and that [§< [REDACTED]]. ComReg's understanding, both from SIRs and bilateral discussions from SIRO is that [[REDACTED]].
- 4.156 In paragraph 4.31 above, Virgin Media suggests that substitution will occur over time towards network infrastructure that is capable of delivering higher speeds and that the rate at which this substitution takes place over time in a given location will depend on population density,⁴⁰⁴ the relative price of the services, and the willingness of customers to pay for additional speed. It is not clear precisely what changes Virgin Media is suggesting based on this consideration. Nonetheless, ComReg's analysis of the WLA Market is on a forward-looking basis and has had due consideration to Eircom and Virgin Media's customer density,⁴⁰⁵ has considered the impact of substitution across varying speeds⁴⁰⁶ and has examined the relative prices of services.⁴⁰⁷
- 4.157 In paragraphs 4.52 to 4.55 above, ComReg notes that Vodafone agreed with ComReg's assessment of direct and indirect constraints on the WLA Market and pointed out that the very high entry barriers to establishing a substantial new fixed network (or the low probability and the high cost implications associated with opening the Virgin Media network) mean that supply-side substitution over alternative networks would not be plausible. ComReg agrees that Virgin Media's network coverage is likely to be a limiting factor that would constrain consumers' abilities to switch; and that Eircom has recently implemented a number of price increases in the WLA Market.⁴⁰⁸

⁴⁰¹ Issued to SIRO in February 2016, November 2016 and June 2017.

⁴⁰² See paragraphs 5.45 to 5.49 below.

⁴⁰³ <https://siro.ie/newbridge-town-hall/>.

⁴⁰⁴ ComReg interprets this to mean that networks are more likely to be rolled out in areas that have higher population densities, as SPs can benefit from economies of scale.

⁴⁰⁵ For example, see paragraphs 4.284, 5.28 and 5.181 of the Consultation.

⁴⁰⁶ For example, see paragraphs 4.95 and 4.103 above.

⁴⁰⁷ For example, see the SSNIP analysis referred to in Section 4 and the 2017 WLAWCA Market Research set out in Appendix: 6.

⁴⁰⁸ As noted in paragraph 4.132 above.

Bitstream Regional Handover should be included in the WLA Market, and other issues

- 4.158 In paragraphs 4.56 and 4.57 above, ComReg noted a number of other issues raised by Respondents regarding the WLA Market definition.
- 4.159 In paragraph 4.56, it was noted that BT considered the Regional Handover product to form part of the WLA Market, given that it is a national product and depends on interconnects throughout the country to achieve its maximum discount.
- 4.160 ComReg's view is that the Regional Handover product does not fall into the WLA Market, based on the first criterion set out in the Consultation, which is that access must occur locally.⁴⁰⁹ While the Regional Handover product fulfils the second and third criteria required, ComReg's position is that the Regional Handover product does not involve local access, and therefore should not be included in the WLA Market. This view is consistent with the Explanatory Note to the 2014 Recommendation which makes reference to non-physical or virtual unbundled access products as potentially falling within the WLA Market (i.e. moved upstream from the WCA Market where Access occurs locally). This means that traffic is handed over at a level which is much closer to the customer premises than access at the national or regional level, as generally granted with traditional Bitstream access. Such 'localness' is typically given in a scenario where access is granted at, or close to, the central office/MDF (including newly built ODF), or the street cabinet.
- 4.161 BT also asserted that ComReg's proposed de-regulation of the leased lines market⁴¹⁰ further increases the need for this handover service to be in the WLA Market, as leased line and Ethernet backhaul from Eircom may not be available - or viably available - in future. ComReg's position is that Regional Handover does not fulfil the criteria for inclusion in the WLA Market (i.e. by definition, it is not local) and it is therefore not of relevance in this context. In relation to BT's point on ComReg's ongoing review of the leased lines market, ComReg published a Consultation on the Wholesale High Quality Access '(WHQA)' market in August 2016, with a further consultation published in February 2018, with the consultation period having closed in April 2018. The matters subject of the WHQA Further Consultation are under active consideration by ComReg.⁴¹¹
- 4.162 In paragraph 4.57 above, ComReg notes Sky's view that SA FTTC accounts for less than 20% of Eircom's NGA customer base (wholesale and retail).⁴¹²

⁴⁰⁹ See paragraph 5.21 of the Consultation.

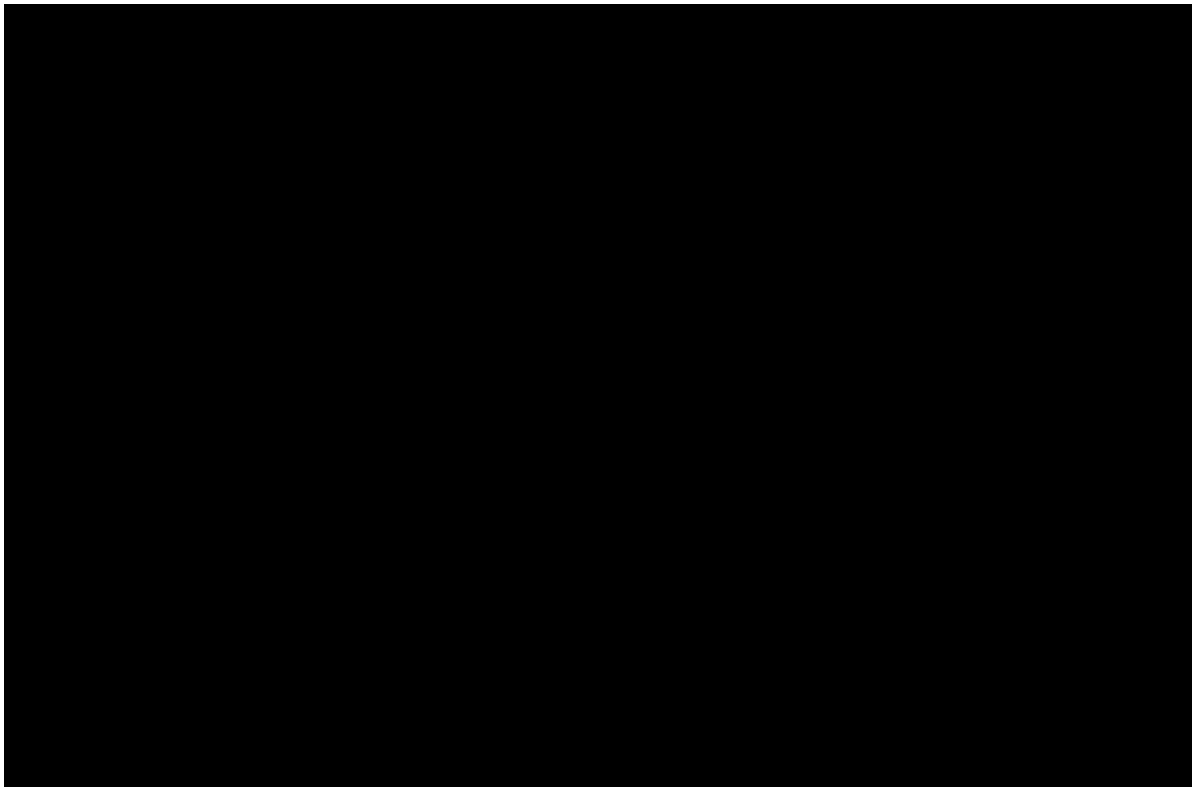
⁴¹⁰ Market Review: Wholesale High Quality Access at a Fixed Location Consultation, [ComReg Document No. 16/69](#), August 2016 (the '**WHQA Further Consultation**').

⁴¹¹ See 'Market Review Wholesale High Quality Access at a Fixed Location Response to Consultation, Further Consultation and Draft Decision', [ComReg Document No. 18/08](#) for further details.

⁴¹² ComReg considers Sky's point to suggest that ComReg should have focussed on POTS-based FTTC, rather than on SA FTTC in its assessment of indirect constraints.

4.163 In Figure 11 below, ComReg plots the numbers of SA and POTS VUA-based WLA lines (wholesale only), in addition to total Eircom VDSL lines (wholesale and retail). SA VUA lines as a percentage of total Eircom VDSL lines are given on the right-hand axis, and ComReg notes that, as at Q4 2017, SA VUA-based WLA lines accounted for approximately [%< ██████████] of Eircom total NGA customer base.

Figure 11: Eircom VDSL lines (VUA and Bitstream) and SA FTTC VUA as Proportion of Total Eircom VDSL [%<REDACTED]



4.164 Having examined Eircom data obtained as part of ComReg's QKDR, ComReg is of the view that SA FTTC lines account for considerably less than 20% of Eircom's NGA customer base (wholesale and retail) and, as of Q4 2017, the proportion was [%< ██████████].

4.165 In undertaking an assessment of indirect constraints, ComReg focussed on total VUA subscriptions (as opposed to specifically SA and POTS). Following Eircom's points in paragraphs 4.36 to 4.46, ComReg provided a weighted average price of VUA (taking a weighted average of FTTH and FTTC subscriptions). Within the FTTC component, ComReg used data on SA and POTS-based subscriptions, but noted that there is a lack of detailed data available on the breakdown between SA and POTS FTTH subscriptions by speed (paragraph 4.116).

4.166 ComReg will continue to monitor the trend towards higher uptake of POTS-based VUA lines on a forward-looking basis.

4.167 ComReg's final position is that the WLA Product Market comprises of the following:

- (a) Current Generation WLA products (being LLU and Line Share products over copper networks); and

- (b) Next Generation WLA products (being VULA products offered over FTTx networks).

WLA Geographic Market Definition

4.168 Below, ComReg assesses Respondents' views under each of the key themes identified in paragraph 4.69 above, as follows:

- (a) On a forward-looking basis, likely market developments of note should be taken into account by ComReg in its analysis (see paragraphs 4.169 to 4.170 below);
- (b) WLA Market is national in scope and this is unlikely to change within the review period (see paragraphs 4.171 to 4.173 below); and
- (c) Evidence suggests that sub-geographic WLA Markets exist (see paragraphs 4.174 to 4.183 below).

Likely market developments of note should be taken into account

4.169 At paragraph 4.68 above, Eircom set out a number of market developments which, on a forward-looking basis, ComReg should take account of in respect of its reviews of both the WLA and WCA markets. Since Eircom did not stipulate whether these developments fall to be considered in ComReg's analysis of market definition, or of market power, in either the WLA or WCA markets, ComReg addresses the points raised by Eircom here.

4.170 Eircom alluded to network rollout proposals announced by SIRO, enet-SSE, Virgin Media, Imagine-Huawei, and enet-SIRO. In respect of each of these developments:

- (a) ComReg addresses SIRO's rollout at paragraphs 4.175, 5.48 to 5.49, and 9.162 to 9.166 below;
- (b) ComReg addresses enet's rollout at paragraphs 4.9 and 5.45 below;
- (c) ComReg addresses Virgin Media's rollout at paragraph 4.131 above;
- (d) ComReg addresses the Imagine-Huawei strategic partnership at paragraphs 3.95 above; and
- (e) ComReg addresses the enet-SIRO partnership at paragraphs 3.121 to 3.122 above, and paragraphs 10.91 to 10.93 below.

WLA Market is national in scope and this is unlikely to change within the review period

4.171 In paragraphs 4.58 to 4.86 above, ComReg detailed Respondents' views on the geographic assessment of the WLA Market. In paragraphs 4.71 to 4.82, it was noted that ALTO, BT, enet, Sky, Vodafone and Virgin Media either agreed or broadly agreed with ComReg's preliminary views on the geographic scope of the WLA Market i.e. that the WLA Market is national in its geographic scope, and that this is unlikely to change over the market review period. ComReg notes that these views broadly accord with the preliminary views which it expressed in the Consultation.

- 4.172 In paragraphs 4.74 and 4.75, ComReg noted Sky's points that since the NGA Decision in 2013, the then-substantial net growth in Virgin Media subscribers, coupled with declining Eircom subscribers has been reversed. Sky presented a chart (Figure 10 above) showing Virgin Media growth compared to Eircom's platform growth since Q1 2009. Sky noted that this showed that Eircom's net subscriber growth in WLA (including self-supply) and WCA has significantly outperformed Virgin Media's subscriber net growth since Q2 2013, with Virgin Media's market share and absolute subscriber base having been in decline for the last three consecutive quarters.
- 4.173 In Figure 3, ComReg presented market shares based on fixed broadband subscriptions from Q1 2014 to Q4 2017. The chart shows that Virgin Media's market share declined from 27.9% in Q1 2016 to 26.8% in Q4 2017. On this basis, ComReg agrees with Sky that Virgin Media's market share has been in decline for the past number of quarters.

Evidence suggests sub-geographic WLA Markets exist

- 4.174 As noted in paragraphs 4.83 to 4.86 above, Eircom indicated that it does not consider that there should be a national WLA Market but, rather, that ComReg should define sub-national markets with respect to the WLA Market (see paragraphs 4.83 to 4.86 above). Eircom's view that the WLA Market is likely to be sufficiently differentiated on a regional basis is based in part on its view of sub-geographic markets with respect to network rollout, in addition to the patterns of network rollout.

4.175 Eircom considered that SIRO's rollout (including its presence in a number of towns where Eircom Wholesale is present) indicates some geographical distinction in the provision of WLA. ComReg has considered Eircom's points and notes that SIRO is present in certain geographic areas, but that its coverage is currently 120,000 premises passed⁴¹³ and is expected to be [redacted] by the end of 2018. However, it remains the case that SIRO's rollout has, to date, been significantly slower than expected, with significant additional delays noted since the Consultation, compared to expectations in the market based on SIRO's plans. SIRO has indicated to ComReg through bilateral discussions and SIRs that some of the delays in rollout surround [redacted]

[redacted]

[redacted].⁴¹⁴ Notwithstanding SIRO's slow rollout to date, conditions of competition are not suggestive of sufficiently different and stable conditions of competition in distinct geographic markets, particularly when considered alongside other data such as pricing and market shares.

4.176 As noted previously,⁴¹⁵ Magnet operates a localised FTTH network which covers 15,000 premises,⁴¹⁶ while Digiweb, via SIRO, operates a localised FTTH network covering 27,000 premises.⁴¹⁷ ComReg does not consider these localised FTTH networks to be sufficient indirect constraints at the retail level to permit their inclusion in the WLA Market definition.

⁴¹³ <https://siro.ie/newbridge-town-hall/>.

⁴¹⁴ ComReg obtained detailed information on SIRO's rollout plans through a SIR, issued in July 2017.

⁴¹⁵ See paragraph 4.9 above.

⁴¹⁶ <https://www.magnet.ie/residential/home-broadband/>.

⁴¹⁷ <http://media.digiweb.ie/>.

- 4.177 Eircom provided further reasoning that, in its view, is sufficient to justify the identification of sub-geographic WLA Markets, in particular, referring to the NBP intervention as being contrary to ComReg's position that the WLA Market is sufficiently homogeneous to indicate a national market. ComReg has responded to similar points raised by Eircom surrounding the NBP in Section 3 above⁴¹⁸ and notes that the NBP is a state subsidy scheme which aims to provide a high-speed broadband service to those premises that do not currently have such a service (likely due to the economic non-viability of rolling out high-speed broadband to these premises). ComReg further notes that the NBP is a policy response which, for reasons of social inclusion, aims to subsidise the development of infrastructure, which will ultimately alter supply conditions in the NBP intervention area, making it more similar to non-NBP areas. For the reasons set out in the Consultation⁴¹⁹ and below, ComReg is of the view at this time that competitive conditions within the NBP area do not warrant the definition of sub-geographic markets.
- 4.178 ComReg has taken utmost account of the EC Notice on Market Definition and the BEREC Common Position on Geographic Aspects of Market Analysis by assessing the geographic scope of the WLA Market across a range of criteria. In doing so, ComReg assesses geographic differences in entry conditions, distribution of market shares, variation in the number and size of potential competitors, evidence of differentiated pricing/marketing strategies and geographic differences in demand characteristics. The presence of the NBP area in and of itself is not a sufficient ground for identifying sub-geographic WLA Markets because there is sufficient demand for the relevant WLA products, where available. In other words, availability is the key issue, rather than differentiated pricing strategies, different marketing strategies and geographic differences in entry conditions with respect to the NBP area. Furthermore, the uncertainty surrounding the NBP in terms of procurement, eventual outcome, subsequent rollout and completion, and the unknown manner in how these will impact the geographic definition further reinforces ComReg's position that a national WLA Market is in question.
- 4.179 While acknowledging that there may be differences in demand for WLA products based on areas of low premises density (such as the NBP area), ComReg finds that the distribution of market shares nationally, the ubiquity of Eircom's network, the limited network foot print of SIRO, and the uniformity of WLA products and pricing across the country is sufficient to suggest a national WLA Market.
- 4.180 In the context of this market review, ComReg's approach with respect to the unknown outcome of the NBP is consistent with a PricewaterhouseCoopers ('PwC') report entitled 'Broadband Strategy for Ireland' which notes that:

⁴¹⁸ See paragraphs 3.117 to 3.123 above.

⁴¹⁹ See paragraphs 5.88, 5.180, 10.57, of the Consultation.

“...depending on the outcome of the procurement processes in the Intervention Area [i.e. the NBP area]...this may give rise to the consideration of the case for a geographic demarcation of the Intervention Area in future market definition processes.”⁴²⁰

- 4.181 Notwithstanding this, as noted in paragraph 4.112, ComReg recognises the significance of the NBP and the potential implications for the WLA Market once the rollout in the intervention area has progressed sufficiently, and demand for wholesale products in the NBP area has similarly materialised sufficiently. ComReg will therefore closely monitor developments as they unfold.
- 4.182 Eircom also expressed the view that ComReg has incorrectly assessed indirect constraints in the WLA Market, as it considered that the retail broadband market is sufficiently differentiated in urban and rural areas,⁴²¹ and that Virgin Media acts as an effective indirect constraint in the WLA Market. ComReg notes that Virgin Media’s network is geographically limited to urban areas covering 38% of premises as of 30 November 2017, in places where population density has made the rollout of a DOCSIS 3.0 CATV network economically viable. On the basis of indirect constraints, ComReg has not included Virgin Media in the WLA Market, having identified that it is not possible, nor will it be possible over the lifetime of this review, to provide a VULA-type service over a CATV network. ComReg therefore does not agree with Eircom that it has incorrectly assessed indirect constraints. Even if Virgin Media’s 375,546 retail subscribers were hypothetically included in the WLA Market on the basis of indirect constraints, this does not have a material impact on ComReg’s position that Eircom is the primary supplier and consumer via self-supply of WLA products.⁴²²
- 4.183 As Table 19 below⁴²³ shows, if ComReg hypothetically included Virgin Media’s retail subscriptions (375k) in the WLA Market alongside other retail products including FWA, satellite, SIRO’s FTTH subscriptions and localised alternative FTTH subscriptions, Eircom’s market share remains elevated at 69%.

ComReg’s Position

- 4.184 ComReg has analysed the WLA Market from a product perspective and considered Respondents’ views in paragraphs 4.20 to 4.57 above, in addition to developments in the market since the Consultation was published in November 2016.

⁴²⁰ Report available online at <http://www.dccae.gov.ie/en-ie/communications/consultations/Documents/80/consultations/Broadband%20Strategy%20for%20Ireland.pdf>.

⁴²¹ ComReg considered Eircom’s view that the retail market is sufficiently geographically differentiated in paragraph 3.120.

⁴²² See paragraphs 5.57 to 5.61 below where ComReg outlines hypothetical market shares.

⁴²³ See Section 5 below.

- 4.185 ComReg takes the view that the relevant Product Market includes a number of local access products provided over copper and FTTx networks, including LLU, Line Share and VULA products, provided by Eircom and SIRO. Furthermore, Eircom's self-supply⁴²⁴ of the above networks is also included in the WLA Product Market.
- 4.186 In summary, the WLA Product Market is comprised of the following:
- (a) CG WLA products (being LLU and Line Share products provided over copper networks); and
 - (b) NG WLA products (being VULA products provided over FTTx networks).
- 4.187 ComReg has also analysed the relevant geographic market and has considered Respondents' views in paragraphs 4.58 to 4.87 above, in addition to developments in the market since the Consultation was published in November 2016. ComReg has taken the view that the WLA Market is national in scope.
- 4.188 Collectively, the relevant WLA Product Market and the relevant WLA geographic market are referred to as the **'Relevant WLA Market'**.

⁴²⁴ Given that ComReg has defined the Relevant WLA Market to include self-supply, ComReg has removed explicit references to self-supply within the WLA Decision Instrument (contained at Appendix: 20).

5 Competition Analysis and Assessment of SMP in the WLA Market

Position set out in the Consultation

5.1 In the Consultation, ComReg assessed competition in the WLA Market,⁴²⁵ including whether any SP had Significant Market Power ('SMP') in this market. ComReg considered the following criteria to be most relevant to assessing whether any Service Provider has SMP⁴²⁶ on the Relevant WLA Market:

- (a) Market Shares;
- (b) Overall size of the undertaking;
- (c) Control of infrastructure not easily duplicated;
- (d) Absence of, or low, countervailing buyer power;
- (e) Product/services diversification (e.g. bundled products or services);
- (f) Economies of scale and scope;
- (g) Vertical integration;
- (h) Absence of potential competition; and
- (i) Barriers to entry and expansion.

Assessment of SMP

5.2 In assessing whether any SP had SMP in the WLA Market, ComReg considered the effectiveness of:

- (a) **Existing competition in the Relevant WLA Market:** ComReg examined factors such as market shares, indirect constraints, vertical integration, relative strength of existing competitors, barriers to expansion, and pricing behaviour;⁴²⁷
- (b) **Potential competition in the Relevant WLA Market:** ComReg examined factors such as the overall size of undertakings, control of infrastructure not easily duplicated, barriers to entry in the WLA Market, product/services diversification, economies of scale/scope, and the overall strength of potential competitors;⁴²⁸ and

⁴²⁵ See Section 6 of the Consultation.

⁴²⁶ See paragraphs 6.10 to 6.13 of the Consultation. In Appendix 11 of the Consultation, other factors in addition to those above were considered but were considered of less or no relevance for the purposes of the SMP assessment in the Relevant WLA Market.

⁴²⁷ See paragraphs 6.15 to 6.43 of the Consultation.

⁴²⁸ See paragraphs 6.44 to 6.102 of the Consultation.

(c) **Strength of any countervailing buyer power ('CBP'):** ComReg assessed the impact posed by purchasers of WLA on the competitive behaviour of WLA providers.⁴²⁹

- 5.3 ComReg set out its preliminary view in the Consultation that Eircom does not face sufficient competitive constraints in the WLA Market from existing competitors. While recognising that Eircom is likely to face an increased degree of constraint in geographic areas where the SIRO network is present or is likely to be present, ComReg noted that the timing of SIRO's network rollout indicated that it was likely that, in the absence of regulation, it would be insufficient to constrain Eircom's behaviour in the WLA Market over the timeframe of the market review.⁴³⁰
- 5.4 Therefore, ComReg set out its preliminary view that alternative FTTH-based networks are not likely to provide a sufficiently effective indirect competitive constraint in the WLA Market over the period covered by this market review, such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers or End Users.
- 5.5 Furthermore, given the likely lack of effective competition in the WLA Market, ComReg set out its preliminary view that, absent regulation, Eircom has both the ability and incentive to, amongst other things, increase prices charged to Access Seekers for WLA, above the levels which would be expected in a competitive market. Thus, having regard to ComReg's assessment in paragraphs 6.17 to 6.41 of the Consultation, which also examined the vertically integrated structure of Eircom,⁴³¹ ComReg set out its preliminary view that, absent regulation in the WLA Market, it is unlikely that Eircom would be sufficiently constrained by existing competition, such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers and End Users.
- 5.6 ComReg also set out its preliminary view that further entry into the WLA Market based on a new network build is unlikely to effectively constrain Eircom within the period of this market review. ComReg considered, for example, that it is unlikely that Virgin Media would enter the WLA Market on any significant scale, if at all, over the period of this market review. While noting that it may be possible for Access Seekers to purchase WLA on a 'patchwork' basis (using, for example, multiple FWA and/or alternative FTTH suppliers to achieve a high level of coverage),⁴³² ComReg set out its preliminary view that this is unlikely to be a realistic or suitable option due to the transaction costs involved in doing so.⁴³³

⁴²⁹ See paragraphs 6.103 to 6.125 of the Consultation.

⁴³⁰ See paragraph 6.15 of the Consultation.

⁴³¹ See paragraphs 6.29 to 6.35 of the Consultation.

⁴³² See paragraph 5.74(d) of the Consultation.

⁴³³ See paragraph 6.99 of the Consultation.

- 5.7 Having assessed CBP, ComReg explained that BT Ireland is the largest external purchaser of WLA from Eircom, but that this is not likely to strengthen BT's bargaining position with Eircom, as any dependency by Eircom on wholesale revenues earned from BT Ireland could be largely converted to retail (and/or potentially other wholesale) revenues by Eircom. Therefore, as BT Ireland currently has no external source of supply of WLA (other than Eircom) capable of meeting BT's coverage needs,⁴³⁴ ComReg set out its view that, absent regulation, WLA Access Seekers' (direct or indirect) retail subscribers would switch their purchases of retail services to an alternative supplier, as BT may not be a viable source of supply for Access Seekers. In other words, absent regulation in the WLA Market, BT's WLA purchases from Eircom would be subject to commercial negotiations and, under these circumstances, BT may not, from its perspective, obtain reasonable terms to enable it to successfully compete with Eircom's offering on the basis of price and/or scale. Consequently, under this scenario, ComReg assumes that the retail subscribers of an Access Seeker who purchased from BT in the presence of regulation would subsequently switch to Eircom.⁴³⁵ In line with this, ComReg considered that Eircom could increase its profitability and revenue by gaining a WLA purchaser's retail customer at the expense of WLA revenue (assuming that Eircom's retail division is profitable).⁴³⁶ Consequently, ComReg was of the preliminary view that it is unlikely that Eircom would be sufficiently constrained by CBP, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and End Users.⁴³⁷
- 5.8 Having assessed competition in the WLA Market, ComReg's preliminary view was that the WLA Market is not effectively competitive, nor is it likely to tend towards effective competition over the period of this market review, and that Eircom is insufficiently constrained, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and End Users.⁴³⁸
- 5.9 Having regard to the preliminary conclusions in the Consultation (as set out above), ComReg was of the preliminary view that Eircom should be designated as having SMP in the WLA Market.

⁴³⁴ With SIRO providing WLA services it has not reached sufficient scale to be a viable alternative source of supply to BT for BT's national coverage needs.

⁴³⁵ ComReg recognises that it is possible that, absent regulation, retail subscribers would switch from BT to an alternative source of supply other than Eircom (e.g. SIRO-based retail supply). ComReg also recognises that some customers may switch to Virgin Media but in the context of indirect constraints this may be insufficient.

⁴³⁶ See paragraph 6.119 of the Consultation.

⁴³⁷ See paragraphs 6.103 to 6.124 of the Consultation.

⁴³⁸ See paragraphs 6.126 to 6.129 of the Consultation.

Respondents' Views

Assessment of SMP

- 5.10 Six of the eight Respondents to the Consultation expressed views on ComReg's preliminary assessment of SMP in the WLA Market. ALTO, BT, enet, Sky, and Vodafone agreed or broadly agreed with ComReg, whereas Eircom was the sole respondent to disagree with this assessment.
- 5.11 Neither Colt nor Virgin Media provided views in their respective Submissions regarding ComReg's preliminary views on SMP in the WLA Market.
- 5.12 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following identified themes, namely:
- (a) ComReg's SMP assessment is questionable in light of the market definition (see paragraphs 5.13 to 5.14 below);
 - (b) Issues in relation to the CID⁴³⁹ and access options (see paragraphs 5.15 to 5.25 below);
 - (c) Wholesale price increases by Eircom may be an indication of SMP (see paragraphs 5.26 to 5.38 below); and
 - (d) Access to capital markets and economies of scale and scope (see paragraph 5.39 below).

ComReg's SMP assessment is questionable in light of the market definition

- 5.13 In its response to the Consultation, Eircom indicated that it did not agree with ComReg's assessment of SMP on the basis that Eircom considers that the WLA Market is sufficiently differentiated to justify the delineation of separate geographic WLA Markets. Eircom suggested that, had ComReg taken this alternative approach in defining the WLA Market, there may have been different competitive outcomes within these markets. Eircom considered that the market shares, under Eircom's preferred scenario, would reflect a different outcome and that, in its view, ComReg appears to be taking the easier route of simply looking at a market that is national in scope.
- 5.14 Eircom stated that, on the basis that ComReg has incorrectly identified the WLA geographic market as being national in scope, ComReg concluded that indirect constraints from Virgin Media's CATV network, alternative fibre, FWA, satellite and mobile networks were insufficient competitive constraints in the WLA Market. Eircom noted that it had already raised a number of concerns in this regard (summarised in Section 3), and that retail services provided over these networks do provide indirect constraints at the wholesale level, to varying degrees.⁴⁴⁰

⁴³⁹ Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (L 155/1) (the '**Civil Infrastructure Directive**' or '**CID**'), transposed into Irish law by the European Union (Reduction of Cost of Deploying High Speed Public Communications Networks) Regulations 2016 (S.I. No. 391 of 2016) ('**2016 Network Cost Reduction Regulations**').

⁴⁴⁰ See paragraphs 3.35 to 3.40 above.

Issues in relation to the EU Civil Infrastructure Directive and competition from other networks

- 5.15 ALTO stated in its Submission that Eircom lacks a fit-for-purpose duct access offering, and has largely curtailed the ability of SPs to use upstream Eircom WLA facilities to climb the ladder of investment. Referring to ComReg's comment at paragraph 6.57 of the Consultation, ALTO supported the need for access obligations in terms of non-discrimination, transparency and pricing controls, which, in its view, ensures that access to civil engineering infrastructure would be workable. ALTO also expressed the view that, without the competitive enhancements set out by ComReg in the Consultation, the Eircom duct offer is simply not fit-for-purpose.
- 5.16 ALTO welcomed the Cartesian Report on CEI Service Delivery⁴⁴¹ and encouraged ComReg to implement the findings contained within Appendix 10 of the Consultation concerning Eircom's CEI service delivery processes.
- 5.17 Referring to paragraph 6.57 of the Consultation,⁴⁴² BT supported the need for access obligations in terms of non-discrimination, transparency, and pricing controls in order to enhance the feasibility of having access to Eircom's civil engineering infrastructure. BT noted also that Eircom's lack of a fit-for-purpose duct and pole access offer has largely curtailed the ability of SPs to use upstream Eircom WLA facilities to climb the ladder of investment. Separately, BT pointed out that attempts to move to a Regional Handover Access solution have proven to be extremely difficult.
- 5.18 BT welcomed the Cartesian Report on CEI Service Delivery detailed in Appendix 10 of the Consultation and suggested that ComReg should implement its findings, particularly if leased lines are to be de-regulated (with BT referring to separate proposals contained in a separate market review). BT also expressed the view that further items (documented under BT's response to Question 7 in the Consultation) should also be considered, including, for example, access to micro-ducting which, in its view, should be supported.
- 5.19 In relation to the CID, Eircom noted that a number of EU Member States have found that SMP remedies are not necessary as a result of the implementation of the Directive (e.g. Sweden).⁴⁴³ Eircom also noted that the 2014 case quoted by ComReg in the Consultation occurred before the Directive came into force.⁴⁴⁴ Eircom therefore considered that the CID is sufficient to achieve ComReg's objectives in terms of ensuring access to CEI, i.e. the presence of the CID negates the regulatory requirement imposed on Eircom to provide access to its network.

⁴⁴¹ ComReg Document 16/96d, CEI Service Delivery Process Equivalence Options - Analysis of alternative service delivery approaches, drafted by Cartesian on behalf of ComReg (the '**Cartesian Report on CEI Service Delivery**').

⁴⁴² See page 223 of the Consultation.

⁴⁴³ Eircom noted that MLex reported a decision by PTS (the Swedish telecommunications regulator) to this effect on 14 November 2016.

⁴⁴⁴ See paragraph 6.57 of the Consultation.

- 5.20 Eircom considered in its Response to the Consultation that SIRO has an indefeasible right of use ('IRU') over the ESB infrastructure, and noted that it is unaware of any other company with such access to that infrastructure. Eircom considered that other Access Seekers will seek access to this network, given its ubiquity. It emphasised that, in ComReg's assessment of the impact of the CID, ComReg cannot simply ignore that ESB's infrastructure reaches almost 100% of premises and is more ubiquitous than Eircom's own network. Eircom also pointed out that the CID only needed to be implemented by July 2016 and, as such, it appears that ComReg has not taken sufficient consideration of its effect on the market thus far and the effect that it will continue to have in the future.
- 5.21 Eircom further claimed that if ComReg considers Virgin Media's infrastructure, in addition to that of the ESB and potentially Bord Gáis,⁴⁴⁵ there is a significant amount of infrastructure available for potential use in delivering telecommunications services. In referring to paragraph 6.66 of the Consultation, Eircom considered that ComReg did not account for the CID also applying to Virgin Media and noted that, whilst it has not yet facilitated access to its infrastructure, there is no reason why it should not.
- 5.22 In responding to the Consultation, Eircom noted that Virgin Media had referenced 'UK & Ireland' when referring⁴⁴⁶ to its £3bn network expansion program 'Project Lightning' and it noted that this consideration is relevant to the WLA Market on a forward-looking basis. In Eircom's view, the investment associated with its expansion programme appears to involve an extension of the cable network and also fibre to the premises ('FTTP') which, in Eircom's view, will facilitate provision of wholesale services. Eircom quoted Virgin Media's Q3 2016 fixed income statement, which stated that "*.....large scale builds deploying narrow trenching to build FTTP are most cost efficient than smaller infill opportunities.*"⁴⁴⁷ Eircom noted that this aligns with local press commentary on new build in New Ross, Ballina, Drogheda and Dundalk and considered that, as a result, the WIK Report published in 2016 by ComReg is outdated.⁴⁴⁸
- 5.23 Eircom also referred to Virgin Media Ireland's announcement of Irish network expansion plans, which stated that Virgin Media intended to pass 200,000 additional premises by the end of 2018.⁴⁴⁹

⁴⁴⁵ Bord Gáis Networks, on behalf of Gaslink, develops, operates and maintains the natural gas transmission and distribution networks in Ireland. <http://www.ervia.ie/annualreport2009/networks.html>.

⁴⁴⁶ See page 22 of Eircom's Submission and page 2 of Liberty Global's Press Release: <http://www.libertyglobal.com/pdf/press-release/Virgin-Media-Fixed-Income-Q3-2016-FINAL.pdf>.

⁴⁴⁷ <http://www.libertyglobal.com/pdf/press-release/Ziggo-Fixed-Income-Q3-2016-FINAL.pdf>.

⁴⁴⁸ ComReg commissioned independent consultants WIK to examine the possibility of providing WLA and WCA over a CATV network in Ireland. The WIK CATV Report is contained at Appendix 8 in the Consultation.

⁴⁴⁹ Eircom has provided the following reference on page 22 of its Submission: <http://www.independent.ie/business/technology/virgin-media-digs-in-for-fibre-battle-as-major-network-expansion-beckons-35378463.html>.

- 5.24 Further commenting on the WIK Report, Eircom noted that WIK advises that Virgin Media is technically constrained from offering an effective active wholesale product. Eircom stated that it does not disagree, but that it does not see why this will necessarily continue and, also, why access to Virgin Media's passive infrastructure should not be treated consistently with Eircom's, i.e. symmetric obligations. Eircom considered that such symmetric obligations are justifiable because Virgin Media has market power in urban retail markets, and from a practical perspective its duct network is newer than Eircom's.
- 5.25 Eircom expressed opposing views with regard to ComReg's preliminary views on the development of competition in the WLA Market over the period of the market review and, specifically, SIRO's network rollout. It stated that SIRO's rollout started off slowly, as expected, as it learnt the practical lessons of FTTH deployment by means of an electricity network. However, Eircom considered that the rollout has since gathered pace and it appears to be achievable that SIRO will meet its target goal of 500,000 homes passed by the end of 2018. Eircom noted that this is during the period of this market review, and does not constitute a limited footprint.

Wholesale price increases by Eircom and absence of CBP may be an indication of SMP

- 5.26 ALTO agreed with ComReg's assessment of SMP, describing it as a "logical analysis". ALTO noted that Eircom price increases in 2015 and 2016 clearly establish the ability of Eircom to act independently of market forces, as there is no viable alternative supply for VUA services.⁴⁵⁰
- 5.27 BT agreed with ComReg's assessment of SMP in the WLA Market and the methodical analysis carried out by ComReg. It considered that WLA price increases in 2015 and 2016 clearly highlight Eircom's ability to act independently of the market as there was, in practice, no alternative supply for WLA services.
- 5.28 enet agreed with ComReg's preliminary view that Eircom should be designated with SMP in the WLA Market. It considered that Eircom's high and stable market share is consistent with a position of dominance in the relevant market, a fact underlined by the absence of existing or potential competitive constraints.⁴⁵¹

⁴⁵⁰ See paragraph 8.626(b) of the Consultation and specifically: "In July 2015 Eircom increased the VUA monthly rental price by €2, from €17.50 to €19.50.687 From 1 September 2016, Eircom increased the rental price for FTTC based VUA by €3.50, from €19.50 to €23, and the monthly rental price for FTTH-based VUA by €3".

⁴⁵¹ enet referred to Eircom's position with respect to both merchant WLA supply and self-supply, both of which are of great significance to WLA services and WCA services (by virtue of WLA inputs).

- 5.29 Sky agreed with ComReg's assessment of SMP in the WLA Market.⁴⁵² Sky considered the analysis carried out by ComReg on the effects of an SSNIP by a hypothetical monopolist to be appropriate. Sky considered, however, that ComReg's analysis is supported by more relevant and compelling data that reinforces ComReg's preliminary conclusion on SMP i.e. it can observe the actual impact of Eircom's two price increases for SA FTTC (increases of 11% in 2015 and 21% in June 2016) and its June 2016 35% price increase for POTS-based FTTC. Sky highlighted that both price increases are significantly above the SSNIP level (even after feeding through to the retail level) yet, as confirmed by the latest Eircom financial reports, the increases were accompanied by a significant increase in sales of its WLA products.
- 5.30 In Sky's view, these developments conclusively support ComReg's opinion that *"Eircom faces a weak price constraint from Virgin Media in the WLA Market"*⁴⁵³ and that it can profit from price increases substantially above those envisaged by the SSNIP test.
- 5.31 Sky raised a specific point in relation to ComReg's analysis of Virgin Media. In particular, Sky stated that ComReg notes that, as of Q1 2016, Virgin Media's retail subscriber base stood at *"368k subscribers giving it a retail market share of 21.5% which is the same as it was in Q1 2015"*.⁴⁵⁴ Sky noted that this subscriber base has since declined by 5k subscribers to 363k subscribers and, coupled with growth in Eircom's WLA (including self-supply) and WCA subscriber volumes, Virgin Media's market share in the WLA Market is, in fact, in decline and now closer to 20%.
- 5.32 Vodafone agreed with ComReg's preliminary conclusion that the WLA Market is not effectively competitive, and that Eircom should be designated with SMP.
- 5.33 Vodafone stated that Eircom's actual pricing behaviour is the most powerful evidence that it is not currently constrained in the WLA Market. Vodafone referred to paragraphs 6.37 to 6.41 of the Consultation in noting that LLU prices have only decreased as a result of ComReg's regulatory intervention, while Eircom has increased the price of its FTTC and FTTH VUA products (which were only subject to a margin squeeze obligation) twice since 2014.
- 5.34 Moreover, Vodafone agreed that, despite the presence of SIRO, Eircom has nearly 100% market share in the WLA Market and this is unlikely to change materially during the lifetime of this market review.
- 5.35 Vodafone agreed with ComReg's preliminary conclusions that the lack of effective indirect pricing constraints emanating from alternative networks (especially CATV and alternative fibre networks) will continue and that, even if ComReg were to include the self-supply of vertically-integrated Alternative Network Operators providing retail services in the WLA Market, Eircom's notional market share would only decrease to around 68%.⁴⁵⁵

⁴⁵² See Section 4 above.

⁴⁵³ See page 6 of Sky's Submission: https://www.comreg.ie/media/dlm_uploads/2017/03/ComReg-1696sR.pdf.

⁴⁵⁴ *Ibid.*

⁴⁵⁵ See paragraphs 6.21 and 6.22 of the Consultation.

- 5.36 Vodafone noted that Eircom is also unlikely to be constrained by prospective competition, as barriers to entry and expansion remain high – and new entry continues to involve significant upfront (sunk) costs, which makes it extremely risky.
- 5.37 Vodafone agreed with ComReg’s preliminary conclusion that CBP is not likely to be a relevant factor constraining Eircom’s behaviour in the WLA Market. Vodafone considered that Eircom is, by far, the largest purchaser of WLA products, while BT Ireland is the largest third-party purchaser in this market. However, in Vodafone’s view, BT Ireland is unlikely to have a strong bargaining position, given that it currently does not have any other external sources of supply (with a national footprint), and Eircom can easily convert any wholesale revenues it earns from BT Ireland into retail revenues.
- 5.38 In response to paragraph 6.121 of the Consultation (where ComReg considered that BT does not have CBP over Eircom in relation to WLA), Eircom reiterated a point made in response to Question 1 of the Consultation (see paragraph 3.41 above) that, in the intervening period since the publication of the consultation, BT and SIRO have established a network interconnect agreement enabling BT to offer its corporate, public sector and wholesale customers access to SIRO’s local access network. Eircom argued that BT now has an external source of supply and has therefore strengthened its bargaining position, and that it can also leverage the market power of its wholesale customers, such as Sky.

Access to capital markets and economies of scale and scope

- 5.39 Eircom noted that in assessing SMP, market shares are only one indicator of market power. It considered that ComReg should consider economies of scale and scope in addition to access to capital markets. It further noted that many of its competitors compete on a global scale and are extremely well resourced, providing the example of Vodafone/SIRO and Liberty Global (Virgin Media), which, in its view, are well placed in terms of access to capital markets.

ComReg’s Assessment of Respondents’ Views

- 5.40 In this section, ComReg assesses Respondents’ views under each of the key themes identified in paragraph 5.12 above, as follows:
- (a) ComReg’s SMP assessment questioned in light of market definition (see paragraphs 5.42 to 5.63 below);
 - (b) Issues in relation to the EU Civil Infrastructure Directive and access options (see paragraphs 5.64 to 5.85 below);
 - (c) Wholesale price increases by Eircom and absence of CBP may be an indication of SMP (see paragraphs 5.86 to 5.97 below); and
 - (d) Access to capital markets and economies of scale and scope (see paragraphs 5.98 to 5.106 below).
- 5.41 ComReg’s overall position on the SMP analysis of the Relevant WLA Market is set out at paragraphs 5.107 to 5.120 below.

ComReg's SMP assessment questioned in light of WLA Market definition

- 5.42 In paragraphs 5.13 to 5.14 above, it was noted that Eircom did not agree with ComReg's assessment of SMP on the basis that the WLA Market is sufficiently differentiated so as to justify the delineation of separate urban and regional geographic WLA Markets, with the intensity of competition within such areas differing.
- 5.43 Eircom considered that in such a scenario, the market shares would reflect a different outcome and that ComReg appears to be taking the easier route of simply looking at a market that is national in scope.
- 5.44 As ComReg outlined in Section 5 of the Consultation (paragraphs 5.174 to 5.199) and in Section 4 of this Decision,⁴⁵⁶ the WLA Market has been defined as being national in scope for several reasons. It should be noted also that ComReg took utmost account of the Notice on Market Definition and the BEREC Common Position on Geographic Aspects of Market Analysis⁴⁵⁷ in reaching its conclusions.
- 5.45 ComReg considers, as set out at paragraph 4.187 above, that the relevant geographic market for WLA is national in scope for the following reasons:
- (a) *Geographical differences in entry conditions*⁴⁵⁸ – given Eircom's ubiquity in the provision of WLA, the geographic WLA Market does not exhibit sufficient variation on a geographic basis. There is variation, for example, with respect to the availability of NGA products such as VULA depending on whether Eircom has rolled out fibre access. The impact of the NBP and Virgin Media's network coverage on the WLA geographic market definition was considered above in Section 4.⁴⁵⁹ In relation to the entry of SIRO into the WLA Market, it has been noted⁴⁶⁰ that SIRO is offering a WLA product, but that while Eircom is likely to face some competitive constraint where SIRO is present, this is not sufficient to delineate the WLA Market into separate sub-geographic markets, given the barriers to entry which likely arise from the level of investment that would be required to replicate a network capable of offering WLA services, such as Eircom's ubiquitous network.⁴⁶¹ Based on Q4 2017 data, SIRO's network coverage in Exchange Areas is, on average, no higher than [redacted].
 - (b) *Variation in the number and size of potential competitors*⁴⁶² – the main existing competitors in the WLA Market are Eircom and SIRO. The impact of the NBP and Virgin Media's network coverage on the WLA geographic market definition was considered above in Section 4.⁴⁶³

⁴⁵⁶ See paragraphs 4.18 to 4.19 above.

⁴⁵⁷ BEREC, [Common Position on Geographic Aspects of Market Analysis](#), BoR (14) 73, 05.06.2014.

⁴⁵⁸ See paragraphs 5.177 to 5.184 of the Consultation.

⁴⁵⁹ See paragraphs 4.177 to 4.182 above.

⁴⁶⁰ See paragraph 5.48 of the Consultation.

⁴⁶¹ See paragraph 5.183 of the Consultation.

⁴⁶² See paragraphs 5.185 to 5.188 of the Consultation.

⁴⁶³ See paragraphs 4.177 to 4.182 above.

ComReg notes that, in April 2017, enet announced the planned rollout of WLA fibre broadband to 10 towns, largely in the north west of Ireland.⁴⁶⁴ In September 2017, enet announced a joint venture with SSE to bring fibre broadband to 115,000 premises in rural Ireland.⁴⁶⁵ Some of this proposed investment was intended to leverage enet's Metropolitan Area Networks ('MANs'). In responding to a SIR,⁴⁶⁶ enet considered that [redacted] [redacted]]. Following discussions with enet in April 2018, ComReg was made aware that [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]]. To date, enet has FTTP⁴⁶⁷ coverage of [redacted] [redacted]] as at end March 2018. enet currently has [redacted] [redacted]] active subscribers across both residential and commercial premises passed. These are currently (as at April 2018), sold to [redacted] [redacted]] as a WCA Bitstream service, with handoff in Dublin.

- (c) *Distribution of market shares*⁴⁶⁸ – ComReg has considered market shares in the WLA Market below in paragraphs 5.54 to 5.61, including the scenario when self-supply of alternative network providers (i.e. network operators self-supplying WLA services for the provision of its own retail service) is included in the WLA Market.⁴⁶⁹ As noted in the Consultation and in this Decision,⁴⁷⁰ ComReg recognises that, as SIRO's network rollout progresses, and the geographic distribution of market shares evolves, Eircom is likely to face a degree of constraint from SIRO in areas where SIRO's network is rolled out. However, at present, given SIRO's rollout and network coverage by Exchange Area (no higher than [redacted] [redacted]] on average), the constraint is not sufficiently binding.

⁴⁶⁴ <https://www.enet.ie/news/167/138/enet-to-bring-high-speed-fibre-networks-to-ten-regional-towns.html>.

⁴⁶⁵ <https://www.enet.ie/news/177/138/Minister-launches-enet-SSE-100M-fibre-plan-for-regional-Ireland.html>.

⁴⁶⁶ enet response to SIR issued in July 2017.

⁴⁶⁷ enet uses the expression Fibre to the Premises ('FTTP'); this includes both residential and commercial premises and is therefore equivalent to the construction of the term 'FTTH', which, in practice, also refers to the provision of service to both residential and commercial premises.

⁴⁶⁸ See paragraphs 5.189 to 5.192 of the Consultation.

⁴⁶⁹ See paragraphs 5.59 to 5.61 below.

⁴⁷⁰ See paragraphs 4.5 and 5.3 above.

- (d) *Evidence of differentiated pricing or marketing strategies*⁴⁷¹ – uniform pricing of WLA products on a national basis suggests that there is no evidence of differentiated pricing by region. The only geographic difference in pricing arises based on the availability of technologies within an exchange (i.e. CGA and NGA).⁴⁷² For WLA, regulation does not prevent differentiated pricing. In practice, Eircom offers a national price for WLA services, as does SIRO. For example, where Eircom's FTTC and/or FTTH networks have not been rolled out, an Access Seeker will only be able to purchase LLU or Line Share. Based on information obtained via SIR,⁴⁷³ SIRO offers WLA services at national prices.
- (e) *Geographic differences in demand characteristics*⁴⁷⁴ – as noted in the Consultation, ComReg considers that demand for WLA services is likely to be national in nature.
- 5.46 For the reasons outlined at (a) to (e) above, ComReg does not consider that there is sufficient evidence to suggest that there are separate geographically differentiated urban and regional WLA Markets.
- 5.47 ComReg previously responded to similar points raised by Eircom above in paragraphs 4.174 to 4.175, noting SIRO's rollout and market share to date (i.e. coverage is not widespread) which ComReg does not consider sufficient to merit a finding of the existence of sub-geographic markets.
- 5.48 ComReg notes that SIRO's network rollout (measured by premises passed)⁴⁷⁵ has been slower than was originally expected. In this respect, having regard to information obtained from SIRO by means of a SIR, ComReg notes that:⁴⁷⁶
- (a) SIRO announced in 2014 that it would rollout to 500,000 premises in 51 towns to be completed by the end of 2018;
 - (b) SIRO subsequently informed ComReg in response to a SIR in May 2015 that it projected a rollout to [REDACTED] premises in 16 selected towns by the end of 2016;
 - (c) SIRO subsequently informed ComReg in response to a SIR in September 2015 that it projected a rollout to [REDACTED] premises in 13 selected towns by the end of 2016;
 - (d) SIRO subsequently informed ComReg in response to a SIR in February 2016 that it projected to rollout to [REDACTED] premises in 18 towns by the end of 2016 and to [REDACTED] premises in 25 towns in 2017, bringing the total rollout to [REDACTED] at the end of 2017;

⁴⁷¹ See paragraphs 5.193 to 5.196 of the Consultation.

⁴⁷² As set out in paragraph 5.41 of the Consultation, Eircom's LLU and VUA pricing is in the presence of regulation, in particular price control obligations, in the WPNIA Market and WBA Market.

⁴⁷³ SIR issued to SIRO on 17 July 2017, returned on 21 August 2017.

⁴⁷⁴ See paragraph 5.197 of the Consultation.

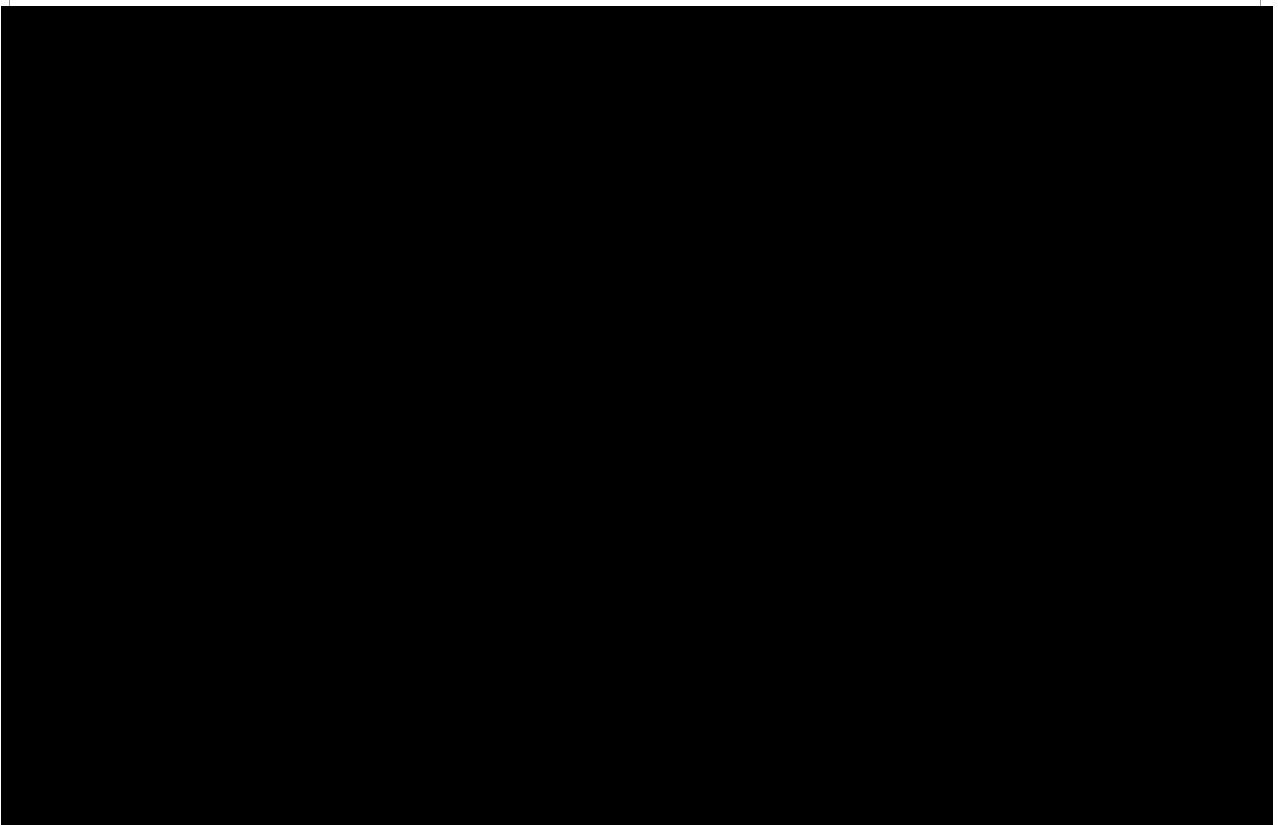
⁴⁷⁵ 'Premises passed' indicates that a customer can request to be connected and a retail partner of SIRO will process this order.

⁴⁷⁶ ComReg obtained detailed information on SIRO's rollout plans through SIRs.

- (e) SIRO subsequently informed ComReg in response to a SIR in November 2016 that it projected to rollout to [§< ██████████] premises in 24 towns by the end of 2017;
- (f) SIRO subsequently informed ComReg that, as of June 2017, it projected to rollout to [§< ██████████] premises in 24 towns by the end of 2017 and to [§< ██████████] premises in 36 towns by the end of 2018; and
- (g) SIRO subsequently informed ComReg that, as of November 2017, it projected to rollout to [§< ██████████] premises in 26 towns by the end of 2018.

5.49 Figure 12 below plots SIRO's projected rollout plans over the period Q4 2015 to Q4 2017.⁴⁷⁷ There have been significant revisions to the rollout plans over time. The SIRO network is expected to pass less than 300,000 premises by the end of 2018.

Figure 12: SIRO's Projected Rollout with respect to premises passed [§<REDACTED]



5.50 ComReg also responded to points raised by Eircom in relation to the NBP in paragraphs 4.177 to 4.181, and for the reasons set out therein, ComReg remains of the view that, on a forward-looking basis, the competitive conditions within the NBP area do not warrant the definition of sub-geographic markets.

⁴⁷⁷ The dates in Figure 12 refer to SIRO's rollout plans at the date of SIRO's SIR response to ComReg.

- 5.51 In response to Eircom's point in paragraph 5.13 above that the market shares would lead to a different outcome if there were sub-geographic WLA Markets, ComReg notes that Eircom is the only provider of WLA services with ubiquitous coverage.
- 5.52 In paragraph 5.14 above, ComReg noted that, in Eircom's view, on the basis that ComReg has incorrectly identified the WLA Market as being national in scope, ComReg proceeds to dismiss indirect constraints from Virgin Media's CATV network, alternative fibre, FWA, satellite and mobile networks as insufficient.
- 5.53 ComReg points out that, in paragraphs 5.99 to 5.171 of the Consultation, and at paragraphs 4.113 to 4.157 of this Decision, it presented a detailed analysis of the strength of indirect constraints. It is important to note that many of Eircom's competitors at the retail level rely on access to Eircom's network (including, for example, Vodafone, Sky and other OAOs), such that substitution in response to a SSNIP of WLA would have to be to other independent networks such as CATV, FWA, satellite or mobile broadband.
- 5.54 Table 18 below outlines market share figures for Eircom's merchant supply of WLA, Eircom's own retail supply of services (based on WLA inputs), Eircom's merchant supply of WCA (which would, absent regulation, become part of Eircom's own supply)⁴⁷⁸ and SIRO's supply of WLA services in Q4 2017.

Table 18: Market Shares in the WLA Market – Q4 2017⁴⁷⁹ [REDACTED]

Service Provider	Lines – Q4 2017	Share
Eircom merchant supply of WLA	234,786	[REDACTED] ⁴⁸⁰
Eircom self-supply of WLA and supply of WCA	719,869	[REDACTED] ⁴⁸¹
SIRO	[REDACTED]	[REDACTED] ⁴⁸²
Total	[REDACTED]	100%

- 5.55 Eircom's market share in the WLA Market is close to 100% and while SIRO's market share is currently very low relative to Eircom's, SIRO's limited network rollout to date and rollout plan suggests that Eircom's high market share is unlikely to change sufficiently over the lifetime of this market review such that it would be suggestive that Eircom would not have SMP (when considered alongside the other factors examined).
- 5.56 Figure 13 below plots these market share figures from 2010 to 2017. ComReg finds that Eircom's market share in self-supply (to the retail arm) has remained relatively constant, while supply of WLA has increased, whereas supply of WCA has declined in recent quarters.

⁴⁷⁸ Going forward there will be more and more scope for Eircom merchant supply, under the assumption of no regulation, to be supplied by SIRO, as opposed to converting entirely to Eircom's self-supply.

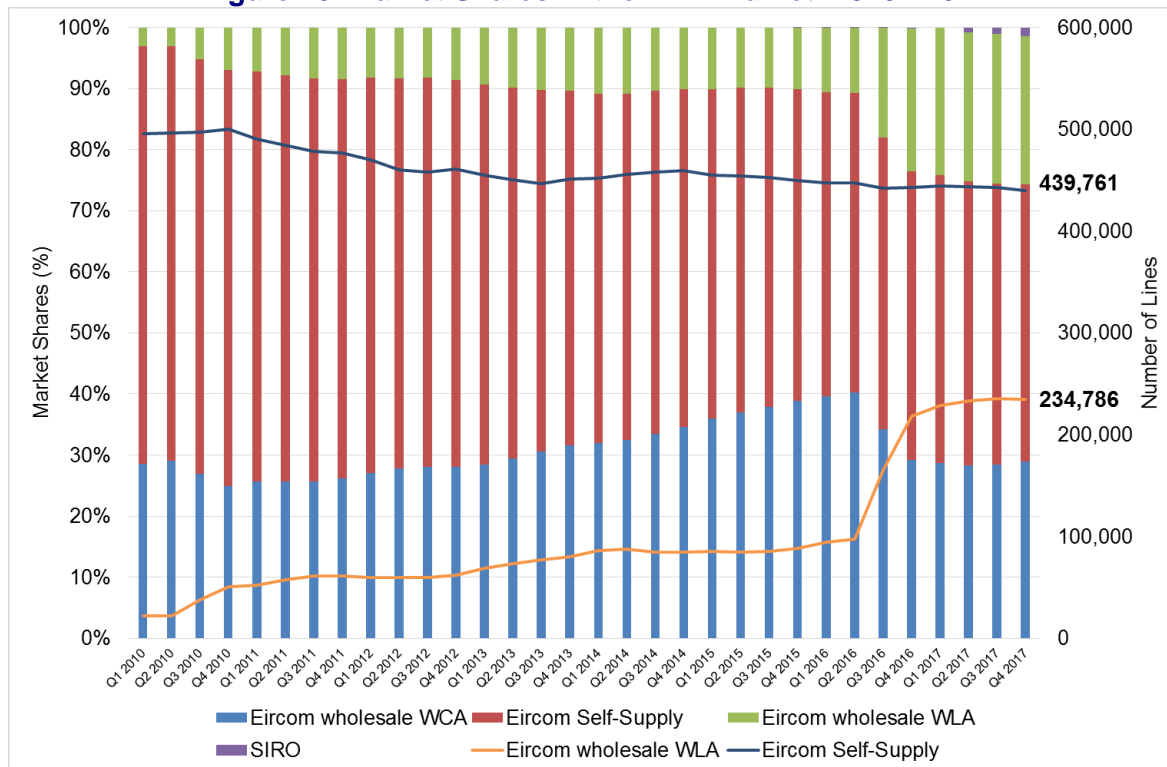
⁴⁷⁹ Q4 2017 QKDR.

⁴⁸⁰ Less than 30%.

⁴⁸¹ Less than 80%.

⁴⁸² Less than 3%.

Figure 13: Market Shares in the WLA Market: 2010 - 2017



- 5.57 Table 19 outlines the hypothetical market shares if the self-supply of vertically integrated CATV, FWA and localised alternative FTTH-based SPs providing only retail services were hypothetically to be included in the WLA Market.
- 5.58 As noted in paragraphs 6.20 to 6.24 of the Consultation, and repeated in Table 19 below, ComReg outlines the notional market shares if the self-supply of vertically-integrated CATV, FWA and localised alternative FTTH-based SPs providing retail services are included in the WLA Market.
- 5.59 Based on data as at Q4 2017, ComReg finds that, even if the self-supply of vertically integrated retail-only SPs were included within the WLA Market, Eircom would have a high and stable market share of approximately [redacted].⁴⁸³

⁴⁸³ Greater than 65%.

Table 19: Hypothetical Market Shares in WLA Market – Q4 2017

Service Provider	Lines – Q4 2017	Share
Eircom merchant supply of WLA	234,786	[< 20%] ⁴⁸⁴
Eircom Self-Supply of WLA and Supply of WCA	719,869	[< 60%] ⁴⁸⁵
SIRO	[< 3%]	[< 3%] ⁴⁸⁶
Virgin Media Self-Supply	375,546	[< 30%] ⁴⁸⁷
FWA	47,443	[< 5%] ⁴⁸⁸
Satellite	4,985	[< 2%] ⁴⁸⁹
Localised Alternative FTTH	[< 2%]	[< 2%] ⁴⁹⁰
Total	1,401,323	100%

5.60 Figure 14 plots these actual and hypothetical market shares between 2010 and 2017. Eircom's hypothetical market share (encompassing merchant supply of WLA and WCA, and self-supply) has remained relatively constant over this period, increasing slightly in recent quarters and falling overall by about 6% since 2010. Eircom's market share has not dropped below 50% at any point.

⁴⁸⁴ Less than 20%.

⁴⁸⁵ Less than 60%.

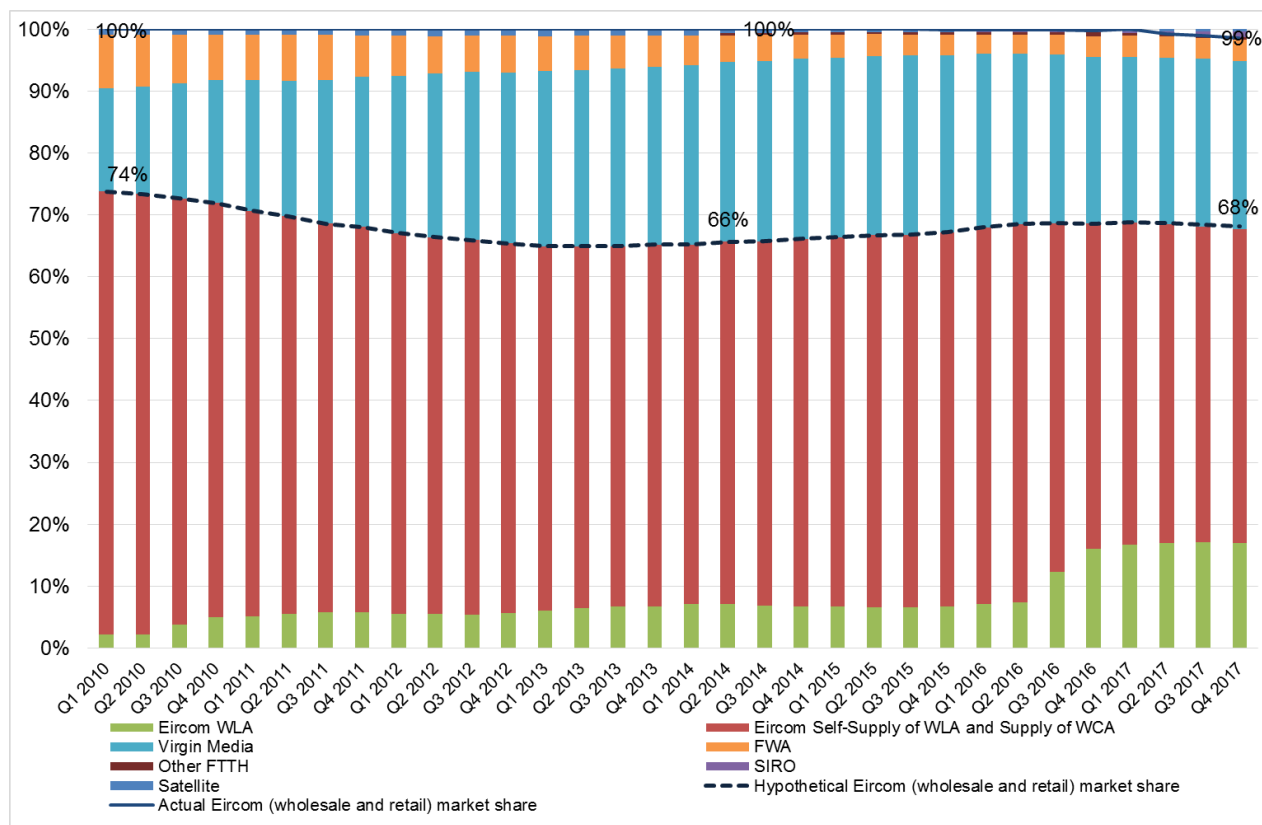
⁴⁸⁶ Less than 3%.

⁴⁸⁷ Less than 30%.

⁴⁸⁸ Less than 5%.

⁴⁸⁹ Less than 2%.

⁴⁹⁰ Less than 2%.

Figure 14: Hypothetical Market Shares in the WLA Market: 2012 – 2017⁴⁹¹

5.61 In paragraph 5.59 above, ComReg found that if the self-supply of vertically integrated retail SPs were included in the WLA Market where such SPs were also active in the WLA merchant market, Eircom's market share remains high at 68% as at Q4 2017. For this and the other reasons outlined above, ComReg remains of the view that that, over the period covered by this market review, retail CATV, FWA and localised alternative FTTH-based networks are not likely to provide a sufficiently effective indirect competitive constraint in the WLA Market, such that it would prevent Eircom from behaving, to an appreciable extent, independently or competitors, customers or End Users.

5.62 Considering the competitive dynamics of the WLA Market, ComReg notes that Eircom's market share by Exchange Area does not drop below 90%, and that the inclusion of other vertically integrated SPs' self-supply (over alternative networks) in the WLA Market does not result in Eircom's market share dropping below 50%.

5.63 For the reasons outlined above in paragraphs 5.42 to 5.63 above, ComReg does not agree with Eircom's view and therefore does not consider that a change in ComReg's position is warranted, based on the issues addressed above.

⁴⁹¹ Note that Eircom WCA is included above and Eircom supplies WLA to itself when providing WCA in the merchant market, albeit currently under SMP regulation.

Issues in relation to the EU Civil Infrastructure Directive and competition from other networks

- 5.64 In paragraphs 5.15 to 5.25, ComReg noted a number of points raised by Respondents in relation to the availability of civil infrastructure and the Civil Infrastructure Directive ('CID').
- 5.65 As outlined in paragraphs 5.15 and 5.17, ALTO and BT stated that Eircom lacks a fit-for-purpose duct access offering, and that this has curtailed the ability of SPs to use WLA facilities to climb the ladder of investment. ALTO was also of the view that, without access obligations in terms of non-discrimination, transparency and relevant pricing controls, the Eircom Duct Offer is simply not fit-for-purpose.
- 5.66 ComReg has addressed these points below in Section 7, paragraphs 7.326 to 7.357.
- 5.67 ComReg notes Eircom's points at paragraph 5.20 that SIRO has an IRU over the ESB Infrastructure and that this extends to almost 100% of premises. Eircom emphasised that in its assessment of the impact of the CID, ComReg cannot simply ignore the fact that the ESB infrastructure goes to almost 100% of premises and is more ubiquitous than Eircom's. Eircom also pointed out that the CID only needed to be implemented by July 2016 and as such it appears that ComReg has not taken sufficient consideration of the effect on the market that such has had and will continue to have. (to consider whether to assess scope of CEI in presence of CID).
- 5.68 ComReg point out that while SIRO has an IRU to ESB's infrastructure, it is important to note that the CID applies to all civil engineering infrastructure and so it is possible that other SPs may avail of access to ESB's infrastructure in that regard.
- 5.69 ComReg acknowledge that ESB's infrastructure offers considerable coverage and that this can be leveraged by telecoms providers in offering services to End Users. For example, enet and BT use the Iarnród Éireann rail network to deliver connectivity services.
- 5.70 ComReg's view is that the CID applies to many forms of civil engineering infrastructure with the overall objective of reducing the cost of rolling out high-speed broadband and delivering benefits to End Users.
- 5.71 In paragraph 5.21, ComReg noted Eircom's point that if account is taken of Virgin Media's infrastructure as well as that of the ESB and potentially Bord Gáis, there is a significant amount of infrastructure available. Eircom referred to paragraph 6.66 of the Consultation and considered that ComReg ignores the fact that the CID also applies to Virgin Media and that whilst it has not yet facilitated access to its infrastructure there is no reason why it should not.
- 5.72 ComReg notes that the CID applies to all entities with CEI available, including Virgin Media and Bord Gáis.
- 5.73 In paragraph 5.22, ComReg noted Eircom's point that Virgin Media referenced 'UK & Ireland' when referring to its £3bn network expansion program, 'Project Lightning' and this involves an extension of the cable network and potentially facilitates the provision of wholesale services.

- 5.74 ComReg made reference to Virgin Media's planned expansion ('Project Lightning') above in Section 4, at paragraph 4.131. Based on information obtained by means of a SIR,⁴⁹² Virgin Media plans to rollout to an additional [redacted] premises by the end of 2018.
- 5.75 Virgin Media has confirmed to ComReg in its SIR response⁴⁹³ that it does not plan on offering a wholesale service at any date. While it may be Eircom's view that FTTP deployment will allow Virgin Media to provide wholesale services, based on Virgin Media's SIR response, it is not currently the case that this eventuality would materialise in practice. ComReg has also noted above it is technically infeasible to offer a WLA service on a CATV network.
- 5.76 In paragraph 5.24, ComReg outlined Eircom's views on the WIK report, where Eircom stated that it does not disagree (with the WIK report) but that it does not see why the conclusions reached by WIK will remain the case indefinitely, such that access to Virgin Media's passive infrastructure should not be treated consistently with access to Eircom's infrastructure, i.e. that symmetric access obligations should be imposed. Eircom considered that such symmetric obligations are justifiable because Virgin Media has market power in urban retail markets, and, from a practical perspective, its duct network is newer than Eircom's.
- 5.77 As Virgin Media has not been designated with SMP in the WLA Market, ComReg does not consider that it would be proportionate or justifiable to impose symmetric obligations on Virgin Media in relation to passive infrastructure access. ComReg also notes that Virgin Media's network has a limited footprint⁴⁹⁴ relative to that of Eircom, with its network predominantly connected to residential premises.
- 5.78 As stated in the Consultation,⁴⁹⁵ where a SP is ultimately designated as having SMP in a market, ComReg is obliged, under Regulation 8(1) of the Access Regulations,⁴⁹⁶ to impose on such an SP (or maintain where they already exist) such of the obligations set out in Regulations 9 to 13 of the Access Regulations as it considers appropriate. Obligations imposed must be:
- (a) Based on the nature of the problem identified;
 - (b) Proportionate and justified in light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended), and Regulation 16 of the Framework Regulations; and
 - (c) Only be imposed following consultation in accordance with Regulations 12 and 13 of the Framework Regulations.

⁴⁹² SIR issued to Virgin Media in November 2017.

⁴⁹³ SIR issued to Virgin Media on 17 July 2017, returned on 14 August 2017.

⁴⁹⁴ See paragraph 4.129 in Section 4 above.

⁴⁹⁵ See paragraph 2.24 of the Consultation.

⁴⁹⁶ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the '**Access Regulations**').

- 5.79 As Virgin Media is not designated with SMP, this would imply that it would neither be proportionate nor justified to impose on Virgin Media access obligations in relation to passive infrastructure access.
- 5.80 ComReg does not consider it to be appropriate to impose a symmetric obligation on Virgin Media, as it has not been designated with SMP in the first instance.⁴⁹⁷
- 5.81 ComReg notes, however, that symmetric obligations can be imposed to ensure access to civil infrastructure and terminating segments identified as bottlenecks. In this respect, the Framework Directive⁴⁹⁸ empowers NRAs to impose symmetrical obligations to provide access to network facilities where this is justified on the grounds that duplication of such infrastructures would be economically inefficient or physically impracticable.
- 5.82 ComReg has further responded to issues in relation to the CID in Section 7, paragraphs 7.283 to 7.294 below.
- 5.83 In paragraph 5.25, it was noted that Eircom considered that SIRO's rollout has now gathered pace and, at the current rate, it appears to be achievable that SIRO will meet its initial target goal of 500,000 homes passed by the end of 2018, that this is during the review period, and that this does not constitute a limited footprint.
- 5.84 As ComReg previously stated in paragraph 5.48, SIRO's rollout to date has been slower than expected, with premises passed totalling 120,000 as at the end of 2017.⁴⁹⁹ In paragraph 5.47, ComReg stated its view that it does not consider that SIRO will pose a constraint on Eircom in the WLA Market over the period of the current market review.
- 5.85 For the reasons set out at paragraphs 5.64 to 5.84, ComReg's view is that:
- (a) It would not be proportionate to impose a symmetric access obligation on Virgin Media at this time, given that it does not have SMP;⁵⁰⁰ and
 - (b) The slow pace of SIRO's rollout suggests that it will not act as an effective competitive constraint on Eircom in the WLA Market in a sufficiently timely manner.

⁴⁹⁷ There are very few instances in Europe, (Austria being a notable exception), where a symmetric infrastructure-sharing obligation is imposed.

⁴⁹⁸ Article 16 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC (the '**Framework Directive**').

⁴⁹⁹ <https://siro.ie/newbridge-town-hall/>.

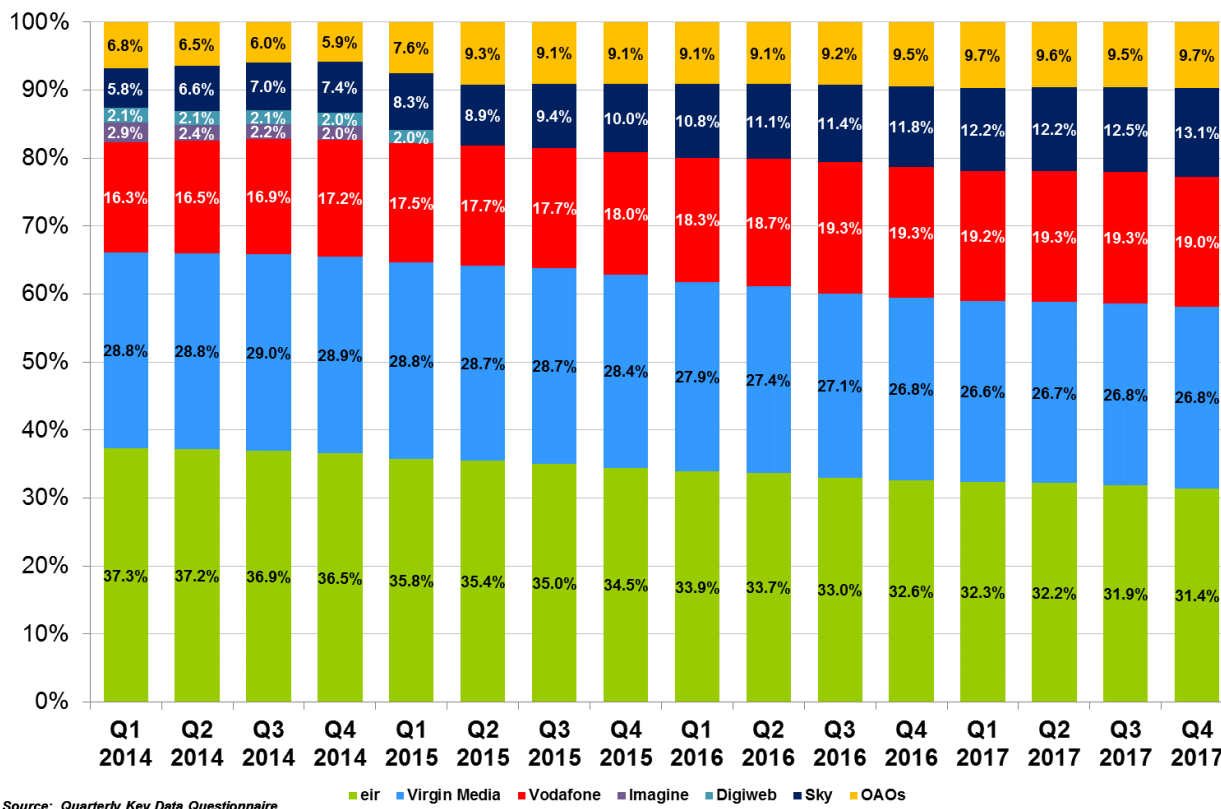
⁵⁰⁰ However, this does not preclude ComReg from imposing such an obligation on Virgin Media (or other non-SMP SPs) at some point if it is considered proportionate and justified to do so.

Wholesale price increases by Eircom and absence of CBP may be an indication of SMP

- 5.86 As outlined in paragraphs 5.26 to 5.38, ALTO, BT, Sky and Vodafone each noted recent wholesale price increases by Eircom as evidence of Eircom's ability to act independently of the market (i.e. competitors, customers and End Users). Vodafone referred to paragraphs 6.37 to 6.41 of the Consultation in noting that LLU prices have only decreased as a result of ComReg's regulatory intervention, while Sky highlighted two price increases for SA FTTC (11% in 2015 and 21% in June 2016) and its June 2016 35% price increase for POTS FTTC. Sky argued that these developments support ComReg's preliminary conclusion that "*Eircom faces a weak price constraint from Virgin Media in the WLA Market*" and that it can profit from price increases substantially above the level envisaged by the SSNIP test.
- 5.87 ComReg has considered a number of factors in its assessment of SMP in the WLA Market, including existing competition, potential competition and CBP. This also included an analysis of pricing behaviour.⁵⁰¹
- 5.88 ComReg acknowledges Sky's points and notes that ComReg presented an analysis of Eircom's pricing behaviour in paragraphs 6.37 to 6.41 in the Consultation. On this basis, ComReg presented its preliminary conclusion that Eircom's pricing behaviour was indicative of a lack of effective (existing) competition in the WLA Market, and was also suggestive that Eircom has both the ability and incentive to increase prices above the competitive level to Access Seekers for WLA.
- 5.89 In paragraph 5.31, ComReg noted Sky's comment on the decline in Virgin Media's market share and the growth in Eircom's WLA (including self-supply) and WCA subscriber volumes.
- 5.90 Figure 15 below presents SP market shares over the period 2014 to 2017; Virgin Media's market share is 26.8%, having declined by 1.6% since Q4 2015.

⁵⁰¹ As outlined in paragraphs 6.15 to 6.125 of the Consultation.

Figure 15: SP Market Shares: 2014 - 2017



- 5.91 ComReg acknowledges enet’s view summarised in paragraph 5.28 above that Eircom’s high, stable market share – comprising both merchant WLA supply as well as self-supply, both of WLA services and WLA inputs to WCA services – is consistent with a position of dominance in the relevant market.
- 5.92 ComReg acknowledges Vodafone’s points that, despite SIRO’s presence, Eircom’s market share in the WLA Market of close to 100% is unlikely to change materially over the course of this market review. Vodafone also agreed that the lack of effective indirect pricing constraints emanating from alternative networks will continue, and that Eircom is also unlikely to be constrained by prospective competition.
- 5.93 In relation to CBP, BT agreed with ComReg’s preliminary conclusion that CBP is not likely to be a relevant factor constraining Eircom’s behaviour in the WLA Market. In Vodafone’s view, BT Ireland is unlikely to have a strong bargaining position, given that it currently does not have any other external sources of supply with a national footprint, and Eircom can easily convert any wholesale revenues it earns from BT Ireland into retail revenues.
- 5.94 As noted in paragraph 5.38, Eircom highlighted that in the intervening period since the publication of the Consultation, BT and SIRO have established a network interconnect agreement enabling BT to offer its corporate, public sector and wholesale customers access to SIRO’s local access network. Eircom argued that as a result, BT now has an external source of supply and has therefore strengthened its bargaining position, and that it can also leverage the market power of its wholesale customers, including Sky.

- 5.95 ComReg acknowledges the network interconnect agreement between BT and SIRO⁵⁰² which was established in December 2016, after the Consultation was published. ComReg also notes that in November 2017, Sky signed an agreement with SIRO to purchase wholesale FTTH services, which will permit increased on-demand content services.⁵⁰³
- 5.96 ComReg undertook an assessment of CBP in the Consultation (paragraphs 6.115 to 6.125, including an assessment of credible alternative sources of supply) and concluded that it is unlikely that Eircom would be sufficiently constrained by CBP such that it would prevent it from behaving, to an appreciable extent, independently or competitors, customers and End Users.
- 5.97 ComReg's view is that SIRO is unlikely to be an effective competitive constraint on Eircom in the WLA Market (as noted in paragraphs 5.54 to 5.56), given that SIRO's network rollout has been slow to date, and also given the extent to which actual or potential switching to SIRO would constrain Eircom's behaviour. Consequently, ComReg considers that such delayed rollout and limited footprint over the lifetime of this market review will not provide BT (should it purchase from SIRO by virtue of the interconnect agreement noted in paragraph 5.95 above) with the ubiquity of WLA services that Eircom provides, and hence is unlikely to give BT a materially strengthened bargaining position over Eircom. ComReg is also of the view that BT would not be able to leverage its wholesale customers (including Sky), as SIRO is unlikely to be able to provide BT with the level of coverage that Sky demands nationally.

Access to capital markets and economies of scale and scope

- 5.98 In paragraph 5.39, ComReg noted points raised by Eircom in relation to access to capital markets and the presence of economies of scale and scope as being factors that should be taken into consideration in assessing SMP. Eircom noted that many of its competitors compete on a global scale and are extremely well resourced, and that significant market players such as Vodafone/SIRO and Liberty Global (Virgin Media) are well placed in terms of access to capital markets.
- 5.99 In paragraphs 6.70 to 6.77 of the Consultation, ComReg considered economies of scale, scope and density. ComReg outlined its preliminary view in paragraph 6.72 of the Consultation that the WLA Market (and related markets) is characterised by economies of scale, scope and density.

⁵⁰² BT SIRO Network Agreement announcement 1 December 2016: <http://siro.ie/siro-bt-announce-network-agreement/>.

⁵⁰³ <https://siro.ie/siro-sky-partnership/>.

- 5.100 ComReg's view is that, given Eircom's ubiquitous footprint and high subscriber figures, economies of scale (and scope) are likely to exist, given falling average costs per subscriber in light of rising numbers of customers and large portions of costs being fixed. ComReg notes also that non-vertically integrated SPs (such as BT and Vodafone) have the potential to achieve benefits from economies of scale and scope by expanding retail customer numbers, including through cross-selling and bundling products. However, such potential for economies of scale and scope has been enabled through having regulated access to WLA (and WCA) products. ComReg points out that, absent regulation of the WLA Market, SPs such as BT and Vodafone would not be in a position to offer downstream wholesale and/or retail services.
- 5.101 In response to Eircom's point that many of its competitors compete on a global scale, ComReg's view is that within Ireland, Eircom likely has the greatest potential for achieving economies of scale and scope, given its network coverage, subscriber base and service availability.
- 5.102 In paragraphs A11.1 to A11.5 in Appendix 11 of the Consultation, ComReg outlined other criteria for the assessment of SMP, one of which was easy or privileged access to capital markets and financial resources. ComReg noted in paragraph A11.4 that access to capital markets and financial resources is unlikely to be a factor in the WLA Market, considering that the main potential entrants are subsidiaries of large parent companies (e.g. BT Ireland, Sky Ireland, SIRO, Vodafone Ireland and Virgin Media). In ComReg's view, these SPs are equally able to access capital markets, and are therefore not at a disadvantage relative to the incumbent and that the issue of comparing capital/financial advantages vis-à-vis competitors does not therefore arise in the WLA Market. This criterion is therefore considered to be of little or no relevance.
- 5.103 ComReg notes that Eircom has recently committed to a €400 million investment in rolling out fibre broadband to 300,000 premises in rural areas and that there did not appear to be any significant barrier to raising the capital for this investment.⁵⁰⁴ ComReg also notes that Eircom is backed by a strong investor base led by NJJ Telecom Europe and Iliad.
- 5.104 Since 2012, Eircom is reported to have invested €1.5 billion in rolling out fibre broadband to 1.6 million premises and in expanding 4G mobile coverage to 95%.⁵⁰⁵ During this time, Eircom has also reported improved financial performance and a strengthened balance sheet, reflected in upgrades by ratings agencies.⁵⁰⁶ In February 2017, Eircom launched a refinancing of an existing €1.6 billion Senior Facilities Agreement (SFA).

⁵⁰⁴ <https://www.eir.ie/pressroom/eircom-Expands-Fibre-Broadband-Investment/>.

⁵⁰⁵

https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/news/eir_launches_refinancing_of_seni_or_facilities_agreement.pdf.

⁵⁰⁶

https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/news/eir_launches_refinancing_of_seni_or_facilities_agreement.pdf.

5.105 It is important to highlight that in late 2015, Eircom acquired Setanta, including BT Sports broadcast rights,⁵⁰⁷ which gives Eircom the right to broadcast certain key sporting events such as the Rugby World Cup and Premier League matches. Setanta was reported to be worth several million euro and it was Eircom's largest acquisition since purchasing Meteor in 2005. In ComReg's view, significant capital was available to Eircom to acquire these entities, and this would suggest that Eircom has adequate access to capital in order to finance investment activities.

5.106 Overall, ComReg's view is that Eircom is not at a competitive disadvantage in terms of economies of scale and scope and access to capital markets relative to other SPs in the WLA Market. Eircom's ubiquitous coverage of WLA services means that it is best placed to achieve economies of scale and scope, and recent developments suggest that Eircom has adequate access to capital.

ComReg's Position

5.107 ComReg assessed competition in the WLA Market in the Consultation,⁵⁰⁸ including whether any SP had SMP in this market. The factors considered included market shares, the overall size of the undertaking, control of infrastructure not easily duplicated, countervailing buyer power, product/services diversification (e.g. bundled products or services), economies of scale and scope, vertical integration, potential competition, and barriers to entry and expansion.⁵⁰⁹ These factors were grouped into three headings:

- (a) Existing competition in the Relevant WLA Market;
- (b) Potential competition in the Relevant WLA Market; and
- (c) Strength of any countervailing buyer power.

5.108 ComReg set out its view that Eircom does not face sufficient competitive constraints in the WLA Market from existing competitors, and that localised alternative FTTH-based networks are not likely to provide a sufficiently effective indirect competitive constraint in the WLA Market over the period covered by this market review such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers or End Users.

⁵⁰⁷ <https://www.eir.ie/opencms/export/sites/default/pressroom/eir-Acquires-Setanta-Sports-Ireland-Including-BT-Sports-Irish-Rights/>.

⁵⁰⁸ See Section 6 of the Consultation.

⁵⁰⁹ In the Consultation, other factors in addition to those above were considered but, for the reasons set out in Appendix 11, were considered less relevant to the SMP assessment in the Relevant WLA Market.

- 5.109 In relation to potential competition, ComReg also set out its view that further expansion and/or entry into the WLA Market based on a new network build is unlikely to effectively constrain Eircom within the period of this market review. ComReg considered, for example, that it is unlikely that Virgin Media would enter the WLA Market on any significant scale, if at all, over the period of this market review, such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers and End Users. ComReg has also noted SIRO's network development plans and does not consider that competition on this platform would effectively constrain Eircom's market power within the timeframe of this review. Similarly, ComReg also notes that there remains sufficient uncertainty regarding the timing and impact of the NBP such that it is also unlikely to effectively constrain Eircom's market power.
- 5.110 When considering CBP, ComReg noted that, while BT Ireland is the largest purchaser of WLA from Eircom, this is unlikely to strengthen its bargaining position as BT Ireland currently has no external source of supply of WLA other than Eircom that is capable of meeting BT's coverage needs.
- 5.111 In the Responses to the Consultation, ALTO, BT, enet, Sky, and Vodafone agreed or broadly agreed with ComReg's preliminary assessment of SMP in the WLA Market, while Eircom did not agree with the assessment. Respondents raised issues with the SMP assessment in light of the market definition in Section 4, issues in relation to the CID and infrastructure access, wholesale price increases imposed by Eircom and access to capital markets and economies of scale/scope, all of which ComReg has responded to in detail in paragraphs 5.42 to 5.106 above.
- 5.112 The concept of SMP is defined in the 2018 SMP Guidelines⁵¹⁰ as a position of economic strength enabling the holder to act, to an appreciable extent, independently of its competitors, customers and consumers. Section 3.1 of the 2018 SMP Guidelines set out a wide range of criteria which may be considered in the context of SMP assessment. As set out in the Consultation,⁵¹¹ ComReg took into account only those criteria which it deemed most relevant to the market analysis in question.
- 5.113 It should be noted that, in the Consultation, ComReg took account of the equivalent set of criteria set out at Section 3.1 of the 2002 SMP Guidelines. ComReg has identified an additional three criteria which are listed in the 2018 SMP Guidelines. These are:
- (a) Direct and indirect network effects;
 - (b) Conclusion of long-term and sustainable access agreements; and
 - (c) Engagement in contractual relations with other market players that could lead to market foreclosure.

⁵¹⁰ See paragraph 52 of the 2018 SMP Guidelines.

⁵¹¹ See paragraphs 11.3 and 11.7, and Appendix 11, of the Consultation.

- 5.114 In respect of **network effects**, ComReg notes that the 2018 SMP Guidelines define network effects in terms of value to the consumer. ComReg has not, therefore, explicitly considered network effects in its SMP analysis, given the lack of material relevance to the WLA market, and the fact that WLA (and WCA) are wholesale, rather than retail, products.⁵¹²
- 5.115 In respect of **access agreements**, ComReg considers that access agreements in the WCA and WLA markets are generally not long-term in nature.⁵¹³
- 5.116 In respect of **contractual relations leading to foreclosure**, ComReg considers that the types of relations envisaged by the European Commission (roaming agreements, network sharing agreements as well as co-investment agreements not opened to third parties) are not present on the WLA (or WCA) markets.⁵¹⁴

SMP Designation

- 5.117 In paragraphs 5.40 to 5.106 above (and in Section 6 of the Consultation), ComReg considered a wide range of factors to examine whether any undertaking enjoys a position of SMP in the Relevant WLA Market identified in Section 4. These factors have included:
- (a) Existing competition in the Relevant WLA Market;
 - (b) Potential competition in the Relevant WLA Market; and
 - (c) The strength of any CBP.
- 5.118 ComReg's position is that the Relevant WLA Market is not effectively competitive, and that Eircom would not be sufficiently constrained by the above factors such that it would be prevented from behaving, to an appreciable extent, independently of competitors, customers and consumers in those markets.
- 5.119 Where ComReg determines, as a result of a market analysis carried out by it in accordance with Regulation 27 of the Framework Regulations, that a given market identified in accordance with Regulation 26 of the Framework Regulations is not effectively competitive, ComReg is obliged to designate an undertaking under Regulation 27(4) of the Framework Regulations with SMP.
- 5.120 Having regard to the conclusions reached in the above market analysis, ComReg's position is that Eircom should be designated as having SMP in the Relevant WLA Market.

⁵¹² As set out at footnote 57 of the 2018 SMP Guidelines.

⁵¹³ Eircom's WBARO specifies a contract duration of 12 months, with automatic rollover and a three-month notice period. Eircom's ARO specifies no minimum contract duration.

⁵¹⁴ As set out at footnote 58 of the 2018 SMP Guidelines. For example, the SIRO network is available to SPs other than Vodafone, which is its co-owner with ESB.

6 Competition Problems in the Relevant WLA Market and Impacts on Competition and Consumers

Position set out in the Consultation

- 6.1 Having formed the preliminary view in Section 6 of the Consultation that Eircom should be designated as having SMP in the WLA Market, in Section 7 of the Consultation ComReg set out potential competition problems that could arise in the WLA Market (and related markets) in the absence of *ex ante* regulation.
- 6.2 In considering the types of competition problems which could arise having regard to Eircom's SMP position in the WLA Market, and its ability and incentives to engage in these behaviours, ComReg noted that it was not necessary to provide examples of actual abuse, or to provide exhaustive examples of potential abuse that could arise, absent regulation.⁵¹⁵ Instead, the purpose of imposing *ex ante* obligations on any SP designated as having SMP is to ensure that it cannot use its market power either to restrict or distort competition on the relevant market, or to leverage such market power onto adjacent markets.
- 6.3 Absent regulation in the WLA Market, ComReg considered that Eircom would have the ability and incentive to influence a range of competition parameters including prices, innovation and output, in addition to the variety and quality of goods and services offered by it. The specific types of competition problems that may arise in a market where an SMP SP is unregulated include:
- (a) Exploitation of customers by means of:⁵¹⁶
- Excessive pricing;
 - Distorting its own investment incentives via excessive pricing; and
 - Reducing its incentive to innovate due to lower or distorted investment incentives in circumstances where competition is dampened.
- (b) Leveraging its market power into adjacent markets through price and/or non-price means, with a view to foreclosing or excluding competitors in downstream retail and/or upstream⁵¹⁷ wholesale markets by:⁵¹⁸
- Undermining alternative suppliers through practices such as unreasonable bundling/tying (i.e. horizontal leveraging);
 - Constructive refusal to supply (i.e. vertical leveraging); and

⁵¹⁵ See paragraph 7.6 of the Consultation.

⁵¹⁶ See paragraphs 7.10 to 7.23 of the Consultation.

⁵¹⁷ Upstream in this context refers to upstream from retail markets, but downstream from the WLA Market.

⁵¹⁸ See paragraphs 7.24 to 7.46 of the Consultation.

- Delaying tactics and/or discriminating on quality of service.
- (c) Engaging in behaviours that would result in delaying or deterring network investment and entry into the WLA Markets⁵¹⁹ by means of foreclosure:
- Refusing to supply access;
 - Engaging in predatory pricing of WLA services; and
 - Entering into long-term exclusivity contracts with downstream customers.

Respondents' Views

Competition Problems and Impacts on Competition and Consumers

- 6.4 Seven of the eight Respondents to the Consultation expressed views on the potential competition problems that could occur absent regulation in the WLA Market, and their impact.
- 6.5 ALTO, BT, enet, Sky and Vodafone broadly agreed with the types of potential competition problems outlined by ComReg. Virgin Media noted that, in the absence of regulation, Eircom would likely continue to maintain its wholesale arm. Colt did not provide any views on this part of ComReg's assessment of the WLA Market.
- 6.6 Eircom disagreed with ComReg's preliminary views on competition problems in the WLA Market, raising a number of issues with ComReg's assessment.
- 6.7 ComReg has summarised Respondents' main views below, grouping the key issues raised into the following themes:
- (a) Eircom's Regulatory Governance Model ('RGM') and associated enforcement issues (discussed in paragraphs 6.9 to 6.21 below);
 - (b) The occurrence of competition problems in the presence of regulation (discussed in paragraphs 6.22 to 6.28 below);
 - (c) List of hypothetical competition problems is inappropriate (discussed in paragraphs 6.29 to 6.38 below); and
 - (d) Importance to Eircom of its Wholesale business means access refusal may be unlikely (see paragraph 6.39 below).
- 6.8 Without commenting on any specific theme, enet noted that ComReg has identified the standard types of competition problems and associated impacts on competition (and ultimately End Users) that may be expected to occur in a market where a SP holds SMP. enet further noted that, in light of ComReg's preliminary findings that Eircom holds SMP in the WLA Market, it is extremely likely that these types of competition problems could occur in this market and that appropriate remedies are, as a result, required to counter Eircom's SMP.

⁵¹⁹ See paragraphs 7.47 to 7.49 of the Consultation.

Eircom's RGM and Enforcement issues

- 6.9 ComReg notes that a number of Respondents have made reference to ComReg's review of Eircom's RGM throughout their Submissions. ComReg takes the opportunity to address these issues below.
- 6.10 Both ALTO and BT raised concerns surrounding enforcement and dispute resolution in their respective Submissions, pointing to such issues as evidence of actual and potential competition problems.
- 6.11 While ALTO agreed that the types of competition problems identified by ComReg are those that could potentially arise in the WLA Market, it stated that the 'myriad of issues' raised in Eircom's August 2015⁵²⁰ and May 2016⁵²¹ RGM Updates (together, the '**Eircom RGM Updates**') suggest that existing regulation is not working effectively and, in particular, that
- ".....[t]his is underpinned by eir's view in the second RGM Styles Report that regulatory non-compliances will be in single figures going forward [which] highlights a worrying disrespect of the regulator."⁵²²*
- 6.12 ALTO expressed the view that there should be zero instances of non-compliance. ALTO also noted that some of its members have concerns that ComReg's market reviews are being undermined
- "....by slow and poor wholesale enforcement which should be ex ante in nature, but [ComReg] appears to be so poorly resourced that the market experiences ex post conditions as a symptom of institutional inertia."⁵²³*
- 6.13 ALTO's position was echoed in BT's Submission. BT agreed that the competition problems and the associated impacts on competition identified by ComReg could potentially arise in the WLA Market. BT was concerned that competition problems are characterised as already being present in the regulated market, even in, and despite, the presence of regulation. Issues raised in the Eircom RGM Updates suggest that regulation is not working, and, echoing ALTO, Eircom's view in its May 2016 RGM Update that regulatory non-compliances will be in single figures going forward demonstrated a '*worrying disrespect of the regulator*'.⁵²⁴ BT suggested that the aim should be for zero instances of non-compliance.

⁵²⁰ Industry Update on Eircom's Regulatory Governance Model (RGM) – August 2015, https://www.eir.ie/opencms/export/sites/default/content/pdf/regulatoryinformation/regulatory_governance_model.pdf (the '**August 2015 RGM Update**').

⁵²¹ Industry Update on Eircom's Regulatory Governance Model (RGM) – May 2016 https://www.eir.ie/opencms/export/sites/default/content/pdf/regulatoryinformation/industry_update_2016.pdf (the '**May 2016 RGM Update**').

⁵²² See page 7 of ALTO's Submission.

⁵²³ *Ibid.*

⁵²⁴ See page 6 of BT's Submission.

- 6.14 BT also noted concerns that ComReg's market reviews are being undermined by slow and poor wholesale enforcement, citing 12 unresolved findings of non-compliance against Eircom on the ComReg website, including some which were close to 18 months old at the time of BT's Submission.⁵²⁵ BT further stated that it takes a considerable amount of time to process complaints and disputes, which serves to undermine confidence in the regulatory system.
- 6.15 BT suggested that ComReg should divert resources from its market analysis function to its compliance function in order to speed up the timeframes within which compliance/dispute issues can be resolved. In BT's view, such an approach would have led to the faster resolution of compliance investigations and increased confidence in the regulatory system.
- 6.16 ALTO called on ComReg to work on seeking to apply remedies that incentivise compliance in the market, with specific reference to ComReg's RGM work and the disclosures in the Eircom RGM Updates. ALTO welcomed the Cartesian Report on CEI Service Delivery set out in Appendix 10 of the Consultation and proposed that ComReg should implement the findings contained therein.
- 6.17 BT agreed with what it terms the '*micro level*' remedies proposed by ComReg in the Consultation but indicated that Eircom RGM Updates demonstrate that micro level regulation is not sufficient to address what it saw as being much larger non-discrimination and compliance problems.⁵²⁶ BT welcomed the governance investigations being undertaken by Cartesian and KPMG (consultants appointed by ComReg)⁵²⁷ and indicated that it is clear to BT that micro level regulation, whilst well intended, will not address wider non-discrimination and compliance issues.
- 6.18 Vodafone questioned whether EoI can be truly effective and enforceable in the absence of strong separation of Eircom's upstream and downstream businesses. Vodafone urged ComReg to continue to prioritise its review of Eircom's RGM, as the effectiveness and success of ComReg's efforts to eliminate existing discriminatory practices (and prevent new ones) rely as much on the governance structure within Eircom as they do on the remedies proposed in the Consultation.
- 6.19 Eircom stated that the product development output which was completed during the RGM work undertaken in the Cartesian Report on CEI Service Delivery is relevant to consideration of product development timelines. Eircom also stated that, with respect to obligations relating to product development and SLAs,⁵²⁸ ComReg is seeking to regulate in advance of the receipt of the final reports from its consultants and consideration of their conclusions.

⁵²⁵ BT provided an extract of notices in Annex A of its Submission.

⁵²⁶ See BT's response to Question 7 of the Consultation (WLA Market Remedies) in BT's Submission.

⁵²⁷ See paragraph 6.45.

⁵²⁸ These Remedies are discussed in Section 7, paragraphs 7.611 to 7.741 and paragraphs 7.524 and 7.610 respectively.

- 6.20 ComReg's failure to consider the RGM outputs prior to proposing regulatory obligations with respect to SLAs amounted to, in Eircom's view, a breach of natural justice, but in any event did not demonstrate evidence-based conclusions on ComReg's part.
- 6.21 Eircom also stated that ComReg's proposed increased obligations in relation to Statements of Compliance ('SoCs')⁵²⁹ would appear to prejudge the conclusion of the RGM review.

Competition problems have occurred in the presence of regulation

- 6.22 In their respective Submissions, both Sky and Vodafone raised concerns relating to competition problems that have occurred despite the presence of regulation. While Sky generally agreed with the assessment in the Consultation of competition problems in the WLA Market, it stated that ComReg's prospective analysis of what could happen in the absence of regulation has, in fact, already occurred in many cases, either because:
- (a) Appropriate remedies are not in place; or
 - (b) Where the appropriate obligations have been imposed, they have not been enforced by ComReg.
- 6.23 Sky noted that it would have been appropriate for ComReg to have acknowledged in the Consultation the occurrence of such actual competition problems since the 2010 WPNIA Decision.
- 6.24 Sky provided the following examples of competition problems in its Submission and supplemented each example with evidence that these competition problems had occurred despite the presence of regulation:⁵³⁰
- (a) **Exploitative Practices:** According to Sky, the presence of exploitative practices/excessive pricing was in evidence in July 2015 and September 2016 when Eircom introduced significant price increases for both standalone FTTC and POTS-based FTTC. Sky set out its view that the September 2016 price increase was announced in tandem with ComReg's decision to introduce a cost orientation obligation in the FACO market⁵³¹ on the Single Billing through Wholesale Line Rental ('**SB-WLR**') product. This effectively meant that Eircom immediately sought to replace revenues lost on a service previously priced considerably above cost in the FACO market by increasing prices on another service in the WLA Market. According to Sky, this was demonstrative both of Eircom's SMP, and of the failure of existing regulatory remedies to curtail its capacity to exercise its SMP.

⁵²⁹ These Remedies are discussed in Section 7, paragraphs 7.1396 to 7.1490.

⁵³⁰ See page 7 of Sky's Submission.

⁵³¹ Pursuant to the 2015 FACO Decision.

- (b) **Inefficiency/Inertia:** According to Sky, Eircom's failure to adequately invest in its access network has led to a gradual but steady decline in performance on dealing with fault repair and provisioning challenges during months characterised by poor weather. In January 2016 lead times for WLR/broadband provisioning were extended from 5 days to 18 days overnight, due to reprioritisation of fault repair relative to service provisioning. The declaration of 'storm mode' by Eircom, which facilitates the reallocation of resources, is a nebulous concept that can be arbitrarily utilised by Eircom to avoid penalties on failure to achieve performance targets. Despite Sky having spent more than a year seeking a SLA on appointment slots for provisioning, Eircom had shown no willingness to engage in negotiations in a meaningful way, and, in Sky's opinion, this matter was expected to result in a formal dispute.
- (c) **Refusal to deal/denial of access/restrictions on access:** According to Sky, the Eircom RGM Updates exposed numerous instances of Eircom restricting or denying access to facilities or services which it had made available to its own retail arm, to competing Access Seekers. In particular, Sky had sought improved address matching capabilities since the launch of its retail services in early 2013. Despite repeated requests in this regard, Eircom withheld capability from Access Seekers that could have greatly enhanced their address matching function until March 2016. However, the Eircom RGM Updates indicated that the sought-after capability was available to Eircom's retail arm throughout this period. This was just one example of vertical leveraging by Eircom during the last review period.
- (d) **Delaying tactics:** Sky also indicated that, as Chair of the various product forums held on a regular basis, ComReg is familiar with Eircom's strategy of delay in relation to initiatives that are either not in its own commercial interests, or in the commercial interests of its competitors. Sky noted that ComReg's minutes of these meetings attest to such behaviour from Eircom, as evidenced by its consistent failure to provide information in a timely manner, complete agreed actions or be represented during negotiations by personnel empowered to make decisions.
- 6.25 Vodafone agreed with ComReg's preliminary views regarding competition problems and their associated impacts on competition and consumers in the WLA and downstream markets. Vodafone pointed out that, in the WLA Market, the high cost of constructing local access networks has meant that Access Seekers have had to rely on gaining access to Eircom's ubiquitous network to reach and deliver services to their customers. In Vodafone's view, this dependency has given rise to (and, in the absence of an effective regulatory framework, can continue to give rise to) two main problems – firstly, that Eircom is the dominant provider of WLA services and, secondly, that Eircom is also the main competitor to Vodafone in the provision of retail services.

- 6.26 Vodafone noted that, given the absence of competition at the local level, Eircom is the SMP provider of WLA services. As a result, and in the absence of regulation, Eircom would have the ability and incentive to use its SMP to engage in anti-competitive behaviour, such as charging high wholesale access prices. In addition, Vodafone noted that Eircom also has reduced incentives to achieve cost efficiencies, as it can pass these higher costs onto its wholesale and retail customers without the fear of losing out to its competitors. Furthermore, Vodafone argued that, in the absence of competitive rivalry at the local level, Eircom would be less motivated to invest and innovate (at least, at an acceptable pace), leading to poor-quality local infrastructure and products/services.
- 6.27 Vodafone pointed out that Eircom, as the main supplier at the wholesale level (and the only supplier at the local access level for Vodafone to reach its own customers), is also the main competitor to Vodafone at the retail level. Vodafone suggested that the result of this vertical integration is that Eircom has the incentive to leverage its SMP at the local access level to favour its own downstream businesses. Vodafone suggested that this could lead, for example, to Eircom engaging in:
- (a) Outright or constructive refusal to supply WLA products and services to its rivals;
 - (b) Exclusionary practices such as margin squeeze, predatory pricing and/or raising switching costs;
 - (c) Developing wholesale access products that favour its own downstream businesses' needs;
 - (d) Providing wholesale access products at lower quality; and
 - (e) Information asymmetries, such as a lack of transparency in how products are both developed and implemented.
- 6.28 Vodafone agreed with ComReg that, absent regulation, Eircom has the ability and incentive to engage in the above-mentioned anti-competitive behaviours. Vodafone therefore agreed that it is justified and proportionate to impose regulatory obligations on Eircom in the WLA Market.

List of hypothetical competition problems is inappropriate

- 6.29 Eircom was the sole Respondent to disagree with ComReg's analysis of competition problems arising from Eircom's proposed SMP position in the WLA Market and its associated abilities and incentives, as set out in the Consultation. It did not agree that the competition problems and the associated impacts on competition and End Users that ComReg identified are those that could potentially arise in the WLA Market. Eircom took this position on the basis that ComReg had failed to delineate the WLA Market in the correct manner, or to appropriately assess the level of competition that Eircom faces in terms of both direct and indirect constraints.

- 6.30 Eircom referred to paragraph 7.21 of the Consultation⁵³² which noted that Eircom's incentives to innovate may not be uniform throughout the State and that it is more likely to innovate where it faces a degree of competition. In commenting on this, Eircom noted that its access obligations require that it implements changes at its own cost where requested by Access Seekers. Eircom stated that, in many cases, it implements the relevant changes, but that Access Seekers then do not use the new products – examples include the provision of BECs over WEIL⁵³³ and NTU⁵³⁴ developments for Line Share. Eircom further stated that [§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]].
- 6.31 Eircom commented on paragraph 7.31 of the Consultation which highlighted that restrictions on access could include limiting the use of a WLA product to specific downstream activities.⁵³⁵ Eircom stated that it does not seek to act in a discriminatory manner, and altered its duct and pole offer in the light of the Broadband Cost Reduction Directive ('BCRD')⁵³⁶ (referred to as the CID by Eircom), unlike other SPs and utility providers which have failed to produce reference offers or even contact points.
- 6.32 Eircom argued that ComReg should be reluctant to introduce new processes when companies like Eircom already operate on a first come, first served basis, regardless of whether the customer is internal or not. In Eircom's view, additional processes create overheads which will, in time, increase the costs of regulation.
- 6.33 Eircom noted also that the Consultation was written prior to Eircom amending its duct and pole products and that, in respect of the reference to downstream markets such as leased lines, the leased line use restriction is no longer in place.

⁵³² Paragraph 7.21 of the Consultation stated that: "ComReg recognises that Eircom's lower incentives to innovate may not be uniform throughout the State, with Eircom more likely to innovate where it faces a degree of competition, including in downstream markets."

⁵³³ Bitstream Ethernet Connection Services ('BECS') over Wholesale Ethernet Interconnect Link ('WEIL').

⁵³⁴ Network Termination Unit ('NTU').

⁵³⁵ Paragraph 7.31 of the Consultation stated that: "A restriction on access might involve an SMP operator restricting the use of a WLA product to specific downstream retail or wholesale services. For example, Eircom could restrict Access Seekers' use of its WLA products, services or facilities, (including ducts or poles) to the provision of only certain services by Access Seekers (while at the same time Eircom's own self-supply is not subject to any such restrictions). This potentially has the effect of limiting Access Seeker' investment, as they cannot benefit from the economies of scale and scope that would result from the ability to use WLA inputs across a range of downstream markets (including but not limited to. retail and wholesale broadband access, fixed telephony, retail TV services or leased lines)."

⁵³⁶ Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks, Broadband Cost Reduction Directive ('BCRD').

- 6.34 Eircom referred to paragraph 7.33 of the Consultation which identified potential vertical leveraging behaviours,⁵³⁷ and argued that ComReg cannot simply have regard to ‘*an extensive hypothetical list of abusive conduct*’. In Eircom’s view, ComReg must produce evidence for its assertions to justify intervention in a market.
- 6.35 In addition, Eircom argued that, in a scenario where it was determined that it had SMP in a particular market, it would be subject to the behavioural constraints imposed by *ex post* competition law.
- 6.36 Eircom also noted that all of its main competitors (Sky, BT, Vodafone and Virgin Media) form part of large international corporations which take advantage of substantial economies of scale in terms of network deployment, product development at both the wholesale and retail levels, and content purchasing power. These SPs would readily, according to Eircom, make a complaint in the event of anti-competitive behaviour by an SMP SP.
- 6.37 In relation to paragraph 7.38 of the Consultation,⁵³⁸ Eircom noted that ComReg has, in the context of its compliance investigation, recently investigated Eircom’s bulk migrations processes which, Eircom asserted, work as intended.
- 6.38 Eircom however referred to its response to Questions 7 and 13 in the Consultation (concerning remedies in the WLA Market and WCA Market), where it noted that migration from NGA to CGA (reverse migration) services is possible, but should be penalised⁵³⁹ through wholesale charging as ComReg should be encouraging investment by SPs and the adoption of new technology for the benefit of consumers. It was Eircom’s view that efficient and swift migrations are key to the operation of a competitive market and require pan-industry processes and agreements. Eircom noted that migrations from other SPs to one another, and to Eircom, also have to operate swiftly and efficiently. Eircom requested ComReg to apply migration principles reciprocally and sought a clear commitment from ComReg to that effect.⁵⁴⁰

⁵³⁷ Paragraph 7.33 of the Consultation detailed a non-exhaustive list of non-price-based vertically leveraging competition problems that could occur.

⁵³⁸ Paragraph 7.38 of the Consultation stated that: “A vertically-integrated SMP undertaking could also have an incentive to frustrate the retail/wholesale switching process through which retail customers can switch to an alternative product or an alternative SP. Access Seekers may wish to migrate their downstream customers between wholesale products, and may wish to carry out single or bulk migration of their customer base (for example, migrations from current generation WLA products to next generation WLA products). This should involve minimal disruption or delay from the downstream customer’s perspective. Examples of actions which could disrupt the migration process could include rejecting migration orders on the basis of technicalities which were not made known to the requesting Access Seekers, requesting additional customer authorisation agreements, or preventing the shift of a large number of retail customers to alternative service provision. This type of action would impose an additional and unnecessary switching cost on Access Seekers and ultimately retail customers.”

⁵³⁹ ComReg interprets this as intending to discourage reverse migrations.

⁵⁴⁰ ComReg addresses Eircom’s response in respect of migrations in further detail at Section 7 below, at paragraphs 7.185 to 7.190 and paragraphs 7.192 to 7.194.

Importance of Eircom's wholesale business means access refusal may be unlikely

6.39 Virgin Media emphasised that Eircom might not withdraw access to its services in the absence of regulation, because of the importance of its wholesale arm and noted that Eircom's wholesale business represents a significant proportion of Eircom's revenue and subscriber base. In Virgin Media's view, as Eircom's wholesale business grows, it will become increasingly important strategically to the company, which means that Eircom will, and most likely already does, have an interest in providing wholesale services via its wholesale arm. Virgin Media therefore concluded that it is feasible for Eircom to choose to provide wholesale broadband services, even if it were not obliged by regulation to do so.

ComReg's Assessment of Respondents' Views

6.40 In this section, ComReg assesses Respondents' views under each of the key themes identified in paragraph 6.7 above, as follows:

- (a) Eircom's RGM and enforcement issues (see paragraphs 6.42 to 6.64 below);
- (b) Competition problems which have occurred in the presence of regulation (see paragraphs 6.65 to 6.83 below);
- (c) List of hypothetical competition problems is inappropriate (see paragraphs 6.84 to 6.104 below); and
- (d) Importance of Eircom's wholesale business means a refusal of access may be unlikely (see paragraphs 6.105 to 6.108 below).

6.41 ComReg's overall position on competition problems is then set out at paragraphs 6.109 to 6.111.

Eircom's RGM and Enforcement Issues

6.42 As noted in paragraphs 6.9 to 6.13 above, ALTO and BT expressed concerns that current regulation is not working effectively, giving examples from Eircom's RGM Updates. ComReg considers that the existing suite of obligations imposed in both the WLA and WCA markets supports enhanced competitive outcomes in downstream retail markets. For example, following the 2010 WPNIA Decision and 2011 WBA Decision, the market shares of OAOs (including Sky and Vodafone) in the retail fixed broadband market⁵⁴¹ rose, in the presence of regulation, from 24.6% in Q1 2012 to 41.8% in Q4 2017.⁵⁴² Specifically, Sky's market share in the retail fixed broadband market increased from 2.2% in Q2 2013 to 13.1% in Q4 2017.⁵⁴³

⁵⁴¹ Fixed broadband includes Narrowband, Cable, DSL, VDSL, FTTx, Satellite and FWA.

⁵⁴² The percentage for Q4 2017 comes from ComReg's QKDR Q4 2017 – Figure 3.1.10 on page 37.

⁵⁴³ See Figure 3 in Section 3 above.

- 6.43 ComReg does, however, appreciate that regulation may require amendment, including updating or extension, in order to be continuously effective and to address competition concerns. In this regard, as contained in Section 7 of this Decision, ComReg has considered the appropriateness of the regulatory regime in place to date and has proposed and justified, in certain circumstances, amendments to those obligations to ensure that the competition problems identified in the Consultation and this Decision have been adequately addressed.
- 6.44 Furthermore, on foot of developments including the Eircom RGM Updates,⁵⁴⁴ in 2016 ComReg initiated an independent assessment of Eircom's regulatory governance structures. The overall objective of that review was to establish whether Eircom's governance arrangements were sufficiently robust such that they could adequately demonstrate and ensure ongoing compliance with Eircom's regulatory obligations.
- 6.45 In July 2017, ComReg published a call for inputs (the '**RGM Call for Input**')⁵⁴⁵ with supporting reports (the '**KPMG Report**'⁵⁴⁶ and '**Cartesian RGM Report**',⁵⁴⁷ together the '**Consultants' RGM Reports**'). ComReg sought the views of interested parties in respect of the contents of the Consultants' RGM Reports. The KPMG Report, which reviews Eircom's RGM, made the following observations:⁵⁴⁸
- (a) The Eircom RGM has not been subject to robust independent monitoring and has not been appropriately embedded within Eircom;
 - (b) The Wholesale Division within Eircom is currently operationally dependent on Group Governance fora and operations teams;
 - (c) The incentive structure for the Wholesale Division is not adequately aligned with the operational and financial performance of the Wholesale Division;
 - (d) The Wholesale Division investment and product development prioritisation process is not clear, formal or transparent;
 - (e) The governance and management of system/data access and handling of Confidential Regulated Data is not adequately robust; and
 - (f) The assurance mechanisms over the RGM are not fully effective, due to a combination of lack of resources, formality and prioritisation.

⁵⁴⁴ ComReg notes that since the Consultation was published Eircom, in June 2017, issued a further RGM update (the '**June 2017 Eircom RGM Update**'). When ComReg refers to Eircom RGM Updates hereafter, it also includes a reference to the June 2017 Eircom RGM Update.

⁵⁴⁵ Review of Eir's Regulatory Governance Model, Publication of Reports and Call for Input, July 2017 [ComReg Document No.17/64](#).

⁵⁴⁶ See Review of eir's Regulatory Governance Model, KPMG, July 2017, [ComReg Document No.17/64\(a\)](#) ('**KPMG Report**').

⁵⁴⁷ Operational Assessment of eir's Regulatory Governance Model, Cartesian, July 2017, [ComReg Document No.17/64\(b\)](#) ('**Cartesian RGM Report**').

⁵⁴⁸ See page 17 of the KPMG Report.

- 6.46 The KPMG Report noted a need to improve the governance and operational independence currently afforded to Eircom's Wholesale Division from other parts of the organisation. The KPMG Report recommended that Eircom enhance its regulatory governance structures in the following areas:
- (a) Establish an independent oversight body for the RGM;
 - (b) Enhance and maintain the RGM;
 - (c) Increase the Wholesale Division's independence through lower reliance on Group governance fora;
 - (d) Change Wholesale employees' incentives to focus on rewarding its operational and finance performance in isolation from Eircom's downstream businesses;
 - (e) Provide greater transparency to the Wholesale investment and product development process;
 - (f) Consider an effective means of segregating Wholesale data at a system level; and
 - (g) Implement the proposed 'Three Lines of Defence Model' for the management of risk and responsibilities of the RGM.
- 6.47 The Cartesian RGM Report made the following recommendations:
- (a) Document business operational, product development and risk management processes and standardise risk management and control operations within Business Units;
 - (b) Develop process standards, escalation criteria, and exception tolerances;
 - (c) Develop a transparent process for handling operator requests;
 - (d) Increase visibility of the RAP prioritisation process;
 - (e) Reduce dependency on forums to progress projects;
 - (f) Design controls for simplified and comprehensive management;
 - (g) Trend control results;
 - (h) Maintain visibility of all KPI-reported transaction records; and
 - (i) Implement independent oversight over critical processes and outputs.
- 6.48 ComReg notes that BT welcomed ComReg's RGM review and that Vodafone and ALTO proposed that ComReg should implement the recommendations therein.

- 6.49 ComReg notes in the RGM Call for Input that the contents of the Consultants' RGM Reports raise serious concerns about the quality of Eircom's regulatory governance. ComReg also notes that it has been addressing ongoing problems with Eircom's compliance with its regulatory obligations. In this regard, ComReg has initiated court proceedings⁵⁴⁹ against Eircom in respect of five findings of breaches of its regulatory SMP obligations over a period from July 2011 to July 2015. In this respect, ComReg issued a June 2017 Enforcement Information Notice⁵⁵⁰ providing information on some recent enforcement cases, which was further updated in a December 2017 Information Notice.⁵⁵¹ A number of other investigations are also ongoing, including investigations which are concerned with matters addressed in the Consultants' RGM Reports.
- 6.50 ComReg has also initiated a follow-on project to identify what regulatory measures would be appropriate to address the issues identified in the Consultants' RGM Reports, having regard to ComReg's 'standard' SMP powers (under Regulations 8, 9, 10, 12 and 13) but also under Regulation 8(5) and Regulation 14 of the Access Regulations (the '**RGM Project**').
- 6.51 Pursuant to Regulation 8(5) of the Access Regulations, where in exceptional circumstances, ComReg intends to impose SMP obligations *other* than those set out in Regulations 9-13 of the Access Regulations, it must submit to the European Commission a request for permission to impose such obligations. Separately, Regulation 14 of the Access Regulations provides for functional separation (also an exceptional measure) to impose an obligation on a vertically-integrated undertaking to place activities relating to the wholesale provision of relevant access products in an independently operating business entity.
- 6.52 ComReg further noted in the RGM Call for Input that Eircom has indicated that it may offer a proposed response to the recommendations in the KPMG Report and Cartesian RGM Report. As set out in the RGM Call for Input, where Eircom makes a detailed and legally enforceable proposal to implement the recommendations in the KPMG Report and Cartesian RGM Report (and any other matters that ComReg may identify as requiring remediation), then ComReg would consider this response.

⁵⁴⁹ ComReg Wholesale Compliance Case No. 481 (High Court Record No. 2017/187/MCA) and ComReg Wholesale Compliance Case No. 568 (High Court Record No. 2017/186 MCA).

⁵⁵⁰ Information Notice, Application to the High Court for declarations of non-compliance and for a financial penalty, June 2017, [ComReg Document No. 17/57](#) ('**June 2017 Enforcement Information Notice**').

⁵⁵¹ ComReg Wholesale Compliance Case No. 481 (High Court Record No. 2017/187/MCA) and ComReg Wholesale Compliance Case No. 568 (High Court Record No. 2017/186 MCA). [ComReg Document No. 17/98](#) ('**December 2017 Enforcement Information Notice**').

- 6.53 As noted in the RGM Call for Input, there are a number of options available to ComReg in terms of the statutory powers it may use to address the concerns identified in the Consultants' RGM Reports. While one option may involve the imposition of obligations pursuant to Regulations 9-13 (which could overlap with the obligations contained in this Decision) there are also a number of alternative and separate legal options that ComReg is currently considering which involve the use of 'exceptional' powers and, therefore, detailed and lengthy procedures. If and when it chooses to impose any further obligation ComReg will, as appropriate, consider whether it is appropriate to amend or withdraw any existing obligation in accordance with the relevant procedures (which may include the obligations contained in this Decision).
- 6.54 ComReg considers the RGM Project to be related to, but separate from, the market review process in this Decision. However, ComReg disagrees with Eircom that ComReg's failure to consider the Consultants' RGM Reports is a breach of natural justice, and ComReg also disagrees with Eircom's assertion that this does not demonstrate the use of an evidence-based approach by ComReg in arriving at its conclusions.
- 6.55 The purpose of ComReg's RGM project was to enable an independent review of Eircom's RGM. The scope and focus of the review was an analysis of how Eircom's governance of compliance with its regulatory obligations was implemented and executed. The outputs of the RGM review to date (the Consultants' RGM Reports) were not intended to be a required input into the Consultation process.
- 6.56 However, ComReg notes that where information comes to its attention which can reasonably be used as an input into the Market Analysis process it will be relied upon when available and where appropriate. In that context, ComReg agrees with Eircom that the data resulting from the Cartesian RGM Report analysis of the product development process is relevant to consideration of obligations relating to the timelines and milestones for the development of products.
- 6.57 ComReg has considered the output of the RGM review, when relevant and appropriate, and, in particular, has used data gathered by Cartesian when finalising its position with respect to obligations relating to the timelines for product development.⁵⁵²
- 6.58 In relation to BT and ALTO's views that the aim should be for zero non-compliances, ComReg's aim is to promote competition and protect End Users through the imposition of appropriate regulatory obligations where warranted. Compliance monitoring and enforcement activities by ComReg may be necessary to support this. As noted above, ComReg is progressing its review of Eircom's RGM, and continues to investigate potential non-compliance with SMP obligations. ComReg considers that the current Decision, and the obligations imposed hereunder, do not pre-judge or render moot the outcome of either of these processes.

⁵⁵² Section 7, paragraphs 7.656 to 7.741 on Conditions of Access: Requirement regarding Timeliness of Product Development.

- 6.59 With respect to ALTO's and BT's views in paragraphs 6.13 to 6.15 concerning the breadth and speed of compliance activities, in the 18 months from 1 January 2016 to 30 June 2017, ComReg carried out 21 active investigations into Eircom's compliance with its SMP obligations. All of these investigations related to extant obligations in or related to the WLA and WCA markets. Obligations under investigation included access, non-discrimination, transparency and price control. In that period, ComReg notified four findings⁵⁵³ of non-compliance and six opinions of non-compliance⁵⁵⁴ in relation to 45 separate identified breaches of SMP obligations by Eircom.
- 6.60 Of particular note in terms of enforcement, on 15 June 2017, ComReg submitted two applications for High Court orders (five declarations of non-compliance and five orders for financial penalty), pursuant to Regulation 19 of the Access Regulations.⁵⁵⁵ This enforcement action (hereafter, the '**Enforcement Proceedings**') related to breaches by Eircom of access, non-discrimination and transparency obligations in three regulated markets. In the event that the Court sees fit to impose orders for financial penalties, ComReg has made submissions to the Court, as required by Regulation 19 of the Access Regulations, recommending financial penalties appropriate to the non-compliance and of a sufficient amount to dissuade future non-compliance.
- 6.61 Following ComReg's applications for High Court orders in the Enforcement Proceedings,⁵⁵⁶ on 18 October 2017, as noted in the December 2017 Enforcement Information Notice,⁵⁵⁷ Eircom challenged Regulation 19 of the Access Regulations in separate plenary proceedings ('**the Access Regulations Proceedings**').⁵⁵⁸ Eircom's subsequent application to stay the Enforcement Proceedings until the Access Regulations Proceedings had been determined was accepted by the High Court. ComReg has appealed this stay order on a number of grounds. ComReg intends to fully defend its position in all proceedings and has successfully applied to have the both the Access Regulations Proceedings and the Enforcement Proceedings moved into the High Court Commercial list to expedite the hearings.

⁵⁵³ See ComReg Information Notices 16/02, 16/24, 16/91 and 17/14.

⁵⁵⁴ See ComReg Information Notices 16/60, 16/99, 16/100, 16/101, 16/102 and 16/103.

⁵⁵⁵ See the June 2017 Enforcement Information Notice.

⁵⁵⁶ See the June 2017 Enforcement Information Notice *The Commission for Communications Regulation v. Eircom Limited*, High Court Record Nos. 2017/186 MCA and 2017/187 MCA.

⁵⁵⁷ See ComReg Information Notice 17/98: "*ComReg Wholesale Compliance Cases 481 and 568.*"

⁵⁵⁸ *Eircom Limited v. The Minister for Communications, Climate Action and Environment, Ireland and the Attorney General and the Commission for Communications Regulation* (High Court Record No 2017/5929P)

- 6.62 Furthermore, on 6 April 2018, ComReg formed an opinion in a separate investigation, that Eircom had breached its non-discrimination obligations in six regulated markets.⁵⁵⁹ ComReg again decided to make an application to the High Court for declarations of non-compliance and for order for financial penalty in respect of these breaches. However, given the proximity to the hearing date in the Access Regulations Proceedings (14 June 2018) ComReg decided that it will bring proceedings in respect of these breaches after judgment is received in the Access Regulations Proceedings.⁵⁶⁰
- 6.63 Compliance monitoring and enforcement forms part of ComReg's remit, and ComReg is required to follow due process in addressing complaints made in relation to any potential non-compliance. ComReg does not consider its enforcement activities to be of a slow or poor nature, as ComReg must thoroughly assess each individual complaint, such that any position taken by ComReg will withstand legal scrutiny in the event of enforcement through the courts or an appeal of a determination in a dispute under Regulation 31 of the Framework Regulations.
- 6.64 With respect to BT's comments about diverting its market analysis resources into compliance activities, ComReg notes that it must manage its resources as it sees fit, and that both market analysis and compliance activities are high priority areas.

Competition problems have occurred in the presence of regulation

- 6.65 ComReg notes the concern raised by Sky, set out in paragraph 6.22 above, that it would have been appropriate for ComReg to highlight instances of competition problems that have actually occurred since the last market review in (and despite) the presence of regulation. The Explanatory Note to the 2014 Recommendation⁵⁶¹ notes that the underlying purpose of the *ex ante* regulatory framework is to deal with predictable problems that have their origin in structural factors in the industry. Additionally, the 2018 SMP Guidelines note that:

“When NRAs consistently apply established methodologies to define markets and assess significant market power, they contribute to ensuring regulatory predictability and limit regulatory intervention to cases of market failures identified by analytical tools.”⁵⁶²

and

⁵⁵⁹ See ComReg Information Notice 18/27, *“Information Notice: Opinion of non-compliance issued to Eircom Limited for a breach of its non-discrimination obligations regarding address matching.”*

⁵⁶⁰ As set out in ComReg Information Notice 18/27, ComReg's decision to await judgement in the Access Regulations Proceedings before applying for High Court Orders is without prejudice to ComReg's position in the Access Regulations Proceedings, the appeal of stay of the Enforcement Proceedings and, any future position that ComReg may take.

⁵⁶¹ See page 6 of the Explanatory Note to the 2014 Recommendation.

⁵⁶² See paragraph 9 of the 2018 SMP Guidelines.

“NRAs should consider past and present data in their analysis when such data is relevant to the developments in that market over the next review period.”⁵⁶³

and

“Market definition is not a mechanical or abstract process but requires the analysis of all available evidence of past market behaviour and an overall understanding of the mechanics of a given sector. In particular, a dynamic rather than a static approach is required when carrying out a prospective, or forward-looking, market analysis.”⁵⁶⁴

- 6.66 As the European Commission’s *Guidelines* make clear, *ex ante* SMP regulation takes place on a prospective basis, with obligations being imposed to prevent competition problems arising, rather than intervening on an *ex post* basis after problems have occurred. Furthermore, it is clear that the potential competition problems are the target of such intervention, with evidence of past behaviour also being informative.
- 6.67 ComReg therefore does not consider that it is appropriate to solely rely on an assessment of actual competition problems that have occurred either in the presence of, or absent, regulation. ComReg does, however, recognise that actual examples of competition issues can be supportive in this regard. In this respect, in the context of the imposition of remedies in Section 7 of the Consultation and this Decision, ComReg has set out the justification for such remedies having regard to potential competition problems and actual competition problems, where appropriate. In doing so, ComReg has taken account of market conditions and cited supporting evidence for its views and positions. Where SMP has been identified at the wholesale level, the purpose of imposing *ex ante* obligations is to ensure that undertakings cannot (i.e. prospectively) use their market power either to restrict or distort competition on the relevant market, or to leverage such market power onto adjacent markets (i.e. the retail market).
- 6.68 ComReg also set out in Section 6 of the Consultation its prospective analysis of a range of potential competition problems that could arise, having regard to Eircom’s ability and incentives to engage in anti-competitive behaviour by virtue of its SMP position.
- 6.69 In its response, Sky listed a number of examples of competition problems that have, in its view, arisen, as referenced in paragraphs 6.23 and 6.24 above. ComReg reiterates that it is necessary neither to catalogue examples of actual abuse, nor to provide exhaustive examples of potential abuse. Rather, the purpose of *ex ante* regulation is to prevent the possibility of competition problems arising, having regard to Eircom’s SMP position, and given its ability and incentives to engage in the identified competition problems. ComReg has also noted above a number of examples where it is investigating potential non-compliance with obligations, or has commenced enforcement action for breaches of such obligations.

⁵⁶³ See paragraph 19 of the 2018 SMP Guidelines.

⁵⁶⁴ See paragraph 25 of the 2018 SMP Guidelines.

- 6.70 ComReg notes Sky's reference to Eircom's introduction of price increases in FTTC-based VUA services (both standalone 'SA' and plain old telephone service 'POTS')⁵⁶⁵ in July 2015 and September 2016. In Sky's view, the latter change was announced in tandem with ComReg's 2015 FACO Decision⁵⁶⁶ to introduce a cost orientation obligation in the FACO market on SB-WLR (as set out in ComReg's 2016 Access Pricing Decision)⁵⁶⁷ and the move was demonstrative of Eircom's ability to exercise its SMP by pricing independently of competitors and customers, to the detriment of competition. ComReg also notes that Eircom has, to date, been subject to a margin squeeze test in its pricing of FTTC services, and so is entitled, within the scope of existing price controls, to increase the prices of these services. ComReg has recently consulted - in the 2017 Pricing Consultation - on the pricing of FTTC products with a view to moving from a margin squeeze price control obligation to cost orientation. The cost orientation obligation for FTTC is examined at Section 7 below and the further specification of the obligation was the subject of the 2017 Pricing Consultation, and Sections 5, 6 and 7 of the 2018 Pricing Decision.
- 6.71 The July 2015 and September 2016 price increases highlighted by Sky were incorporated into ComReg's assessment of the appropriateness of a cost oriented price control for FTTC services, as proposed in the 2017 Pricing Consultation, and confirmed in the 2018 Pricing Decision.⁵⁶⁸ ComReg is of the view that the competitive constraints on Eircom's retail and/or wholesale broadband prices may no longer be as effective as originally envisaged, and this view was reflected in the remedies proposed in the 2017 Pricing Consultation. In particular, the constraint posed by copper-based broadband is likely to have diminished, given the reduction in LLU volumes, and the switch from CG copper to NG fibre-based services, as set out in Figure 16 below. The 2017 Pricing Consultation outlined cost-based prices for both FTTC VUA-based WLA services and FTTC Bitstream based WCA services (SA and POTS-based) that are lower than the prices currently referenced in Eircom's Wholesale Bitstream Access Reference Offer ('**WBARO**'), which are based on a margin squeeze test.⁵⁶⁹

⁵⁶⁵ SA broadband means Standalone broadband; POTS-based broadband means broadband and a telephone service based on 'Plain Old Telephony Service'.

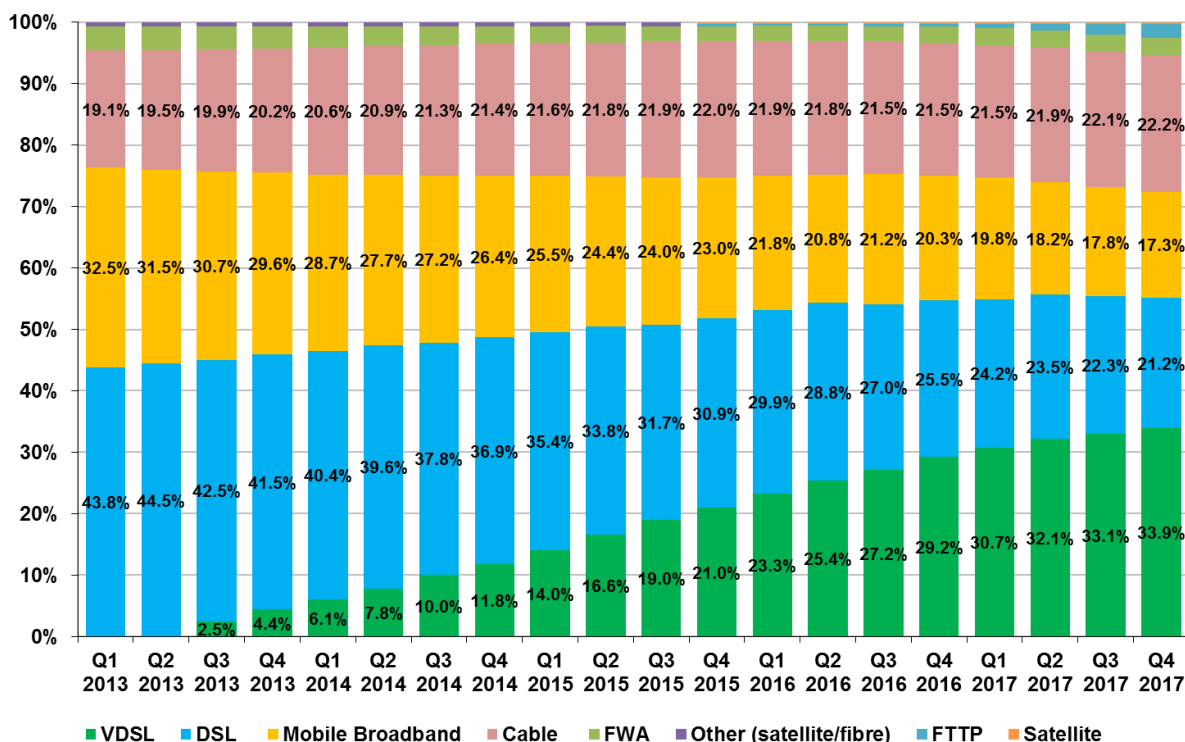
⁵⁶⁶ Wholesale Fixed Voice Call Origination and Transit Markets Decision, ComReg Document Number 15/82, ComReg Decision D05/15 (hereafter, the '**2015 FACO Decision**').

⁵⁶⁷ Pricing of Eir's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision - ComReg Document 16/39 - https://www.comreg.ie/csv/downloads/ComReg_1639.pdf ('**Access Pricing Decision**').

⁵⁶⁸ See paragraph 15.14b of the 2017 Pricing Consultation and Section 3.5.2 of the 2018 Pricing Decision.

⁵⁶⁹ See pages 243 to 246 and Figure 36 to 38 of the 2017 Pricing Consultation.

Figure 16: Fixed Broadband Shares by Platform: 2010 – 2017



Source: Quarterly Key Data Questionnaire

6.72 Whilst the proposed pricing changes discussed at paragraph 6.70 above were permissible under the existing price control obligations, they are, in ComReg’s view, suggestive of Eircom’s ongoing ability and incentive to act independently of competitive constraints in the market, with uncertainty consequently arising for competitors in terms of their actual and planned investments. As Sky pointed out in its response, the timelines of the pricing changes coincided with the movement to cost orientation on SB-WLR following the Access Pricing Decision. Moreover, ComReg’s assessment of Eircom’s costs shows that price increases for wholesale products in the WLA Market cannot be justified solely on the basis of increased costs.⁵⁷⁰ This was a decision within Eircom’s discretion at that time. Eircom’s actions to date appear to be supportive of ComReg’s view as summarised in paragraph 6.3 above.

⁵⁷⁰ See Sections 6 and 7 of the 2018 Pricing Decision.

- 6.73 In paragraph 6.24(b) above, ComReg noted Sky's reference to lead times for WLR/broadband provisioning and the use of 'storm mode' by Eircom to avoid penalties for failing to achieve performance targets. Sky and other SPs⁵⁷¹ submitted a dispute regarding SLAs for repair to ComReg for determination pursuant to Regulation 31 of the Framework Regulations. This dispute included storm mode in its scope. This dispute was resolved to the satisfaction of all parties, including Sky, by mediation on 26 April 2017.⁵⁷² Regarding Sky's reference to a potential dispute regarding an "SLA on appointment slots for provisioning", the mediation agreement of 26 April 2017 also set a deadline of 1 October 2017 for the conclusion of an agreement on such matters. With the agreement of all parties, the 1 October 2017 deadline was extended to 20 October 2017. On 20 November 2017, the deadline was further extended by agreement. ComReg considers Sky's point here to generally relate to the nature and quality of Service Level Agreements ('SLAs') provided by Eircom, and Eircom's failure to invest sufficiently in its access network.⁵⁷³ In the Consultation, ComReg outlined proposed revisions to existing SLAs as part of the access remedies⁵⁷⁴ and has responded to SPs' views on SLAs in Section 7 below (see in particular, paragraphs 7.539 to 7.545).
- 6.74 In relation to refusal to deal, as well as denial of access, and the placing of restrictions on access, Sky noted that the Eircom RGM Updates demonstrated numerous instances of Eircom restricting or denying access to competing Access Seekers to facilities or services which it had made available to its own retail arm. Sky referred to requests for address matching, and the fact that the Eircom RGM Updates indicated the sought after capability was available to Eircom's retail arm throughout this period. ComReg has notified Eircom of findings of non-compliance in relation to address matching.⁵⁷⁵ Various matters arising from Consultants' RGM Reports are also currently under investigation by ComReg.
- 6.75 In relation to Sky's point that Eircom restricted or denied access to competing Access Seekers to facilities or services which it made available to its own retail arm, the regulatory obligations imposed in this Decision with respect to Equivalence of Inputs ('EoI') are designed to ensure that both Eircom's own retail business and Access Seekers enjoy the non-discriminatory provision of services by Eircom's wholesale arm.⁵⁷⁶
- 6.76 Regarding its concerns about Eircom's alleged delaying tactics, as set out in paragraph 6.24(d) above, Sky expressed the view that ComReg is familiar with Eircom's strategy of delay in relation to numerous initiatives, particularly as ComReg is Chair of the various product forums held on a regular basis.

⁵⁷¹ Vodafone, Magnet and BT.

⁵⁷² See ComReg Information Notice [17/36](#).

⁵⁷³ Service Level Agreements ('SLAs') are legally binding contracts between Eircom and Access-Seekers in relation to the service levels which Eircom commits to from time-to-time, as more particularly set out in the ARO.

⁵⁷⁴ See Requirements governing fairness, reasonableness and timeliness of access – paragraphs 8.302 to 8.353 of the Consultation.

⁵⁷⁵ See ComReg Information Notice 17/14.

⁵⁷⁶ See paragraphs 7.938 to 7.939 at Section 7 below.

- 6.77 ComReg's role at the industry forums is primarily to facilitate discussions between Eircom and Access Seekers, who attend the forum on a voluntary basis, with respect to the development of Regulated Access Products. However, ComReg considers any matters that arise, including those that arise at industry fora, which may give rise to concerns regarding Eircom's compliance with its regulatory obligations.
- 6.78 ComReg has proposed timelines and milestones for the development of Regulated Access Products in order to address competition problems arising from the pace of development of regulated products and services. These are discussed in detail in Section 7 (Remedies) below.
- 6.79 As noted in paragraphs 6.25 and 6.28 above, Vodafone expressed the view that the high cost associated with building local access networks has meant that SPs have had to rely on gaining access to Eircom's ubiquitous network. Given this dependency, Vodafone noted that, in the absence of an effective regulatory framework, Eircom is both the dominant provider of WLA services, and the main competitor to Vodafone in the provision of retail services. Vodafone indicated that this creates incentives for Eircom to engage in anti-competitive conduct.
- 6.80 In both the Consultation and this Decision,⁵⁷⁷ ComReg has recognised the ubiquity of Eircom's local access network and the associated high sunk costs associated with its replication. The Consultation also identified⁵⁷⁸ that, absent regulation, Eircom has the ability and incentive to engage in a range of anti-competitive behaviours in respect of access, discrimination and pricing, having regard to the fact that the ultimate beneficiaries of such wholesale access are its downstream competitors.
- 6.81 ComReg considers that, as a vertically-integrated SP with SMP, Eircom has the ability and incentive to leverage that SMP into downstream or adjacent markets, including (but not limited to) the provision of retail services and WCA. This could serve to enhance its market power in these downstream markets.⁵⁷⁹ The issue of vertical leveraging was also discussed in the Consultation.⁵⁸⁰
- 6.82 However, in relation to Vodafone's assertion in paragraph 6.27 above that Eircom is the only supplier at the local access level for Vodafone to reach its own customers, ComReg does not agree, given the presence of SIRO, from whom Vodafone is currently buying WLA services.

⁵⁷⁷ ComReg considered the strength of potential competition in the WLA Market in paragraphs 6.79 to 6.102 of the Consultation and outlined its preliminary conclusion that it is unlikely that Eircom would be sufficiently constrained by potential competition, one reason being the existence of barriers to entry around building an independent local access network. ComReg has confirmed its position on this in Section 6 of this Decision.

⁵⁷⁸ See Section 7 of the Consultation.

⁵⁷⁹ See paragraph 7.29 of the Consultation.

⁵⁸⁰ See paragraphs 7.27 to 7.48 of the Consultation.

6.83 In order to prevent competition problems in the WLA Market from occurring, in Section 8 of the Consultation and Section 7 of this Decision, ComReg has proposed a suite of regulatory obligations (access, non-discrimination, transparency, price control/cost accounting and accounting separation) designed to mitigate the risk of competition problems arising due to vertical leveraging behaviour by Eircom.

List of hypothetical competition problems is inappropriate

6.84 In paragraphs 6.29 to 6.37, ComReg outlined a number of points raised by Eircom in its Submission.

6.85 As noted in paragraph 6.29, Eircom did not agree that the competition problems and the associated impacts on competition and End Users that ComReg identified are those that could potentially arise in the WLA Market. Eircom considered that ComReg has failed to delineate the market in the correct manner or appropriately assess the level of competition that Eircom faces from both direct and indirect constraints. In Section 4 of this Decision, ComReg has considered Eircom's assertions.⁵⁸¹

6.86 In paragraph 6.30, ComReg noted Eircom's concern that the access obligations already imposed on it require Eircom to implement changes at its own cost when requested by Access Seekers, but that, in many cases, Access Seekers do not, in Eircom's view, use the new products requested by them. ComReg does not consider this to be relevant to the issue of competition problems. However, ComReg considers that, in general, when Eircom implements changes to access products, any price control obligations in place allow Eircom to recover its efficiently incurred costs, as appropriate.

6.87 In paragraph 6.31, ComReg noted Eircom's view that it does not seek to act in a discriminatory manner and that it altered its duct and pole offer in the light of the BCRD. ComReg disagrees with Eircom in relation to discrimination in the duct and pole offer and accordingly notified a finding of non-compliance in October 2017.⁵⁸²

6.88 ComReg notes Eircom's comments in paragraph 6.31 that it is inherently inefficient to provide passive infrastructure access on an EoI basis, and effectively force Eircom to consume its own CEI products. ComReg has responded to a number of points raised by Eircom in this regard in Section 7⁵⁸³ concerning remedies.

6.89 In paragraph 6.33, ComReg noted Eircom's view that the Consultation appears to have been written prior to Eircom amending its duct and pole products, as ComReg's reference to downstream markets such as leased lines is not relevant, since the leased line use restriction is no longer in place.⁵⁸⁴

⁵⁸¹ See paragraphs 4.92 to 4.107 and 4.113 to 4.157 above.

⁵⁸² See ComReg Information Notice 16/91.

⁵⁸³ See paragraphs 7.906 to 7.911 in Section 7.

⁵⁸⁴ ComReg assumes that Eircom is referring to paragraph 7.31 of the Consultation where ComReg outlined issues around refusal to deal/denial of access/restrictions on access.

6.90 ComReg is aware that Eircom amended its duct and pole offer after the publication of the Consultation in November 2016, with such restrictions removed in December 2016.⁵⁸⁵ In paragraph 7.31 of the Consultation, ComReg outlined issues relating to the restriction of a WLA product to specific downstream retail or wholesale services. In relation to leased lines, ComReg specified that the effect of restrictions on use of WLA products

*“.....potentially has the effect of limiting Access Seekers’ investment as they cannot benefit from the economies of scale and scope that would result from the ability to use WLA inputs across a range of downstream markets (including but not limited to retail and wholesale broadband access, fixed telephony, retail TV services or leased lines)”*⁵⁸⁶

6.91 ComReg noted that leased lines are one example of a downstream retail service that Access Seekers could use WLA inputs to provide, and that undue restrictions on such use could restrict or distort competition in related markets.

6.92 In paragraph 6.34, ComReg noted Eircom’s view that ComReg’s assessment cannot be based on a hypothetical list of abusive conducts, and that Eircom is subject to the behavioural constraints imposed by *ex post* competition law.

6.93 ComReg refers to its response above in paragraphs 6.65 to 6.68. ComReg does not consider *ex post* competition law enforcement to be sufficient in restraining potential anticompetitive behaviour by an SMP SP in those markets that have been identified by the European Commission as being susceptible to *ex ante* regulation.⁵⁸⁷ Furthermore, as stated in paragraph 7.3 of the Consultation, and in accordance with Regulation 27(4) of the Framework Regulations, where an SP is designated as having a position of SMP in a relevant market, ComReg is required to impose on that SP each of the obligations (or remedies) set out in Regulations 9 to 13 of the Access Regulations, as ComReg deems appropriate.

6.94 Moreover, in the absence of regulation, the terms on which Access Seekers obtain access would be subject to commercial negotiation, with scope for Eircom to offer terms that could put Access Seekers at a competitive disadvantage, given that it is often in direct competition with such Access Seekers in horizontally or vertically-related markets.

6.95 As discussed in the 2017 Pricing Consultation⁵⁸⁸ and the Bundles Consultation,⁵⁸⁹ ComReg is of the view that, absent the proposed regulatory remedies, Eircom would have the incentive and ability to leverage its market power through a number of pricing and non-pricing means. ComReg has outlined the price control remedies for the WLA Market in Section 7 of this Decision.

⁵⁸⁵ http://www.openeir.ie/Products/Data/Pole_and_Duct_Access/ - Duct Access Product Description V1_3.

⁵⁸⁶ See paragraph 7.31 of the Consultation.

⁵⁸⁷ The list of markets susceptible to regulation is available at: <https://ec.europa.eu/digital-single-market/en/news/commission-recommendation-relevant-product-and-service-markets-within-electronic-communications>.

⁵⁸⁸ See paragraphs 3.23 to 3.26 of the 2017 Pricing Consultation.

⁵⁸⁹ See paragraphs 3.7 to 3.26 of the 2017 Bundles Consultation.

- 6.96 Setting **excessive wholesale charges** would raise input costs for those Access Seekers that purchase Eircom's wholesale services which compete with Eircom's retail arm. Given that these excessive wholesale charges may then be passed on by such OAOs to their retail end users via higher retail prices, excessive pricing could ultimately have the potential to harm the development of effective competition in the downstream market through the actual or effective exclusion of downstream competitors.
- 6.97 **Leveraging** SMP into adjacent vertically or horizontally-related markets through price and non-price means may have the effect of foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets. Eircom, as a vertically-integrated SP with SMP, has the incentive to use its market power in upstream markets to affect the competitive conditions in downstream wholesale and/or retail markets, in particular, through its ability to control the key inputs used by wholesale customers which compete against Eircom in such markets. This could result in a distortion of, or restriction in, competition in these downstream markets, ultimately resulting in harm to end users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced consumer choice.
- 6.98 A SP having SMP in a wholesale market may attempt to squeeze its wholesale customers, whereby, in addition to or instead of increasing wholesale charges, it reduces the prices it charges its own retail customers. Such a **margin squeeze** may occur in a standalone context, or in the context of a bundle of services. Competition may be harmed where existing OAOs either fail to expand, or exit the market, or due to the chilling effect on entry that the risk of such conduct may have on potential entrant OAOs.
- 6.99 An additional competitive harm may occur where there has been entry by OAOs in the wholesale market. A margin squeeze may affect the competitive position of such wholesale OAOs purchasing wholesale WLA services. This may happen, for instance, if the exclusionary effect of a margin squeeze at the retail level causes a wholesale OAO's customers to lose market share, delay entry or exit the market, thus undermining the wholesale OAO's business case, potentially damaging competition at the wholesale level of the market.
- 6.100 Engaging in behaviours similar to those outlined above (leveraging, excessive pricing, and margin squeeze), or as further described in the 2017 Pricing Consultation and the 2017 Bundles Consultation, may delay or deter network investment or market entry, to the ultimate detriment of competition and consumers in downstream markets.
- 6.101 In paragraph 6.36, ComReg noted Eircom's assertion that all of its main competitors form part of large international corporations who take advantage of substantial economies of scale in terms of network deployment, product development at both the wholesale and retail levels, and content purchasing power. Each of these competitors would readily make a complaint in the event of an SMP SP engaging in anti-competitive conduct.

- 6.102 ComReg notes that a similar point was raised by Eircom in response to Section 6 of the Consultation in relation to its competitors taking advantage of economies of scale (see paragraph 5.39), which ComReg has responded to in Section 5 (paragraphs 5.98 to 5.106) above. ComReg notes that, while such competitors may, through their parent international organisations, experience some shared economies of scale, any such benefits also need to be considered in the context of the WLA Market. In this context, ComReg notes that the scale economies experienced by Eircom associated with its relative size in the Irish market (absent regulation), its ubiquitous access network (and the level of sunk costs involved) are likely to confer a greater competitive advantage upon Eircom than would be the case for its competitors.
- 6.103 In paragraph 6.37, ComReg noted Eircom's reference to the recent investigation by ComReg of Eircom's bulk migration processes. ComReg has responded to Eircom's views on bulk migrations in Section 7 (paragraph 7.190 below). This investigation was conducted on foot of complaints from BT, Sky and Vodafone, all of whom alleged that Eircom had not complied with access obligations at 6.1 and 6.2(vi) of the Decision Instrument at Annex 2 of D03/13 requiring that Eircom provide migrations from NGA to CGA products. ComReg's investigation found no evidence to support this allegation, and Eircom and the complainants were informed of the outcome on 21 February 2017.
- 6.104 With respect to Eircom's comments in paragraph 6.38 that reverse migrations from NGA to CGA should be penalised through charging in order to encourage investment by SPs and to encourage the adoption of new technology for the benefit of consumers, ComReg does not consider this to be relevant to the consideration of competition problems. Such comments are, however, considered in the context of WLA pricing remedies in Section 7.⁵⁹⁰

Importance of wholesale arm to Eircom

- 6.105 In paragraph 6.39, ComReg noted points raised by Virgin Media that Eircom's established wholesale business represents a significant proportion of Eircom's revenue and subscriber base, and that it is therefore likely that Eircom would choose to continue to provide wholesale broadband services, even if it were not obliged by means of regulation to do so.
- 6.106 ComReg notes that Eircom's wholesale customers represent [redacted]]⁵⁹¹ of its total subscriber base (i.e. CGA/NGA subscribers across both wholesale and Eircom retail) as of Q4 2017. While ComReg notes that Eircom's wholesale sales are significant, ComReg does not, however, agree that it is likely to be the case that Eircom would continue, absent regulation, to provide access to WLA products, services and facilities in a similar manner as is required by regulation (which seeks to mirror outcomes that would occur in a competitive market). The Consultation identified that Eircom has the ability and incentive to refuse to provide access to WLA products, services and facilities.⁵⁹²

⁵⁹⁰ See Section 7, at paragraph 7.1366.

⁵⁹¹ According to Eircom's [full year financial results ending Q4 2017](#), Eircom sold 471K wholesale broadband lines and 440K retail broadband lines.

⁵⁹² See paragraphs 7.30 to 7.32 of the Consultation.

- 6.107 Even to the extent that Eircom would continue to provide wholesale services, ComReg considers it unlikely that this unregulated wholesale service would be equipped with the required terms and conditions of access to enable Access Seekers to compete effectively with Eircom at downstream levels. Contracts could, for example, be terminated at certain times, potentially leaving an Access Seeker unable to serve its subscribers. Similarly, the quality of products on offer could be inferior to those consumed by Eircom retail, to ensure that the Access Seeker is at a competitive disadvantage. ComReg outlined a number of such potential competition problems that could arise absent regulation in Section 7 of the Consultation. Absent regulation, Eircom would also be more likely to expropriate greater profits at the retail level through sales to its own downstream arm, than at the wholesale level, particularly in circumstances where the competitive constraints facilitated by regulation (i.e., those constraints from Access Seekers using Eircom wholesale products) in the WLA Market (such as by Vodafone, Sky or other SPs) would effectively be removed.
- 6.108 ComReg notes that Eircom faces the ability and incentive to refuse to provide access to those Access Seekers that it is directly competing with in downstream markets, including having regard to the probability that it would be in a position to restrict and/or distort competition in such markets, ultimately with a view to increasing its overall profits.

ComReg's Position

- 6.109 Having regard to the analysis in Section 7 of the Consultation and the consideration of Respondents' views in paragraphs 6.4 to 6.107 above, and Eircom's proposed designation with SMP in the Relevant WLA Market, ComReg's position is that Eircom has the ability and incentive to engage in the range of anti-competitive behaviours and problems outlined in Section 7 of the Consultation, absent regulation.
- 6.110 In particular, absent regulation in the Relevant WLA Market, ComReg considers that Eircom would have the ability and incentive to influence competition through effects on prices, innovation, output and the variety or quality of goods and services provided. A number of competition problems may arise whereby Eircom could:
- (a) Exploit customers or End Users by virtue of its SMP position;
 - (b) Leverage its market power into adjacent vertically or horizontally-related markets with a view to foreclosing or excluding competitors in downstream and/or upstream markets; and
 - (c) Delay or deter investment and market entry into the Relevant WLA Market (and, ultimately, downstream markets).
- 6.111 Overall, ComReg does not consider that Eircom would be sufficiently constrained in the Relevant WLA Market, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and End Users. To this end, ComReg considers that the identified competition problems would likely arise in the Relevant WLA Market in the absence of competition.

7 Remedies for the WLA Market

Approach to Specifying and Implementing Remedies

- 7.1 In Section 6 of the Consultation, ComReg set out its preliminary view that Eircom has SMP in the WLA Market and in Section 7 ComReg identified a range of competition problems and End User impacts that, absent regulation, could arise in the WLA Market (and related downstream markets) as a result. These competition problems related to, amongst other things, Eircom having the ability and the incentive to foreclose competition in the WLA Market and related markets, leverage its SMP into adjacent markets, and exploit wholesale and retail customers, ultimately to the detriment of competition and End Users ('**End Users**').
- 7.2 In Section 8 of the Consultation, ComReg considered the imposition of regulatory remedies (or obligations) to address these competition problems, and in doing so ComReg:
- (a) Reviewed⁵⁹³ the legal framework for imposing remedies (summarised in paragraphs 7.3 to 7.8 below);
 - (b) Reviewed⁵⁹⁴ existing WLA remedies imposed under the 2010 Wholesale Physical Network Infrastructure Access ('**WPNIA**') Decision, 2013 NGA Decision⁵⁹⁵ and in other related decisions (summarised in paragraphs 7.9 to 7.22 below);
 - (c) Assessed⁵⁹⁶ the regulatory approaches to imposing regulatory remedies in the WLA Market (summarised in paragraphs 7.23 to 7.28 below); and
 - (d) Proposed regulatory remedies in the WLA Market relating to access, non-discrimination, transparency, price-control, cost accounting and accounting separation (summarised in paragraph 7.29 below).

Legal Framework for Imposing Remedies

- 7.3 In accordance with Regulation 8(1) of the Access Regulations, where an undertaking is designated as having SMP in a relevant market, ComReg is required⁵⁹⁷ to consider the imposition of obligations as set out in Regulations 9 to 13. In this regard, the obligations that may be imposed by ComReg on SMP undertakings are those relating to:
- (a) Access;
 - (b) Transparency;

⁵⁹³ See paragraphs 8.3 to 8.7 of the Consultation.

⁵⁹⁴ See paragraphs 8.8 to 8.22 of the Consultation.

⁵⁹⁵ Next Generation Access ('**NGA**'): Remedies for Next Generation Access Markets, ComReg Document 13/11, ComReg Decision D03/13, 31 January 2013.

⁵⁹⁶ See paragraphs 8.23 to 8.29 of the Consultation.

⁵⁹⁷ The SMP Guidelines also state at paragraph 17 that "*NRAs must impose at least one regulatory obligation on an undertaking that has been designated as having SMP*".

- (c) Non-Discrimination;
 - (d) Price Control and Cost Accounting; and
 - (e) Accounting Separation.
- 7.4 In addition, Regulation 8(6) of the Access Regulations provides that any of the above obligations imposed must:
- (a) be based on the nature of the problem identified;
 - (b) be proportionate and justified in light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations;⁵⁹⁸ and
 - (c) only be imposed following public consultation and notification of the draft measures to the European Commission, BEREC and other National Regulatory Authorities ('NRAs') in accordance with Regulation 12 of the Framework Regulations.
- 7.5 Regulations 12(1) and 12(4) of the Access Regulations also provide statutory criteria that ComReg must take into account before imposing access obligations on an SMP undertaking. These criteria include, *inter alia*, examining: the technical and economic viability of using or installing competing facilities; the feasibility of providing access; the initial outlay of investment by the undertaking; and the need to safeguard competition in the long term.
- 7.6 Regulation 6(1) of the Access Regulations provides that the Regulator shall, acting in pursuit of its objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations, encourage and, where appropriate, ensure adequate access, interconnection and the interoperability of services in such a way as to:
- (a) Promote efficiency;
 - (b) Promote sustainable competition;
 - (c) Promote efficient investment and innovation; and
 - (d) Give the maximum benefit to End Users.
- 7.7 Regulation 13(2) and Regulation 13(3) of the Access Regulations provide that ComReg is also required, when imposing price control obligations, to:

⁵⁹⁸ Pursuant to Section 12 of the Communications Regulation Act 2002 (as amended), ComReg's relevant objectives in relation to the provision of electronic communications networks and services are: (i) to promote competition; (ii) to contribute to the development of the internal market; and (iii) to promote the interests of users within the Community. Regulation 16 of the Framework Regulations further specifies ComReg's objectives and sets out a number of obligations in relation to the pursuit of its objectives.

- (a) take into account the investment made by the SMP operator which ComReg considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project;⁵⁹⁹ and
- (b) ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits.⁶⁰⁰

7.8 These considerations are taken into account in Section 8 of the Consultation and now in Section 7 of this Decision, as appropriate, when assessing whether and what form of remedy to impose, and are also discussed in further detail in the context of the Regulatory Impact Assessment ('**RIA**') set out at Section 14.⁶⁰¹ ComReg has also taken the following into account in considering the imposition of remedies on Eircom:

- (a) the European Regulators Group ('**ERG**')⁶⁰² common position on the approach to appropriate remedies in the electronic communications networks and services regulatory framework;⁶⁰³
- (b) BEREC common position on best practice in remedies;⁶⁰⁴ and
- (c) any relevant comments letters issued by the European Commission pursuant to Articles 7 and 7a of the Framework Directive in its review of regulatory measures notified by Member States under the EU consultation mechanism for electronic communications services.

⁵⁹⁹ Pursuant to Regulation 13(2) of the Access Regulations.

⁶⁰⁰ Pursuant to Regulation 13(3) of the Access Regulations.

⁶⁰¹ A Draft RIA was also set out in Section 15 of the Consultation.

⁶⁰² Pursuant to Regulation (EC) No 1211/2009 of the European Parliament and the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications ('**BEREC**') and the Office ERG was replaced with the Body of European Regulators for Electronic Communications (BEREC) in 2010.

⁶⁰³ Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework, ERG (06)33, May 2006, available at:

https://www.pfs.is/upload/files/erg_06_33_remedies_common_position_june_06.pdf.

⁶⁰⁴

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1126-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-broadband-access-including-bitstream-access-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1127-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-physical-network-infrastructure-access-including-shared-or-fully-unbundled-access-at-a-fixed-location-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

Existing WPNIA Remedies

- 7.9 Before considering which remedies would best meet ComReg's statutory objectives in regulating the WLA Market, in the Consultation ComReg highlighted the existing remedies that are in place with respect to Eircom's provision of WPNIA⁶⁰⁵ arising from the obligations imposed in the 2010 WPNIA Decision, 2013 NGA Decision and in other relevant decisions.
- 7.10 These regulatory obligations are set out in 2010 WPNIA Decision (with respect to Current Generation WLA⁶⁰⁶ services) and the 2013 NGA Decision⁶⁰⁷ (with respect to Next Generation WLA⁶⁰⁸ services), and are discussed⁶⁰⁹ briefly below.

Existing Access Remedies

- 7.11 Eircom is currently subject to a range of access obligations having been designated with SMP in the WPNIA Market pursuant to the 2010 WPNIA Decision, with obligations imposed under that decision and in the subsequent 2013 NGA Decision. These remedies were designed to address various competition problems that were identified at that time. The obligations imposed under the 2010 WPNIA Decision (as amended by the 2013 NGA Decision) require Eircom, amongst other things, to provide access to the following products, services and facilities in respect of Current Generation and Next Generation WPNIA:
- (a) Unbundled access to the fibre loop;
 - (b) Unbundled access to the fibre loop combined with Geographic Number Portability ('GNP')⁶¹⁰ where required;
 - (c) Unbundled Local Metallic Path ('ULMP');
 - (d) Unbundled Local Metallic Path with Number Portability ('GLUMP');
 - (e) Shared Access to the Local Loop;
 - (f) Sub-Loop Unbundling ('SLU'), combined with GNP where required, and Shared Sub-Loop Unbundling ('SSLU') in areas which have been identified as susceptible to form part of a state subsidy scheme;

⁶⁰⁵ See paragraphs 1.15 to 1.17 of the Consultation.

⁶⁰⁶ 'Current Generation Wholesale Local Access' or 'Current Generation WLA' means Wholesale Local Access provided over Eircom's current generation copper access network infrastructure and its Associated Facilities (including self-supply by Eircom for the purpose of serving its downstream markets) that is copper-based.

⁶⁰⁷ This amended the 2010 WPNIA Decision.

⁶⁰⁸ 'Next Generation Wholesale Local Access' or 'Next Generation WLA' means Wholesale Local Access provided over NGA and its Associated Facilities (including self-supply by Eircom for the purpose of serving its downstream markets).

⁶⁰⁹ This does not purport to be an exhaustive list of each individual remedy currently imposed upon Eircom. Details of obligations imposed upon Eircom are available at https://www.ComReg.ie/telecoms/table_of_smp_obligations.563.1076.html.

⁶¹⁰ Geographic Number Portability ('GNP') is a number portability process that facilitates the transfer of End Users between service providers.

- (g) Co-Location;
- (h) Cabinet Co-Location;
- (i) Interconnection;
- (j) Backhaul;
- (k) Migrations;
- (l) Civil Engineering Infrastructure ('**CEI**') including Duct Access where reasonable; Where CEI is not available, Dark Fibre where reasonably available; and
- (m) Access to building and cabinet space.

7.12 In addition, the 2010 WPNIA Decision also imposed the following access obligations upon Eircom, namely obligations:

- (a) to negotiate in good faith with undertakings requesting access;
- (b) not to withdraw access to facilities already granted without ComReg's prior approval;
- (c) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;
- (d) to provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services; and
- (e) to provide access in accordance with product descriptions and conditions specified in the Access Reference Offer ('**ARO**').⁶¹¹

7.13 Eircom was required to provide access in a fair, reasonable and timely manner. In that regard, Eircom was required to:

- (a) conclude, maintain or update, as appropriate, legally binding Service Level Agreements ('**SLAs**') which include provision for associated Performance Metrics with Other Authorised Operators ('**OAOs**');⁶¹²
- (b) negotiate in good faith with Access Seekers in relation to the conclusion of legally binding and fit-for-purpose SLAs;
- (c) ensure that all SLAs include provision for service credits arising from a breach of an SLA, with details of how service credits are calculated;
- (d) ensure that payment of service credits, where they occur, shall be made in a timely and efficient manner; and

⁶¹¹ The ARO is the offer of contract by Eircom to Access Seekers in relation to various wholesale services.

⁶¹² Referred throughout this document as Access Seekers.

- (e) where a request for provision of Access, or a request for provision of information is refused or met only in part, Eircom was required to provide the objective criteria for refusing a request for access or information.

Existing Non-Discrimination Remedies

- 7.14 Eircom is subject to non-discrimination obligations pursuant to the 2010 WPNIA Decision and the 2013 NGA Decision, with respect to the provision of WPNIA. These obligations include requirements on Eircom to:
- (a) apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services; and
 - (b) ensure that all services and information are provided to other undertakings under the same conditions and of the same quality as the services and information that Eircom provides to its own services or those of its subsidiaries or partners.
- 7.15 Eircom is also required to supply Current Generation ('**CG**') WPNIA and Next Generation⁶¹³ ('**NG**') WPNIA products, services and facilities on an Equivalence of Outputs ('**EoO**')⁶¹⁴ basis and to submit a written Statement of Compliance ('**SOC**') to ComReg to demonstrate its compliance with its non-discrimination obligations.
- 7.16 Eircom's non-discrimination obligations applied irrespective of whether or not a specific request for products, services, facilities or information has been made by an Access Seeker to Eircom.

Existing Transparency Remedies

- 7.17 The 2010 WPNIA Decision and the 2013 NGA Decision required that Eircom should be transparent in relation to the provision of services, with ComReg having the ability to issue directions to Eircom requiring it to publish specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices.
- 7.18 The 2010 WPNIA Decision and 2013 NGA Decision also subjected Eircom to a range of transparency obligations whereby it was required to make certain information available. These include specific obligations on Eircom to:

⁶¹³ At the time of the 2010 WPNIA Decision, VUA was considered to fall within the then defined downstream WBA Market. In the context of the obligations imposed with respect to NG WBA in the 2013 NGA Decision, Eircom was required to provide pre-ordering, ordering, provisioning, fault reporting and repair for NG WBA (Next Generation Bitstream and VUA) on an EoI basis.

⁶¹⁴ EoO means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers in a manner which achieves the same standards in terms of functionality, price, terms and conditions, service and quality levels as the SMP Undertaking provides to itself, albeit potentially using different systems and processes.

- (a) publish an ARO which should contain a minimum specified set of details with respect to the access products defined, including prices; be sufficiently unbundled so that Access Seekers are not required to pay for services that are not requested; and be subject to a transparent change management process, including advance public notification of proposed changes to products and prices;
- (b) provide, in accordance with specified timeframes, advance notification to Access Seekers and to ComReg of proposed changes to the ARO, prices and the introduction of products, services and facilities;
- (c) ensure transparency in its billing by making its wholesale invoices sufficiently disaggregated, detailed and clearly presented such that an Access Seeker can reconcile the invoice to Eircom's ARO and ARO prices;
- (d) publish information in respect of Current Generation and Next Generation products, services, facilities and processes which are to be sufficient to identify and justify any permissible differences between these products, services, facilities and processes and those which Eircom supplies to itself;
- (e) publish on its publicly available website Key Performance indicators ('KPIs'), and SLAs relating to WLA products, services and facilities;
- (f) publish in advance on its publicly available website information regarding its NGA rollout plans providing at different timeframes specific information with respect to geographic availability of the service;
- (g) make available and keep updated on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg), information regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies;
- (h) provide details to ComReg in respect of the rollout of NGA;
- (i) meet requirements concerning access to confidential and/or commercial information; and
- (j) make available and keep updated on its publicly available website information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices as may be specified by ComReg from time-to-time.

Existing Price Control Remedies

- 7.19 Currently, products supplied in the WPNIA Market are subject to a cost orientation price control obligation, as set out in the 2010 WPNIA Decision and further specified in the 2013 NGA Decision and 2016 Access Pricing Decision.⁶¹⁵ This current cost orientation obligation applies to Local Loop Unbundling ('**LLU**'), SLU, Line Share ('**LS**'), CEI (duct and pole access), Dark Fibre, backhaul, unbundled access to the fibre loop, co-location and interconnection as well as ancillary services.
- 7.20 In addition, Eircom is also subject to a margin squeeze obligation such that it should not cause a margin/price squeeze, pursuant to the 2010 WPNIA Market Decision and 2013 NGA Decision.

Existing Cost Accounting and Accounting Separation Remedies

- 7.21 Eircom is subject to a cost accounting and accounting separation obligation under the 2010 WPNIA Decision, 2013 NGA Decision and the 2010 Accounting Separation Decision.⁶¹⁶ Virtual Unbundled Access ('**VUA**') products, which are currently regulated under the 2011 WBA Decision and 2013 NGA Decision, are also subject to a margin squeeze obligation.

Existing Remedies relating to VUA

- 7.22 In the 2013 NGA Decision, ComReg imposed remedies in relation to VUA product which, at that time fell within the WBA Market (as defined in the 2011 WBA Decision). The 2011 WBA Decision (as amended by the 2013 NGA Decision) required Eircom to provide the VUA product with relevant Interconnection⁶¹⁷ and Associated Facilities⁶¹⁸ (including Multicast Services and In Premises Services). In addition, non-discrimination, transparency, price control and cost accounting and accounting separation obligations were imposed in relation to the VUA products, services and facilities.⁶¹⁹ For the reasons set out above, ComReg has, in the context of this Decision, concluded that VUA falls within the WLA Market.

⁶¹⁵ ComReg Document 16/39 "Pricing of Eircom's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision", 18 May 2016 (the '**2016 Access Pricing Decision**').

⁶¹⁶ Response to Consultation, and Final Decision: Accounting Separation and Cost Accounting Review of Eircom Limited, ComReg Document 10/67, August 2010 ('**2010 Accounting Separation Decision**').
<https://www.comreg.ie/fileupload/publications/ComReg1067.pdf>.

⁶¹⁷ "Interconnection" shall have the same meaning as under Regulation 2 of the Access Regulations as may be amended from time-to-time, and for the purposes of this Decision Instrument includes, but is not limited to, the Eircom WEIL (Wholesale Ethernet Interconnect Link) service;

⁶¹⁸ "Associated Facilities" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time-to-time;

⁶¹⁹ See <https://www.comreg.ie/media/2016/03/Market-5-Table-of-SMP-Obligations-3-July-2016.pdf> for a schedule of obligations that apply to the WBA market.

Assessment of Regulatory Approaches to Imposing Remedies

7.23 In Section 5 of this Decision ComReg has set out its view that Eircom has SMP in the Relevant WLA Market. Furthermore, in Section 6 of this Decision ComReg identified a range of potential competition problems that may arise in the WLA Market (and related markets), absent regulation, arising from Eircom's ability and incentives as a vertically integrated SMP undertaking that competes with Access Seekers in a number of related retail and wholesale markets. In this Section, ComReg assesses the regulatory options for addressing the competition problems that have been identified, before then imposing specific regulatory obligations.

Option of 'No Regulation' in the WLA Market

7.24 In the Consultation, ComReg considered whether the option of de-regulation or regulatory forbearance is appropriate in the WLA Market.

7.25 Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated as having SMP. In Section 6, ComReg set out its view that the WLA Market is not effectively competitive (and is not likely to become effectively competitive within the timeframe covered by this review). In Section 7, ComReg identified a range of competition problems that could occur in the WLA Market and related markets, absent regulation.

7.26 In view of this assessment, it was ComReg's position that the WLA Market (and related markets including downstream retail and wholesale markets) would be unlikely to function effectively absent regulation. This would not be in the interest of promoting sustainable retail competition. As discussed in Section 7 concerning competition problems, a number of service providers use WLA inputs to compete with Eircom in related downstream wholesale and retail markets, including in the supply of WCA. ComReg has set out its position that Eircom has the ability and incentive to exclude or foreclose Access Seekers competing in the provision of wholesale and/or retail services by refusing to supply them with WLA (including constructive refusal), or by setting WLA prices at an excessive level. This would ultimately be detrimental to retail competition.

7.27 It is ComReg's position that the option of regulatory forbearance in the WLA Market is not, therefore, appropriate or justified. The relevant issue to be considered, therefore, relates to what form of regulation is appropriate. In particular, which of the remedies identified in paragraph 7.3 above are appropriate having regard to the particular circumstances of the WLA Market, the associated identified competition problems and taking account of the relevant statutory requirements to which ComReg must have regard when imposing remedies.

Option to impose remedies in the WLA Market

7.28 Eircom has to date been subject to a range of SMP based regulatory obligations as imposed primarily in the 2010 WPNIA Decision and the 2013 NGA Decision, as well as in a number of other decisions that enhanced or amended existing remedies in the intervening period. On that basis, Eircom is already subject to a range of regulatory obligations requiring it to provide WLA to Access Seekers and to do so on non-discriminatory and transparent terms and conditions, including at regulated prices.

Remedies to be imposed in the WLA Market

7.29 In the Sections below ComReg sets out its position regarding the remedies that it is imposing upon Eircom in the WLA Market. These include:

- (a) Access obligations (discussed in paragraphs 7.30 to 7.768);
- (b) Non-discrimination obligations (discussed in paragraphs 7.769 to 7.939);
- (c) Transparency obligations (discussed in paragraphs 7.940 to 7.1221);
- (d) Price control & cost accounting remedies in the WLA Market (discussed in paragraphs 7.1222 to 7.1382);
- (e) Accounting separation remedies in the WLA Market (discussed in paragraphs 7.1383 to 7.1395); and
- (f) Statement of Compliance ('SoC') Remedy (discussed in paragraphs 7.1396 to 7.1490).

Access Remedies

Overview

7.30 As identified in Sections 4 and 5 of the Consultation and in section 3 and 4 of this Decision, a number of Service Providers ('SPs') are, in providing their own retail and/or wholesale services, dependent upon the use of WLA inputs from Eircom. ComReg has already set out its position that Eircom has the ability and incentive to refuse to supply WLA to Access Seekers, either actually or constructively, or to provide these services on discriminatory or unreasonable terms and conditions (including in relation to price or non-price means) and that this would likely hinder the development of sustainable competition in the WLA market and related markets. This would ultimately be detrimental to the interests of End Users, and would be contrary to the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.

7.31 ComReg's view is that there are likely to continue to be differences in bargaining power between Eircom and Access Seekers, particularly given the absence of widely available alternative sources of supply within the timeframe of this review period.⁶²⁰

⁶²⁰ ComReg notes that while SIRO offers VULA-based WLA based services, the expected coverage of the SIRO network during the lifetime of this market review is likely to be limited, in particular, relative to that of Eircom. This is noted in paragraph 5.45 above.

- 7.32 Absent the presence of effective access remedies, ComReg would be left to address any such refusal by Eircom to supply WLA through either its general dispute resolution powers or its compliance functions, all of which would occur after the fact, take time to resolve, be specific to the bilateral circumstances between the relevant parties and would not thereby contribute to regulatory certainty amongst market players. As a consequence, this could be damaging to competition and ultimately End Users.
- 7.33 Such case-by-case interventions by ComReg would also be inefficient and ineffective in resolving the broader competition problem of denial/delayed access.
- 7.34 Additionally, ComReg could seek to use its *ex post* competition law powers. However, such powers could ultimately result in a finding by an Irish court that an undertaking has abused its dominant position, but not necessarily require access to be provided as an outcome of any such finding. Similar to the reasons above, use of competition law powers would also take significant time to resolve, be specific to the relevant circumstances of the case and may not contribute to regulatory certainty amongst market players.
- 7.35 Overall, therefore, ComReg considers that dispute resolution (which can be of relevance in resolving access and other issues in certain circumstances) and *ex post* competition law approaches would not be effective in resolving issues concerning denial of access in the WLA Markets.
- 7.36 Regulation 12(1) of the Access Regulations provides that ComReg may, in accordance with Regulation 8 of the Access Regulations, impose on an operator obligations to meet reasonable requests for access to, and use of, specific network elements and Associated Facilities⁶²¹ where ComReg considers that the denial of such access, or the imposition by operators of unreasonable terms and conditions having a similar effect, would:
- (a) hinder the emergence of a sustainable competitive retail market;
 - (b) not be in the interests of End Users; or
 - (c) otherwise hinder the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.
- 7.37 Obligations must also be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.
- 7.38 Regulation 12(2)(a) to 12(2)(j) and Regulation 12(3) of the Access Regulations provide that ComReg can impose, where appropriate, additional access obligations and may attach conditions covering fairness, reasonableness and timeliness to those access obligations.

⁶²¹ 'Associated Facilities' shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time-to-time.

- 7.39 As noted above, pursuant to Regulation 12(4) of the Access Regulations, when considering whether to impose obligations referred to in paragraphs (1) and (2) of Regulation 12 and, in particular, when assessing whether such obligations would be proportionate to the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended), ComReg has to take the following factors into account:
- (a) the technical and economic viability of using or installing competing facilities, in light of the rate of market development, taking into account the nature and type of interconnection and access involved;
 - (b) the feasibility of providing the access proposed, in relation to the capacity available;
 - (c) the initial investment by the facility owner, bearing in mind the risks involved in making the investment;
 - (d) the need to safeguard competition in the long-term;
 - (e) where appropriate, any relevant intellectual property rights; and
 - (f) the provision of pan-European services.
- 7.40 ComReg is required to take utmost account of Recommendations issued by the European Commission under Article 19(1) of the Framework Directive, including the NGA Recommendation and the 2013 Non-Discrimination Recommendation. ComReg is similarly obliged to take utmost account of opinions and common positions adopted by BEREC, including the Common Position on best practice in remedies in the WPNIA market.⁶²²
- 7.41 In general terms ComReg's proposals are consistent with the relevant Recommendations and advice of the European Commission and BEREC. Where ComReg proposes to depart from the relevant Recommendations, opinions and common practices set out by those bodies, the exceptions and reasoning will be detailed in the relevant section of this Decision.

Position set out in the Consultation

- 7.42 In the Consultation,⁶²³ ComReg proposed to impose specific access obligations upon Eircom in order to address identified competition problems and ultimately to promote the development of downstream competition to the ultimate benefit of End Users. This included obligations:

⁶²²

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1127-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-physical-network-infrastructure-access-including-shared-or-fully-unbundled-access-at-a-fixed-location-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

⁶²³ See paragraphs 8.43 to 8.301 of the Consultation.

- (a) to provide access to ULMP and ULMP combined with GNP⁶²⁴ where required, and shared access to the local loop;⁶²⁵
- (b) to provide access to SLU (combined with GNP where required) and SSLU, in areas which have been identified as susceptible to form part of a state subsidy scheme, such as DCCA's⁶²⁶ National Broadband Plan⁶²⁷ ('**NBP**');
- (c) to provide access to VUA⁶²⁸ (including Fibre to the Curb/Cabinet ('**FTTC**'), Fibre to the Home ('**FTTH**') and Exchanged based VDSL ('**EVDSL**')⁶²⁹ based VUA), combined with GNP where required;
- (d) to meet all reasonable requests from undertakings for the provision of unbundled access to the fibre loop;
- (e) to provide access to Co-Location, Co-Location Resource Sharing and Co-Location Rack Interconnection;
- (f) requirements to provide access to Migrations;
- (g) to provide access to Interconnection Services,⁶³⁰ namely In-Building Handover ('**IBH**'),⁶³¹ In-Span Handover ('**ISH**'),⁶³² Customer-Sited Handover ('**CSH**')⁶³³ and Edge Node Handover ('**ENH**'),⁶³⁴

⁶²⁴ GLUMP is the synchronised delivery of ULMP and GNP.

⁶²⁵ Discussed in paragraphs 8.58 to 8.71 of the Consultation.

⁶²⁶ Department of Communications, Climate Action and Environment ('**DCCA**').

⁶²⁷ The DCCA published the NBP in August 2012. This is a Government wide initiative to deliver high-speed broadband services to all businesses and households in Ireland. The NBP defines high-speed broadband as a minimum speed of 30Mbps download and 6Mbps upload. <https://www.dcca.gov.ie/en-ie/communications/topics/Broadband/national-broadband-plan/Pages/National-Broadband-Plan.aspx>.

⁶²⁸ As described in the Consultation, Virtual Unbundled Access ('**VUA**') means the wholesale active access product provided by Eircom. It is an enhanced Layer 2 product which allows the handover or interconnection of aggregate End Users' connections at the Metropolitan Point of Presence ('**MPoP**'). It allows a level of control to the Access Seeker similar to that afforded to the Access Seeker connecting their own equipment to an unbundled Local Loop.

⁶²⁹ EVDSL service means that the active VDSL equipment required to provide the broadband service is housed in an Eircom exchange building or equivalent.

⁶³⁰ Interconnection Services is the term used to collectively refer to ISH, CSH, IBH and ENH.

⁶³¹ In-building handover ('**IBH**') means the connection from the Eircom network to the Access Seeker's equipment within the exchange, or equivalent facility.

⁶³² In-Span Handover ('**ISH**') means the connection between the exchange and the Access Seeker's nominated Point of Handover.

⁶³³ As defined in the Consultation, Customer Sited Handover ('**CSH**') means the connection from the Eircom network to the Undertaking's equipment in the Undertaking's premises, which includes the installation of an Eircom NTU at the Undertaking's premises.

⁶³⁴ Edge Node Handover ('**ENH**') means the connection from the Eircom network through a dedicated aggregation node interface to the Access Seeker's equipment.

- (h) requirement to seek approval from ComReg for any changes to network management plans including the Copper Loop Frequency Management Plan ('**CLFMP**');⁶³⁵
- (i) to include the Vectoring protocol in the ARO;
- (j) to provide access to Associated Facilities,⁶³⁶ including Multicast⁶³⁷ and Class of Service ('**CoS**');⁶³⁸
- (k) to provide access to Civil Engineering Infrastructure ('**CEI**'),⁶³⁹ including:
 - (i) Ducts⁶⁴⁰ and Poles;
 - (ii) Sub-Duct Access⁶⁴¹ and Direct Duct Access;⁶⁴²
 - (iii) Chambers;⁶⁴³

⁶³⁵ Copper Loop Frequency Management Plan ('**CLFMP**') is the Eircom document that defines the spectral rules that all Access Seekers' equipment must comply with if such equipment is to be deployed on Eircom's copper access network.

⁶³⁶ Associated Facilities shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time-to-time.

⁶³⁷ Multicast means a service that accepts a single copy of a designated data stream from the Access Seeker and distributes these data streams within the Eircom network to multiple End Users.

⁶³⁸ Class of Service ('**CoS**') means a network traffic management technique that involves the autonomous treatment of traffic at a single router, switch or equivalent equipment using classes to group and manage traffic that have common forwarding characteristics.

⁶³⁹ As defined in the Consultation, Civil Engineering Infrastructure ('**CEI**') also known as passive access infrastructure means the physical access path facilities deployed by Eircom to host cables such as copper wires, optical fibre and co-axial cables. It includes but is not limited to, subterranean or above-ground assets such as Sub-ducts, Ducts, chambers and Poles.

⁶⁴⁰ As defined in the Consultation, 'Duct' means an underground pipe or conduit that carries cables that are in turn used to deliver electronic communication services to End Users.

As defined in the Consultation, 'Duct Access' means the installation of a Sub-Duct into an Eircom Duct to allow an Undertaking to install cables.

⁶⁴¹ As described in the Consultation, 'Sub-Duct' means the tube inserted in a Duct through which a fibre optic cable may be installed. 'Sub- Duct Access' means access to Eircom's Sub-Duct for the installation of Access Seekers cables.

⁶⁴² 'Direct Duct Access' means direct access to Eircom's Ducts for the installation of cables without the use of a Sub-Duct.

⁶⁴³ As defined in the Consultation, 'Chamber' means any underground construction which is built to facilitate access to cables within Eircom's Duct network for the purposes of splicing, jointing, distribution, fault localisation and repairs.

- (iv) Ingress⁶⁴⁴ and Egress⁶⁴⁵ points;
 - (v) Co-Location⁶⁴⁶ for CEI;
 - (vi) CEI Tie Connection Service⁶⁴⁷ between the Co-Location space/rack and the Ingress and Egress points;
 - (vii) where access to CEI is not available, to provide access to Dark Fibre⁶⁴⁸ where reasonably available; and
 - (viii) access to Passive Access Records (**'PAR'**).
- (l) to negotiate in good faith with undertakings requesting access;
 - (m) not to withdraw access to facilities already granted without ComReg's prior approval;
 - (n) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services; and
 - (o) to provide access to Operational Support Systems (**'OSS'**) or similar software systems necessary to ensure fair competition in the provision of services.

7.43 ComReg also proposed certain conditions should apply to the provision of access namely: requirements governing fairness, reasonableness and timeliness of access, including SLAs and requirements regarding timeliness of product development.

7.44 ComReg also proposed the withdrawal⁶⁴⁹ of the following obligations:

- (a) Cabinet space;

⁶⁴⁴ 'Ingress' means the point on Eircom's CEI where, in the case of Direct Duct Access, Duct Access and Sub-Duct Access, an Access Seeker's cable enters the Eircom Sub-Duct, duct or chamber, or where an Access Seeker's Sub-Duct physically enters the Eircom duct. In the case of pole access, the ingress point is the first pole used or to be used by the Access Seeker on an Eircom aerial route.

⁶⁴⁵ As defined in the Consultation, 'Egress' means the point on Eircom's CEI where, in the case of Direct Duct Access, Duct Access and Sub-Duct Access, an Undertaking's cable or Sub-Duct exits an Eircom owned duct, sub duct or chamber. In the case of pole access, it is the last Eircom pole used by an Undertaking on a particular route.

⁶⁴⁶ As defined in the Consultation, Co-Location shall have the same meaning and description as under Part B "Co-location services" of the Schedule to the Access Regulations (as may be amended from time to time), save that it includes for the purposes of this Decision Instrument, access to the Main Distribution Frame (**'MDF'**) and/or to the Optical Distribution Frame (**'ODF'**), floor space, Alternating Current (**'AC'**) power, Direct Current (**'DC'**) power, air conditioning, mast access, roof access, cable trays and trunking as applicable, at an Eircom Exchange.

⁶⁴⁷ 'CEI Tie Connection' means the fibre connection, provided by Eircom or the Access Seeker, between an Access Seeker's co-located equipment in their equipment rack or from the Access Seekers co-located ODF to a Chamber or pole on an Eircom CEI route usually in close proximity to the exchange building site.

⁶⁴⁸ As defined in the Consultation, Dark Fibre is optical fibre that is currently installed in the Local Access network but is not in use.

⁶⁴⁹ Paragraph 8.391 of the Consultation.

- (b) Backhaul;
- (c) Access to buildings; and
- (d) Notification of co-investment.

Respondents' Views, ComReg Assessment and Position on WLA Access Remedies

- 7.45 Of the eight Respondents, seven expressed views on issues relating to the proposed access remedies set out in the Consultation (namely ALTO, BT, Colt, Eircom, enet, Sky and Vodafone).
- 7.46 In this section, Respondents' Submissions and ComReg's position with respect to each proposed WLA access remedy will be structured as follows:
- (a) Respondents' Views;
 - (b) ComReg's Assessment of Respondents' Views; and
 - (c) ComReg's position.
- 7.47 Respondents' views on the proposed access remedies are classified into the themes identified below:
- (a) Requirement to meet reasonable requests for Access to WLA products, services and Associated Facilities (discussed in paragraphs 7.49 to 7.55 below).
 - (b) Unbundled Access Remedies (CG & NG) (discussed in paragraphs 7.56 to 7.125 below).
 - (i) Proposed requirements: LLU and LS Access Remedies;
 - (ii) Proposed requirements: Sub-Loop Unbundled Remedy;
 - (iii) Proposed requirements: VUA Remedy; and
 - (iv) Proposed requirements: Fibre Loop Unbundled Remedy.
 - (c) Associated Facilities Remedies (discussed in paragraphs 7.126 to 7.271 below).
 - (i) Proposed Requirement: To provide access to Co-Location, Co-Location Resource Sharing and Co-Location Rack Interconnection;
 - (ii) Requirements to provide access to Migrations;
 - (iii) Proposed requirements regarding access to Interconnection Services, namely IBH, ISH, CSH and ENH;
 - (iv) Proposed requirements regarding seeking approval from ComReg for any changes to network management plans including the CLFMP;
 - (v) Proposed requirements regarding including the Vectoring protocol in the ARO; and

- (vi) Proposed requirements regarding access to Associated Facilities to VUA, such as Multicast and Class of Service ('**CoS**').
- (d) CEI Remedies (discussed in paragraphs 7.272 to 7.516 below).
- (i) Requirements for CEI access / ComReg's power to impose SMP obligations;
 - (ii) Transposition of Broadband Cost Reduction Directive ('**BCRD**'),⁶⁵⁰
 - (iii) Infrastructure bottlenecks;
 - (iv) Necessity for the CEI Remedy;
 - (v) Demand for CEI access / requirement for a fit-for-purpose CEI access;
 - (vi) Competition and investment;
 - (vii) Scope of CEI access;
 - (viii) Ducts and Poles Access;
 - (ix) Sub-Duct Access and Direct Duct Access;
 - (x) Chambers;
 - (xi) Ingress and Egress points;
 - (xii) Co-Location for CEI;
 - (xiii) CEI Tie Connection Service between the Co-Location space/rack and the Ingress and Egress points;
 - (xiv) Where access to CEI is not available, to provide access to Dark Fibre where reasonably available; and
 - (xv) Access to PAR;
- (e) Supporting Access Remedies (discussed in paragraphs 7.517 to 7.522 below).
- (i) requirements to negotiate in good faith with undertakings requesting access;
 - (ii) requirements not to withdraw access to facilities already granted without ComReg's prior approval;

⁶⁵⁰ Referred to as Civil Infrastructure Directive ('**CID**') in the Consultation: Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (L 155/1) (the '**Civil Infrastructure Directive**' or '**CID**'); transposed into Irish law by the European Union (Reduction of Cost of Deploying High Speed Public Communications Networks) Regulations 2016 (S.I. No. 391 of 2016) ('**2016 Broadband Cost Reduction Regulations**').

- (iii) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services; and
- (iv) to provide access to OSS or similar software systems necessary to ensure fair competition in the provision of services;
- (f) To provide access in accordance with a range of conditions governing fairness, reasonableness and timeliness including but not limited to SLA, Services Credits, timeline for the agreement of the SLA etc. (discussed in paragraphs 7.524 to 7.610 below);
- (g) Requirement regarding Timeliness of Product Development (discussed in paragraphs 7.611 to 7.763 below); and
- (h) Withdrawal of specific Access Obligations imposed in 2013 NGA Decision (discussed in paragraphs 7.764 to 7.768 below).

7.48 This Decision considers current market issues in the context of potential competition problems that may arise in the WLA Market for the purpose of imposing *ex ante* remedies. In some instances, these or similar/related market issues may be the subject of separate ongoing ComReg investigations into compliance with existing remedies. For the avoidance of doubt, this Decision is without prejudice to ComReg's statutory powers to conduct such investigations or to take subsequent enforcement action if appropriate.

Requirement to meet Reasonable Requests for Access to WLA and Associated Facilities

Respondents' Views

7.49 Vodafone agreed that there needs to be a requirement to meet reasonable requests for access to WLA and associated facilities.

ComReg's Assessment of Respondents' Views

7.50 ComReg notes that one Respondent (Vodafone) agreed that there needs to be a requirement to meet reasonable requests for access to WLA and associated facilities.

ComReg's Position

7.51 Having considered Respondents' views as summarised and assessed in paragraphs 7.49 to 7.50 above, and having regard to the analysis set out in the Consultation,⁶⁵¹ ComReg has decided to maintain its view as set out in the Consultation.

7.52 ComReg position is that reasonable requests includes, *inter alia*, Dark Fibre and FTTH VUA Integrant ('FVI').⁶⁵²

⁶⁵¹ Paragraphs 8.46 to 8.48 of the Consultation.

⁶⁵² Summary of Eircom Draft Product Specification, 2 March 2017:

- 7.53 ComReg is cognisant that, during the lifetime of this review, the evolution of technology is likely to result in the potential for the development of and demand for new types of Network Access (e.g. access technology supporting wavelength unbundling). ComReg considers that in order to develop and evolve its Network, Eircom must take account of the state of development of, and the roadmap for, networking technology at a particular point in time, when investment decisions are being made. ComReg considers that one input to the decision making process should be reasonable consideration of potential forms of network access which could be required by Access Seekers. In this context ComReg observes that a refusal of an access request by Eircom due to limitations arising from a technology choice or an implementation decision may not be considered reasonable by ComReg.
- 7.54 Eircom shall meet all reasonable requests from undertakings for the provision of Access to Wholesale Local Access including Associated Facilities.
- 7.55 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

The FVI product consist of Layer 2 Ethernet-only access products, giving the Access Seeker full control of network protocols and core transport solutions. The FVI product combines the physical infrastructure owned by Eircom along with the physical infrastructure provided by an Access Seeker. Eircom layer an Ethernet service onto the physical infrastructure to provide the Access Seeker with an access service that resembles the existing NGA FTTH Product.

The FVI product provide an enhanced broadband access service, between the service termination at an End User premises and a WEIL at an Access Seeker's nominated handover point within the Aggregation Node. It supports traffic-based Class of Service to allow time-critical applications, such as Voice over IP, be prioritised. Further flexibility is provided by including Multicast Support, for cost-effective distribution of TV and other broadcast services.

The FVI product is designed to be used with fibre as the physical access medium. The demarcation point would vary, depending on the scenario in which the FVI product is utilised. The demarcation scenarios include:

- (a) Local Aggregation Node - (Access Seeker Facing End)
- (b) "Meet me" closure connected to an existing open Primary Splitter port (subject to port availability), utilising a shared Eircom OLT port - (Access Seeker Facing End). This allows the Access Seeker to potentially serve up to 4 customers.

OR

"Meet me" closure at an existing Eircom closure location, not connected to an Eircom Primary splitter port, and instead utilising a spare fibre to a dedicated Eircom OLT port (subject to fibre/closure/OLT port availability) - (Access Seeker Facing End). This allows the Access Seeker to potentially serve up to 4 customers.




OR

Eircom ODF port (where available), from a dedicated Eircom OLT port, for a scenario where Access Seeker runs their own fibre up to the Eircom ODF - (Access Seeker Customer Facing End).

Unbundled Access Remedies (CG & NG)

Proposed requirements: LLU and LS Access Remedies

Respondents' Views

- 7.56 Two Respondents (Eircom and Vodafone) expressed views on unbundled access remedies.
- 7.57 Vodafone described its Regulated Access Product ('**RAP**') purchase choices with respect to CG wholesale inputs and noted that it does not currently consume LLU, but purchases regulated WCA based Bitstream products provided by Eircom to service its CG retail customer base. However, Vodafone noted and recognised the role that LLU has played in developing a competitive environment in Ireland by providing an alternative route to downstream markets for certain Access Seekers (especially BT Ireland) that have chosen this investment path. Therefore, Vodafone was supportive of the continuation of CG WLA based LLU obligations.
- 7.58 Vodafone explained, in its view, the interrelationship between the WLA Market and the WCA Market, noting that if, as proposed by ComReg, regulated access to WCA products were to be withdrawn in the Urban WCA Market⁶⁵³ Vodafone believed that the resultant competitive conditions in the Urban WCA Market would be insufficient to secure the continued provision of the WCA services that Vodafone depends on. In this respect Vodafone noted:
- [

].⁶⁵⁴
- 7.59 Therefore, Vodafone requested that ComReg consider imposing a requirement on Eircom to provide access to a CG VUA product. Vodafone argued that the proposed de-regulation of the Urban WCA Market⁶⁵³ would weaken competition, because supply-side substitution⁶⁵⁵ is not, from Vodafone's perspective, an economically feasible alternative. Switching its wholesale purchases from WCA products to the purchase of upstream WLA based access products would require Vodafone to unbundle exchanges for the purposes of self-supply of CG WLA services. This approach would not be consistent with Vodafone's historical and current investment strategy of not purchasing CG WLA products and services.
- 7.60 Furthermore, at the retail and wholesale level with the migration from CGA to NGA services, CG retail broadband services are gradually declining. Therefore, new investment for Vodafone in CG WLA based LLU services would be unjustified when compared to other market participants, who have pursued alternative investment strategies, and have already unbundled exchanges for the purposes of purchasing LLU.

⁶⁵³ Discussed in Section 14 of the Consultation (and in Section 13 of this Decision).

⁶⁵⁴ Vodafone Submission, paragraph 77.

⁶⁵⁵ Vodafone supplying a CG retail broadband product based on its purchase of NG WLA based VUA.

- 7.61 Vodafone explained that even in the [redacted] ⁶⁵⁶ exchanges where Vodafone then currently consumed NG VUA services, [redacted] [redacted], because of the differences in the technical implementation of NG WLA based VUA services and CG WLA based LLU services.
- 7.62 If NG WLA and CG WLA services were to use a common handover technology, Vodafone indicated that it could leverage its current VUA support network to provide CG services with limited additional investment when compared to LLU. This would enable Vodafone, through the purchase of an upstream wholesale input (e.g. LS), to self-supply on a more cost efficient basis and therefore benefit competition and ultimately End Users.
- 7.63 Even though Vodafone expects its CG retail broadband subscriber base to decrease over the lifetime of this market review, it indicated that some of its retail customers are likely to continue using CG based retail broadband products. Vodafone considered that this arises as a result of customer inertia, rather than as a consequence of “*active and informed choice*” (i.e. some customers wish to stay with CG broadband services). The absence of an economically viable regulated WLA input that is consistent with Vodafone’s investment strategy may impact End User choice.
- 7.64 Eircom disagreed with ComReg’s proposal to continue to impose the obligation upon Eircom to provide LLU access products on the basis of proportionality and the objective justification for such LLU-based CG WLA remedies. Eircom justifies its position on projected CGA customer numbers.⁶⁵⁷ In this respect, Eircom stated:
- “.....the need to maintain all of the legacy LLU/LS remedies (paragraphs 8.58 to 8.71) would appear extremely questionable, from the perspective of materiality and the requirement on ComReg to forebear from imposing remedies, unless such remedies are proportionate and objectively justified.”⁶⁵⁸*
- 7.65 Later in its Submission, Eircom states that:
- “EVDSL can be unbundled utilising Line Share and the existing rules governing Line Share should be maintained for this variant.”⁶⁵⁹*

⁶⁵⁶ Vodafone Submission, paragraph 70.

⁶⁵⁷ Eircom Submission, page 23 states

“As of Q3 2016 the sum total of LLU and LS lines in the Eircom network was [redacted] (about [redacted] of all fixed lines). This overall figure is declining steadily. At current rates of decline, Eircom estimates that the figure will likely be around [redacted] by the end of 2021 (the lifetime of the review). Between Q2 2015 and Q2 2016 the total number of LLU lines decreased by [redacted] and has declined by [redacted] since Q1 2016. Full LLU lines have decreased by [redacted] since Q2 2015 and have declined by [redacted] since Q1 2016. Shared LLU lines decreased by [redacted] since Q2 2015 and have declined by [redacted] since Q1 2016. Based on this rate of decline a [redacted] figure is likely to be extremely conservative, as the rate of decline is likely to intensify with the accelerated transition to FTTX based services”.

⁶⁵⁸ Eircom Submission, page 23.

⁶⁵⁹ Eircom Submission, page 24.

7.66 Therefore, Eircom appears to support the continuation of CG LS based WLA remedies on the condition that LS access is limited to VDSL technology only.

ComReg's Assessment of Respondents' Views

7.67 Below ComReg addresses Respondents' views as set out in paragraph 7.56 to 7.66 above.

7.68 ComReg notes that Vodafone is supportive of a continuation of CG WLA based access obligations relating to LLU/LS products for the purposes of ultimately serving downstream retail customers using CG services.

7.69 ComReg has considered Vodafone's concerns and views, in particular, the requirement for a new CG VUA-based WLA product variant. In ComReg's view, imposing an obligation requiring that Eircom provide such an access product is not proportionate for a number of reasons. Firstly, there is an alternative SP, namely BT, which is currently offering CG WCA wholesale services⁶⁶⁰ in certain geographic areas within the WCA Markets and Vodafone could purchase wholesale products from wholesale providers such as BT. Secondly, Vodafone could effectively self-supply an equivalent product by buying NG WLA based VUA service (where available and utilised by Vodafone) and using it to provide an equivalent CG retail product that has the same product characteristics as a CG retail broadband provided via a CG WLA LLU/LS product. Finally, Vodafone could purchase LLU/LS products and deploy CG WLA with ADSL or VDSL technology at exchanges⁶⁶¹ enabling Vodafone to market its own CG retail broadband. Given the above, a specific access remedy mandating a new CG VUA-based WLA product variant is neither proportionate nor necessary.

7.70 Eircom claims that the proposed continuation of the CG WLA based LLU and LS access remedies are disproportionate and unjustified. The supporting evidence for this claim is based on Eircom's future market demand trend analysis set out above.⁶⁶²

7.71 ComReg agrees that, over time, there is likely to be a reduction in the reliance by Access Seekers on LLU and LS as End Users migrate to higher speed broadband (and related) services. Such a migration will ultimately result in Access Seekers using NG WLA based services such as VUA. However, a number of Access Seekers have already invested⁶⁶³ in order to use CG WLA services and currently use those wholesale services to provide downstream WCA and/or retail services, either directly or indirectly (in the latter case when selling WCA services using upstream CG WLA inputs), to End Users.

⁶⁶⁰ Selling CG WCA based Bitstream using CG WLA based LLU purchased upstream.

⁶⁶¹ 'Current Generation Wholesale Local Access' or 'Current Generation WLA' means Wholesale Local Access provided over Eircom's current generation copper access network infrastructure and its Associated Facilities (including self-supply by Eircom for the purpose of serving its downstream markets) that is copper-based.

⁶⁶² Refer to paragraph 7.64 above in this Decision.

⁶⁶³ Investment in 6kW DC power supply and Co-Location space.

- 7.72 These Access Seekers should be provided with the opportunity to continue to benefit from that investment, even as the demand for CG broadband declines. These Access Seekers should also be afforded a reasonable opportunity to engage in normal business planning in order to execute an orderly transition from reliance on CG WLA services to NG WLA services.
- 7.73 ComReg considers that it would be unreasonable and premature to remove the obligation to provide LLU and LS. While migrations are taking place (driven by End User demand) there remains a cohort of End Users that still use CG services. In addition, Access Seekers can purchase LLU/LS products and deploy CG WLA with VDSL technology at exchanges thus enabling Access Seekers to market its own CG retail broadband.
- 7.74 It would also be unnecessarily disruptive on those End Users who are consuming a CG retail broadband service (and unwilling to switch to NG retail broadband services) which is reliant on the continued availability of the CG WLA services. Prematurely forcing a change to NG WLA services would cause disruption⁶⁶⁴ to their service as their SP changes to a different wholesale input. In addition, Eircom continues to supply retail customers with CG broadband services.
- 7.75 The continuation of CG WLA services is required as otherwise Access Seekers would be unable to maintain their provision of CG services to End Users in some geographic areas (i.e. those areas where CG WLA services are used, which most likely fall within the Urban WCA Market (given this is where the LLU footprints are largely located). Otherwise, there would be no WLA or fewer downstream WCA inputs available in these areas (on the basis of the de-regulation of the Urban WCA Market).⁶⁶⁵
- 7.76 The potential impact of the removal of the obligation to provide LS and LLU on Access Seekers and End Users is such that ComReg considers that the obligations to provide access to CG WLA services should remain in place.
- 7.77 In relation to Eircom's suggestion that CG WLA based LLU/LS access should be restricted to VDSL technology given the decline for LS/LLU services.⁶⁶⁶ ComReg notes that Line Share enables the sharing of an access path for broadband services (using both ADSL and VDSL technologies). Restricting the use of LS to one broadband technology such as VDSL would be inappropriate, as there are no technical reasons, or regulatory justifications, to impose such an arbitrary restriction.

ComReg's Position

- 7.78 Having considered Respondents' views as summarised and assessed in paragraphs 7.56 to 7.77 above, and having regard to the analysis set out in the Consultation,⁶⁶⁷ ComReg has decided to maintain its view as set out in the Consultation.

⁶⁶⁴ This would include a technician site visit, a change of the NTU/modem, a change to the data port extension and possible changes to internal wiring.

⁶⁶⁵ As discussed in Section 13 of this Decision.

⁶⁶⁶ Refer to paragraph 7.64 above in this Decision.

⁶⁶⁷ Paragraphs 8.58 to 8.71 of the Consultation.

- 7.79 Eircom is required to provide and grant Access to the following particular products and services:
- (a) ULMP;
 - (b) GLUMP; and
 - (c) Shared Access to the Local Loop;
- 7.80 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed requirements: Sub-Loop Unbundled Remedy

Respondents' Views

- 7.81 Eircom expressed the view that the proposed obligations to provide access to SLU (combined with GNP where required) and SSLU should exist both inside and outside areas which have been identified as susceptible to form part of a state subsidy scheme (such as the DCCAE NBP). An exception to this related to those specific requirements set out in the DCCAE NBP contract which will be dictated by State Aid rules.

“Regarding the proposed obligation to provide access to Sub-Loop Unbundling (combined with GNP where required) and Shared Sub-Loop Unbundling, in areas which have been identified as susceptible to form part of a state subsidy scheme, such as the NBP (8.58 to 8.71) eir propose that the same rules in relation to RAP⁶⁶⁸ services provided in the NBP footprint and outside of this footprint should apply except for those specific requirements set out in the DCCAE NBP contract which will be dictated by State Aid rules”⁶⁶⁹

- 7.82 Eircom justified its views by referring to specified criteria that are set out in the 2013 NGA Decision that Eircom considered should be used to assess whether an SLU access request would be reasonable.

“A request will be considered unreasonable if:

FTTC/Vectoring rollout has taken place or is imminent or credibly scheduled by an operator deploying FTTC.

The SLU operator fails to commit to next generation wholesale access (VUA/Bitstream).

The SLU operator fails to commit to bandwidth enhancing technology where it is possible.

A request will be considered reasonable if:

The request for SLU is at a cabinet or in an exchange area where NGA rollout and vectoring enablement has not already taken place and is not imminent or credibly scheduled; and

There is a commitment to open access by the SLU operator;

⁶⁶⁸ Regulated Access Product ('RAP').

⁶⁶⁹ Eircom Submission, page 24.

There is a commitment by the Access Seeker to bandwidth enhancing technology (BET), where it is possible”.

- 7.83 Eircom noted that it had upgraded its network and deployed approximately 6,000 FTTC Vectoring cabinets, and that these cabinets are, therefore, not currently eligible for sub-loop unbundling. Eircom also noted that it had, in fact, not received any requests for SLU since the obligation was first imposed. For these reasons, therefore, Eircom considered that the SLU obligation should be withdrawn.
- 7.84 Eircom also stated that “*Sub-loop unbundling is not possible for FTTH.*”⁶⁷⁰ However, Eircom pointed to the statement in the Consultation⁶⁷¹ that spectrum unbundling (via WDM-PON)⁶⁷² may be available in the future, and indicated that this technology is not in operation today.
- 7.85 Eircom also stated that “*VUA is available today in FTTH, CVDSL and EVDSL.*”⁶⁷³ Eircom stated that VUA is the remedy that should be applied in both the NBP area and outside of it, except for those specific requirements set out in the DCCAE NBP contract which will be dictated by State Aid rules. In view of this it considered that SLU access obligations were unnecessary.

ComReg’s Assessment of Respondents’ Views

- 7.86 ComReg disagrees with Eircom (per paragraph 7.81 above) that the requirements of the DCCAE’s NBP contract where they apply to SLU/SSLU should apply in NBP areas - even in cases where they differ from SMP regulation. NBP contractual terms are relevant to the procurement process for this State subsidised scheme. These contractual terms are a matter for DCCAE and arise independently of, and separately to, SMP regulation. ComReg may, nonetheless, have regard to the effect of the NBP once it is implemented and its effects are known. However, in assessing the appropriateness of imposing an SLU/SSLU obligation ComReg has considered the potential demand for SLU/SSLU arising in areas susceptible to form part of a state subsidised scheme.
- 7.87 In the Consultation,⁶⁷⁴

⁶⁷⁰ Eircom Submission, page 24.

⁶⁷¹ Please see paragraphs 8.84 to 8.85 of the Consultation which stated:

“ComReg engaged WIK Consult GmbH to consider and to report on the feasibility of TWDM-GPON as a potential access remedy. In June 2016 WIK produced a report for ComReg setting out its findings (‘WIK GPON and TWDM-GPON Report’), a copy of which is attached at Appendix: 9 to this Consultation. In summary, TWDM-GPON is a nascent technology that has been recently standardised the deployment of which has been very limited.

Having regard to the WIK GPON and TWDM-GPON Report and considering the timeline for technology adoption and network rollout, in ComReg’s preliminary view, TWDM-GPON is unlikely to be a technically or economically feasible access network technology during the lifetime of this market review”

⁶⁷² Wavelength-division multiplexing passive optical network.

⁶⁷³ Eircom Submission, page 24.

⁶⁷⁴ See page 275 of the Consultation.

“ComReg notes that there are limitations arising from vectoring technology whereby two Operators cannot independently implement vectoring on copper pairs in the same copper binder. ComReg considers that due to the extent of Eircom’s rollout of cabinet based vectored services, and in consideration of these limitations, it would not be reasonable to maintain the obligation on Eircom to meet reasonable requests for SLU. However Eircom’s NGA rollout has been limited to certain areas and, in general, Eircom have not rolled out NGA services in less populated and more rural areas. These areas broadly align with the areas targeted for State intervention as part of a State Subsidy Scheme.”⁶⁷⁵

7.88 In the Consultation,

“ComReg notes that the obligation to provide SLU is limited to areas which have been identified as susceptible to form part of a state subsidy scheme, such as the National Broadband Plan.”⁶⁷⁶

7.89 ComReg disagrees with Eircom’s views summarised in paragraphs 7.83 to 7.85 above given ComReg’s views as outlined in the Consultation (see paragraphs 7.87 to 7.88 above)

7.90 ComReg agrees that if the demand for SLU/SSLU does not emerge in the medium term, including in the context of the NBP, then SLU as an obligation could be withdrawn. Such a request for withdrawal from Eircom would be considered by ComReg at that time.

ComReg’s Position

7.91 Having considered Respondents’ views as summarised and assessed in paragraphs 7.81 to 7.90 above, and having regard to the analysis set out in the Consultation,⁶⁷⁷ ComReg has decided to maintain its view as set out in the Consultation.

7.92 Eircom is required to provide and grant Access to the following particular products and services:

- (a) Sub-Loop Unbundling, combined with GNP where required, and Shared Sub-Loop Unbundling in areas which have been identified as susceptible to form part of a state subsidy scheme.

7.93 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed requirements: VUA Remedy

Respondents’ Views

7.94 Vodafone’s Submission was supportive of the continuation of access obligations relating to NG WLA based FTTx VUA products and services.

⁶⁷⁵ For example, the current State Subsidy Scheme is the National Broadband Plan which is being run by the Department of Communications, Climate Action and Environment.

⁶⁷⁶ See page 24 of the Consultation.

⁶⁷⁷ Paragraphs 8.58 to 8.71 of the Consultation.

- 7.95 Vodafone explained that VUA is a significant part of Vodafone's activity as it seeks to build its presence in the provision of retail NG services and thus provide a competitive challenge to Eircom. Vodafone claimed that the absence of a properly regulated NG WLA based VUA product would seriously undermine its ability to compete with Eircom.
- 7.96 Eircom supported ComReg's proposed imposition of an obligation to provide access to NG WLA based FTTx VUA.

ComReg's Assessment of Respondents' Views

- 7.97 Below ComReg addresses Respondents' views as set out in paragraph 7.94 to 7.96 above.
- 7.98 ComReg notes Respondents' broad agreement that the obligations should be imposed requiring Eircom to provide access to NG WLA based VUA (including FTTC, FTTH and EVDSL based VUA) with GNP, where required.⁶⁷⁸ The justification for this obligation is outlined below.
- 7.99 Eircom's VUA product is a wholesale Layer 2⁶⁷⁹ access product that enables the handover and interconnection of aggregate End User traffic at the Metropolitan Point of Presence ('**MPoP**').⁶⁸⁰
- 7.100 The standard VUA product set includes three distinct variants, FTTH-based VUA, FTTC-based VUA ('**CDVDSL**')⁶⁸¹ and Exchange Launched VUA ('**EVDSL**'). All VUA products are also available on a standalone basis.⁶⁸²
- 7.101 The three VUA variants have different characteristics, the primary difference being the achievable bit rate.⁶⁸³ The demarcation points at the End User's premises (i.e. the Network Termination Unit ('**NTU**')⁶⁸⁴) and at the point of interconnection,⁶⁸⁵ are the same for both CDVDSL and EVDSL based VUA types. FTTH VUA requires an Optical Termination Unit ('**ONT**') at the demarcation point at the End Users premises. All variants of the VUA product are in scope with respect to the considerations below concerning related access obligations.

⁶⁷⁸ Refer to paragraphs 8.72 to 8.84 of the Consultation.

⁶⁷⁹ Layer 2 Ethernet-only access – As the service is offered at Layer 2 this allows Access Seekers to differentiate their services above Layer 2 of the OSI reference model i.e. at Layer 3, the Internet Protocol Layer, and above.

⁶⁸⁰ Metropolitan Point of Presence ('**MPoP**') means the point of inter-connection between the access and core networks of an undertaking.

⁶⁸¹ A Cabinet based VDSL ('**CDVSL**') service means that the active VDSL equipment required to provide the broadband service is housed in an Eircom street cabinet.

⁶⁸² Standalone VUA is the supply of a VUA service without a SB-WLR/POTS-based telephony service.

⁶⁸³ Bit rate means the number of bits per second that can be transmitted along a network path.

⁶⁸⁴ As described in the Consultation, Network Termination Unit ('**NTU**') means the equipment that resides at the demarcation point between the access network and End Users' network or CPE.

⁶⁸⁵ Wholesale Ethernet Interconnection Link ('**WEIL**') is the interconnection service provided by Eircom which provides a handover for various wholesale products including its NGA (VUA and Bitstream Plus) and NGN (NGN Logical service) wholesale products.

- 7.102 ComReg also considers that it is necessary to have an option to combine VUA with GNP. When GNP is combined with a service such as VUA, the End User's telephone number can be transferred from Eircom to the Access Seeker at the same time as the VUA service is delivered (and vice versa). This facilitates an efficient switching process that is to the benefit of competition and ultimately End Users.
- 7.103 ComReg considers the imposition of an obligation to provide access to VUA (including with GNP) is justified and proportionate. Such obligations are justified because they promote competition by providing access to essential facilities which are necessary to facilitate the development of effective competition. Absent regulation, ComReg's view is that Eircom, as a vertically integrated undertaking with SMP in the WLA Market, has the ability and incentive to refuse to provide access to VUA products, services and facilities.
- 7.104 Without access to VUA, competition would not be effective. This is because the level of investment required by a third party to rollout the fibre or copper necessary to replicate Eircom's access network would be of such a scale as to be a barrier to entry and/or expansion. This would ultimately reduce the effectiveness of competition, to the detriment of End Users.
- 7.105 In this respect, access to VUA products and services is necessary to ensure the development of sustainable and effective downstream competition and to minimise foreclosure concerns that could arise, absent such regulation. ComReg considers the proposed VUA access obligation to be proportionate as it is required to promote and foster infrastructure competition, and does not place an unreasonable burden on Eircom.
- 7.106 VUA products and services have already been developed by Eircom and are available and in use by Access Seekers at [redacted] MPOPs in Eircom's network.⁶⁸⁶ Considering the uptake of FTTx-based access services to date and expected trends,⁶⁸⁷ in ComReg's view VUA is one of the relevant wholesale products which is key to supporting the development of sustainable competition.
- 7.107 ComReg is of the view that Access Seekers and Eircom will continue to increase their use of VUA products during the lifetime of this review, particularly as End Users opt for higher speed broadband and associated services.
- 7.108 As part of the review of the WLA Market, ComReg considered emerging virtual access technologies and developments which could potentially offer virtual forms of fibre based access as alternatives to VUA. One technology which was given particular consideration due to its advanced state of development is Wavelength Division Multiplexing ('WDM')⁶⁸⁸ access.

⁶⁸⁶ Open eir NGA Deployment Plan (V60.0 October 2017).

⁶⁸⁷ With reference to Q2 2017 ComReg Quarterly Key Data Report (QKDR);

www.comreg.ie/industry/electronic-communications/market-information/quarterly-key-data-report

⁶⁸⁸ Wave Division Multiplexing ('WDM') is a technology which multiplexes (combines) more than one optical carrier (wavelength) on to same optical fibre or optical distribution network. WDM enables one or more SPs to use the same Access Path to provide services to End Users.

7.109 In this respect, ComReg engaged WIK Consult GmbH⁶⁸⁹ to consider and to report on the feasibility of TWDM-GPON⁶⁹⁰ as a potential access remedy. In June 2016 WIK produced a report for ComReg setting out its findings (**‘WIK GPON and TWDM-GPON Report’**),⁶⁹¹ a copy of which was included in the Consultation. In summary, TWDM-GPON is a nascent technology which has been standardised recently, the deployment of which has been limited to date.

7.110 ComReg notes that developments in virtual access technologies (e.g. NG-PON2),⁶⁹² which could potentially offer virtual forms of fibre based access as alternatives to VUA, are progressing rapidly. In this respect a 2017 BEREC PON Report⁶⁹³ notes:

“...in Europe NG-PON2 is currently in a state of lab tests and field trials and not in a state of first deployments or beginning of mass market deployment. Mass deployments of NG-PON2 (TWDM PON) are expected to begin around 2019/2020”.

7.111 Having regard to the WIK GPON/TWDM-GPON and the recent BEREC Report (October 2017) and considering the timeline for technology adoption and network rollout, ComReg’s position is that access to specific virtual access technologies will be on the basis of reasonable requests submitted by Access Seekers during the lifetime of this market review.

ComReg’s Position

7.112 Having considered Respondents’ views as summarised and assessed in paragraphs 7.94 to 7.111 above, and having regard to the analysis set out in the Consultation,⁶⁹⁴ ComReg has decided to maintain its view as set out in the Consultation.

7.113 Eircom is required to provide and grant Access to the following particular products and services:

- (a) VUA which includes, without limitation, the following;
 - (i) FTTC-based VUA;
 - (ii) FTTH-based VUA; and
 - (iii) Exchange launched VUA.

⁶⁸⁹ WIK-Consult is a research and advisory institute for communications services.

⁶⁹⁰ Time Wavelength Division Multiplexing Gigabit Passive Optical Networking (**‘TWDM GPON’**), is a network architecture which can provide 80G of capacity with eight wavelengths of 10G each.

⁶⁹¹ The WIK GPON and TWDM GPON Report is set out in Appendix 9 of the Consultation.

⁶⁹² New forms of sharing Passive Optical Networks (**‘PON’s**) have become possible, for example, the new PON standard NG-PON2 (G.989.2), which was approved by the ITU in December 2014. NG-PON2 uses several wavelengths per direction over the same PON fibre infrastructure to serve multiple End Users. This raises the opportunity that several network operators share the same PON fibre infrastructure and each deploys its own NG-PON2 equipment and uses different wavelengths.

⁶⁹³ BEREC Report on the New Forms of Sharing Passive Optical Networks Based on Wavelength Division Multiplexing, BoR (17) 182, 5 October 2017(‘2017 BEREC PON Report’), page 3.

⁶⁹⁴ Paragraphs 8.72 to 8.84 of the Consultation.

(b) VUA, combined with GNP where required;

7.114 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed requirements: Fibre Loop Unbundled Remedy

Respondents' Views

7.115 Vodafone agreed with ComReg's preliminary view in the Consultation⁶⁹⁵ that Fibre Loop Unbundling ('**FLU**') is not likely to be the predominant means of WLA supply during the lifetime of this review, but acknowledged that this could change. Therefore, Vodafone supported ComReg's proposal that an obligation should be imposed on Eircom to meet reasonable requests for access to FLU but that an obligation mandating access to a specific FLU product is not required at this point.

7.116 Eircom disagreed with ComReg's proposal that Eircom should be subject to an obligation requiring it to meet reasonable requests for access to FLU. Eircom justified its position by reference to extracts from ComReg's WIK GPON and TWDM GPON Report⁶⁹⁶ that indicated that FLU is not an economically feasible option for physical unbundling of fibre access infrastructure in a Point to Multipoint ('**PTMP**') network topology. Eircom suggested that the only option for supporting WLA Market demand for unbundling for a GPON-based⁶⁹⁷ NGA network is a VULA product⁶⁹⁸ or VUA product.

7.117 Eircom also stated that an FLU access remedy is an impractical solution and WDM-PON⁶⁹⁹ may be a more workable alternative to FTTH-based VUA in the future, if there is demand for this.

ComReg's Assessment of Respondents' Views

7.118 ComReg notes Vodafone's views summarised in paragraph 7.115 above.

⁶⁹⁵ See paragraphs 8.85 to 8.88 of the Consultation.

⁶⁹⁶ The WIK GPON and TWDM GPON Report states at page 39 that:

"There is no economically feasible option for physical unbundling of the fibre access infrastructure of a PtMP topology unless in very densely populated areas and if the splitters are not cascaded"

⁶⁹⁷ Gigabit Passive Optical Networks ('**GPON**').

⁶⁹⁸ In the Consultation, ComReg refers to VULA products to be a type of virtual unbundled local access product. Eircom offers a wholesale VULA product called VUA.

⁶⁹⁹ Wavelength-Division Multiplexing Passive Optical Networks ('**WDM-PON**').

- 7.119 ComReg disagrees with Eircom's view (noted in paragraph 7.116 above) that it should not be subject to an obligation requiring it to meet reasonable requests for access to FLU. While presently FLU may not be an economically feasible option for physical unbundling of fibre access infrastructure in a PTMP network topology, this may change in the future given current technological developments (e.g. NG-PON2). ComReg is not proposing to require Eircom to provide access to specific FLU access product. However, ComReg will continue to monitor both demand for FLU and developments in virtual access technologies.
- 7.120 An Access Seeker may, during the lifetime of the market review, make a request to Eircom for FLU, at which point an assessment by Eircom of the reasonableness of such a request should be made. This assessment could be informed by, but not limited to, the state of development of virtual access technology, its availability and use
- 7.121 ComReg has considered Eircom's feedback,⁷⁰⁰ and has amended the definitions of FLU and FTTH. The definitions in the Consultation were:
- (a) "Fibre Loop Unbundling" or "FLU" means where an Access Seeker rents access to the fibre loop and uses it to supply services to its customers either on a wholesale or retail basis. Fibre Loop Unbundling includes both physical and also non-physical access, such as but not limited to WDM. The Section of Eircom's access network that provides access into the End User premises (whether residential, business or other premises). It runs between the ODF or equivalent and the relevant End User premises; and
 - (b) "Fibre to the Home" or "FTTH" means fibre to the home which is a variant of the FTTN access network architecture where fibre is used to connect the end-user premises to the Exchange.
- 7.122 The amended definitions of FLU and FTTH are as set out in the Decision Instrument in Appendix: 20, Section 2 of this Decision. The amended definitions are as follows:
- (a) "Fibre Loop Unbundling" or "FLU" means where an Access Seeker rents access to the Fibre Loop and uses it to supply services to its customers either on a wholesale or retail basis and includes both physical and virtual access, such as but not limited to WDM; and
 - (b) "Fibre to the Home" or "FTTH" means an access network architecture whereby fibre optic cable is used to connect the End-User premises to the ODF in an Exchange.

ComReg's Position

- 7.123 Having considered Respondents' views as summarised and assessed in paragraphs 7.115 to 7.121 above, and having regard to the analysis set out in the Consultation,⁷⁰¹ ComReg has decided to maintain its view as set out in the Consultation.

⁷⁰⁰ Eircom's Submission, page 73.

⁷⁰¹ Paragraphs 8.85 to 8.88 of the Consultation.

7.124 Eircom is required, subject to reasonable requests, to provide and grant Access to the following particular products and services:

(a) Unbundled Access to the Fibre Loop.

7.125 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Associated Facilities Remedies

Proposed Requirement: To provide access to Co-Location, Co-Location Resource Sharing and Co-Location Rack Interconnection

Respondents' Views

7.126 Two Respondents (Eircom and Vodafone) expressed views on ComReg's proposed obligations⁷⁰² requiring Eircom to provide access to Co-Location, Co-Location Resource Sharing and Co-Location Rack Interconnection.

7.127 Vodafone supported ComReg's proposed Co-Location obligations.

7.128 Eircom disagreed with ComReg's proposed Co-Location obligations, in particular, the proposal for Co-Location Rack Interconnection services and the proposed broadening of the scope of Co-Location to enable access to third party masts at Eircom exchange sites to facilitate wireless backhaul associated with the purchase of WLA.

7.129 Eircom noted that it sold its masts to Towercom in 2007 and that it is unlikely to build masts in the future. Therefore, in Eircom's view the proposed obligation is disproportionate. Eircom stated that Towercom⁷⁰³ is a major mast network operator in Ireland. Eircom sold its mast business to Towercom in September 2007. Therefore, in Eircom's view, it would be more suitable to impose a Co-Location obligation on Towercom in a separate 'mast market

7.130 Eircom also referenced the EU guidelines on the application of State aid rules to Broadband noting that "...in any event that the NBP will have such a remedy...".⁷⁰⁴

7.131 Eircom, therefore considered that it is not necessary to impose a Co-Location obligation to facilitate mast usage as a result of a market review.

7.132 In its Submission, Eircom argued that access to masts is unnecessary and that there is no demonstrated market failure. Eircom supported its view by quoting statistical data on wireless data circuits in Dublin area. It also noted that Eircom offers commercial wireless backhaul service to wireless operators. Therefore, in Eircom's view there is no bottleneck to justifying the imposition of the obligation.

⁷⁰² See paragraphs 8.91 to 8.114 of the Consultation.

⁷⁰³ <https://www.towercom.ie>.

⁷⁰⁴ Eircom Submission, page 25.

- 7.133 On Co-Location Rack Interconnection services Eircom argued that it does not accept that such an obligation is in any way necessary to ensure competition in downstream markets and that ComReg had not adequately explained why Co-Location Rack Interconnection is necessary.
- 7.134 Eircom also argued that Co-Location Rack Interconnection is not an Associated Facility within the meaning of the Framework Regulations, i.e. Eircom's position is that Co-Location Rack Interconnection is not required to enable Access Seekers to avail of the WLA services which Eircom is being obliged to provide. Therefore, in Eircom's view, the imposition of this obligation would constitute an unjustifiable encroachment upon Eircom's constitutional right to private property.
- 7.135 Eircom set out its view that the proposed Co-Location Rack Interconnection service has nothing to do with the provision of WLA services, but actually enables Access Seekers to interconnect their networks at Eircom premises i.e. exchanges.

ComReg's Assessment of Respondents' Views

- 7.136 ComReg notes that Vodafone supported ComReg's proposal to impose access obligations on Eircom in relation to Co-Location, Co-Location Resource Sharing and Co-Location Rack Interconnection.
- 7.137 ComReg disagrees with Eircom's view that Co-Location Rack Interconnection services are not an Associated Facility or service within the meaning of the 2011 Framework Regulations.
- 7.138 Associated Facilities are defined in the Framework Regulations⁷⁰⁵ as:

*“those associated services, physical infrastructures and other facilities or elements associated with an electronic communications network or an electronic communications service **which enable or support** the provision of services via that network or service or have the potential to do so and include, among other things, buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes and cabinets”*
[EMPHASIS ADDED]

- 7.139 Associated Services are defined in the Framework Regulations⁷⁰⁶ as:

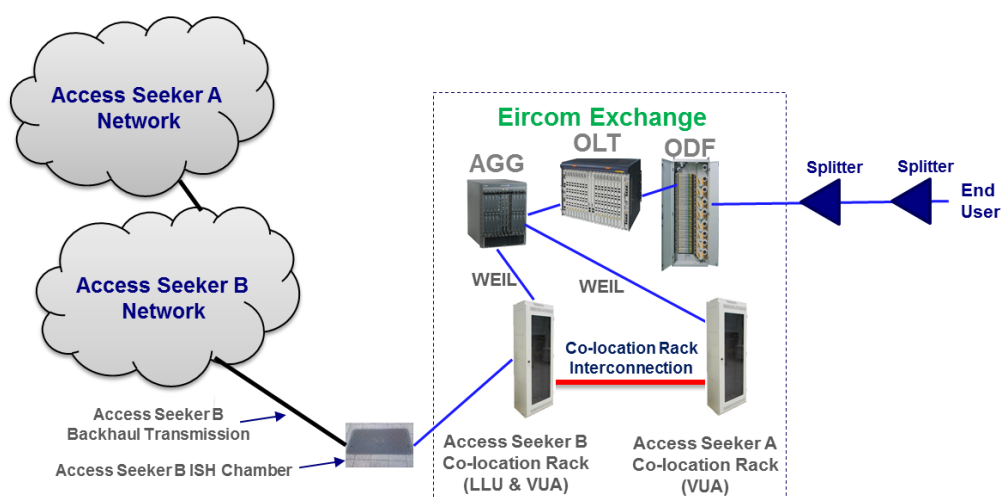
*“those services associated with an electronic communications network or an electronic communications service **which enable or support** the provision of services via that network or service or have the potential to do so and include, among other things, number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides, as well as other services such as identity, location and presence services.”*
[EMPHASIS ADDED]

⁷⁰⁵ Regulation 2 of the Framework Regulations.

⁷⁰⁶ *Ibid.*

- 7.140 ComReg notes that Co-Location Rack Interconnection *enables and supports the provision of WLA products, services and facilities* and, therefore, it is ComReg's position that it falls within the definition of Associated Services and Associated Facilities as defined in the Framework Regulations. The manner in which Co-Location Rack Interconnection supports the provision of services can be demonstrated by the following example.
- 7.141 In order to provide services to End Users, Access Seeker 'A' may install equipment in a rack on a Co-Location footprint within an Eircom exchange (or equivalent). Connectivity is then required between the equipment in Access Seeker A's Co-Location footprint and Access Seeker A's network in order to route traffic to and from the End User, thus enabling the provision of broadband and other services to End Users.
- 7.142 Access Seeker B is also co-located in the same exchange (or equivalent) and has infrastructure that allows connectivity between Access Seeker B's Co-Location (in Eircom's exchange) and Access Seeker B's network. Using Co-Location Rack Interconnection, Access Seeker A can establish a connection between Access Seeker A's equipment in its Co-Location footprint (in Eircom's exchange) to equipment in Access Seeker B's rack (also within its Co-Location footprint within the Eircom exchange) using Co-Location Rack Interconnection.
- 7.143 In this way, connectivity from equipment in Access Seeker A's Co-located rack to Access Seeker A's network can effectively be achieved via a backhaul service offered by Access Seeker B. In that way Co-Location Rack Interconnection enables and supports the take-up of WLA services and the provision of downstream services, including to End Users. This Co-Location Rack Interconnection can result in lower costs for Access Seekers as they may be able to avail of an alternative backhaul service from other Co-located Access Seekers. Allowing Access Seekers to share backhaul increases their economies of scale and scope thereby reducing barriers to WLA take-up and encouraging deeper infrastructure competition.

Figure 17: Co-Location Rack Interconnection



7.144 Figure 17 illustrates an example of the use of Co-Location Rack Interconnection referred to in paragraphs 7.141 to 7.143 above. In this example, Access Seeker B purchased LLU and VUA from Eircom, installing its own backhaul transmission to its network. Access Seeker A purchased VUA from Eircom with connectivity from its equipment in its Co-Location rack in Eircom exchange to its network achieved via a backhaul service offered by Access Seeker B facilitated by the Co-Location Rack Interconnection service.

7.145 ComReg notes that Eircom states that:

“eir does not accept that Co-Location Rack Interconnection is in any way “necessary” to ensure competition in markets downstream from WLA and notes that ComReg has provided no explanation why it is “necessary”, as it contends.”⁷⁰⁷

7.146 ComReg notes that the degree to which competition is sustainable is dependent on a number of factors. Competition arising from investment by Access Seekers in infrastructure is likely to be more sustainable in the long term (relative to services based competition) and this sustainability is underpinned, *inter alia*, by potentially lowering Access Seekers’ effective costs thereby improving Access Seekers’ ability to take-up WLA-based services.

7.147 Artificial barriers preventing the effective and efficient use of Co-Location services and facilities undermines the sustainability of competition, as such barriers raise Access Seekers’ costs and reduce their opportunities to reasonably avail of WLA products.

7.148 This, in turn, dampens downstream competition to the ultimate detriment of End-Users. Optimisation of Co-Location enhances competition by reducing effective costs through sharing backhaul services associated with WLA.⁷⁰⁸

7.149 There is evidence of demand⁷⁰⁹ from Access Seekers for such connectivity. ComReg is aware of two separate requests having been made to Eircom by Access Seekers for connectivity between the Access Seeker’s Co-Location footprints, such that one Access Seeker could provide backhaul services to the other in order to provide services to End Users. Both requests were refused by Eircom.

7.150 ComReg considers, therefore, that imposing an obligation on Eircom requiring it to provide access to Co-Location Rack Interconnection will encourage efficient investment in infrastructure, and in doing so promote sustainable competition and innovation to the ultimate benefit of End Users in terms of choice, price and quality.

⁷⁰⁷ Eircom Submission, page 25.

⁷⁰⁸ “Backhaul” means the provision of dedicated transmission capacity (contended or uncontended in accordance with an OAO’s requirement) by Eircom at various bandwidths, using an appropriate mechanism (e.g. Ethernet or fibre) between an OAO’s equipment at the Co-Location site and the OAO’s nominated Point of Handover or between an OAO’s equipment at the Co-Location site and the Eircom exchange.

⁷⁰⁹ [REDACTED].

7.151 For the reasons outlined above (and in the Consultation),⁷¹⁰ ComReg's position is that obligations requiring Co-Location Rack Interconnection services enable the supply of WLA services to downstream markets. Therefore, access to Co-Location Rack Interconnection promotes long-term sustainable competition and therefore ultimately benefits End Users.

7.152 Eircom also states in its Submission that:

*“Co-located rack interconnection between access seekers has nothing to do with the provision by eir of WLA services. It is concerned with requiring eir to allow the use of its premises by Access Seekers so that they can provide interconnection services to each other.”*⁷¹¹

7.153 For the avoidance of doubt, as explained in paragraphs 7.138 to 7.151 above, ComReg considers that Co-Location Rack Interconnection services fall within the meaning of an Associated Facility and Associated Service with respect to WLA. ComReg is not, however, proposing that an Eircom exchange (or equivalent) be used by an Access Seeker as a hosting centre.

7.154 When considering the regulatory burden for Eircom of implementing Co-Location Rack Interconnection, ComReg has considered the following three deployment scenarios.

- (a) **Scenario 1:** The racks are immediately adjacent to each other and the Access Seeker's technician connects a fibre or copper cable between the Access Seekers' racks.
- (b) **Scenario 2:** The racks are not adjacent to each other, but there is a cable tray to enable the routing of fibre between the two racks by the Access Seeker's technician.
- (c) **Scenario 3:** The racks are not adjacent to each other and there is no cable tray to facilitate Co-Location Rack Interconnection. In this case, construction work may be required e.g. Eircom installs a cable tray between Co-Location racks.

7.155 In the case of deployment Scenario 1 and Scenario 2 above, the burden on Eircom is likely to be minimal as the work to facilitate Co-Location Rack Interconnection could be completed by the Access Seeker's technician (as previously explained in the Consultation).⁷¹² In the case of Scenario 3 above, there are long established Quote for Infrastructure Build ('**QIB**') and Provide Infrastructure Build ('**PIB**') wholesale processes that are available to facilitate the construction of cable trays and the installation of fibre/copper connectivity, if needed.

⁷¹⁰ See paragraphs 8.106 to 8.112 of the Consultation.

⁷¹¹ Eircom Submission, page 26.

⁷¹² See paragraphs 8.106 to 8.112 of the Consultation.

- 7.156 In its Submission, Eircom states that an obligation to provide access to Co-Location services (generally) is a very intrusive remedy, whereby the SMP operator must provide access to its property and thereby interferes with its property rights. It is on this basis that Eircom asserts that Co-Location should only be mandated where such intrusion is actually necessary to ensure that Access Seekers may rely on the services which Eircom is obliged to provide.
- 7.157 It is correct to state that Eircom has a right under Article 43 of the Constitution to private property. However, it is also the case that this right is not absolute and may be limited by the principles of social justice and addressing the common good. Consequently, the exercise of such rights may be restricted, provided that any restrictions correspond to ComReg's statutory objectives and do not constitute a disproportionate and excessive interference, impairing the very substance of the rights guaranteed.
- 7.158 The proposed Co-Location obligations have been justified above (and in the Consultation)⁷¹³ as a means of promoting sustainable competition in downstream markets, to the ultimate benefits of End Users. As set out above, the proposed Co-Location access obligations are required to enable and support the provision of services by Access Seekers via a range of WLA access products including VUA and/or LLU.
- 7.159 In the absence of an obligation requiring access to Co-Location services, the effectiveness of the obligations requiring Eircom to provide access to the mandated WLA products/services would likely be undermined, compromising the objective of ensuring the development of effective downstream competition. In this respect, ComReg notes in Section 6 that Eircom has the ability and incentive to refuse to provide access and, hence the specific obligations are being imposed.
- 7.160 It would appear that Eircom may have misunderstood ComReg's proposed broadening of the scope of Co-Location to enable access to third party masts at Eircom exchange sites to facilitate wireless backhaul associated with the purchase of WLA.
- 7.161 ComReg is aware that Eircom sold its mast real-estate in 2007 and, therefore, was not proposing to require third-party access to masts that no longer belong to Eircom. The obligations proposed by ComReg relate only to requirements for Eircom to provide access to Co-Location facilities that enables Access Seekers to use third party masts located at Eircom exchange (or equivalent) sites. Access to third party mast infrastructure will be by commercial agreement between mast provider and the Access Seeker.
- 7.162 ComReg notes that the proposed modification to the current Co-Location obligation is specifically to include all the necessary facilities and services to connect an Access Seeker's equipment in its co-located rack within the Eircom exchange to the third party masts located on the curtilage of Eircom exchange sites.

⁷¹³ See paragraphs 8.91 to 8.114 of the Consultation.

- 7.163 In addition, ComReg notes that potential requirements of the NBP contract(s) are not a substitute for remedies to address SMP-related competition problems in regulated markets and ComReg therefore disagrees with Eircom's views in this regard.
- 7.164 As Eircom self-supplies services and facilities that enables its use of commercial third party mast infrastructure provided at Eircom's exchange sites. The proposed modification to the Co-Location obligation is to ensure that Access Seekers have access to the same services and associated facilities as Eircom self-supplies.
- 7.165 ComReg has considered Eircom's comments and, in imposing the Co-Location obligations, has balanced its property rights (and entitlement to exploit its infrastructure for its own benefit) and the rights of other Access Seekers to access facilities that are essential for the provision of competing services.

ComReg's Position

- 7.166 Having considered Respondents' views as summarised and assessed in paragraphs 7.126 to 7.165 above, and having regard to the analysis set out in the Consultation,⁷¹⁴ ComReg has decided to maintain its view as set out in the Consultation.
- 7.167 Eircom is required to provide and grant Access to the following particular products and services:
- (a) Co-Location generally and in particular for the following;
 - (i) Co-Location for Interconnection services
 - (ii) Co-Location Resource Sharing; and
 - (iii) Co-Location Rack Interconnection;
- 7.168 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Requirements to provide access to Migrations⁷¹⁵

Respondents' Views

- 7.169 Three of eight Respondents (Eircom, Sky and Vodafone) provided views on the proposed obligation requiring Eircom to provide access to Migrations.

⁷¹⁴ Paragraphs 8.91 to 8.112 of the Consultation.

⁷¹⁵ "Migration(s)" means where the upstream wholesale input used to supply a retail service is changed whilst maintaining services to the End User, irrespective of whether or not the supplier at the retail level changes. For the avoidance of doubt, Migrations include but are not limited to Migrations:-(i) between all Next or Current Generation WLA services in any direction; (ii) between Next or Current Generation WLA and Next or Current Generation WCA in any direction; (iii) VUA Soft Migrations; and (iv) Bulk Migration;

"(Bulk) Migration" means the facility whereby an Access Seeker can have multiple Migrations facilitated via a single request;

7.170 Vodafone stated that effective migration processes are vital to the development of a competitive landscape.⁷¹⁶ Vodafone noted it is following [redacted]

7.171 Vodafone stated that without effective Migrations, it is not possible for Vodafone to use Eircom WLA products to compete for retail customers, to invest and maintain its customer base accordingly, or to meet customer demand for new and improved products. Vodafone therefore supports ComReg's proposal that an obligation should be imposed upon Eircom requiring it to provide access to Migrations.

7.172 Eircom considered that Migrations processes should be efficient, swift and are key to a properly functioning market and are therefore key to the operation of a competitive market and require pan-industry processes and agreements.

7.173 Eircom stated that it expects:

*"ComReg to apply migration principles reciprocally and seeks a clear commitment to that effect rather than the imposition of additional remedies on eir, which are disproportionate"*⁷¹⁷

7.174 These Respondents then offered specific comments on the following areas:

- (a) Obligations requiring access to VUA Soft Migrations (discussed in paragraphs 7.179 to 7.183 below).
- (b) Reverse Migrations (discussed in paragraph 7.191 below).

ComReg's Assessment of Respondents' Views

7.175 ComReg agrees with Vodafone's view that efficient migration processes are essential to well-functioning and competitive downstream markets.

7.176 ComReg also agrees with Eircom's view that Migrations processes should be efficient, swift and are key to a properly functioning market.

7.177 The proposed Migrations obligation is to support the ability for Access Seekers (and Eircom) to efficiently and swiftly switch between various wholesale access products (including those in other regulated markets such as the WCA Markets). Eircom has a central role in the design and implementation of Migration processes and therefore is ultimately responsible for ensuring their effectiveness and efficiency.

7.178 In relation to Eircom's view (as noted in paragraph 7.173) on the reciprocal application of migration principles and Eircom's request for ComReg to make a clear commitment to that effect. In ComReg's view it would be inappropriate for ComReg to make such a commitment. However, ComReg will continue to discharge its functions as required.

'VUA Soft Migrations' means the facility whereby an End User can migrate from SB-WLR with VUA to standalone VUA without the need for physical network intervention at the time of provisioning and must include the porting of their telephone number from the current SP, if required.

⁷¹⁶ Vodafone Submission, paragraph 85.

⁷¹⁷ Eircom Submission, page 26.

Obligations requiring access to VUA Soft Migrations**Respondents' Views**

- 7.179 Vodafone agreed with ComReg that a migration from combined SB-WLR and VUA to standalone VUA or to standalone VUA combined with number porting should be treated as a VUA Soft Migration.
- 7.180 Vodafone supported the VUA Soft Migration requirement noting that the current process means that Migrations (whether Bulk Migrations or individual Migrations) can only take place when an Eircom field engineer is available to recover the physical 'jumper'.⁷¹⁸ Vodafone considered this to be hugely inefficient, and that it constituted a serious and artificial impediment to Access Seekers, given that Migration volume throughput is '*severely limited*'⁷¹⁹ by the absence of a VUA Soft Migration feature.
- 7.181 Vodafone supported a rapid move to a VUA Soft Migration process, where low cost software-based Migrations can be carried out in a timely manner and without limits on the volume of Migrations. Vodafone noted that the 'jumpers' can then be recovered by Eircom engineers at a later stage, at Eircom's discretion, as and when field engineering resources become available. It is Vodafone's view that the cost incurred by Eircom for recovering 'jumpers' should not form part of the cost attributed by ComReg to the Migration and should not be recovered from Access Seekers. In Vodafone's view, the incremental cost of the VUA Soft Migration should constitute the charge levied on the Access Seeker.
- 7.182 Sky also agreed with ComReg's proposal that the migration from combined SB-WLR and VUA to Standalone ('SA') VUA or to SA VUA combined with number porting should be treated as a VUA Soft Migration. Sky stated that the majority of VUA customers on Eircom's network today consume a service based on Plain Old Telephone Service ('POTS') based FTTC broadband and any barrier to migrating to SA FTTC from this POTS-based FTTC product could hinder the deployment by an Access Seeker of a VOIP⁷²⁰ telephony solution to customers. Sky noted that VOIP based telephony solutions have the potential to deliver savings to Access Seekers (relative to POTS-based telephony) and, by extension, their retail customers.
- 7.183 Eircom noted ComReg's proposed imposition of the VUA Soft Migration obligation and expressed the view that this is not possible given that the telephone service needs to be disconnected and it would require changes to its existing migration process.

⁷¹⁸ A jumper is the copper cable connecting the Access Path to the telephony port.

'Access Path' means the connection from the NTU/ONT in the End User's premises to the Point-of-Handover. The Points-of-Handover for physical unbundling are the MDF (for metallic) and the ODF (for fibre) in the exchange, and the Point-of-Handover for non-physical unbundling (virtual access) is the Wholesale Ethernet Interconnection Link at the serving Aggregation Node for the End User i.e. at the MPoP.

⁷¹⁹ Vodafone Submission, paragraph 90.

⁷²⁰ Voice over Internet Protocol.

ComReg's Assessment of Respondents' Views

- 7.184 ComReg notes that Sky and Vodafone agreed with ComReg's proposal that Migrations from SB-WLR and VUA to standalone VUA or to standalone VUA combined with number porting should be treated as a VUA Soft Migration.
- 7.185 With respect to Eircom's comments that a VUA Soft Migration is not possible, ComReg is aware that VUA Soft Migration is technically possible and, while Eircom may have to modify its existing Migration processes, ComReg notes that Eircom already provides soft migrations for CG WLA services. For example, Eircom offers soft Migrations from SB-WLR and Line Share to a ULMP.⁷²¹
- 7.186 A VUA Soft Migration is the electronic disablement of the SB-WLR service. With a soft migration the recovery of the jumper can occur at a later stage. Soft Migrations are more efficient in ComReg's view as the removal of the jumper recovery step allows for a more efficient migration process resulting in higher migration order throughput and therefore increased efficiency, benefiting both competition and End Users.
- 7.187 For example, on receiving a request for a soft Migration of SB-WLR and VUA to SA VUA , Eircom, could:
- (a) electronically disable the voice service;
 - (b) schedule the recovery of the physical 'jumper' at a point in time; and
 - (c) close the order once the 'jumper' is recovered.
- 7.188 In the Consultation⁷²² ComReg justified the need for a Migrations obligation. The purpose of the obligation is to avoid the requirement for a technician visit to an exchange (or equivalent) when an SB-WLR and VUA service is being migrated to SA VUA, as this is likely to unnecessarily restrict the volume of migration orders that can be processed at any one time. This would have the effect of reducing customer switching which could negatively impact competition. ComReg considers that the purpose of the obligation should be in keeping with Eircom's own view (summarised in paragraph 7.172 above) on the need for Migrations processes that are efficient in order to ensure a well-functioning and competitive market place.

⁷²¹ Reference open eir LLU Soft Migrations Product Description, version 2.0, 7 June 2017.

⁷²² See paragraphs 8.113 to 8.124 of the Consultation.

7.189 ComReg does not agree with Eircom that soft Migrations are not possible. Eircom already has the capability to electronically disable a SB-WLR service and the proposed obligation is therefore technically feasible. It is straightforward to implement,⁷²³ in particular, where the same Access Seeker requesting the migration already provides the retail based telephony and broadband services using both SB-WLR and VUA respectively to the End User.

7.190 ComReg recognises that the main demand⁷²⁴ for the VUA Soft Migration will arise from Access Seekers who wish to migrate their installed base from SB-WLR to VoIP services. Access Seekers may wish to bulk migrate their customer base hence efficient migration processes are required.

Reverse Migrations⁷²⁵

Respondents' Views

7.191 Eircom made reference in its Submission to 'Reverse Migration(s)'. ComReg note that Eircom explained in its Submission that it considers a Reverse Migration to be a Migration from a NG WLA service to a CG WLA service. Eircom set out its view that ComReg should penalise Reverse Migrations through regulated pricing because ComReg should be encouraging Access Seekers to invest and to encourage the adoption of new technology by End Users. Eircom stated that the

*"Definition of 'Migrations' should not include migration from NGA to CGA as that is not economically efficient"*⁷²⁶

ComReg's Assessment of Respondents' Views

7.192 ComReg notes Eircom's suggestion that Reverse Migrations be penalised by charging. ComReg considers that it is up to Access Seekers to choose the wholesale inputs that best meet their needs and the needs of their End Users. Arbitrary fees or levies do not apply in regulated markets. To adjust regulated access prices to penalise End Users for choosing the services that best meet their needs would not be in interests of End Users.

⁷²³ [redacted]

[redacted] ComReg understands that these test results could be ignored for the period the jumper remains in place.

⁷²⁴ [redacted].

⁷²⁵ Migration from an NG WLA service to a CG WLA service.

⁷²⁶ Eircom's Submission, page 73.

- 7.193 As already stated in paragraph 7.190, ComReg is of the view that demand driven migration to NG broadband (and related) services will continue to gain momentum; however, there will be users whose requirements may best be met by a Reverse Migration. ComReg is of the view that it is not appropriate that such End Users should be penalised. It is more appropriate that consideration should be given to End Users' requirements and ComReg considers that the offer of a broad range of innovative retail services that meets End Users requirements is a more appropriate way of ensuring the continued uptake of NG retail products and services.
- 7.194 ComReg disagrees with Eircom's view that the definition of Migrations should be modified so as not to include migration from NGA to CGA, for the reasons outlined in paragraphs 7.192 to 7.193 above.

Migrations Obligation

ComReg's Position

- 7.195 Having considered Respondents' views, as summarised and assessed in paragraphs 7.169 to 7.194 above, and having regard to the analysis set out in the Consultation,⁷²⁷ ComReg has decided to maintain the obligation on Eircom to provide access to Migrations. However, by way of clarification, ComReg has decided to amend the definition of 'VUA Soft Migrations' as follows:
- "VUA Soft Migrations means the facility whereby an End User can be migrated from SB-WLR with VUA to standalone VUA without the need for physical network intervention at the time of provisioning and must include the porting of the End User's telephone number from the current service provider, if required."*
- 7.196 As a result, it is clear that a porting capability must be included by Eircom in the VUA Soft Migration process. This is a slight change from the Consultation which then mandated that a porting capability should (rather than must) have been required. It now must be provided.
- 7.197 The current migration processes from 'SB-WLR with VUA' (otherwise known as 'POTS based VUA') to standalone VUA is facilitated by the 'Provide NGA from WLR' order i.e. PNW order, which includes an option to port the End User's telephone number(s).
- 7.198 In ComReg's view, the majority of End Users will want to retain their telephone number when they migrate from a POTS based VUA service to a standalone broadband service. Without the inclusion of a porting option (at the discretion of the End User) the effectiveness of the obligation to provide access to Migrations would be significantly undermined and the potential for switching would be lessened. End Users must have the option to retain their telephone as part of the soft migration process and therefore the definition of VUA Soft Migrations should be amended.
- 7.199 Eircom is required to provide and grant Access to the following particular products and services:
- (a) Migrations.

⁷²⁷ Paragraphs 8.113 to 8.124 of the Consultation.

7.200 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed Requirement: To provide access to Interconnection Services, namely In-Building, In-Span, Customer-Sited and Edge Node Handover

Respondents' Views

7.201 One Respondent (BT) noted that ComReg has not specifically imposed an obligation requiring the provision of access to a regional handover interconnection facility. BT noted that WLA interconnect is not limited to operators interconnecting at VUA exchanges.

7.202 BT stated that

“.....Regional Handover is in the market and within the regional areas it's the only economically viable [sic] to reach the WLA network particularly if the availability of leased line / wholesale Ethernet could be restricted”⁷²⁸

ComReg's Assessment of Respondents' Views

7.203 Below ComReg considers the Respondent's views set out in paragraph 7.201 above.

7.204 In the Consultation, ComReg proposed to require Eircom to provide access to a range of Interconnection Services. ComReg considers that Interconnection Services will provide BT with the appropriate interconnection flexibility necessary.

ComReg's Position

7.205 Eircom has to date provided Interconnection Services on foot of regulatory obligations imposed under the 2010 WPNIA Decision, 2011 WBA Decision and the 2013 NGA Decision. The continuation of this obligation is in the interests of End Users to facilitate their choice of SPs and services to the benefit of competition.

7.206 Having considered Respondents' views as summarised and assessed in paragraphs 7.201 to 7.204 above, and having regard to the analysis set out in the Consultation,⁷²⁹ ComReg has decided to maintain its view as set out in the Consultation.

7.207 Eircom is required to provide and grant Access to the following particular products and services:

(a) Interconnection Services, to include the following:

- (i) In-Building Handover;
- (ii) In-Span Handover;
- (iii) Customer-Sited Handover; and

⁷²⁸ BT Submission, page 2.

⁷²⁹ Paragraphs 8.125 to 8.137 of the Consultation.

(iv) Edge Node Handover

7.208 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed Requirement: Rules and Technical Standards for the deployment of Access Network Equipment Approvals and in particular CLFMP

Respondents' Views

7.209 Two Respondents (Eircom and Vodafone) expressed views on ComReg's proposed requirement for approval for changes to network management plans⁷³⁰ including CLFMP.

7.210 Eircom supported ComReg's proposals on a conditional basis. Eircom indicated that, only in the case where the network change is not classified as "business as usual"⁷³¹ and where the proposed network change impacts on other Access Seekers, should ComReg's prior approval be sought.

7.211 Eircom supported its view by explaining that it is imperative that some technical changes to meet wholesale customer operational requirements or changes to enhance or protect the network are capable of being made in the shortest possible time and without ComReg's approval. Eircom provided operational examples where a requirement to obtain ComReg's prior approval for network changes may impact on Eircom's ability to manage its network. For example, where a notable increase in demand would require rapid deployment of technical equipment in the shortest possible time to preserve the quality of service.

7.212 Eircom also proposed that network changes should be notified and approved through the normal regulatory governance processes rather, than adding another layer of bureaucracy.

7.213 Vodafone, outlining the risks to competition, was supportive of the introduction of the obligation. Vodafone proposed that ComReg should inform Access Seekers of proposed network changes, seek input from Access Seekers during the review process, and that Access Seekers should be able to review, test and trial results.

7.214 Vodafone expressed its view that proposals by Eircom to re-designate 'child' exchanges as 'parents' can increase the cost to Access Seekers that use VUA and undermine their VUA business case.⁷³²

⁷³⁰ See paragraphs 8.138 to 8.154 of the Consultation.

⁷³¹ Eircom Submission, page 26.

⁷³² Vodafone Submission, paragraph 64-68 states:

ComReg's Assessment of Respondents' Views

- 7.215 Below ComReg considers Respondents' view set out in paragraphs 7.209 to 7.214 above.
- 7.216 ComReg notes that Eircom agreed that any network changes impacting Access Seekers, which do not have an agreed 'business as usual' classification, should be submitted to ComReg for approval.
- 7.217 ComReg stated clearly in the Consultation that:
- “.....pursuant to Regulation 12 of the Access Regulations, ComReg proposes that Eircom should be required to seek approval from ComReg in writing for changes to the rules or technical standards for the deployment of telecommunications equipment in the access network when such changes have the potential to impact on services already available and services in use, including changes to the CLFMP”⁷³³*
- 7.218 ComReg also noted in the Consultation⁷³⁴ that Eircom as the designated SMP operator has the ability and incentive to deny access to WLA products, services and facilities through introducing or changing access network technologies or technical standards, thereby potentially restricting or removing access, including access already granted.
- 7.219 There are two distinct scenarios which can arise in relation to changes to the rules or technical standards for the deployment of telecommunications equipment in the access network, namely changes to the CLFMP and changes to the rules or technical standards for the deployment of telecommunications equipment in the access network.
- 7.220 ComReg's position is that any change in the CLFMP should be notified to and approved by ComReg. Changes to the CLFMP clearly would not fall within the category of "business as usual" because such changes have the potential to impact on services already available and services in use. Therefore, ComReg's and Eircom's views are aligned in this regard, changes to the CLFMP fall within scope for notification to and approval by ComReg.

“This needs to be controlled such that 'child' exchanges should not be unilaterally re-designated as 'parent' exchanges as it undermines the VUA investment case.Upgrading a 'child' exchange to a 'parent' increases the number of points of interconnection (POI) at which Vodafone needs to be present to pick up NGA user traffic. Moreover, VUA is only available at parent exchange locations. An increasing number of NGA parent exchanges has the consequence of increasing an Access Seekers requirements for backhaul connectivity, housing and equipment. It also has the effect of devaluing an Operator's investment as the density of NGA subscribers per parent reduces – making it less commercially viable for an Operator to build backhaul capability to those exchanges. Vodafone calls on ComReg to enforce tight controls to limit the number of new NGA parent exchanges allowed”

⁷³³ See paragraph 8.138 of the Consultation.

⁷³⁴ See paragraph 8.139 of the Consultation.

- 7.221 ComReg's position is that the normal regulatory governance process which apply to transparency requirements governing notifications⁷³⁵ of changes to wholesale products would not be suitable, as ComReg does not approve proposals made by Eircom through this notification process. However, ComReg considers that the notification process could be used with an additional approval step added explicitly for CLFMP changes, with approval for this being considered on foot of the receipt by ComReg from Eircom of the required analysis, including supporting documentation.
- 7.222 As regards changes to the rules or technical standards for the deployment of telecommunications equipment in the access network, ComReg does not intend to get involved in the day-to-day operational management of Eircom's network, as it would be impractical and inappropriate.
- 7.223 ComReg agrees with Eircom in respect of these "business as usual" changes. ComReg considers that it is reasonable to expect that Eircom would examine the potential impacts of all network or technology changes, including the impact on Access Seekers, and that where there is potential for material impacts on Access Seekers, End Users and competition, Eircom should notify ComReg accordingly.
- 7.224 When changes to rules or technical standards governing the deployment of access network equipment have the potential to impact Access Seekers, End Users or competition, then it is appropriate for ComReg to be notified and for ComReg to give its approval through an informed decision making process.
- 7.225 With respect to Vodafone comments (referred to in paragraph 7.214 above) ComReg was not aware⁷³⁶ of any Eircom proposal to re-designate 'child' exchanges as 'parents'. ComReg notes that no other Access Seeker or Respondent raised this issue.
- 7.226 As detailed below, ComReg notes some recent incidents⁷³⁷ which illustrate and re-enforce the need for such a notification and approval process.
- 7.227 One example occurred on 14 December 2016, where Eircom communicated at the NGA Industry Forum⁷³⁸ that it intended to change the service design rules for VUA at exchanges with more than one NGA Aggregation ('**AGG**') Node.⁷³⁹ If implemented, these service design rules, would, in ComReg's view, have negatively impacted Access Seekers by restricting access, including access already granted.

⁷³⁵ Refer to Transparency Obligations, paragraphs 7.940 to 7.1216 of this Decision.

⁷³⁶ On or before the 31 January 2017 (the deadline for responding to the Consultation).

⁷³⁷ Refer to paragraphs 7.227 to 7.232 below.

⁷³⁸ ComReg facilitates a range of industry forums - to facilitate discussions between operators on the development and enhancement of the wholesale RAP set in relevant markets for use by Access Seekers as wholesale inputs to the downstream services they provide.

⁷³⁹ "Aggregation Node" or "AGG node" means a network concentration point for Access Paths.

- 7.228 Eircom's proposed change would have resulted in additional AGG Nodes at the relevant exchanges thereby requiring Access Seekers purchasing VUA services at these exchanges to purchase an additional WEIL⁷⁴⁰ to handover VUA traffic from the exchange, rather than utilising their existing single WEIL. This would have the effect of raising Access Seekers' costs and potentially lead to a restriction and/or denial of access.
- 7.229 If implemented, Eircom's proposed change to the network topology would have significantly altered the service design rules for gaining VUA access and, as a result, would have undermined the original business case for Access Seekers to invest in VUA at these exchanges.
- 7.230 After ComReg's intervention, Eircom subsequently withdrew its proposal, replacing it with service design rules which did not impact Access Seekers i.e. it did not restrict access, including access already granted.
- 7.231 In another example, Eircom communicated a plan to the NGA Industry Forum⁷⁴¹ on 5 April 2017, that an existing NGA exchange, Narin (exchange code 'NAN') in County Donegal would be re-parented from Donegal exchange to Letterkenny exchange on 5 July 2017. Narin exchange was published on the NGA Deployment plan some years ago and went live for NGA⁷⁴² orders on 5 August 2015.
- 7.232 Eircom's proposal meant that an Access Seeker which purchased, or planned to purchase, NG WLA based VUA services at the Donegal exchange, based on the network topology in place prior to the re-parenting announcement, would not be able to offer NG VUA-based downstream, NG broadband (and other) services to its existing and future customers within the Narin exchange catchment area after 5 July 2017. The Access Seeker would have to purchase a WEIL at the Letterkenny exchange, a requirement that could not have been included in their initial business planning.
- 7.233 ComReg had concerns regarding this proposal, including the manner in which it was communicated to Access Seekers and ComReg. The timeliness, extent and thoroughness of Eircom's engagement with Access Seekers on its proposal was of particular concern to ComReg.

⁷⁴⁰ Eircom proposed a change to the network topology whereby Eircom installed an additional AGG node at an exchange site. This resulted in Access Seekers now requiring an additional WEIL in order to continue to provide VUA services.

⁷⁴¹ ComReg facilitates a range of industry forums. In general, the purpose of these forums is to facilitate discussions between Operators on the development and enhancement of the wholesale Regulated Access Product (RAP) set in relevant markets for use by Other Authorized Operators' (OAOs) as wholesale inputs to the retail services they provide in the market.

⁷⁴² VUA and Bitstream Plus products.

- 7.234 ComReg wrote to Eircom on a number of occasions⁷⁴³ to stress that Eircom must notify ComReg, in writing, of any proposal to withdraw access to facilities already granted, giving a detailed explanation of the proposal, the nature and extent of communications with impacted or potentially impacted stakeholders and should include, in particular, the impacts that the withdrawal of access is likely to have on End Users and competition.
- 7.235 Eircom responded to ComReg's correspondence,⁷⁴⁴ provided the details sought, and sought ComReg's approval before proceeding with the proposed network change.
- 7.236 Such uncertainty regarding Eircom's network topology (and Eircom's management of changes to it) potentially impacts on Access Seekers' ability to engage in business planning regarding the deployment and availability of services, thereby impacting on their incentives to invest in such access with a subsequent potential impact on competition.
- 7.237 While Eircom needs to be able to manage its network and make network topology or other changes as required, it must take into account during the planning process, the impact on Access Seekers and not act in a manner which unreasonably impacts on Access Seekers existing services, investments, business planning and competition generally. While some network changes may not withdraw access already granted they may have the potential to impact competition and/or End Users.
- 7.238 Such issues and principles, amongst others, underpin the reasoning why Eircom must seek approval from ComReg for any changes to network management plans including the CLFMP.
- 7.239 Eircom's rollout of fibre in the access network required new rules and technical standards for the deployment of optical equipment (e.g. GPON). The rules and standards for the deployment of network equipment on Eircom's copper and fibre access networks will likely evolve as new developments in access network technology results in the deployment of new equipment.
- 7.240 Changes to the rules and technical standards have the potential to impact on existing services already being provided to End Users.
- 7.241 ComReg expects that Eircom would implement a governance regime to ensure and oversee the consideration of proposed network changes in order to determine if and when ComReg approval is required. Such a governance regime should be guided by clear and consistently applied criteria which are informed by Eircom's regulatory obligations, including but not limited to Eircom's transparency and non-discrimination obligations and the obligation not to withdraw services or facilities already granted.
- 7.242 ComReg offers the following as examples of activities which have raised concerns regarding their potential impact on competition, Access Seekers and End Users and therefore are types of activities which should be carefully considered by Eircom to determine whether ComReg's prior approval is required. Note that this is a non-exhaustive list provided for guidance:

⁷⁴³ 25 April 2017, 12 May 2017 and 2 June 2017.

⁷⁴⁴ 5 May 2017, 18 May 2017 and 15 June 2017.

- (a) Rehoming of 'child' exchange(s) from one 'parent' to another;
- (b) Rehoming of FTTC cabinet(s) from one exchange to another;
- (c) Rehoming of FTTH customers from one exchange to another;
- (d) Designation of 'child' exchange(s) to 'parent' exchange;⁷⁴⁵
- (e) Designation of 'parent' exchange(s) to 'child' exchange(s);⁷⁴⁶ and
- (f) Changes to exchange designations.⁷⁴⁷

7.243 In such instances, if Eircom reasonably assesses that approval is needed, ComReg's position is that Eircom must notify ComReg, in writing, of any proposal to withdraw access to facilities already granted, giving a detailed explanation of the proposal, the nature and extent of communications with impacted or potentially impacted stakeholders and should include, in particular, the impacts that the withdrawal of access is likely to have on End Users and competition.⁷⁴⁸

7.244 Eircom must seek ComReg's approval before proceeding with any plan based on such proposals and Eircom should ensure that it builds into its planning timeline an estimate of the time required for approval by ComReg.

7.245 For the avoidance of doubt ComReg is not proposing that Eircom must notify it regarding every network or technology change as this would be unnecessarily burdensome. However ComReg considers that it is reasonable to expect that Eircom would examine the potential impacts of all network or technology changes, including the impact on Access Seekers, and that where there is potential for material impacts on Access Seekers, End Users and competition, Eircom should notify ComReg accordingly.

7.246 ComReg's position is that Eircom should be required to notify ComReg in writing of proposed changes to the rules or technical standards for the deployment of telecommunications equipment in the access network when such changes have the potential to impact adversely impact Access Seekers, End Users and competition in general and, in particular, with respect to Eircom's compliance with its regulatory obligation. Eircom must seek approval from ComReg before any proposed changes can be implemented. ComReg also notes that the responsibility for determining whether notification is necessary with respect to a particular network change rests with Eircom, in the first instance.

⁷⁴⁵ Designation of 'child' exchange to 'parent' exchange refers to a scenario where an existing 'child' exchange, of an existing 'parent' exchange, is re-designated as a 'parent' exchange.

⁷⁴⁶ Designation of 'parent' exchange to 'child' exchange refers to a scenario where a published/existing 'parent' exchange is re-designated as a 'child' exchange.

⁷⁴⁷ Change to exchange designation refers to a scenario where the classification of an existing exchange is changed. For example, an existing exchange classified as 'Local WEIL' is designated as an exchange with no WEIL capability.

⁷⁴⁸ The submission to ComReg should include communication, engagement and feedback from all Access Seekers, including Access Seekers with plans to invest in NG WLA based VUA handoff in the exchange where the addressable market will potentially reduce.

7.247 Separate to Eircom's SMP obligation (as outlined above) it should be noted that all undertakings (including Eircom) have an obligation under the General Authorisation regarding network integrity.⁷⁴⁹

ComReg's Position

7.248 Having considered Respondents' views as summarised and assessed in paragraphs 7.209 to 7.315 above, and having regard to the analysis set out in the Consultation,⁷⁵⁰ ComReg has decided to maintain its view as set out in the Consultation.

7.249 Eircom is required to provide:

- (a) Rules and Technical Standards for the deployment of Access Network Equipment Approvals and in particular CLFMP;

7.250 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Proposed Requirement: To include the Vectoring Protocol in the ARO

Respondents' Views

7.251 Two of eight Respondents (Eircom and Vodafone) provided views on the requirement to include the Vectoring Protocol in the ARO.⁷⁵¹

7.252 Vodafone stated that ComReg acknowledges a solution to the challenges around vectoring has been agreed by industry and is now included in the ARO. Vodafone supports ComReg's proposal that there should be an obligation to include this agreed protocol in the ARO.

7.253 Vodafone noted the continued risks to competition from vectoring technology. It noted that Multiple-Operator Vectoring ('MOV') is still at a relatively early stage of development. Vodafone supported ComReg's intention to monitor the rollout of vectored EVDSL and consider whether a further regulatory intervention is necessary should issues of concern arise. Given the risks, Vodafone encouraged a proactive approach to monitoring by ComReg and a readiness to act should there be developments that put the future of competition in the provision of NGA services at risk.

⁷⁴⁹ Condition 9.2 of the General Authorisation (ComReg Document 03/81R5, dated 22 December 2015) made pursuant to Regulation 8 of the Authorisation Regulations provides that "*The Authorised Person shall comply with any decisions, determinations, requirements, specifications, notifications and directions issued by the Commission from time-to-time regarding the maintenance of the integrity of Public Electronic Communications Networks and in connection with investigations by the Commission into cases of interference with the operation of Electronic Communications Networks or other authorised apparatus for wireless telegraphy.*"

⁷⁵⁰ Paragraphs 8.138 to 8.154 of the Consultation.

⁷⁵¹ Paragraphs 8.155 to 8.171 of the Consultation.

- 7.254 Eircom argued that imposing a regulatory obligation to include a Vectoring Protocol in the ARO is unnecessary because there is already an industry agreed Vectoring Protocol in it. Therefore, Eircom's view was that ComReg's proposed obligation requiring Eircom to include a Vectoring Protocol in the ARO is an inappropriate use of ComReg's powers.
- 7.255 Eircom also noted an issue⁷⁵² in relation to the implementation of the Vectoring Protocol and suggests that ComReg needs to ensure compliance with the Vectoring Protocol.

ComReg's Assessment of Respondents' Views

- 7.256 Below ComReg considers Respondents' view set out in paragraphs 7.251 to 7.255 above.
- 7.257 ComReg notes that Vodafone is supportive of ComReg's proposal that there should be an obligation to include the Vectoring Protocol in the ARO.
- 7.258 ComReg does not agree with Eircom's view that an obligation requiring it to include a Vectoring Protocol in the ARO is unnecessary. As noted above Eircom has suggested that the "*agreed industry solution*" reflected in the EVDSL Vectoring Protocol is already included in the ARO, thus "*ensuring its status*". It is on that basis that Eircom asserts that there is no justification to mandate it to include the Vectoring Protocol in the ARO. Eircom further states that while the Vectoring Protocol applies to all network operators, the proposed obligation "*places eir alone in the position of taking compliance action*".
- 7.259 It is not disputed that the Vectoring Protocol involved the agreement with industry and therefore extends beyond the full control of Eircom. The objective of the Vectoring Protocol is to minimise any potential disruption to End Users as only one implementation of vectoring technology can be used to manage interference on a cable binder at any one time.⁷⁵³
- 7.260 ComReg considers that to provide greater legal certainty it is appropriate to require Eircom (as the undertaking with control over the network) to provide access to information relating to the Vectoring Protocol via the ARO. Ancillary to this access obligation is the transparency obligation (imposed pursuant to Regulation 9 of the Access Regulations) to make publically available and publish on its wholesale website an ARO.
- 7.261 ComReg considers that a Vectoring Protocol is imperative to promote the interest of End Users through the provision of broadband services with the highest speed possible whilst also enabling competition. For this to be effective, ComReg further considers that the protocol for enabling vectoring on EVDSL contained needs to be binding on all parties. The inclusion of the Vectoring Protocol in the ARO essentially binds both Eircom and Access Seekers to its terms.

⁷⁵² Access Seekers have deployed EVDSL in Eircom exchanges and Eircom has not been made aware that any Access Seeker has enabled vectoring.

⁷⁵³ Therefore, vectoring cannot be implemented by more than one operator using separate vectoring equipment on the copper cables in the same binder. If two operators implement vectoring separately on the same cable binder, then the benefits of vectoring to both operators are diminished such that they are effectively cancelled in this scenario.

- 7.262 Continuing the current approach whereby the Vectoring Protocol is voluntarily included in the ARO increases potential risks (in terms of interference to End User services) for both Eircom and other Access Seekers that consume EVDSL based WLA services.
- 7.263 For the avoidance of doubt, in practice, the requirement to include the Vectoring Protocol in the ARO requires Eircom to publish the protocol for enabling vectoring on EVDSL in the ARO and update when necessary (e.g. via Industry agreement). As the protocol on enabling vectoring is already included in the ARO, ComReg does not consider that this requirement results in a significant regulatory burden.
- 7.264 Furthermore, to clarify Eircom's concern regarding compliance, where there is a breach of the terms of the Vectoring Protocol, by Eircom or an Access Seeker ComReg expects that such a breach should be addressed in the first instance and where appropriate, under the terms of the contract. It is therefore incumbent on Eircom to ensure that ARO properly reflects any update to the Vectoring Protocol thereby ensuring that relevant Access Seekers are contractually bound by such amendments. However, where there is a breach of the Vectoring Protocol that undermines Eircom's other SMP access obligations (i.e. the obligation to provide access to ULMP) this would have to be considered by ComReg separately.
- 7.265 Separate to Eircom's SMP obligation (as outlined above) it should be noted that all undertakings (including Eircom) have an obligation under the General Authorisation regarding network integrity.⁷⁵⁴

ComReg's Position

- 7.266 Having considered Respondents' views as summarised and assessed in paragraphs 7.251 to 7.265 above, and having regard to the analysis set out in the Consultation⁷⁵⁵ and having reflected further on the proposed obligation, ComReg has decided to maintain its view as set out in the Consultation that it is necessary to impose an obligation on Eircom to include the Vectoring Protocol in the ARO. ComReg considers however, that this obligation is more appropriately imposed as a transparency obligation. ComReg's assessment and position with respect to maintenance and publication of an ARO, which is to contain a minimum list of items is set out in paragraphs 7.1063 to 7.1066 and 7.1194 to 7.1195 below.

⁷⁵⁴ Condition 9.2 of the General Authorisation (ComReg Document 03/81R5, dated 22 December 2015) made pursuant to Regulation 8 of the Authorisation Regulations provides that "*The Authorised Person shall comply with any decisions, determinations, requirements, specifications, notifications and directions issued by the Commission from time-to-time regarding the maintenance of the integrity of Public Electronic Communications Networks and in connection with investigations by the Commission into cases of interference with the operation of Electronic Communications Networks or other authorised apparatus for wireless telegraphy.*"

⁷⁵⁵ Paragraphs 8.155 to 8.171 of the Consultation.

Proposed Requirement: To provide access to Associated Facilities, including Multicast and Class of Service

Respondents' Views

7.267 One Respondent (Vodafone) provided views on the obligation requiring Eircom to provide access to Associated Facilities, including Multicast and Class of Service.⁷⁵⁶ Vodafone supported ComReg's proposal to impose obligations upon Eircom requiring it to provide access to associated facilities, including Multicast and Class of Service ('CoS').

ComReg's Assessment of Respondents' Views

7.268 ComReg notes Vodafone supported ComReg's position to provide access to associated facilities, including Multicast and Class of Service.

ComReg's Position

7.269 Having considered Respondents' views as summarised and assessed in paragraphs 7.267 to 7.268 above, and having regard to the analysis set out in the Consultation,⁷⁵⁷ ComReg has decided to maintain its view as set out in the Consultation.

7.270 Eircom is required to provide and grant Access to the following particular products and services:

- (a) Associated Facilities related to VUA such as
 - (i) Multicast; and
 - (ii) Class of Service.

7.271 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Civil Engineering Infrastructure ('CEI') Remedies

7.272 Six of the eight Respondents (ALTO, BT, Colt, Eircom, enet and Vodafone) expressed views on ComReg's proposed obligations regarding the need for CEI access remedies.⁷⁵⁸

7.273 ComReg has grouped Respondent's views and its analysis in the following manner:

- (a) General issues regarding the proposed obligations for Access to CEI (as summarised in paragraph 7.275 below). This section is structured as follows: (i) Respondents' views of all general issues raised (discussed in paragraphs 7.276 to 7.377 below); and (ii) ComReg's assessment of Respondents' views of all general issues raised (discussed in paragraphs 7.283 to 7.381 below); and

⁷⁵⁶ Paragraphs 8.172 to 8.185 of the Consultation.

⁷⁵⁷ Paragraphs 8.172 to 8.185 of the Consultation.

⁷⁵⁸ See paragraphs 8.186 to 8.221 of the Consultation.

- (a) Specific issues relating to the proposed obligations for Access to CEI that have been raised and addressed on a remedy-by-remedy basis (as summarised in paragraph 7.382 below). This section is structured as follows: (i) Respondents' views on an issue-by-issue basis (commencing at paragraph 7.383 below); and (ii) ComReg's Assessment of Respondents' views on an issue-by-issue basis (commencing at paragraph 7.388 below).

7.274 ComReg's position on CEI remedies, both general and specific, are outlined in paragraphs 7.511 to 7.516.

7.275 Respondents' views on a number of issues relating to Access to CEI are summarised as follows:

- (a) Requirements for CEI access / ComReg's power to impose SMP obligations (discussed in paragraphs 7.276 to 7.282 below);
- (b) Transposition of the BCRD (discussed in paragraphs 7.295 to 7.296 below);
- (c) Infrastructure bottlenecks (discussed in paragraphs 7.298 to 7.301 below);
- (d) Necessity for the CEI remedy (discussed in paragraphs 7.312 to 7.313 below);
- (e) Demand for CEI access / requirement for a fit-for-purpose CEI access (discussed in paragraphs 7.319 to 7.325 below);
- (f) Competition and investment (discussed in paragraphs 7.358 to 7.367 below); and
- (g) Scope of CEI access (discussed in paragraphs 7.376 to 7.377 below).

Requirements for CEI access / ComReg's power to impose SMP obligations

Respondents' Views

7.276 Eircom stated that because of the existence of the BCRD, "*.....there is no justification for the imposition of a CEI access obligation on eir.*"⁷⁵⁹

7.277 Eircom supports this position by noting that some Member States such as Denmark and Sweden have concluded that the BCRD is sufficient such that SMP access obligations are not required.

7.278 Eircom also argued that ComReg should permit the BCRD to operate before reaching a conclusion on its efficacy and should not disregard it in advance of any experience with respect to its application.

⁷⁵⁹ Eircom Submission, page 27.

7.279 Eircom also noted that under Regulation 6(4)(g) of the 2016 Broadband Cost Reduction Regulations⁷⁶⁰ ('**2016 BCRR**') (which transpose the BCRD into Irish law), a network operator has the right to refuse or limit access to its infrastructure having regard to:

*"...the availability of viable alternative means of wholesale physical network infrastructure access provided by the other network operator and suitable for the provision of high-speed electronic communications networks provided that such access is offered under fair and reasonable terms and conditions."*⁷⁶¹

7.280 Eircom stated that, in this regard, it is not clear that ComReg has the authority to deny Eircom its rights under Irish law (i.e. under the 2016 BCRR) through the imposition of a blanket obligation to provide access to its CEI.

7.281 Eircom also claimed that ComReg has failed to undertake a proper and thorough analysis of the requirements for CEI access due to its over-reliance on the Cartesian Report on CEI Service Delivery⁷⁶² based on Eircom's view that the mandate provided by ComReg to Cartesian was narrow. Eircom cited an extract from the Cartesian Report on CEI Service Delivery:

*"Also out of scope for the project are pricing, and quantification of the benefits of the identified options."*⁷⁶³

7.282 Eircom claims that the Consultation process, absent a balanced consideration of all relevant facts, is not sufficient for the purpose of establishing regulatory policy or imposing obligations on Eircom.

ComReg's Assessment of Respondents' Views

7.283 ComReg disagrees with Eircom's view that the BCRD/2016 BCRR replaces the need for the imposition of SMP-based CEI access remedies. The BCRD/2016 BCRR was intended to encourage rollout of next generation networks but it was not intended to, and does not, address competition problems arising from an SMP undertaking's abilities and incentives to engage in anti-competitive behaviour – it does not therefore replace the need for SMP remedies, where warranted. Hence, ComReg disagrees with the suggestion that the BCRD/2016 BCRR removes the need for CEI access remedies under the SMP framework. The BCRD/2016 BCRR has scope to offer certain options for Access Seekers rolling out new network infrastructure. However, the role of the BCRD/2016 BCRR is supplementary to, rather than a replacement for, any SMP-based remedy.

⁷⁶⁰ S.I. No. 391/2016 - European Union (Reduction of Cost of Deploying High-Speed Public Communications Networks) Regulations 2016: <https://www.irishstatutebook.ie/eli/2016/si/391/made/en/print>.

⁷⁶¹ Eircom Submission, page 30.

⁷⁶² Cartesian Report on CEI Service Delivery, page 8.

⁷⁶³ Eircom Submission, page 39.

- 7.284 This point is recognised in the BCRD where reference is made to the fact that the BCRD is without prejudice to national measures adopted pursuant to the common regulatory framework.⁷⁶⁴
- 7.285 As noted in the Consultation⁷⁶⁵ the access regime required by the BCRD and 2016 BCRR is of a type that is very different from that used to address SMP type competition problems. The terms of access under the BCRD/2016 BCRR may be determined by the access provider and need only be fair and reasonable. The BCRD and the 2016 BCRR do not specifically impose any transparency, non-discrimination or price control obligations.
- 7.286 In addition, there is no requirement for access to infrastructure to be provided on an EoI basis, allowing access to be provided on a different basis to Access Seekers than the provider provides to itself. The fact that the BCRD contains no explicit requirement for non-discrimination means that it does not address the potential for vertically integrated providers of CEI to discriminate between their own downstream businesses and Access Seekers.
- 7.287 Additionally, the BCRD and the 2016 BCRR do not clearly contemplate the terms and conditions of access being set on an *ex ante* basis. While ComReg notes Eircom's comment summarised in paragraph 7.295 that the European Commission considers Article 3(2) of the BCRD⁷⁶⁶ to require the production of a reference offer, there may be uncertainty on the extent of any such obligation. For example, the lack of a clear reference offer could create uncertainty (regarding the terms upon which access would be provided) and hinder the ability of the Access Seeker to develop a business case for using passive access.

⁷⁶⁴ Recital 12 of the BCRD provides as follows:

"In the light of the lex specialis principle, when more specific regulatory measures in conformity with Union law apply, those should prevail over the minimum rights and obligations provided for in this Directive. Therefore this Directive should be without prejudice to the Union regulatory framework for electronic communications set out in Directive 2002/21/EC of the European Parliament and of the Council (1) as well as Directive 2002/19/EC of the European Parliament and of the Council (2), Directive 2002/20/EC of the European Parliament and of the Council (3), Directive 2002/22/EC of the European Parliament and of the Council (4) and Commission Directive 2002/77/EC (5), including national measures adopted pursuant to that regulatory framework, such as specific symmetric or asymmetric regulatory measures"

⁷⁶⁵ See paragraphs 8.193 to 8.194 of the Consultation.

⁷⁶⁶ Article 3(2) of the BCRD provides that

"Member States shall ensure that, upon written request of an undertaking providing or authorised to provide public communications networks, any network operator has the obligation to meet all reasonable requests for access to its physical infrastructure under fair and reasonable terms and conditions, including price, with a view to deploying elements of high-speed electronic communications networks. Such written request shall specify the elements of the project for which the access is requested, including a specific time frame"

- 7.288 The distinction between the two regimes is further highlighted through the proposed inclusion of Article 70 in the draft European Electronic Communications Code⁷⁶⁷ (concerning the ability for a NRA to impose a specific SMP obligation relating to access to civil engineering).
- 7.289 For the avoidance of doubt, ComReg considers that the right to limit access to its infrastructure (as referred to in Regulation 6(4)(g) of the 2016 BCRR)⁷⁶⁸ would be likely to be inappropriate in light of Eircom's position as the SMP operator. ComReg notes in this regard that Recital 12 of the BCRD specifically notes that:
- “In the light of the lex specialis principle, when more specific regulatory measures in conformity with Union law apply, those should prevail over the minimum rights and obligations provided for in this Directive”*
- 7.290 ComReg thus considers that it has in no way denied Eircom of its rights under the 2016 BCRR.
- 7.291 In its Submission Eircom stated that Sweden and Denmark had concluded that the BCRD was sufficient such that SMP access obligations were not required. However, Sweden⁷⁶⁹ has in fact imposed SMP obligations requiring the SMP operator to provide access to ducts. The Swedish NRA (PTS) reversed its position after initially proposing not to impose Duct Access obligations on TeliaSonera in light of the BCRD. The regulator determined that it was not appropriate to rely on the BCRD, noting that an important reason for this is that the BCRD is not primarily aimed at overcoming competition problems - the aim is rather to accelerate and reduce the cost of deploying high-speed networks in general.
- 7.292 Therefore, ComReg considers that the need to review markets and set SMP obligations, where appropriate, remains fully applicable notwithstanding the scope of the BCRD. ComReg's position is that there is an explicit need for SMP-based CEI access obligations in order to remedy the identified competition problems in the WLA Market (and related markets). ComReg does not consider that the obligations imposed under the BCRD are an adequate or appropriate alternative to the imposition of CEI remedies on Eircom.
- 7.293 ComReg assesses Eircom's views (in paragraphs 7.281 to 7.282 above) on the scope of Cartesian's mandate in paragraphs 7.832 to 7.845 of this Decision.
- 7.294 Having considered Respondents' views, ComReg maintains its position as set out in the Consultation.

⁷⁶⁷ Proposal for a Directive establishing the European Electronic Communications Code, 2016/0288, 12.10.2016.

⁷⁶⁸ Regulation 6(4)(g) states: A refusal or limitation of access, in whole or in part, to the physical infrastructure of a network shall be based on an objective, transparent or proportionate reason which may include, but is not limited to—the availability of viable alternative means of wholesale physical network infrastructure access provided by the other network operator and suitable for the provision of high-speed electronic communications networks provided that such access is offered under fair and reasonable terms and conditions.

⁷⁶⁹ See case SE/2015/1687.

Transposition of BCRD**Respondents' Views**

7.295 Eircom stated that it is concerned at certain omissions in the 2016 BCRR that, in its view, may amount to a flawed transposition of the BCRD. Specifically, Eircom stated that there is no obligation imposed on entities that would meet the requirement set out in Article 3(2) of the BCRD⁷⁷⁰ which provides as follows:

“Member States shall ensure that, upon written request of an undertaking providing or authorised to provide public telecommunications networks, any network operator has the obligation to meet all requests for access to its physical infrastructure under fair and reasonable terms and conditions, including price, with a view to deploying elements of high-speed electronic communication networks”

7.296 Eircom stated that its concerns have been made known to the Department of Communications, Climate Action and Environment (**‘DCCA’**). Eircom also suggested that the European Commission understands this provision (Article 3(2) of the BCRD) to require the production of a reference offer. Eircom claims that deficiencies in the Irish transposition of the BCRD cannot be held up to justify the imposition of CEI access remedies on Eircom alone.

ComReg's Assessment of Respondents' Views

7.297 As summarised in paragraphs 7.295 and 7.296 above, Eircom claims that the BCRD has been incorrectly transposed by the 2016 BCRR (in that the implementing Regulations do not give effect to Article 3(2) of the BCRD).⁷⁷¹ ComReg does not consider that there is any material difference between the BCRD and the 2016 BCRR in this regard but has, in any event, considered the terms of both the BCRD and the 2016 BCRR in reaching its conclusions regarding the impact of these provisions.

Infrastructure bottlenecks**Respondents' Views**

7.298 Eircom does not agree with ComReg's view that access to Eircom's CEI is a bottleneck.⁷⁷² Eircom's reasoning, which emphasises the presence of the BCRD and the absence of a need for CEI obligations in light of this, is set out in paragraphs 7.276 to 7.296 above.

⁷⁷⁰ Eircom Submission, page 28.

⁷⁷¹ This Article states that “Member States shall ensure that, upon written request of an undertaking providing or authorised to provide public communications networks, any network operator has the obligation to meet all reasonable requests for access to its physical infrastructure under fair and reasonable terms and conditions, including price, with a view to deploying elements of high-speed electronic communications networks. Such written request shall specify the elements of the project for which the access is requested, including a specific time frame.”

⁷⁷² Eircom Submission stated that the BCRD gives access to CEI as well as gas, electricity and water infrastructure. It also stated that the ESB has more ubiquitous infrastructure than Eircom (the ESB access network provides service to 100% of homes whereas the Eircom network does not have the same reach).

- 7.299 Eircom also stated that SIRO has entered the retail market using CEI inputs from ESB,⁷⁷³ in addition to noting the presence of Virgin Media in urban areas and the associated CEI belonging to Virgin Media. It is Eircom's view that no infrastructure bottleneck exists due to the presence of alternative CEI that can be obtained from alternative providers.⁷⁷⁴
- 7.300 Eircom stated that ESB/SIRO provides a clear competitive alternative to Eircom given that Vodafone is offering its retail 'LightSpeed' broadband packages which it purchases from SIRO at prices comparable to its 'Simply Broadband' packages which are purchased from Eircom. Eircom concludes that this illustrates that SIRO's access to the ESB's ducts and poles enables services to be supplied at a retail level at competitive prices and notes that SIRO's access to ESB's infrastructure was achieved even before the BCRD/2016 BCRR.
- 7.301 Eircom considers that there is sufficient competitive constraint on Eircom and that, in a market tending towards effective competition, Eircom should not be subject to regulation in relation to CEI.

ComReg's Assessment of Respondents' Views

- 7.302 ComReg's disagrees with Eircom's views (summarised in paragraphs 7.298 to 7.301 above) that CEI access remedies are not required in the WLA Market, on the basis that Eircom has been designated with SMP in the WLA Market, and absent regulation Eircom has the ability and incentive to refuse to provide access with a view to leveraging its market power into the related downstream markets thereby restricting infrastructure-based competition.
- 7.303 ComReg has proposed a suite of access remedies such as access to LLU, VUA and CEI to provide access to the local access network (i.e. non-replicable infrastructure - the bottleneck). Otherwise, Eircom may refuse/deny/restrict access etc. to the non-replicable infrastructure.
- 7.304 A suite of access remedies that includes CEI access is necessary to facilitate the ladder of investment principle and ultimately deeper and more effective and sustainable competition. When an Access Seeker enters the market it can start with the purchase of services on Eircom's network (e.g. Bitstream). Access Seekers may then choose to invest further by purchasing deeper infrastructure-based wholesale products such as ULMP, LS⁷⁷⁵ and VUA, before potentially building their own access network based on wholesale CEI inputs. Each step on this ladder requires a corresponding increase in infrastructure and other investment by the Access Seeker.
- 7.305 The availability of a suite of access products allows the Access Seeker to progress further up the ladder of investment, each subsequent step up the ladder of investment rendering competition more sustainable in the long term. Therefore, a suite of access remedies is required which includes CEI access.

⁷⁷³ Eircom further noted that there are alternative retail offerings provided by Vodafone based on wholesale inputs from ESB/SIRO.

⁷⁷⁴ Eircom referred to this being available on fair and reasonable terms and conditions, following adjudication by ComReg.

⁷⁷⁵ In this way, an Access Seeker can grow its customer base without having to incur high (and sometimes sunk costs) associated with infrastructure investment. Once the Access Seeker achieves scale and scope economies the business case for deeper infrastructure investment is more certain.

- 7.306 An Access Seeker's movement between the rungs of the ladder of investment will be triggered, *inter alia*, by factors such as economies of scale and scope, subscriber density etc. For example, BT and Vodafone have followed the ladder of investment approach, whereby they have migrated customers from Bitstream services to VUA services. BT and Vodafone expressed their intention to continue up the ladder of investment by purchasing wholesale CEI products to build their own networks and to migrate customers from LLU and VUA services onto their new networks.
- 7.307 The LLU, VUA and CEI access remedies are a mutual set of supporting obligations allowing deeper infrastructure and more sustainable competition. A suite of access remedies is required to enable an Access Seeker to offer its products and services to align with its position on the ladder of investment. The progressive nature of the ladder of investment means that an Access Seeker can choose the most appropriate wholesale access product linked to its relative position on the ladder of investment.
- 7.308 The existence of alternative CEI inputs from other potential infrastructure providers (e.g. Waterways Ireland etc.) is insufficient in the context of access remedies required to address competition problems in the WLA Market. The availability of CEI inputs from alternative suppliers (other than Eircom) is insufficient from a remedy perspective.
- 7.309 ComReg has considered the effectiveness of the competitive constraints faced by Eircom in the WLA Market in Section 5 in the context of the assessment of SMP. For the reasons set out therein, ComReg does not agree that SIRO (operating in the presence of its underlying access arrangements with the ESB) or Virgin Media are likely to prevent Eircom from behaving, to an appreciable extent, independent of its competitors, customers or consumers.
- 7.310 Eircom is the only entity that has been designated with SMP in the WLA Market. Eircom has the incentive and ability to refuse access which could restrict competition in the WLA Market and in the related downstream markets (as identified in Section 5). Consequently, a suite of access remedies, including CEI access, is required to address the potential and/or actual competition problems (refer to in Section 6 of this Decision).
- 7.311 ComReg also notes that having a suite of access remedies to facilitate access at each rung on the ladder of investment is consistent with BEREC's common position on remedies.⁷⁷⁶

⁷⁷⁶

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1127-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-physical-network-infrastructure-access-including-shared-or-fully-unbundled-access-at-a-fixed-location-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

Necessity for the CEI Remedy**Respondents' Views**

- 7.312 Eircom made reference to the competition problems section of ComReg's Consultation, in particular paragraphs 7.35 to 7.40 relating to ComReg's view that there are information asymmetries that can lead to competition problems and an inefficient use of resources by Access Seekers. Eircom stated that it is not clear to it that any of these issues are relevant to the CEI access products. Eircom stated that Ducts and Poles are used by Eircom to operate its network and provide services and these services are offered to both its downstream arms and Access Seekers, and Eircom's downstream arms do not consume Ducts and Poles directly.
- 7.313 Eircom claimed that the imposition of a CEI access remedy is disproportionate, supporting its view as follows:

"In our view we do not have significant market power in the provision of CEI and ComReg has produced no evidence to the contrary. To the extent to which we do have SMP in the WLA market then unbundling / VUA remedies are sufficient given the lack of any bottleneck in the provision of passive infrastructure. To date no Access Seeker has availed of our CEI products outside of the National Broadband Plan and so there is clearly no commercial demand for CEI access. This means the obligation ComReg is seeking to impose is not proportionate."⁷⁷⁷

ComReg's Assessment of Respondents' Views

- 7.314 ComReg notes Eircom's view, expressed in paragraph 7.313 above, that it does not have significant market power in the provision of CEI. ComReg has not defined a specific CEI market. CEI access is a remedy to address competition problems in the WLA market.
- 7.315 Eircom has the ability and incentive to refuse access to its largely non-replicable assets i.e. local access network. It is ComReg's position that a range of access remedies are required to coincide with each step rung on the ladder of investment to enable and promote long-term sustainable competition.
- 7.316 Eircom has an incentive not to provide effective CEI access as it limits deeper infrastructure competition which allows Access Seekers to operate more independently and provide greater competitive constraints over the longer term.
- 7.317 Unbundled access remedies alone are not sufficient to facilitate competition at the deepest level possible i.e. an Access Seeker building its own network. The more access network infrastructure that an Access Seeker can self-supply, the more control that the Access Seeker has over its product and service offerings (e.g. own OSS, IT Development).

⁷⁷⁷ Eircom Submission, pages 29 and 30.

7.318 Having greater control over self-supplied access network infrastructure provides Access Seekers with more flexibility in their technology choices and product development, etc. This in turn further facilitates and deepens competition as self-supplied access network infrastructure enables Access Seekers to innovate and to better differentiate their product offerings in the downstream markets.⁷⁷⁸

Demand for CEI access / requirement for a fit-for-purpose CEI access

Respondents' Views

7.319 Five Respondents (ALTO, BT, Colt, enet and Vodafone) stated they have a requirement for a fit-for-purpose CEI access product.

7.320 BT indicated that it wishes to mitigate the risk of disrupted supply of leased lines, if the leased lines market is de-regulated, with access to a fit-for-purpose CEI product. Colt provided a number of examples of how it intends to use CEI access.

7.321 BT stated that the current CEI access products are not fit-for-purpose:

“We note that eir’s lack of a fit-for-purpose Duct and Pole Access offer has largely curtailed the ability of operators to use upstream eir WLA facilities to climb the ladder of investment”⁷⁷⁹

7.322 Vodafone stated that the availability of fit-for-purpose passive access products can fundamentally change the economics of network build in some key areas. Vodafone is supportive of the obligations set out by ComReg in its Consultation. Vodafone stated that the imposition of a high-level obligation has not to date resulted in the development of suitable fit-for-purpose CEI products and that more granular CEI access obligations, detailing specific aspects of the product, are necessary.

7.323 Vodafone also expressed concern that Eircom may still be able to avoid providing fit-for-purpose access products:

“.....where there are damaging practices that are difficult to detect or where delays mean that the lack of required services causes irreparable commercial damage to those seeking to use WLA products to challenge the incumbent”⁷⁸⁰

7.324 Eircom disagreed with ComReg’s analysis that current CEI access products are ineffective and that the existing CEI access remedies need to be further enhanced.

⁷⁷⁸ Refer to paragraphs 8.188 to 8.199 of the Consultation.

⁷⁷⁹ BT Submission, page 5.

⁷⁸⁰ Vodafone Submission, paragraph 74.

7.325 Eircom stated it had removed⁷⁸¹ all the restrictions on the use of CEI which ComReg has previously notified to Eircom. Eircom stated that, to date, no Access Seeker has availed of its CEI products outside of the NBP Intervention area and so “.....there is clearly no commercial demand for CEI access.”⁷⁸² Eircom therefore concludes that there is no demand for CEI access.

ComReg’s Assessment of Respondents’ Views

7.326 ComReg disagrees with Eircom’s view summarised in paragraphs 7.324 to 7.325 that there is an absence of demand for CEI access, and that the current CEI access products offered by Eircom are fit-for-purpose i.e. that existing CEI access is effective.

7.327 As outlined in paragraph 7.319 above, several Respondents (ALTO, BT, Colt, enet,⁷⁸³ and Vodafone) have expressed their demand for an effective CEI product as proposed in the Consultation.

7.328 It is worth noting that the majority of the cost associated with building an access network are the CEI components, which typically represents [x%] of the access network build costs.⁷⁸⁴ Therefore, without a CEI access remedy, competition would be hindered as Access Seekers would be unable to economically build an access network, which could distort competition by restricting the Access Seekers ability to climb the ladder of investment.

7.329 ComReg notes that BT Ireland,⁷⁸⁵ Vodafone⁷⁸⁶ and other Access Seekers such as Colt⁷⁸⁷ and enet⁷⁸⁸ have raised concerns regarding the CEI products offered by Eircom at present and have signalled, through their Submissions, their intentions to climb the ladder of investment when effective CEI access products are available.

⁷⁸¹ On 31 January 2017, Eircom removed the usage restrictions published in its Duct and Pole product descriptions which restricted Access Seekers’ use of Eircom CEI access products for the deployment of broadband service only.

⁷⁸² Eircom Submission, page 30.

⁷⁸³ On 7 September 2017, enet announced its plan to rollout a fibre network to 115,000 premises by 2019.

<https://www.enet.ie/news/177/138/Minister-launches-enet-SSE-100M-fibre-plan-for-regional-Ireland.html>.

⁷⁸⁴ Based on the Revised Copper Access Model it is calculated that between [x%] of the access network build costs can be attributable to civil engineering infrastructure build costs.

Revised Copper Access Model means the model, as amended from time-to-time (subject to approval by ComReg), used by ComReg and Eircom to assess Eircom’s compliance with the obligations. The model calculates costs based on both Top Down HCA and BU-LRAIC+ costing methodologies. The operation and details of the Revised Copper Access Model are described in Section 5 of ComReg Decision D03/16.

⁷⁸⁵ BT Submission, page 5

⁷⁸⁶ Vodafone Submission, page ii, paragraph xiv.

⁷⁸⁷ Colt Submission, page 3.

⁷⁸⁸ enet Submission, page 4.

- 7.330 ComReg's position is that there is a causal relationship between 'fit-for-purpose' CEI access products and the emergence of demand for CEI. It is clear, that where access to CEI is ineffective, demand will not be forthcoming. In this respect it is ComReg's position that the lack of demand to date has been driven by the lack of an effective CEI access product set.
- 7.331 ComReg raised its concerns with Eircom on the restrictions it imposed on the use of CEI for the provision of products and services in the WPNIA market only. ComReg notes that Eircom stated it had removed all the restrictions on the use of CEI.
- 7.332 ComReg's position is that Eircom's removal of restrictions on the use of CEI for the provision of products and services in the WPNIA market only is insufficient to address the potential competition problems in the WLA market. For the avoidance of doubt, as set out in the Consultation,⁷⁸⁹ ComReg's position is that there should be no unreasonable restrictions on access to Eircom's CEI for the purposes of provision of services in either downstream and/or retail markets.
- 7.333 ComReg is of the view that there is demand for effective CEI access products, but that there is lower demand than would otherwise be the case for Eircom's current CEI access products, because there are significant differences between the Eircom self-supply of CEI and the CEI access product made available to Access Seekers (See Appendix: 16).
- 7.334 In jurisdictions where CEI access products are fit-for-purpose, demand for CEI has emerged and grown. For example, there are well-functioning passive access regimes in countries such as Portugal, France and Spain.⁷⁹⁰ An analysis of the uptake of Duct Access in Portugal, France and Spain in 2015/16 is summarised in Appendix: 14.
- 7.335 In Portugal, passive remedies have been instrumental to the rollout of high-speed broadband fixed line and mobile networks. The development and quality of Portugal Telecom's CEI Reference Offer supported a rapid deployment of fibre networks by competitors to Portugal Telecom (PT), such as Optimus and Vodafone, with such networks competing with ZON (a cable company, formerly owned by PT) and PT, using CEI access as an input.
- 7.336 In France, the amount of Duct leased from France Telecom increased by 40% in the 12 month period ending 30 September 2014, following already extensive NGA deployment using alternative infrastructure in major urban centres.
- 7.337 In Spain, the incumbent market share fell from 55% in 2009 to 45% in 2014. ComReg considers that it is interesting to note in this regard that since 2009, more than 200 Access Seekers have signed contracts for Duct Access with Telefónica and 20,000 km of leased sub-ducts was in use in 2016.⁷⁹¹

⁷⁸⁹ Refer to paragraph 8.213 of the Consultation.

⁷⁹⁰ In France, over 41,000km of Duct has been leased representing ~ 12% of incumbent Duct network. In Spain, ~20,000km of Duct has been leased representing ~ 7% of incumbent Duct network. While in Portugal, ~12,000km of Duct has been leased representing ~ 50% of incumbent Duct network.

⁷⁹¹ CNMC Press Release: <https://www.cnmc.es/2016-11-09-la-cnmc-mejora-las-condiciones-para-que-los-operadores-alternativos-puedan-desplegar>.

- 7.338 ComReg's position is that Eircom has taken a narrow interpretation of demand/requirement for CEI. Eircom has interpreted demand to be a specific request for Duct and Pole Access rather than the overall demand for CEI i.e. demand for Duct and Pole Access which is a consequence of the demand for active and passive products and services which relies on CEI, for example, active products such as FTTHC/FTTH which make use of CEI.
- 7.339 On 4 April 2017, Eircom publicly announced an agreement with the DCCAE⁷⁹² to rollout high-speed broadband in the form of FTTP to 300,000 premises across Ireland by December 2018. This deployment will make use of Eircom CEI.
- 7.340 Eircom's high-speed broadband network rollout is dependent on efficient and effective access to CEI. This demonstrates how effective CEI access can enable the rollout of network infrastructure – ComReg considers that this is equally essential to Access Seekers' progression up the ladder of investment and to the ultimate development of sustainable competition through investment in infrastructure.
- 7.341 ComReg also notes that in the period 2014 to 2016, Eircom executed an average of [§< ██████████] new Duct/Sub-Duct work orders⁷⁹³ and utilised on average a further [§< ██████████] existing Duct/Sub-Duct routes⁷⁹⁴ for NGN Ethernet products (downstream of WLA).
- 7.342 In addition, there is the prospect of demand for CEI access from NBP bidders, as it is possible that the deployment of infrastructure for NBP will rely on access to CEI given that the network rollout will be to 542,000 postal addresses.
- 7.343 It follows that there is significant demand and potential demand for CEI access because CEI access is a required component of downstream products and services.
- 7.344 ComReg's position is that effective CEI access products have the potential to unlock demand for CEI from Access Seekers⁷⁹⁵ who have signalled their intention to climb the ladder of investment and to consume CEI, when effective CEI access products are available. Without effective CEI access products upstream demand from Access Seekers for CEI access will be curtailed.
- 7.345 Four Respondents (BT, Colt, enet, and Vodafone) agreed with ComReg's preliminary views on the need for effective CEI access products. Vodafone noted that effective CEI products are required and that they will not invest unless the CEI products are fit-for-purpose.
- 7.346 Appendix: 17 of this Decision contains a non-confidential summary of Colt's plans for using CEI access.

⁷⁹² <https://www.dccae.gov.ie/documents/Press%20Release%2004%20Apr%202017.pdf>.

⁷⁹³ A work order, created by the Eircom designer, is a work pack containing instructions for the Build function to execute specific task(s) in the access network.

⁷⁹⁴ Eircom Response to April 2017 Statutory Information Request ('SIR'), 26 May 2017, page 1.

⁷⁹⁵ Vodafone Submission, page vi and BT Submission, page 5.

7.347 Vodafone's Submission⁷⁹⁶ to the European Commission's public consultation on the evaluation and review of the regulatory framework for electronic communications networks and services also provides insight into its position in relation to CEI:

"First, wholesale access should be regulated as far upstream as possible. This will mean a combination of duct and pole access and fibre unbundling. Second, the way these upstream products are provided needs to be on a truly equivalent basis....."

Remedies should be first and foremost designed to encourage competitive investment in FTTH. In order to achieve this Europe needs clear prioritisation for passive upstream remedies such as duct, pole and dark fibre access"

7.348 Appendix: 15 of this Decision provides a comparative analysis, undertaken by ComReg for the purpose of this Decision, between Eircom's wholesale Duct and Pole Product offerings⁷⁹⁷ to Access Seekers and Eircom's internal self-supply of CEI. This is analysed across a range of service steps, including pre-ordering, ordering, provisioning and service assurance. ComReg notes that there are significant differences between the Eircom self-supply of CEI and the CEI access product made available to Access Seekers.

7.349 This view is informed by an analysis set out in the Cartesian Report on CEI Service Delivery, on feedback from Access Seekers, on information gathered by ComReg from Eircom using its statutory information gathering powers,⁷⁹⁸ from ComReg's own analysis and on international comparisons. ComReg's analysis has identified a significant number of issues⁷⁹⁹ relating to the effectiveness of Eircom's current wholesale CEI product. The extent of these issues identified causes concerns regarding the effectiveness of the CEI access product being offered by Eircom to Access Seekers.

⁷⁹⁶

https://www.vodafone.com/content/dam/group/policy/downloads/01_12_2015_DSM_Framework_Review_Vodafone_submission.pdf, December 2015.

⁷⁹⁷ https://www.openeir.ie/Products/Data/Pole_and_Duct_Access/.

⁷⁹⁸ Eircom Response to February 2016 Statutory Information Request ('SIR'), 3 March 2016.

Eircom's Response to April 2016 SIR, dated 20 May 2016.

Eircom's Response to March 2017 SIR, dated 10 April 2017.

Eircom's Response to April 2017 SIR, dated 26 May 2017.

Eircom's Response to May 2017 SIR, dated 23 June 2017.

Eircom's Response to November 2017 SIR, dated 20 November 2017.

Eircom's Response to November 2017 SIR, dated 19 December 2017.

⁷⁹⁹ Refer to Appendix: 15 of this Decision.

7.350 These issues must be addressed, given that the performance of self-supply by Eircom of CEI is superior to the published wholesale CEI products which Eircom offers to Access Seekers – especially with respect to turnaround time for provision (paragraphs 7.352 to 7.354 below), publication of PAR⁸⁰⁰ information (paragraphs 7.459 to 7.465 below) and granularity of Duct and Pole Access (paragraphs 7.400 to 7.407 and 7.413 to 7.422 below).

7.351 ComReg has compared the pre-ordering and service provision SLAs of the current wholesale Duct product offerings and the CEI component of the NGN Ethernet pre-ordering and service provisioning for a provide⁸⁰¹ order. A NGN Ethernet provide order is typically sub-divided into two parts:

- (a) Site survey, Sub-Duct design and installation of Sub-Duct, which ComReg have referred to as ‘the CEI component’, and
- (b) Installation of fibre and the active element i.e. installation and configuration of the Ethernet equipment.

7.352 Therefore, ComReg’s position is that the provisioning of the CEI component of an Ethernet NGN order and CEI access provisioning are directly comparable.

7.353 Table 20 below summarises the differences in SLAs between Eircom Duct Access provision and the CEI components of Eircom NGN Ethernet provision for the scenario where a new Sub-Duct is required. The cumulative difference in maximum time of the SLAs is 56 working days (over 11 working weeks) for comparable CEI provisioning.⁸⁰²

7.354 ComReg notes that the CEI component of the SLA for Eircom NGN Ethernet provision is superior to the SLA offered for the provision of Duct Access.⁸⁰³

Table 20: Comparison between Eircom Duct Access provision and Eircom NGN Ethernet provision, in the scenario where new Sub-Duct is required

Process Activity		SLA (Working Days)		
		New Sub-duct + Field Survey Open eir Duct Offer	New Sub-duct + Field Survey Open eir NGN Ethernet	Difference between Internal & External Supply
Pre-Ordering	Acknowledgement	2	2	-
	Desktop Survey	13	5	8*
	Field Survey	13	10	3*
	Sub-duct Design	30	5	25*
Ordering	Acknowledgement	2	2	-
	Sub-duct Connection	-	-	-
	Sub-duct Installation	40	20	20*
Maximum Time within SLA		100	44	56

⁸⁰⁰ Passive Access Records.

⁸⁰¹ Provide order is a request to Eircom to provide a new service connection.

⁸⁰² In Appendix: 16, ComReg has outlined all scenarios relating to CEI provisioning to derive comparisons between the provision of CEI using Eircom’s regulated Duct Access product and the CEI component of Eircom’s provisioning of NGN Ethernet

⁸⁰³ The performance of the Eircom NGN Ethernet meets the published SLA as evidenced from the Eircom Data Services Report circulated monthly to Access Seekers.

* Access Seekers experience longer lead-time for Eircom Duct Product

- 7.355 ComReg considers that Eircom offers an NGN Ethernet service with a supporting SLA in order to compete effectively in the market. ComReg notes that the performance of the CEI related activities in the provision of open eir NGN Ethernet is at variance with the published open eir wholesale duct access maximum target timelines. It is not clear to ComReg why this difference exists.
- 7.356 ComReg considers that the time required to provision a new service to an End User, a corporate entity, for example, is likely to be one of the key considerations when choosing a supplier of data services. For example, Access Seeker A is seeking to invest in infrastructure in order to offer high bandwidth services, and in doing so plans to consume the open eir wholesale duct access product in order to install its own fibre offer. Access Seeker A could potentially be at a disadvantage to another Access Seeker (or Eircom) who opts to purchase an active product such as the open eir NGN Ethernet product in order to offer high bandwidth services in competition with Access Seeker A, as the time required to deliver the service is likely to be considerably longer⁸⁰⁴ than the time required for a competing service provider to provide a service based on an NGN Ethernet service provided as an upstream input by open eir.
- 7.357 ComReg's position is that current and future direct demand for CEI access, and competition generally and in particular infrastructure-based competition, could be curtailed by ineffective CEI access products. ComReg considers that demand for CEI will can only develop if effective and fit-for-purpose CEI access products are available in the WLA market, which allow Access Seekers to invest in infrastructure such that they can offer competitive services in related Markets. Having considered Respondents' views, ComReg maintains its position as set out in the Consultation.

Competition and investment

Respondents' Views

- 7.358 BT stated that Access Seekers are faced with the expensive option of building infrastructure to customers, whilst Eircom has existing infrastructure with largely sunk costs which could be utilised for its own services – thereby providing it with a competitive advantage.
- 7.359 enet considered that ComReg's proposals for enhanced CEI access obligations could offer significant positive benefits in promoting the deployment of competing fibre infrastructure. enet supports ComReg's proposal on Duct and Pole Access. enet is interested in how regulation may help to secure improved access to CEI under the control of the SMP operator, in order to further its aim of deploying additional network.
- 7.360 Colt stated that mandating Eircom to provide fully unrestricted access to its CEI is the most appropriate remedy to promote infrastructure competition in the WLA Market. Colt stated that ComReg's proposed approach has proven to be highly effective in countries where similar approaches have been adopted including in Spain, Italy, Portugal and France where Duct Access has been mandated with no restrictions and where Fibre to the Premises ('FTTP') is being rolled out extensively.

⁸⁰⁴ Based on open eir SLA performance targets (open eir Duct Access SLA, version 2.0, 19/06/17).

- 7.361 Colt stated that it has excellent experience of sharing ducts of SMP operators in European countries where Duct Access is offered both under regulated and commercial terms. Colt's experience is that deployment of fibre cable in Duct represents a small fraction of the corresponding digging cost. In this respect, Colt stated that the average typical dig cost (trench, cable, Chambers) is about €150 per metre and that by using Duct sharing instead, this cost can be reduced by about 80%.
- 7.362 Vodafone stated that sustainable and effective competition is key to the ability of Ireland's communications infrastructure to deliver to the needs and expectations of households and businesses – this, in turn, relies on deep network investment in alternative infrastructure. Vodafone considered that competing modern infrastructure will create the conditions of competition to incentivise the required investment and innovation to make sure Ireland benefits from leading-edge communications services which are responsive to users' changing needs. Vodafone stated that it supports this vision by investing heavily in modern network infrastructure that will deliver superfast broadband to an increasing number of premises.
- 7.363 Vodafone supports ComReg's view that allowing competitors the means to build their own network infrastructure represents a significant opportunity for a more competitive model of service delivery, referring to it as
- “.....one that truly rewards competitive investment and innovation and could reduce the dis-benefits created by Eircom dominance of the access network...”*⁸⁰⁵
- 7.364 Vodafone stated that where the economics support such investment, it should be encouraged, because competing end-to-end networks are the building blocks for the creation of the modern Gigabit Society.
- 7.365 Vodafone stated that where Eircom has existing passive infrastructure, and others do not, the economics of network build make it unviable for alternative operators to build their own infrastructure. Vodafone believes that fit-for-purpose, cost-based passive infrastructure access is vital to the long-term prospects for end-to-end network competition and that availability of CEI, in a meaningful way, could fundamentally transform the prospects of network investment and sustainable competition.

⁸⁰⁵ Vodafone Submission, paragraph 104.

- 7.366 Vodafone follows a ‘ladder of investment’⁸⁰⁶ approach whereby it migrates retail customers from WCA delivery to WLA based delivery (especially via NG WLA based VUA) as its network expands. Vodafone considered that Eircom’s CEI products are not fit-for-purpose, and stated that the experience has mirrored the LLU experience for the previous generation of broadband products, where it took several years for Eircom to produce a product that was fit-for-purpose.
- 7.367 Eircom’s view (summarised in paragraphs 7.298 to 7.313 above) is that CEI access remedies are not required to address competition problems in the WLA Market and that no additional CEI access remedies should be imposed.

ComReg’s Assessment of Respondents’ Views

- 7.368 ComReg’s position is that effective competition is key to the development of Ireland’s communications infrastructure and that alternative network investment will be a key enabler for a competitive market. ComReg’s position is that network competition at the deepest level is likely, where economically viable, to be the most effective driver for investment in high quality, networks. Analysis⁸⁰⁷ of network deployment across a number of different countries indicates that the scale of FTTx coverage tends to correlate with the level of network competition.
- 7.369 ComReg’s position on the importance of CEI access for competition and investment is echoed by various consultants, other regulators and the European Commission. Some examples of their views are provided below.
- 7.370 The WIK Consult Report⁸⁰⁸ considers the measures taken to enable access to physical infrastructure (duct, pole and in-building wiring access) in five EU countries: France, Germany, Portugal, Spain and the UK. It concludes that:

“Countries with effective physical infrastructure access and in-building wiring have achieved greater deployment and infrastructure competition in FTTH/B. Those countries which have operationalized duct, pole and in-building wiring access have achieved greater deployment of FTTH/B and infrastructure competition in dense urban areas than those which have not pursued this strategy”

- 7.371 Ofcom, the UK NRA, notes that:

⁸⁰⁶ “Ladder of investment principle: The ladder consists of access products at specific access points and wholesale products to reach these access points. The access products have a geographic/architectural dimension as well as a dimension of product characteristics. Bitstream access covers a range of products from close to physical unbundling up to close to resale depending on (a) access point (e.g. local, regional or national), (b) used technology (e.g. IP, Ethernet) (c) product characteristics” [BEREC Common Position on best practice in remedies on the market for wholesale broadband access (including Bitstream Access) imposed as a consequence of a position of significant market power in the relevant market, BoR (12) 128].

⁸⁰⁷ Ofcom Wholesale Local Access Market Review, Initial proposals to develop an effective PIA remedy, 6 December 2016, paragraph 2.4 (based on data provided by Analysys Mason).

⁸⁰⁸ WIK Consult Report ‘Best practice for Passive Infrastructure Access’, 19 April 2017.

“A key element of our strategy to promote infrastructure-based competition is to make it quicker and easier for rival providers to build their own fibre networks by improving duct and pole access..... Improving duct and pole access will make it quicker and easier for rival providers to build their own fibre networks, promoting infrastructure-based competition”⁸⁰⁹

7.372 Consultants Arthur D. Little state that:

“To secure innovation and differentiation in the services that will create the gigabit platform for industry, policy goals should aim to facilitate investment in fibre networks by competing operators. This can be encouraged by reducing the costs of rolling out gigabit networks, where the reuse of physical infrastructure that support digital networks has an important role to play. We can learn from countries, such as Portugal and Spain, which have developed comprehensive regimes that ensure regulated access to passive infrastructure such as ducts, poles and dark fibre, and encouraged co-investment in networks”⁸¹⁰

7.373 The European Commission’s proposals for a ‘European Electronic Communications Code’ (‘EECC’) make access to very high capacity data connectivity an explicit objective for NRAs.⁸¹¹ The European Commission has recognised the importance of physical infrastructure access in the proposed EECC, by placing it at the heart of a proposed revamped regulatory framework.

7.374 Overall, the above shows that countries with effective physical infrastructure access generally achieve greater deployment of high-speed broadband networks and therefore enhanced infrastructure competition. By its inclusion in the EECC, the European Commission recognises the important role of CEI access in supporting greater infrastructure competition by ensuring access to civil infrastructure, such as ducts, poles etc., where these are held by operators with SMP.

7.375 Having considered Respondents’ views, ComReg maintains its position as set out in the Consultation.

Scope of CEI access

Respondents’ Views

7.376 Colt stated that access should be agnostic as to the segment of the Access Provider’s network that the facility belongs to (i.e. access or core network). While Colt acknowledged that CEI is intended for the deployment of access networks, Colt considered that this does not imply that the Access Seeker should be denied access to a facility merely because Eircom has classified the facility as belonging in its backhaul segment.⁸¹²

⁸⁰⁹ Ofcom Wholesale Local Access Market Review: Consultation on Duct and Pole Access remedies, 20 April 2017.

⁸¹⁰ Creating a Gigabit Society - A report by Arthur D. Little for Vodafone Group Plc, 2016.

⁸¹¹ https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=comnat:COM_2016_0590_FIN (Art. 3).

⁸¹² See paragraphs A 12.5 to A 12.10 of the Consultation.

7.377 Vodafone noted that Access Seekers should not be limited to Eircom's network topology boundaries, i.e. the Access Seeker's CEI access requirement may span more than one Eircom exchange area.

ComReg's Assessment of Respondents' Views

7.378 ComReg notes the views of Colt and Vodafone as summarised in paragraphs 7.376 to 7.377 above.

7.379 ComReg does not agree with Colt's view that there should be no restriction on the use of CEI access i.e. it should be capable of being used by an Access Seeker to deploy access and core network. ComReg position is that the scope of CEI access obligations is as outlined in Appendix 12 of the Consultation (Scope of CEI access). An Access Seeker can determine the acceptable and unacceptable usage scenarios for CEI from a Local Access⁸¹³ network perspective using the principles outlined in Appendix 12 of the Consultation.

7.380 As outlined in paragraphs A 12.5 to A 12.10 of Appendix 12 of the Consultation, ComReg's position is that the use of CEI access paths to connect End Users (i.e. Access Seekers' Customers) to the Access Seekers Point-of-Presence (i.e. MPOPs), shall not be restricted by the boundaries of Eircom's Aggregation Node/exchange areas. For clarity, ComReg sets out three scenarios⁸¹⁴ in the Consultation to explain ComReg's position regarding the geographic scope of CEI access.

7.381 As outlined in Appendix 12 of the Consultation, CEI access is not restricted by the boundaries of Eircom's Aggregation Node/exchange areas given that the Access Seeker defines its access network - from the Access Seeker's MPOP to its End Users. CEI access is available to enable Access Seekers deploy their access network which is independent from Eircom's own access and core network.

Specific Issues relating to Access to CEI

7.382 Below, ComReg summarises Respondents' views on specific CEI remedies followed by ComReg's assessment of Respondents' views. The specific remedies are:

- (a) Sub-Duct Access and Direct Duct Access (Respondents' views summarised in paragraphs 7.383 to 7.387 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.388 to 7.391 below);
- (b) Access to Chambers (Respondents' views summarised in paragraphs 7.392 to 7.399 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.400 to 7.407 below);

⁸¹³ "Local Access" means the physical infrastructure or a circuit (metallic, fibre or hybrid metallic-fibre path) that is between the End User's premises and a point in an Eircom Exchange i.e. for metallic path physical unbundling this point will be at the MDF in an Eircom Exchange, for fibre physical unbundling this point will be the ODF in an Eircom Exchange and for virtual unbundling this point will be at the Aggregation Node in an Eircom Exchange;

⁸¹⁴ Paragraphs A12.6 to A12.10 of the Consultation.

- (c) Ingress and Egress points (Respondents' views summarised in paragraphs 7.408 to 7.412 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.413 to 7.422 below);
- (d) CEI Co-Location (Respondents' views summarised in paragraphs 7.423 to 7.427 below; ComReg's assessment of Respondents' outlined views in paragraphs 7.428 to 7.430 below);
- (e) CEI Tie Connection Service between the Co-Location space/rack and the Ingress and Egress points (Respondents' views summarised in paragraphs 7.431 to 7.434 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.435 to 7.437 below);
- (f) De-Congestion and Optimisation of Ducts (Respondents' views summarised in paragraphs 7.438 to 7.441 below; ComReg's assessment of Respondents' outlined in paragraphs 7.442 to 7.443 below);
- (g) Where access to CEI is not available, to provide access to Dark Fibre where reasonably available (Respondents' views summarised in paragraphs 7.444 to 7.447 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.448 to 7.458 below); and
- (h) Access to Passive Access Records ('PAR') (Respondents' views summarised in paragraphs 7.459 to 7.475 below; ComReg's assessment of Respondents' views outlined in paragraphs 7.476 to 7.510 below).

Sub-Duct Access and Direct Duct Access

Respondents' Views

- 7.383 Five Respondents (ALTO, BT, Colt, enet and Vodafone) agreed with ComReg's proposal to oblige Eircom to provide Sub-Duct Access⁸¹⁵ and Direct Duct⁸¹⁶ Access. Eircom disagreed with ComReg's proposed remedy of Direct Duct Access. Some such Respondents provided additional views.
- 7.384 BT and enet supported ComReg's proposal to oblige Eircom to provide Sub-Duct and Direct Duct Access.
- 7.385 Vodafone agreed that efficient network provision requires the CEI access obligation to include both Sub-Duct Access and Direct Duct Access. Vodafone considers that such flexibility is required to prevent inefficient and costly duplication of network investment.
- 7.386 Eircom stated that, in order to protect fibre optic cable in the Duct network, the use of Sub-Duct is essential. Eircom stated that putting fibre directly in a duct was bad engineering practice.⁸¹⁷

⁸¹⁵ "Sub-Duct" means the tube inserted in a Duct through which a cable is installed.

⁸¹⁶ "Direct Duct Access" means direct access to Eircom's Ducts for the installation of cables without the use of a Sub-duct.

⁸¹⁷ Eircom Submission, page 41 states:

"Placing the fibre in sub-ducting provides more protection for individual fibres and allows eir to maintain the integrity of its network whilst promoting the efficient use of scarce resources in the form of duct space."

7.387 Eircom also stated that it would be sub-optimal for Access Seekers to install their own Sub-Ducts within Eircom Ducts if utilisation by Access Seekers and Eircom of individual Sub-Ducts is low.

ComReg's Assessment of Respondents' Views

7.388 ComReg notes Eircom's view that it would be sub-optimal for Access Seekers to install their own Sub-Ducts in Eircom Ducts if utilisation of individual Sub-Ducts is low.

7.389 ComReg acknowledges that Access Seekers may consider re-using spare micro-ducts⁸¹⁸ or Sub-Ducts where capacity is available instead of the Access Seeker installing its own Sub-Duct. However, for operational reasons, the Access Seeker can request Duct Access for its own Sub-Duct.

7.390 For the avoidance of doubt, Eircom must offer Access Seekers with the option to install multi-way Sub-Ducts (e.g. 3-way, 7-way) into its ducts, on the same basis that Eircom provides this option to itself.

7.391 Having considered Respondents' views, ComReg maintains its position as set out in the Consultation.

Access to Chambers

Respondents' Views

7.392 Five Respondents (ALTO BT, Colt, enet and Vodafone) agreed with ComReg's proposal to oblige Eircom to provide access to Chambers. Eircom disagreed with the proposal. Some of these Respondents provided additional views.

7.393 Vodafone supported the proposed requirement for Eircom to provide access to Chambers,⁸¹⁹ which it considered is required to allow Access Seekers to install and maintain their network infrastructure, and to carry out necessary repairs as needed.

7.394 enet stated that such an obligation will be critical in a situation where only Eircom Duct is available.

7.395 Eircom commented that Duct/Chamber space is an extremely scarce resource and that access by multiple operators could be inefficient.⁸²⁰ Eircom states that the provision of stand-off⁸²¹ Chambers by other Access Seekers for their own equipment/splices will ensure optimum usage of Eircom duct space/Chambers.

⁸¹⁸ Micro-ducts are a collection of sub-ducts (typically 3 or 7, referred to as 3-way and 7-way respectively) combined in a single bundle encased in an outer plastic protective sheath.

⁸¹⁹ 'Chamber' means any underground construction which is built to facilitate access to cables within Eircom's Duct network for the purposes of splicing, jointing, distribution, fault localisation and repairs.

⁸²⁰ Eircom Submission, page 44.

⁸²¹ A stand-off Chamber is an Access Seekers Chamber constructed in close proximity (typically a few metres apart) to an Eircom Chamber. The stand-off Chamber is connected to the Eircom Chamber by a duct (typically 110mm in diameter).

7.396 Eircom noted the reference in the Consultation⁸²² to the Cartesian Report on CEI Service Delivery⁸²³ which stated:

“It can be argued that the absence of Chamber access undermines the value of Duct Access. This in turn undermines potential downstream competition as the Access Seeker may be reluctant to risk potential service outages for high value customers or groups of customers. Without access to duct Chambers maintenance and repair tasks could be cumbersome and time consuming. These delays could have negative consequences for End Users and would be ultimately detrimental to competition.”⁸²⁴

7.397 Eircom did not agree with Cartesian’s argument (quoted in paragraph 7.396 above) and stated that the Access Seeker’s fibre might traverse Eircom’s Chambers but that the jointing would be in the Access Seeker’s Chamber. Eircom also stated that repair of fibre in a damaged Duct will not adversely impact the Access Seeker, as in Eircom’s view

“they can pull in new fibre (long length to minimise splices) through their Chamber”

7.398 Eircom asserts that ComReg cannot undermine Eircom’s right to maintain its network integrity with a blanket obligation to provide access to any Chamber, irrespective of the suitability of access to that Chamber. Eircom stated that this proposed remedy will increase Eircom’s costs as it will need to administer access to the CEI facilities and validate the work undertaken by the Access Seeker to ensure that it is done to an acceptable standard and that no damage is done to Eircom’s network. Eircom then stated that it will offer access to any suitable⁸²⁵ Chamber to an Access Seeker.

7.399 Eircom also stated that it is unclear how it would be indemnified if a third party damages either Eircom’s own fibre network or another operator’s network while engaging in this proposed activity (i.e. access to Eircom CEI facilities), and to what extent a third party will be obliged to make good damage caused and compensate Eircom for loss of revenue and reputation.⁸²⁶ Eircom stated that in contrast to ComReg’s view expressed in the Consultation⁸²⁷ that

“.....this proposed obligation will not result in a significant additional burden on Eircom.....”

Eircom will need to produce documentation, then administer the access and, following any access granted, it would have to check that no damage is done to its network. Eircom stated that this would result in an additional burden.

⁸²² See paragraph 8.251 of the Consultation.

⁸²³ Cartesian Report on CEI Service Delivery.

⁸²⁴ Eircom Submission, page 41.

⁸²⁵ A chamber with sufficient space and access.

⁸²⁶ Eircom Submission, page 40.

⁸²⁷ Paragraph 8.229 of the Consultation.

ComReg's Assessment of Respondents' Views

- 7.400 ComReg notes that five Respondents (ALTO, BT, Colt, enet and Vodafone) agreed with ComReg's proposal to oblige Eircom to provide access to Chambers.
- 7.401 ComReg disagrees with Eircom's view that restricted access to Chambers will not adversely impact Access Seekers. Access to Chambers facilitates optimum network design and efficient network maintenance practices. For example, access to Chambers will enable Access Seekers to carry out repairs to fibre located at an Eircom Chamber without the need to replace the entire section of the Access Seeker's fibre (from Access Seeker Ingress to Egress locations).
- 7.402 ComReg disagrees with Eircom's view as set out in paragraphs 7.398 to 7.399 above that access to Chambers will undermine Eircom's right to maintain its network integrity. However ComReg acknowledges that Eircom may specify objectively justified reasonable terms and conditions governing access to Chambers in order to safeguard network integrity. Such terms and conditions and any associated operational processes/procedures governing access to Chambers, must be clearly documented and published by Eircom in order that Access Seekers can be aware of and clearly understand them.
- 7.403 ComReg does not accept that there will be material increases in administration costs to validate and inspect third party work,⁸²⁸ or that indemnification of third party access to the network cannot be appropriately managed. ComReg understands there would be an accreditation process available to Access Seekers so that their nominated contractors could be accredited. ComReg notes that Eircom engages accredited authorised third party contractor(s) to carry out survey and build functions on its access network. ComReg notes that these accredited contractor(s) indemnify Eircom against damages to its network⁸²⁹. ComReg's position is that Access Seekers should be subject to the same conditions of access as Eircom's own contractors. In some instances, Access Seekers will use the same contractors who work for Eircom.
- 7.404 For the avoidance of doubt, access to Chambers is available to Access Seekers who purchase CEI access i.e. an Access Seekers who purchase CEI access for a particular Duct and Pole route may seek access to the Chambers along the Duct and Pole route.
- 7.405 For the avoidance of doubt, Eircom is required to give access to the final Chamber on a Duct route (known as the Distribution Point ('DP') Chamber) and the Duct from the DP Chamber to the End User premises (sometimes referred to as the 'lead-in' Duct), where there is a pre-existing Eircom Duct/Sub-Duct which is reasonably available.⁸³⁰

⁸²⁸ Eircom email, dated 29 November 2017.

⁸²⁹ *Ibid.*

⁸³⁰ Reasonably available means instances where the 'lead-in' Duct has sufficient capacity to allow the Access Seeker its Sub-Duct and/or cable.

- 7.406 Eircom is required to give access to the final DP Chamber on a Duct route in instances where the End User owns the Duct/Sub-Duct (from the Eircom DP Chamber to the End User premises), where there is a pre-existing End User⁸³¹ Duct/Sub-Duct which is reasonably available.
- 7.407 ComReg's position is that Eircom must offer Access Seekers access to Chambers,⁸³² which includes providing Access Seekers with the option of housing passive equipment in the Chambers on the same basis that Eircom provides this option to itself (passive fibre enclosure of a specific size for Eircom's own use). From ComReg's perspective, the guiding principle is that the 'design principles',⁸³³ which Eircom developed over time, must be applied transparently and equivalently to both Access Seekers and Eircom.

Ingress and Egress points

Respondents' Views

- 7.408 Five Respondents (ALTO, BT, Colt, enet, and Vodafone) agreed with ComReg's proposal to oblige Eircom to provide access to Ingress and Egress points. Eircom disagreed with ComReg's proposal to oblige it to provide access to Ingress and Egress points. Some of these Respondents provided additional views.
- 7.409 Vodafone supported the proposal that there should be no artificial restrictions placed on Access to CEI and stated it is vital that Access Seekers should be able to request, and make use of, the particular Ingress and Egress points needed to serve their customers.
- 7.410 Colt stated that Eircom should not be able to limit the points of Ingress and Egress into the network noting that
- "...allowing Eircom to limit the Ingress and Egress points allows it to institute a de facto limitation on end use ..."*⁸³⁴
- 7.411 enet supported ComReg's proposal to require Eircom to provide access to CEI Ingress and Egress points noting that
- "ComReg's proposal would make the task of deploying an alternative fibre network using CEI access far easier to do, as it would give the OAO the ability to switch in and out of the Duct network for short runs without having to build additional interface Chambers"*⁸³⁵
- 7.412 Eircom stated that ComReg's proposed obligation is unnecessary and thus not appropriate as:

⁸³¹ In the case of End User Duct/Sub-Duct (from the Eircom DP Chamber to the End User premises), the Access Seeker will obtain a wayleave from the End User to use this Duct/Sub-Duct.

⁸³² See paragraphs 8.250 to 8.260 of the Consultation.

⁸³³ Design principles e.g. maximum size fibre enclosure permitted in a particular Chamber, when a Chamber is classified as full, etc.

⁸³⁴ Colt Submission, page 5.

⁸³⁵ enet Submission, page 5.

“Duct access will be offered at any technically/operationally suitable ingress/egress point/chamber. open eir recommends that the ingress/egress points outside the open eir exchange / cabinets / final Distribution Point (DP) are the optimal locations from an engineering point of view to offer interconnection with an OAO chamber for the purpose of OAO duct access provision. It is not technically feasible to consider access to breach the sub-duct between an open eir exchange and a cabinet as the sub-duct is multicore sub-duct carrying other services - ingress/egress would require cutting into multicore sub-duct along a route which raises engineering risk and technical difficulty”⁸³⁶

ComReg’s Assessment of Respondents’ Views

- 7.413 ComReg notes that five Respondents agreed with ComReg’s proposal to oblige Eircom to provide access to Ingress and Egress points.
- 7.414 ComReg notes that Eircom considers that the Ingress/Egress points outside the Eircom exchange / cabinets / final Distribution Point⁸³⁷ are the optimal locations, from an engineering point of view, to offer interconnection with an Access Seeker’s Chamber for the purpose of providing Duct Access.
- 7.415 ComReg notes that Eircom’s published Duct Access Product Description⁸³⁸ states that:

“Duct access may be offered at any technically/operationally suitable ingress/egress point/chamber. Open eir recommends that the ingress/egress points outside the open eir exchange/ cabinets / final Distribution Point (DP) are the optimal locations from an engineering point of view to offer interconnection with an OAO chamber for the purpose of OAO duct access provision. It is not technically feasible to consider access to breach the sub-duct between an open eir exchange and a cabinet as the sub-duct is multicore sub-duct carrying other services - ingress/egress would require cutting into multicore sub-duct along a route which raises engineering risk and technical difficulties”

- 7.416 ComReg does not agree with Eircom’s view (outlined in paragraph 7.415) that ingress/egress points outside the open eir exchange/ cabinets / final Distribution Point (DP) are the optimal locations from an engineering point of view to offer interconnection with an OAO chamber for the purpose of OAO duct access provision. It is technically feasible to access the sub-duct between an open eir exchange and a cabinet even if the multicore sub-duct is carrying other services.
- 7.417 Micro-duct bundles (referred to as multicore Sub-Duct in Eircom Duct Access Product Description) are specifically designed to enable network operators to have access to each micro-duct individually, even where some micro-ducts have fibre cables carrying End-User traffic. Each micro duct is clearly labelled by colour coding, which reduces the risk of a technician cutting into the incorrect micro-duct.

⁸³⁶ Eircom Submission, page 39.

⁸³⁷ A Distribution Point is the network connection point closest to the End User where service is provided. The network connection point is a termination box on a pole or a joint in a chamber.

⁸³⁸ Duct Access Product Description, Version 2.0, 19 June 2017, pages 5-6.

- 7.418 ComReg notes that in its Submission Eircom did not provide any valid technical or operational reason as to why access to any suitable Chamber along an access route should be restricted.
- 7.419 Eircom has unrestricted access to Ingress/Egress points on its access network at all its accessible Chambers. Eircom can create a new Ingress/Egress point at any accessible Chamber with sufficient capacity. The proposed non-discrimination obligations require Eircom to offer the same CEI product with the same terms and conditions to Access Seekers as it offers itself.
- 7.420 An Access Seeker may request that a Sub-Duct is installed in Eircom's duct irrespective of whether Eircom has spare micro-duct already installed. The Access Seeker may wish to have full control of its Sub-Duct and, for example, install fibre joints at any suitable Eircom Chamber as the Access Seekers install new service connections to End Users (either residential or business). If Sub-Duct Access is not available, then the Access Seeker may request Direct Duct Access.
- 7.421 ComReg is not undermining Eircom's right to maintain its network integrity by the imposition of an obligation to provide access to any suitable Chamber. The proposed remedy will not materially increase Eircom's costs to administer access to the CEI facilities. For example, Eircom appoints accredited contractors to undertake work in its duct network without the need to validate the work undertaken by the accredited contractor.⁸³⁹ This same model can be applied to Access Seekers accessing Eircom's duct network. ComReg considers that Eircom's effort to produce documentation, and administer the access via accredited contractors, is not burdensome on Eircom.
- 7.422 ComReg does not accept that Eircom is unclear how it would be indemnified if a third party damages either Eircom's own fibre network or another operator's network while engaging in this proposed activity (i.e. access to Eircom CEI facilities). Eircom appoints accredited contractors to undertake work in its duct network hence it has already has arrangements in place to manage damage caused by accredited contractors.⁸⁴⁰

CEI Co-Location

Respondents' Views

- 7.423 Six Respondents (ALTO, BT, Colt, Eircom, enet, and Vodafone) provided comments on ComReg's proposal to oblige Eircom to provide access to CEI Co-Location.⁸⁴¹
- 7.424 enet considered that ComReg's proposal to require Eircom to provide access to CEI Co-Location would be a positive development as it would promote faster network deployment and help to reduce power and facility provision cost with respect to the standard Co-Location product.

⁸³⁹ Eircom email, dated 29 November 2017.

⁸⁴⁰ *Ibid.*

⁸⁴¹ "CEI Co-Location" means the Co-Location services and facilities that are necessary to support Access to CEI.

7.425 Vodafone considered that access to CEI Co-Location and associated services is a prerequisite to obtaining effective access to Eircom's WLA products and in this respect noted:

*".....without mandated access to these services, there is a risk that Eircom would use its dominant position to frustrate access and distort competition in downstream markets."*⁸⁴²

7.426 Vodafone therefore supported ComReg's proposal to impose access obligations related to Co-Location services for CEI.

7.427 Eircom stated that Co-Location is a very intrusive remedy, allowing an Access Seeker to have access to its property. Eircom stated that the obligation of Co-Location thereby interferes with its enjoyment of its property rights. Eircom noted that it is a proportionate remedy only where such intrusion is absolutely necessary and such that it ensures that Access Seekers may rely on the services which Eircom is obliged to provide.

ComReg's Assessment of Respondents' Views

7.428 Five Respondents agreed with ComReg's proposal to oblige Eircom to provide access to CEI Co-Location.

7.429 Eircom qualified its response by noting that it is a proportionate remedy only where such intrusion is absolutely necessary and such that it ensures that Access Seekers may rely on the services which Eircom is obliged to provide.

7.430 ComReg's position is that Eircom is obliged to provide co-location to a third party where that third party facilitates Access Seekers to consume regulated products, services and facilities. For example, a third party may have an agreement with an Access Seeker to provide the Access Seeker with backhaul services at an exchange so that the Access Seeker can purchase VUA services at that exchange.

CEI Tie Connection Service between the Co-Location space/rack and the Ingress and Egress points

Respondents' Views

7.431 Three Respondents (BT, enet, and Vodafone) agreed with ComReg's proposal to oblige Eircom to provide access to a CEI Tie Connection Service.⁸⁴³ Eircom disagreed with ComReg's proposal regarding such access.

⁸⁴² Vodafone Submission, paragraph 83.

⁸⁴³ As defined in the Consultation, 'CEI Tie Connection Service' means the fibre connection, provided by Eircom, between an Undertaking's co-located equipment in their equipment rack or from the Undertaking's co-located Optical Distribution Frame (ODF) to a Chamber or Pole on an Eircom CEI route usually in close proximity to the exchange building site.

- 7.432 Eircom noted that ComReg proposed that Eircom provide access to a CEI Tie Connection Service between an Access Seeker's Co-Location footprint/Optical Distribution Frame ('ODF') and a Chamber or Pole outside the exchange (paragraph 8.230 of the Consultation). It is Eircom's view that this is not necessary given that an Access Seeker will have a fibre connection between the Access Seeker's Co-Location and the Access Seeker's Chamber once the Access Seeker has purchased either LLU or WEIL ISH.⁸⁴⁴
- 7.433 Eircom's view is that the Tie Connection service between Co-Location and CEI Ingress and Egress points is not necessary given that Co-Location is offered to support delivery of Eircom products e.g. LLU, WEIL VUA - with OAO or Eircom backhaul.
- 7.434 Eircom's view is that CEI access from the Access Seeker's Co-Location footprint to a Chamber or Pole outside the exchange, if available, is a suitable substitute for the fibre 'CEI Tie Connection' Service.

ComReg's Assessment of Respondents' Views

- 7.435 ComReg does not agree with Eircom's views summarised in paragraph 7.432 above that CEI Tie Connection is unnecessary. In this respect ComReg notes that an Access Seeker may purchase CEI access without also purchasing LLU or WEIL ISH. In such circumstances a CEI Tie Connection would therefore be necessary. ComReg position is that an Access Seeker is permitted to install a suitable enclosure in any suitable Chamber belonging to Eircom, hence the Access Seeker does not have to invest in the installation of standoff chambers in order to access CEI.
- 7.436 ComReg notes that CEI access from the Access Seeker's Co-Location footprint to a Chamber or Pole outside the exchange, if available, could be a suitable alternative for the 'CEI Tie Connection' service.⁸⁴⁵ The Access Seeker can decline CEI access (i.e. Sub-Duct) from the Access Seeker's Co-Location footprint to a Chamber or Pole outside the exchange (if available) and instead opt for a CEI Tie Connection Service.
- 7.437 A Tie Connection Service is a fibre connection between the Access Seekers' collocated equipment or the Access Seekers' co-located ODF in an Eircom exchange and a Chamber or Pole outside the exchange.⁸⁴⁶ For the avoidance of doubt, the Access Seekers' collocated equipment may be situated in the Access Seeker's own Co-Location or another Access Seeker's Co-Location (in the case of Co-Location Resource Sharing) in an Eircom exchange.

⁸⁴⁴ Wholesale Ethernet Interconnect Link In-Span Handoff.

⁸⁴⁵ Where Eircom has an over-supply of Sub-Duct space between the Co-Location footprints in the exchange to Chamber(s) or Pole(s) outside the exchange.

⁸⁴⁶ See paragraph 8.231 of the Consultation.

De-Congestion and Optimisation of Ducts**Respondents' Views**

- 7.438 Two of eight Respondents (Eircom and Vodafone) commented on the requirement for Eircom to provide Access to de-congestion⁸⁴⁷ and optimisation of ducts.
- 7.439 Eircom agreed with ComReg's conclusion that no additional measures need be specified relating to network de-congestion/optimisation.
- 7.440 Vodafone expressed its concern at the lack of remedies relating to the de-congestion and optimisation of Ducts and requested ComReg to consider the introduction of remedies in this regard.⁸⁴⁸
- 7.441 Vodafone noted that ComReg is of the view that refusal of access to CEI, where redundant cables are not removed from Ducts and Poles, may be seen as an unjustifiable refusal of a request for Duct access.⁸⁴⁹

ComReg's Assessment of Respondents' Views

- 7.442 Having considered Vodafone's response, ComReg does not intend to impose a specific CEI decongestion/optimisation obligation at this time. ComReg considers that any refusal by Eircom to provide CEI access, due to the presence of redundant cables on its ducts/poles, may be an unjustifiable refusal of access. Furthermore, ComReg can investigate any instance of refusal of access to CEI to establish whether there was an unjustifiable refusal of access on the grounds that the ducts/poles could be decongested and/or optimised. ComReg will take appropriate steps where the refusal of access to CEI is found to be unjustified.

⁸⁴⁷ Congested ducts are full due to the existence of multiple cable in the ducts which can include redundant cables. In such cases, removing redundant cables can decongest the ducts.

⁸⁴⁸ Vodafone Submission, paragraph 114 states:

"It is a risk to the potential for competitive transformation resulting from Duct Access that Eircom dominance gives it the incentive and ability to avoid proactive management of its network and therefore reduce availability of duct capacity for competitors. It could do so by not having sufficient systems in place to monitor and remove redundant cables, thus showing ducts to be full when efficient management would create capacity along the same network routes"

⁸⁴⁹ Vodafone Submission, paragraph 115 states:

"ComReg has not set out how Access Seekers, or indeed ComReg, would be able to detect when refusal of access has arisen from full capacity with fully active circuits, as opposed to a situation when refusal results from circuits which are redundant. Vodafone urge ComReg to consider its position in this area, and to proactively monitor the situation to ensure this situation does not arise"

7.443 ComReg notes that blockages⁸⁵⁰ are cleared by Eircom in the delivery of NGN Ethernet circuits and for Eircom's self-supply of Duct. Therefore, Eircom must clear blockages in the provision of CEI Duct Access, noting that Eircom must provide access to CEI to the standard of Equivalence of Inputs ('EoI')⁸⁵¹ and having regard to its non-discrimination obligation.

Where access to CEI is not available, to provide access to Dark Fibre where reasonably available

Respondents' Views

7.444 Three Respondents (Eircom, enet and Vodafone) agreed with ComReg's proposal on the requirement to provide access to Dark Fibre where CEI is not available.

7.445 enet welcomed ComReg's proposal to oblige Eircom to provide access to Dark Fibre as an alternative to CEI access, where Dark Fibre access is reasonably available. However, enet stated that access to Dark Fibre should be available in its own right as a regulated product, and not just in circumstances where CEI access is unavailable.

7.446 enet also stated that as access to passive infrastructure becomes "...an accepted part of the regulatory toolkit..."⁸⁵² It makes sense that Dark Fibre access is mandated in its own right, along with Duct and Pole Access. enet noted

*".....in this way, Access Seekers have all available passive infrastructure options from which to choose when deploying alternative local access fibre networks using the incumbent's infrastructure"*⁸⁵³

7.447 Vodafone stated that it is interested in using passive access (including Dark Fibre) where the business case is justified.

ComReg's Assessment of Respondents' Views

7.448 ComReg has considered enet's statement that access to Dark Fibre should be available in its own right as a regulated product, not just in circumstances where CEI access is not available.

7.449 ComReg has proposed CEI access obligations including that Eircom be required to provide CEI access to the standard of EoI. ComReg considers that the CEI obligation is necessary in order to enable Access Seekers install fibre on Eircom Duct or Pole routes in order to expand the reach of their network. The CEI remedy, therefore, has the potential to enhance infrastructure competition to the benefit of End Users.

⁸⁵⁰ Blockages in duct are due to the duct collapse, damage to duct or build-up of silt in the duct. Blockages are easily identified during the 'Rod and Rope' duct activity. In the case of damaged or collapsed duct section, the blockage is cleared by digging down to the damaged/collapsed duct and repairing. Blockages caused by silt build-up is removed by pressure washing the blocked section using commercial drain clearing equipment.

⁸⁵¹ See paragraphs 8.421 to 8.443 of the Consultation, and paragraphs 7.829 to 7.934 of this Decision.

⁸⁵² enet Submission, page 7.

⁸⁵³ enet Submission, page 7.

- 7.450 ComReg notes, therefore, that effective CEI access can result in more sustainable competition. ComReg considers that the imposition of a mandatory (and unconditional) Dark Fibre Access obligation in conjunction with the requirement for CEI access may be disproportionate and could also act as a disincentive to Access Seekers to build their own network infrastructure, thereby undermining the goal of infrastructure competition.
- 7.451 In the Consultation ComReg proposed that Eircom be subject to an obligation requiring it to provide access to Dark Fibre where CEI is not available and where Dark Fibre is reasonably available. Furthermore, ComReg notes that Eircom is also subject to a general obligation to meet reasonable requests from undertakings for Access to WLA including Associated Facilities. Therefore, Access Seekers may request Dark Fibre on a reasonable request basis (i.e. even in circumstances where CEI is available). Any such request would be subject to a reasonableness assessment by Eircom.
- 7.452 In addition, ComReg also notes that Eircom had planned to offer Dark Fibre to NBP bidders for the purposes of NBP. ComReg considers that this Dark Fibre Access is within the scope of Local Access. In this regard, ComReg notes that Eircom is subject to both a non-discrimination obligation and an obligation not to withdraw services and facilities already granted.
- 7.453 ComReg's preliminary view and reasoning on access to Dark Fibre was set out in the Consultation.⁸⁵⁴ ComReg proposed that Dark Fibre access would be conditionally available in cases where CEI access was unavailable for technical reasons which give rise to capacity constraints, such as Duct being full.⁸⁵⁵
- 7.454 ComReg has further considered CEI access and is of the view that considerations other than the technical availability of CEI can be a barrier to Access Seekers' use of CEI. In this context, ComReg considers that CEI is also not available if CEI access products are not developed and available to Access Seekers or are available but reasonably considered by ComReg as not meeting Access Seekers' requirements such that Access to CEI is effectively denied.
- 7.455 ComReg notes that circumstances may arise where there may be available CEI capacity on a particular duct or pole route, however CEI may nevertheless be effectively unavailable due to deficiencies in the CEI access products offered by Eircom.
- 7.456 In such circumstances the Access Seeker may request an amendment to the CEI product. If this request is refused by Eircom then ComReg may assess the views of both the Access Seeker and Eircom on the matter and come to a view as to whether CEI can be considered unavailable and therefore whether Access to Dark Fibre should be provided by Eircom, where reasonably available.

⁸⁵⁴ See paragraphs 8.269 to 8.272 of the Consultation.

⁸⁵⁵ CEI could also be unavailable arising from a technical issue such as an extensive duct collapse, for example.

- 7.457 For the avoidance of doubt, if Dark Fibre is made available due to CEI not being available then the Access Seeker should have the same opportunity to build their network infrastructure as would have been afforded to them had CEI been available.⁸⁵⁶ For example, Access Seekers should have the ability to combine CEI access and Dark Fibre access on the same Duct or Pole route in instances where CEI access is not available, but Dark Fibre is reasonably available, over a section of a route.
- 7.458 ComReg maintains its position as taken in the Consultation that Eircom is obliged to provide Access to Dark Fibre, where reasonably available, where CEI is not available.

Access to Passive Access Records (PAR)

Respondents' Views

- 7.459 Three of eight Respondents (Colt, Eircom and Vodafone) commented on access to PAR.
- 7.460 Vodafone supported the requirement for access to PAR. Vodafone particularly emphasised the requirement for access to PAR as an important required feature if Duct and Pole Access is to be a viable option for those seeking to use it to deploy their own network infrastructure.⁸⁵⁷
- 7.461 Vodafone stated that access to PAR is likely to have been an important feature in Portugal and Spain, both of which have enjoyed some success in the development of alternative FTTP networks relying on access to the passive infrastructure of the incumbent.
- 7.462 Colt stated that it is necessary that support systems allow Access Seekers to interrogate the Duct owner's inventory in order to plan deployment of its network. The inventory should contain the best available information on, at the very least, the location of Duct routes and manholes and also on the availability of Duct capacity on routes.
- 7.463 Colt stated that an example of a well-functioning OSS framework is in Portugal, where the inventory database is so accurate that an Access Seeker can begin to deploy its fibre cables into ducts five days after the initial request, provided that the support system shows that there is available capacity for the requested route. The Duct Access product should therefore include functional interfaces and processes, and a support system for access to the required information.
- 7.464 The issues raised by Eircom with respect to Access to PAR are grouped into the following themes which are detailed in paragraphs 7.466 to 7.475 and then assessed by ComReg in paragraphs 7.476 to 7.510.

⁸⁵⁶ Ingress and Egress points for dark fibre should not be limited to Ingress/Egress points outside the Eircom exchange / cabinets / final Distribution Point ('DP'). The Ingress and Egress points for dark fibre can be at any suitable location in the access network where it is feasible to connect to Eircom dark fibre.

⁸⁵⁷ Vodafone Submission, paragraph 108 states:

"Access to PAR will ensure those seeking to invest are able to plan their network investments and estimate costs for business planning purposes accordingly. The cost of ad-hoc on-site work to assess viability of particular deployments would make investment using CEI uneconomic"

- (a) Inventory information (discussed in paragraphs 7.466 to 7.470 below);
- (b) Scope and cost of producing PAR (discussed in paragraphs 7.471 to 7.473 below);
- (c) Evidence justifying the PAR obligation (discussed in paragraph 7.474 below); and
- (d) Capacity management (discussed in paragraph 7.475 below).

7.465 In addition other points made by Eircom, are grouped into the following themes and are addressed in Appendix: 18 of this Decision.

- (a) Reservations and Reservation System;
- (b) Definition of PAR; and
- (c) Pre-Qualification File.

Inventory Information

7.466 Eircom stated that, in its opinion, ComReg believes there are information asymmetries that can lead to competition problems and an inefficient use of resources by Access Seekers.⁸⁵⁸ Eircom stated that this is not correct and ComReg should be well aware that Eircom is already providing Access Seekers with access to the PAR information that is available on its systems.

7.467 Eircom quoted the definition of PAR provided by ComReg in the Consultation⁸⁵⁹ and stated that it appears to be limited to available information, so it would appear that there is no obligation to provide information Eircom does not have on existing utilisation (e.g. Duct or Sub-Duct utilisation). Eircom suggested that ComReg needs to clarify the confusion that, in Eircom's view, the Cartesian Report on CEI Service Delivery and the Consultation have produced.

7.468 Eircom also noted that there appears to be a presumption in the Cartesian Report on CEI Service Delivery and ComReg's proposals that Eircom is holding back information related to CEI from Access Seekers. Eircom stated "...*that is simply not the case...*"⁸⁶⁰ and that it makes available the PAR it has. Eircom stated that it does not have occupancy records and this has been explained to ComReg.⁸⁶¹

⁸⁵⁸ Eircom Submission, page 42.

⁸⁵⁹ Definition of PAR in ComReg's Consultation: "means all available physical records for passive access, including *inter alia* information relating to (i) physical location of Ducts, Sub-Ducts, Poles, Chambers, cabinets, and distribution points, including their technical and physical characteristics; (ii) the installed fibre and metallic cable capacity in Ducts and in Sub-Duct and on Poles, including their used capacity (iii) the reserved Duct, Pole and Chamber capacity (reservation information includes x-y co-ordinates of start and the end of the route, requested date of reservation, reservation lapse date); and (iv) the reserved capacity by internal or external Undertakings, per route."

⁸⁶⁰ Eircom Submission, page 35.

⁸⁶¹ Eircom Submission, page 35.

7.469 Eircom stated that it is providing access to PAR that it has available to it and that the 'Click Before You Dig' ('CBYD')⁸⁶² application provided to Access Seekers offers the most up to date information as it has a link to the Eircom GIS⁸⁶³ database.

7.470 Eircom noted in its Submission that for large-scale requests such as major infrastructure programmes,⁸⁶⁴ digital mapping extracts⁸⁶⁵ can be provided, although extracts are not live but a snapshot of the network at a point in time.⁸⁶⁶

Scope and Cost of producing PAR

7.471 With respect to the production of PAR, Eircom noted the following.

- (a) Eircom had highlighted to ComReg that it' Pole and Chamber records are incomplete;⁸⁶⁷
- (b) Eircom noted that the Cartesian Report on CEI Service Delivery appears to contemplate that all the data on Eircom's physical network infrastructure which is described in the report should be collected and included in Eircom's systems. Eircom stated that whether or not this is in fact required is unclear when looking at ComReg's proposed obligations. In Eircom view, this could be interpreted such that the proposed obligations would only apply to the existing data set.⁸⁶⁸ Eircom considered that ComReg cannot propose any such remedy without being clear on what is required and what market failure it is intended to remedy;

⁸⁶² 'Click Before You Dig' is an online service provided to facilitate customers who require information on the existing Eircom infrastructure prior to any works taking place in any given area. This service relies on and interrogates the information stored on Eircom's GIS database i.e. Smallworld.

⁸⁶³ Eircom's GIS is an application known as 'Smallworld' - the brand name of a portfolio of Geographical Information System (GIS) software provided by General Electric. The system stores geographical PAR information which has been recorded on the system. In order for the data on Smallworld to be complete and accurate all PAR information must be uploaded as passive infrastructure is built.

⁸⁶⁴ Eircom considers a major infrastructure programme to be one that contemplates rollout in at least 10 exchange areas with the intention to pass at least 10,000 premises.

⁸⁶⁵ For large-scale requests such as major infrastructure programmes, Eircom provides the Access Seeker with digital mapping extracts. The digital mapping extracts span a larger area than CBYD (typically an exchange area).

⁸⁶⁶ Digital mapping extracts provide a snapshot of the network as the data is not real-time.

⁸⁶⁷ Eircom's Response to February 2016 SIR, dated 3 March 2016 and Eircom's Response to April 2016 SIR, dated 20 May 2016.

⁸⁶⁸ Eircom Submission, page 30 states:

"If such data is required, a point ComReg needs to clarify, then it has not been collected. The utility of the remedy which is proposed is as unclear as ComReg's description of it and again the expenditure contemplated by Cartesian (which is only a small part of the likely expenditure) is disproportionate"

- (c) Based on a high-level analysis, Eircom estimated the resource requirement and costs associated with undertaking a survey of its entire access network to capture PAR information not available to Eircom. Eircom estimated that the cost of recording Duct utilisation (including Chamber remediation) would be in excess of [redacted]⁸⁶⁹ and that the cost of capturing information on Pole utilisation would be in excess of [redacted]⁸⁷⁰ and
- (d) Eircom stated that the capability to manage a Duct space record and store utilisation data only became available to Eircom with the introduction of Smallworld (in early [redacted]).

7.472 Eircom also stated that it is currently recording new cables in Ducts and Sub-Ducts on its GIS system. Eircom stated that inventory relating to the position of pre-existing cables within specific Ducts does not exist.

7.473 With respect to the scope of the obligation requiring access to be provided to PAR, Eircom requested that ComReg clarify what it saw as confusion in the Cartesian Report on CEI Service Delivery and the Consultation. In this respect Eircom stated that

“Despite the fact that gathering information not currently on-hand would not be economically feasible for Eircom, ComReg state they did not find an equally effective and efficient obligation to remedy the potential competition problems whilst proposing a contradictory Direction”

Evidence for the PAR obligation

7.474 Eircom stated that, in its opinion, ComReg has failed to produce any evidence to justify the need to specify an obligation in respect of access to PAR.

Capacity Management

7.475 With respect to Capacity Management, Eircom noted that:

- (a) Duct space is established at ‘Rod & Rope’ stage with capacity constraints identified at the time of network construction.
- (b) Pole information is derived from data captured during Pole testing for decay. Inventory of Pole capacity is currently available through physical survey.

ComReg’s Assessment of Respondents’ Views

Inventory Information

7.476 ComReg agrees with Vodafone’s statement summarised in paragraph 7.461 above that access to PAR is an important feature if CEI access is to be a viable option for those seeking to deploy networks using such infrastructure.

⁸⁶⁹ Eircom Submission, page 37.

⁸⁷⁰ Eircom Submission, page 38.

- 7.477 ComReg notes Colt's statement summarised in paragraphs 7.462 to 7.463 above that, based on its experience from the European countries where access to Ducts is a proven and well working wholesale service, it is imperative that the product offer contains an ordering interface, together with fit-for-purpose processes and support systems. It is also necessary that the support systems allow Access Seekers to interrogate the Duct owner's inventory in order to plan deployment.
- 7.478 ComReg notes that CEI access by Access Seekers will potentially result in PAR information which will include confidential regulated information relating to Access Seekers CEI access and that Eircom are required to manage the access to such information appropriately, such that Eircom remains compliant with its regulatory obligations.
- 7.479 Having analysed Eircom's views and Eircom's responses to the SIRs,⁸⁷¹ ComReg disagrees with Eircom that Access Seekers already have access to the PAR information that is available on Eircom's systems or that Access Seekers have access to the same information Eircom provides to itself.
- 7.480 The CBYD application allows access, by Access Seekers, to PAR information on Eircom's GIS Database. However, an Access Seeker who accesses PAR information in CBYD is limited to a single street view given that the application was developed for the construction industry.
- 7.481 This means that multiple views are required in order to determine whether a duct route exists for routes which extend beyond a single or a small number of streets, rendering this form of access inefficient and difficult to use, and thereby undermining its effectiveness for Access Seekers. Furthermore, the CBYD application does not have the same richness⁸⁷² of data that Smallworld has, given that selected data on CBYD is not available to Access Seekers. However Eircom has access to a GIS system with no such limitations.

⁸⁷¹ In its response to the Consultation Eircom referred to its response to two SIRs which ComReg issued to Eircom before the Consultation was published. ComReg subsequently sent Eircom a number of additional SIRs following Eircom's response to the Consultation in order to clarify and better understand the points made by Eircom. In assessing the points made by Eircom in its response to the Consultation ComReg relies on Eircom's responses to these SIRs i.e. the response to SIRs which pre-date the Consultation and the response to SIRs after Eircom Submission.

Eircom's Response to Feb 2016 SIR, dated 3 March 2016.

Eircom's Response to April 2016 SIR, dated 20 May 2016.

Eircom's Response to March 2017 SIR, dated 10 April 2017.

Eircom's Response to April 2017 SIR, dated 26 May 2017.

Eircom's Response to May 2017 SIR, dated 23 June 2017.

Eircom's Response to November 2017 SIR, dated 20 November 2017.

Eircom's Response to November 2017 SIR, dated 19 December 2017.

⁸⁷² Paragraph 8.278 of the Consultation, states:

"Access to Eircom's CEI information (such as the information that is available through Smallworld or equivalent) and access to other passive access inventory systems (such as fibre inventory systems) will enable Access Seekers to more efficiently plan their network deployments. Therefore, Access Seekers will be able to avoid unnecessary costs, which will help to promote competition through the efficient use of resources"

- 7.482 ComReg has reviewed the geographical and logical systems and although decisions on how access to PAR is implemented are a matter for Eircom, ComReg understands that the systems are designed such that access to the full functionality and data within it can be readily enabled in a cost effective manner.
- 7.483 Eircom has not enabled certain facilities on CBYD even though, ComReg understands, it is straightforward and not costly for Eircom to do so. For example, the installed fibre and copper route information and Sub-Duct capacity information facility is not available to Access Seekers on CBYD; however, this information is available to Eircom.
- 7.484 In ComReg's opinion, this type of information is very important as Access Seekers planning a request for CEI access for a particular duct or pole route need to be aware of routes where Sub-Duct capacity may be available or where Dark fibre may be available, for example, in the event of a CEI route being unavailable.
- 7.485 ComReg notes that a PAR record has the following typical lifecycle.
- (a) When Eircom designers design a new Duct / Sub-Duct or Pole route they create what is referred to as a 'To Be Built'⁸⁷³ or proposal drawing which is stored on Smallworld and for a fibre / copper route they create an additional record referred to as a logical record on Access Network Resource Manager ('ANRM').⁸⁷⁴
 - (b) The planned CEI or fibre / copper route is then issued to the Eircom infrastructure build function (which can be an Eircom team or a contractor) in order for a Duct / Sub-Duct or Pole route to be built or fibre or copper infrastructure to be installed.
 - (c) After the infrastructure build has been completed the Eircom build function return an 'As Built'⁸⁷⁵ drawing and logical record (in the case of fibre/copper having been installed) to the Eircom designer.
 - (d) The Eircom designer then updates Eircom's GIS, i.e. Smallworld with the 'As Built' record, and/or updates Eircom's logical system (ANRM) with the logical record.
- 7.486 ComReg also notes that available PAR information includes all elements of the PAR information throughout its lifecycle as outlined in paragraph 7.485 (a), (c) and (d).

⁸⁷³ Also referred to as 'proposed state'.

⁸⁷⁴ ANRM (Access Network Resource Manager) is Eircom's database of access network logical elements e.g. fibre sheath, fibre pairs, copper cables and copper pairs.

⁸⁷⁵ Also referred to as 'final post state'.

- 7.487 ComReg notes that there could be a lead time between Eircom completing the infrastructure build and updating its GIS system (Smallworld) with the 'As Built' drawings once the work order(s) for the infrastructure build are completed.⁸⁷⁶ Therefore, for the duration that the 'As Built' records are not on Smallworld these PARs are not available to Access Seekers through CBYD.
- 7.488 If these records are not uploaded onto Eircom's GIS, in a timely manner, Access Seekers cannot rely on the limited CBYD (GIS) access as an accurate representation of Eircom's CEI without having access to Eircom's 'As Built' drawings attached to work orders. ComReg notes, however, that Eircom designers have access to 'As Built' drawings that have not been updated to GIS.
- 7.489 ComReg does not agree with Eircom's views on information asymmetries. Information asymmetries clearly exist given that Eircom has access to PAR that Access Seekers do not have access to either (a) at all or (b) in an effective and timely manner.
- 7.490 ComReg considers that all available PAR information must be provided to Access Seekers in order for such Access Seekers to make an informed request for Access to CEI. ComReg notes that while Eircom's downstream arms do not submit requests for CEI access, Eircom network designers manage the process for Eircom.
- 7.491 Eircom network designers have access to PAR information in order for them to determine the existence of potential Duct and Pole routes. In preparing a request for CEI access, Access Seekers are attempting to carry out the same or a sufficiently similar task. Therefore, ComReg's position is that the same information needs to be provided to Access Seekers as is provided to Eircom's network designers.
- 7.492 In order for an Access Seeker to make a CEI access request, and in order to ensure Eircom meets its separate non-discrimination obligations, the PAR information available to Eircom network designers must also be made available to Access Seekers.
- 7.493 In ComReg's opinion,⁸⁷⁷ Eircom is not providing Access Seekers with the PAR it has made available to itself. A comparison between PAR that are made available to Eircom on the one hand and Access Seekers on the other is summarised in Table 21 below.

⁸⁷⁶ Eircom's Response to November 2017 SIR, dated 20 November 2017 [§< [REDACTED]

[REDACTED].

⁸⁷⁷ Based on extensive analysis by ComReg of Eircom published documents and Eircom response to SIRs.

Table 21: Comparison between PAR available to Eircom and Access Seekers

(Note 1 Unable to determine if all 'As Built' drawings are updated onto Smallworld in a timely manner)

	Eircom				Access Seeker			
	GIS (Physical)	ANRM (logical)	'Proposal' Drawing	'As-Built' Drawing	GIS (Physical)	ANRM (logical)	'Proposal' Drawing	'As-Built' Drawing
Passive Access Records ('PAR')								
Physical location of Ducts, chambers, cabinets and Distribution points	Yes	N/A	Yes	Yes	Limited by CBYD	N/A	No	(Note 1)
Physical location of Sub-ducts (1-way, 3-way, 7-way)	Yes	N/A	Yes	Yes	Limited by CBYD	N/A	No	(Note 1)
Sub-duct (3-way, 7-way) Capacity	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A
The installed fibre and metallic cable capacity in Ducts and in Sub-duct and on Poles, including their used capacity	Yes	Yes	N/A	N/A	No	No	N/A	N/A
The reserved Duct, Pole and Chamber capacity	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A
The reserved capacity by internal or external Undertakings, per route;	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A

Scope and Cost of producing PAR

7.494 ComReg disagrees with Eircom that the meaning of 'available' PAR as set out in the Consultation was not clear. ComReg states, for the avoidance of doubt, that PAR includes information stored in Eircom systems, data/drawings attached to work orders which are either 'approved',⁸⁷⁸ 'assigned',⁸⁷⁹ 'field complete'⁸⁸⁰ or 'closed'⁸⁸¹ and any other available PAR information stored in either electronic or paper form.

7.495 This includes access to all available physical records for passive access, including *inter alia*, records stored in its information systems (e.g. Eircom's GIS (i.e. Smallworld), ANRM), 'As Built' drawings attached to works orders (not stored on its GIS system), 'To Be Built' drawings attached to works orders and duct/fibre survey information stored in paper or electronic form.

7.496 Therefore, ComReg disagrees with Eircom that the imposition of the obligation of PAR Access will result in a financial burden on Eircom of the scale detailed in its Submission, as ComReg does not expect Eircom to carry out a survey of its Duct and Pole network exclusively to determine available capacity. In summary ComReg is of the view that only the information which is available to Eircom network designers is required to be made available to Access Seekers.

⁸⁷⁸ 'Approved' is the term used to describe the state of a work order as being approved by Eircom Access Design.

⁸⁷⁹ 'Assigned' is the term used to describe the state of a work order as being issued to a build resource for execution.

⁸⁸⁰ 'Field complete' is the term used to describe the state of a work order as being physically complete but not yet validated by the Eircom designer.

⁸⁸¹ 'Closed' is the term used to describe the state of a work order as being validated by the Eircom designer and recorded on the Eircom geographical and logical systems.

- 7.497 However, now that the recording of Duct/Sub-Duct capacity capability is available in Smallworld, ComReg expects that as part of Eircom's business as usual activities which involve network intervention, Eircom could record utilisation of CEI assets (i.e. space in Ducts / Sub-Duct and on Poles) and make this information available to Access Seekers.
- 7.498 ComReg expects that this would be standard business practice for an efficient operator and would benefit both Eircom and Access Seekers. ComReg considers that the introduction of such a standard operational procedure would not be an undue burden on Eircom.
- 7.499 ComReg also notes that if paper records are available to Eircom's network designers then they need to be made available to Access Seekers. ComReg notes that, on a manual basis, this is not burdensome on Eircom given that the process must already be in place. Eircom must ensure that the same process is available to Access Seekers.
- 7.500 ComReg also notes that in order for Access Seekers to be aware of the existence of paper records such as site surveys etc. then a catalogue of available paper records associated with particular exchange areas or other geographic information, must be made available to Access Seekers such that they can request access to paper records during their infrastructure design and planning process, prior to making a request for CEI access.

Evidence for the PAR obligation

- 7.501 ComReg notes Eircom's view that ComReg has failed to produce any evidence to justify the need to specify an obligation in respect of access to PAR.
- 7.502 ComReg disagrees with Eircom's position. As stated in the Consultation,⁸⁸² the provision of information about Duct / Sub-Duct / Chamber / Pole locations and capacity is fundamental to CEI access - Access Seekers would be unable to access CEI without it. This would therefore negatively impact on Access Seekers' ability to build network infrastructure, on infrastructure competition and ultimately End Users.
- 7.503 Furthermore, Eircom self-supplies CEI and has access to PAR information today through various systems/processes and site surveys. In ComReg's opinion the obligation with respect to access to PAR is fundamental for the operation of an effective and fit-for-purpose CEI product.
- 7.504 As detailed in the Consultation,⁸⁸³ access to PAR is necessary to allow Access Seekers to plan network installation or expansion by using access to CEI. For example, it is necessary in order for an Access Seeker to be able to assess whether there is sufficient CEI capacity available in Eircom's duct or pole network to accommodate its access network rollout needs.
- 7.505 The availability of PAR information will enable Access Seekers to be better able to plan their network rollout, and if necessary consider alternative routes or deployment strategies to overcome congestion or pinch-points in the CEI network. Therefore, access to PAR is invaluable from the perspective of network planning and deployment purposes.

⁸⁸² See paragraphs 8.275 to 8.281 of the Consultation.

⁸⁸³ See paragraphs 8.274 - 8.275 of the Consultation.

Capacity Management

7.506 ComReg has considered Eircom's views summarised in paragraph 7.475 above concerning capacity management.

7.507 While the capability to manage a Duct space record that shows utilisation only became available to Eircom with the introduction of Smallworld⁸⁸⁴ (in early [REDACTED]), in its Response to a SIR,⁸⁸⁵ Eircom confirmed that

"The capability to record sub-duct occupancy was delivered as part of the Smallworld GIS solution in early [REDACTED]

[REDACTED]

]. The recorded 3-way & 7-Way sub-duct occupancy at time of writing is [REDACTED]."

However, Eircom did not make this information available to Access Seekers⁸⁸⁶ even though Eircom itself has access to this information.

7.508 [REDACTED]

- (a) [REDACTED]
- (b) [REDACTED]
- (c) [REDACTED]

⁸⁸⁴ Smallworld is the brand name of a portfolio of Geographical Information System (GIS) software provided by General Electric.

⁸⁸⁵ Eircom's Response to April 2017 SIR, dated 26 May 2017, page 3.

⁸⁸⁶ Via CBYD or alternative mechanism.

⁸⁸⁷ At an Eircom Product Development Industry workshop.

⁸⁸⁸ Eircom committed to the Irish Government to deliver high-speed broadband access on a commercial basis to 300,000 rural premises by the end of 2018 ('300K Footprint').

<https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf>.

7.509 ComReg notes that Eircom has the number of fibre strands available for use in the 300K region, it therefore has available PAR information on “...*the installed fibre....capacity in Ducts and in Sub-duct and on Poles, including their used capacity....*”.⁸⁸⁹ Eircom should make all available information on fibre installed and used capacity nationwide visible to Access Seekers and not just for a selected region of their network (i.e. the 300K region) which is the basis of a commercial agreement with the Irish Government.

7.510 By not providing Access Seekers with this information which is available to Eircom, Eircom would be directly raising Access Seekers’ costs, potentially denying effective access, and inhibiting timely and efficient investment decisions and thereby impacting competition.

ComReg’s Position - CEI Remedies

7.511 Having considered Respondents’ views as summarised and assessed in paragraphs 7.275 to 7.510 above, and having regard to the analysis set out in the Consultation,⁸⁹⁰ ComReg has decided to maintain its view as set out in the Consultation.

7.512 Eircom is required to provide access to CEI, including the following particular products and services:

- (a) Ducts and Poles;
- (b) Sub-Duct Access and Direct Duct Access;
- (c) Chambers;
- (d) Ingress and Egress points;
- (e) Co-Location for CEI;
- (f) CEI Tie Connection Service between the Co-Location rack and the Ingress and Egress points;
- (g) where access to CEI is not available, to provide access to Dark Fibre where reasonably available; and
- (h) access to Passive Access Records (**‘PAR’**).

7.513 ComReg notes that access to Ducts, Sub-Ducts, Poles, Direct Duct Access and Access to Dark Fibre where Dark Fibre is reasonably available (i.e. the primary CEI inputs) are typically used in conjunction with other CEI input in particular Chambers, Ingress and Egress points and CIE Tie Connection Services (i.e. the secondary CEI inputs).

⁸⁸⁹ Extract from ComReg PAR definition.

⁸⁹⁰ Paragraphs 8.186 to 8.279 of the Consultation.

- 7.514 The primary and secondary CEI inputs are consumed together to facilitate the rollout of Access network segments. Consuming secondary CEI inputs independent of the primary CEI inputs, in ComReg's view, would be unreasonable and inappropriate. For example, Chamber space is a finite resource. Using Chamber access for purposes other than building CEI access network segments would be unjustified and inconsistent with ComReg's views as set out in the Consultation.⁸⁹¹
- 7.515 For clarity ComReg has decided to amend the CEI obligation so that access to Chambers, Ingress and Egress points and CIE Tie Connection Services are contingent on the concurrent usage of either Ducts, Sub-Ducts, Poles, Direct Duct Access or Dark Fibre where Dark Fibre is reasonably available.⁸⁹²
- 7.516 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Supporting Access Remedies

Respondents' Views

- 7.517 Two of eight Respondents (Sky and Vodafone) provided views on a range of ComReg's proposed supporting access remedies,⁸⁹³ including those obligations requiring Eircom to:
- (a) to negotiate in good faith with undertakings requesting access;
 - (b) not to withdraw access to facilities already granted without ComReg's prior approval;
 - (c) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services; and
 - (d) to provide access to OSS or similar software systems necessary to ensure fair competition in the provision of services.
- 7.518 Vodafone supported the requirement for Eircom to negotiate in good faith, urging ComReg to enforce this obligation vigorously.
- 7.519 Sky agreed with ComReg's view that Access Seekers would be put at "*a significant competitive disadvantage relative to Eircom's retail arm in providing services*"⁸⁹⁴ in the absence of the Access Seeker being able to gain effective and efficient access to Eircom's OSS.

⁸⁹¹ See paragraphs 8.248 to 8.258 of the Consultation.

⁸⁹² For the avoidance of doubt, an Access Seeker also has the ability to connect to an Eircom Chamber for the purpose of obtaining access to In-Span Handover, Interconnection and LLU.

⁸⁹³ See paragraphs 8.280 to 8.301 of the Consultation.

⁸⁹⁴ Sky Submission, paragraph 34.

ComReg's Assessment of Respondents' Views

7.520 ComReg note the Respondents' view set out in paragraphs 7.517 to 7.519 above, are supportive of ComReg imposing supporting access remedies.

ComReg's Position

7.521 Having considered Respondents' views as summarised and assessed in paragraphs 7.517 to 7.520 above, and having regard to the analysis set out in the Consultation,⁸⁹⁵ ComReg has decided to maintain its view as set out in the Consultation.

7.522 Eircom is therefore being required to:

- (a) negotiate in good faith with undertakings requesting Access;
- (b) not withdraw Access to facilities already granted without the prior approval of ComReg and in accordance with terms and conditions as may be determined by ComReg;
- (c) grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products, services or facilities; and
- (d) provide access to OSS or similar software systems necessary to ensure fair competition in the provision of services (including those products, services and facilities described in this Section).

7.523 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 7 of this Decision.

Conditions of Access: Requirement regarding Service Level Agreements**Position set out in the Consultation**

7.524 In the Consultation ComReg proposed to attach relevant conditions to the access obligations covering fairness, reasonableness and timeliness. Such conditions of access included requirements governing Service Level Agreements ('SLAs'). In the Consultation ComReg set out its view that such obligations are needed to ensure that access to WLA products, services and facilities is provided in a fair, reasonable and timely manner, thereby promoting effective downstream competition to the ultimate benefits of End Users.

7.525 The proposed obligations included requirements that Eircom:⁸⁹⁶

⁸⁹⁵ Paragraphs 8.280 to 8.301 of the Consultation.

⁸⁹⁶ The reasoning and the proposed requirement with respect to the requirements governing fairness, reasonableness and timeliness in respect of SLAs are set out in paragraph 8.302 to 8.353 of the Consultation.

- (a) conclude, maintain and update legally binding, fit-for-purpose SLAs with undertakings for WLA products, services and facilities and the Unified Gateway ('UG'),⁸⁹⁷ which shall encourage an efficient level of performance;
- (b) negotiate in good faith with undertakings in relation to the conclusion of legally binding and fit-for-purpose SLAs (either in the case of a new SLA or an amendment to an existing SLA);
- (c) provide undertakings, at the end of the SLA Negotiation Period,⁸⁹⁸ with Eircom's best and final offer ('BAFO') in respect of the relevant SLA which, for the avoidance of doubt, shall be fit-for-purpose; include all relevant information that is required under paragraph 7.524 (a) to (o); and accord with the principles set out in in paragraph 7.524 (a) to (o). The SLA Negotiation Period ends with the closing of negotiations and the making of a BAFO by Eircom to undertakings with respect to the SLA. When Eircom makes its BAFO, the SLA is deemed by ComReg to be concluded;
- (d) ensure that the SLA Negotiation Period includes a discussion on the process for suspension of an SLA and the associated terms and conditions, as described below;
- (e) ensure that SLAs specify circumstances which trigger the payment of Service Credits⁸⁹⁹ such as a failure by Eircom to achieve committed service levels, or the occurrence of specified events (such as incidents of service outage or deterioration), or other appropriate criteria;
- (f) ensure that SLAs specify the methodology for calculating the quantum of Service Credits and include an example calculation of Service Credits;
- (g) ensure that circumstances which trigger the payment of Service Credits and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable in that they adequately incentivise Eircom to deliver an efficient level of service quality and allow undertakings to recoup at a minimum the direct costs and any other loss of value that the undertakings incur as a result of the circumstances that had triggered the payment of Service Credits;
- (h) ensure that application of Service Credits, where they occur, shall be applied automatically and in a timely and efficient manner;

⁸⁹⁷ Unified Gateway or 'UG' was defined in the Consultation as an interface into Eircom's OSS used by Access Seekers in order to avail of regulated wholesale services, including WLA products, services and facilities.

⁸⁹⁸ As described in the Consultation, 'SLA Negotiation Period' means the time required by Eircom to close negotiations between it and Undertakings in respect of an amended or new SLA.

⁸⁹⁹ Service Credit(s) means a financial credit which is provided by Eircom to an Access Seeker where Eircom has failed to meet the service levels which Eircom commits to in its SLA, or on the occurrence of specified events or other appropriate criteria.

- (i) ensure that SLAs include, where appropriate, the comprehensive set of terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA. Such terms and conditions should be based on objectively defined and measurable parameters;
- (j) in relation to an existing product, service or facility, following a request from an undertaking (including Eircom) for an amendment to an SLA, Eircom shall, within one (1) month of the receipt of such a request, inform the undertaking in writing whether the request for an amendment is accepted or rejected and, if accepted, include details of the SLA Negotiation Period and the associated start date. Negotiations in respect of the amended SLA shall close, unless otherwise agreed with ComReg, within six (6) months of the date the undertaking makes such a request. Within one (1) month of the date the undertaking makes such a request Eircom may seek an extension to the six (6) month period from ComReg;
- (k) in relation to an amendment to an existing product, service or facility, where Eircom itself initiates the amendment, Eircom shall, within one (1) month of the initiated amendment, inform and seek undertakings' views as to whether the proposed product amendment should result in an amendment to the relevant SLA;
- (l) ensure that its obligations with respect to SLAs have been complied with prior to notifying ComReg of non-pricing amendments or changes to the ARO resulting from the offer of a new or an amendment to an existing product, service or facility which falls with the scope of the Relevant Market;
- (m) ensure that the new or amended SLA is implemented and is made available to undertakings by the date on which:
 - i. any amendment or change to an existing product, service or facility; or
 - ii. the offer of a new product, service or facility, comes into effect;
- (n) where the amended SLA does not relate to (m)(i) or (m)(ii) above, Eircom shall ensure that the amended SLA is implemented and is made available to undertakings within three months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg); and
- (o) within six months (unless otherwise agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update its SLAs to include all relevant information and accord with the principles set out above.

SLA, Services Credits, timeline for the agreement of the SLA

Respondents' Views

7.526 Five out of the eight Respondents expressed views, with four agreeing (ALTO, BT, Vodafone and Sky) and one disagreeing (Eircom) with ComReg's proposed SLA obligations relating to fairness, reasonableness and timeliness.

7.527 ComReg notes that the Respondents only expressed views on a subset of the proposed SLA obligations. The Respondent's views were grouped into themes as identified below:

- (a) The requirement for an SLA (discussed in paragraphs 7.528 to 7.538 below);
- (b) Service credits (discussed in paragraph 7.546 below);
- (c) New product development and changes to existing products (discussed in paragraphs 7.551 to 7.555 below);
- (d) Suspension of SLAs (discussed in paragraphs 7.577 to 7.582 below);
- (e) Proposed amendments to the draft WLA Decision Instrument (discussed in paragraphs 7.592 to 7.596 below); and
- (f) Moving the obligation to provide individual SLA reports from transparency to conditions of access⁹⁰⁰ (discussed in paragraph 7.601 below).

The requirement for an SLA

Respondents' Views

7.528 Four of eight Respondents (BT, Eircom, Sky and Vodafone) expressed views on the requirement for an SLA. These views are summarised in paragraphs 7.529 to 7.538 below.

7.529 BT supported⁹⁰¹ the proposed process improvements outlined in the Consultation for requesting and developing SLAs, and noted the benefits that fit-for-purpose SLAs will have in improving customer experience.

7.530 Vodafone also supported ComReg's proposals on SLAs. In particular, Vodafone stated that it supported ComReg's view (as set out in paragraph 8.312 of the Consultation) noting that:

"...we cannot emphasise enough the damaging effect of the weak SLA regime that has prevailed in Ireland. As a result of a serious [sic], of failings Irish consumers have had to put up with an experience of installation and repair that is simply not acceptable."⁹⁰²

7.531 Vodafone explained that, in its opinion, ineffective SLAs have damaged competition, harmed competitors and inhibited the business case for new investment, which in turn has damaged the Irish telecommunications market over recent years. To support its position that the current SLAs are ineffective, Vodafone listed some examples of what it considers to be the key failings with the current SLA regime.⁹⁰³

⁹⁰⁰ This theme arises from a change proposed by ComReg.

⁹⁰¹ BT Submission, page 11 (bullet (c) of SLA Remedy).

⁹⁰² Vodafone Submission, Page 20, paragraph 132.

⁹⁰³ Vodafone Submission, Page 20, paragraph 135.

- 7.532 Sky agreed with ComReg's view⁹⁰⁴ that a sub-standard SLA negatively impacts downstream markets and the SMP operator does not have incentives to provide fit-for-purpose SLAs.
- 7.533 Sky also stated⁹⁰⁵ that it supports all of the requirements ComReg proposed to impose on Eircom with respect to SLAs.
- 7.534 Sky noted⁹⁰⁶ that it is particularly important that SLAs for new products or amendments to existing products should be concluded before being notified to ComReg.
- 7.535 Sky made specific reference to general example in paragraph 8.331⁹⁰⁷ of the Consultation where product amendments could result in no agreed SLA. Sky supported ComReg's position noting that there were instances where an order type was replaced with a new order type, but the new order (process) was not supported by an agreed SLA. Sky welcomed ComReg's proposed obligation to address such issues by ensuring that there should be an appropriate SLA available at product launch.
- 7.536 Eircom proposed that, other than in the case of introducing new products, the start of the six month SLA negotiation period (for a change to an existing SLA metric or the introduction of a new SLA metric) should be conditional on the Access Seeker providing a clear set of SLA requirements and that the SLA requirements should include the Access Seeker's reasoning for the SLA request.
- 7.537 In addition, Eircom proposed that when an SLA negotiation cycle is concluded, no further requests for new or modified SLA metrics can be submitted by Access Seekers for at least two years, without the agreement of Eircom and ComReg.
- 7.538 Eircom also stated that ComReg should confirm whether the SLA requirements submitted by Access Seekers are, in ComReg's opinion, clear and 'fit-for-purpose'.

ComReg's Assessment of Respondents' Views

- 7.539 ComReg notes that BT, Vodafone and Sky expressed support (as outlined in paragraphs 7.528 to 7.533 above) for ComReg's proposals relating to SLA obligations.

⁹⁰⁴ See paragraph 8.312 of the Consultation.

⁹⁰⁵ Sky's Submission, Page 9, paragraph 35.

⁹⁰⁶ Sky's Submission, Page 9, paragraph 36.

⁹⁰⁷ Examples of such amendments include, *inter alia*, process changes, the introduction of new order types and the retirement of existing order types. Access Seekers have, for example, raised concerns that when order types are introduced, changed or replaced by Eircom, the associated SLA is not changed at the same time. This results in a delay before the SLA is amended, and therefore in such situations the new or amended order type is in use without being supported by an SLA.

- 7.540 ComReg disagrees with Eircom's view (as outlined in paragraphs 7.536 to 7.538 above) that there should be a two year moratorium on Access Seekers submitting further requests for changes to an SLA following its conclusion. The market is continually changing and access to downstream services, including broadband, has become essential for many End Users. End Users' service level requirements are continually evolving, reflecting increased usage of downstream services for a broad range of applications.⁹⁰⁸ In ComReg's opinion, this trend is likely to continue.
- 7.541 Access Seekers need to be able to react to the requirements of market demand in order to be able to compete effectively and, in this context, it is likely that Access Seekers will continue to review SLAs in order to ensure that End Users are provided with an acceptable level of service in light of evolving needs.
- 7.542 Product performance is a fundamental characteristic of the regulated product set and can have a significant impact on an Access Seeker's ability to compete in downstream markets. Therefore, it is ComReg's position that it is inappropriate to impose unreasonable time-bound restrictions on an Access Seeker's ability to request a review of an SLA.
- 7.543 Furthermore, notwithstanding the fact that Eircom has an obligation to conclude an SLA, a request from an Access Seeker to Eircom to amend an SLA or develop a new SLA is subject to Eircom's general obligation to meet reasonable requests for access, and in particular to do so in a fair, reasonable and timely manner.
- 7.544 In the context of a reasonable request relating to SLAs, an assessment of fairness, reasonableness and timeliness could include consideration of the period of time that has elapsed between the conclusion of an SLA and a request by an Access Seeker to commence a new review of the SLA or elements of it.
- 7.545 ComReg agrees with Eircom that an SLA request should include a clear set of requirements and the reasoning as to why a new or amended SLA is required. ComReg's position is that the SLA negotiation period should only commence when Access Seekers set out their requirements, which in practice means that the SLA request is documented, clear, and understandable.

Service Credits

Respondents' Views

- 7.546 Eircom commented that paragraph 8.311 of the Consultation seemed to suggest that any SLA should offer a 100% performance level without exception and for this to be compensated in the pricing. Eircom stated that it did not agree "*with such an obligation*", particularly as there is no evidence of a relevant pricing proposal which would give adequate compensation. Eircom stated that it doubted that ComReg would be able to adjust any cost oriented pricing to give effect to a non-commercial SLA.

⁹⁰⁸ Downstream services are used for teleworking, broadcast TV, video on demand and social media, for example.

ComReg's Assessment of Respondents' Views

- 7.547 ComReg is of the view that it is reasonable that a SLA should specify the methodology for calculating the quantum of Service Credits and include an example calculation of Service Credits and notes that no Respondent objected to this.
- 7.548 ComReg is also of the view that its proposal regarding circumstances which trigger the payment of Service Credits and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable as set out in the Consultation. Any SLA that fails to meet these minimum criteria is unlikely to provide the correct incentives to Eircom in terms of an efficient level of service or meet minimum conditions of fairness if OAOs are not compensated for their losses.
- 7.549 With regard to Eircom's comments in respect of paragraph 8.311 of the Consultation ComReg disagrees that such an approach would necessarily be inappropriate. Nevertheless ComReg is not mandating such an approach in this Decision.
- 7.550 In conclusion, ComReg maintains its position as set out in the Consultation that Eircom should ensure that circumstances which trigger the payment of Service Credits and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable in that they adequately incentivise Eircom to deliver an efficient level of service quality and allow undertakings to recoup at a minimum the direct costs and any other loss of value that the undertakings incur as a result of the circumstances that had triggered the payment of Service Credits.

New product developments and changes to existing products**Respondents' Views**

- 7.551 Four of eight Respondents (BT, Eircom, Sky and Vodafone) expressed views on the development of SLAs for new and existing products as summarised in paragraphs 7.552 to 7.555 below.
- 7.552 BT supported the proposed requirements on SLA developments and stated that ComReg's proposal:
- “...for introducing SLAs with new products and new order types is inspirational and should go some way to addressing the difficulties the industry has had negotiating new Service SLAs and also the current experience of new order types rendering existing SLAs ineffective.”⁹⁰⁹*
- 7.553 Eircom raised a number of issues which are summarised as follows:
- (a) Eircom argued that ComReg has failed to explain why the introduction of a new product or product variant will always require a new SLA or a change to an existing SLA.
 - (b) Eircom stated that ComReg's proposed SLA requirements would invariably delay product launches that are “valuable” to, or have been requested by, Access Seekers.

⁹⁰⁹ BT Submission, Page 11.

- (c) Eircom argued that when a new product is introduced, an SLA review should be delayed for a period of 12 months to allow a period during which the performance of the new product can be assessed, thereby allowing the identification of any relevant SLAs.
- (d) Eircom explained that, in the past, SLAs have taken more than two years for agreement from all OAOs. Eircom acknowledged that SLAs are 'valuable', but in its view SLAs do not affect the efficiency and operation of the new product/service. Therefore, in Eircom's view new product/services should be launched as soon as they are fit-for-use as this will allow the new products/services to be available without delay, and only when the product/service matures should SLAs and penalties be applied.

7.554 Sky supported ComReg's proposal noting the importance of having SLAs for new products or for amendments to existing products concluded before Eircom notifies the product introduction/amendment to ComReg.

7.555 Vodafone supported ComReg's proposal stating that:

*"ComReg has proposed a series of detailed obligations to be placed on Eircom to secure timely negotiation of effective SLAs on existing products and on new products in advance of launch. We are supportive of ComReg's proposals: such an approach is clearly necessary in the context of the significant failings to date."*⁹¹⁰

ComReg's Assessment of Respondents' Views

7.556 Four Respondents expressed views on the requirement for SLAs for new products/services or change to existing products/services where required. BT, Sky, and Vodafone were supportive of ComReg proposal and Eircom argued against the proposed obligations. ComReg's assessment of Eircom's views are outlined below.

7.557 Eircom stated in its Submission (as summarised in paragraph 7.553 (a) above) that ComReg has failed⁹¹¹ to explain why the introduction of a new product or product variant(s) will always require a new SLA or a change to an existing SLA. In ComReg's view the reasons why SLAs are required in the context of new products were explained in the Consultation notwithstanding this ComReg considers that it would be helpful to further explain why SLAs are required for new products/new product variants.

7.558 Access Seekers will be using WLA RAP products as inputs to their downstream and retail products and services. Access Seekers will need to be assured that the wholesale inputs meet a minimum standard to ensure that the downstream and retail products can be provisioned and repaired in a timely manner and to a standard that meets the needs of the market. Launching a product without an appropriate SLA could be harmful to competition and could damage the reputation of Access Seekers. A fit-for-purpose product must have a fit-for-purpose SLA that aligns with requirements of the Access Seeker(s).

⁹¹⁰ Vodafone Submission, Page 21, paragraph 140.

⁹¹¹ Eircom Submission, Page 44.

- 7.559 It is ComReg's position that a new product must have an SLA which details the minimum standard for the performance of the product. SLAs are a fundamental requirement of all WLA products and services. A product or service that does not have appropriate SLAs are missing an essential feature which is necessary to ensure that Access Seekers can offer fit-for-purpose downstream retail and/or wholesale products.
- 7.560 ComReg also noted in the Consultation that an existing SLA or an amended version of an existing SLA could be used for a new product or for an amendment to an existing product. In that context, a newly developed SLA is not always required if an existing SLA can be re-used or amended to ensure that the minimum standard of performance is assured. ComReg notes that the views of Access Seekers' should be ascertained as to whether reusing an existing SLA is appropriate.
- 7.561 ComReg disagrees with Eircom's view (as summarised in paragraph 7.553 (b) above that the requirement to conclude an SLA prior to notification of a new or amended product will invariably delay the launch of RAP products. SLA development is managed by Eircom through the product development process therefore whether the SLA development occurs prior to or post launch of a product the demand on the product Development process is the same.
- 7.562 ComReg accepts that Eircom will need to consider the impact of including the development of an SLA on development timelines as it would with any product feature. However, ComReg does not accept that the development of an SLA should be considered to be sufficiently different such that it needs to be developed outside the product development process for the associated product.
- 7.563 ComReg notes that concluding an SLA requires discussion with Access Seekers. However, once Eircom determines that an access request is reasonable which requires the development of a new product/service, or a change to an existing product/service, then Eircom should commence the SLA discussion with Access Seekers. In ComReg's opinion, Eircom can manage the lead time for product development such that it allows sufficient time to agree an SLA or offer its BAFO to Access Seekers, thereby allowing for the development of the SLA prior to launch.
- 7.564 It is ComReg's position that SLA negotiations should take place concurrent with the existing product development process phases to avoid or to minimise any impacts on product development timelines. Therefore, ComReg does not agree with Eircom that it is "invariable" that product development timelines will necessarily be extended because of the requirement to conclude an SLA prior to notification to ComReg.
- 7.565 In ComReg's view launching a product that does not meet the needs of Access Seekers and ultimately End Users is counterproductive. A product without an effective SLA is of limited use. Ensuring that a product has a fit-for-purpose SLA is not delaying the product development process, in fact it is an integral component of the product development process.

- 7.566 Furthermore, by ensuring that there is an appropriate SLA in place at launch, ComReg's view is that this will ensure that the overall product development timeline is shortened. Completing a product development cycle without key features such as appropriate SLAs means that the product or service is not fully developed at launch. This is likely lead to a second round of development, which in effect will delay the availability of effective WLA products or services to the WLA Market.
- 7.567 In ComReg's view it is important for competition that all features necessary to make the product successful (including a minimum standard of performance) are included at launch therefore avoiding multiple developments cycles, which are time consuming, rendering product development inefficient. Avoiding a sequence of developments will reduce the overall period required to implement effective access products.
- 7.568 ComReg disagrees with Eircom's views (as summarised in paragraphs 7.553 (c) above) that SLA availability should be delayed for twelve months after the product launch because, with a new product, there is limited experience as to the likely performance in a live environment.
- 7.569 In its Submission Eircom proposed an approach whereby SLA performance metrics are set by measuring the product's performance post launch. It is ComReg's position that requests by Access Seekers for assurance of product performance should be a key part in the product development process (rather than an "add-on"). Therefore, the associated incentives (i.e. SLAs) should be treated in a similar way to other product features and should be included in the product offering from the outset when requested by Access Seekers.
- 7.570 The measurement of a product's performance post launch should, in effect, be a monitoring phase rather than a performance-setting phase of the product's lifecycle. In the case where the product's performance falls short of the Access Seeker's requirements, then appropriate action should be taken by Eircom to ensure that the product's performance meets the Access Seeker's requirements.
- 7.571 While ComReg is of the view that SLAs can be delivered in parallel with other product features during the product development process, ComReg would expect that SLAs will change and evolve over time, therefore post launch performance data may indicate that an SLA review may be required and that such a review, whether initiated by Eircom or requested by Access Seekers, may be reasonable.
- 7.572 ComReg's view is that product features and product performance (SLAs) are interlinked and, therefore, should be developed in tandem. However, in some instances SLA changes may require minimal system/product development activity.⁹¹² ComReg has decided to amend the SLA obligation text for clarity. When SLA changes are required that do not necessitate significant product development, in those circumstances SLA amendment(s) shall be implemented within 3 months from the end of the SLA negotiation period (unless otherwise agreed with ComReg).

⁹¹² For example, change to SLA credit values or SLA parameter which give rise to configuration or parameter changes.

- 7.573 ComReg's position is that the SLA obligation text shall be amended such that the obligation imposed on Eircom shall include the text as detailed in paragraph 7.606 below.
- 7.574 ComReg disagrees with Eircom's views (as summarised in paragraphs 7.553 (d) above) that new product/services should be launched without an SLA and that it is only when the product/service matures that SLAs and penalties should be applied.
- 7.575 Delaying the development of an SLA or launching a product without an SLA will result in the same outcome i.e. a product will be available in the WLA Market without the necessary assurances for Access Seekers that the product or service will perform to a minimum standard. If a product lacks minimum performance standards it could have negative consequences. These consequences have been explained in paragraphs 7.565 to 7.567 above.
- 7.576 In ComReg's view it is inappropriate to delay the introduction of SLAs as suggested by Eircom in its Submission because such a delay could restrict and/or distort competition.

Suspension of SLAs

Respondents' Views

- 7.577 Three of the eight Respondents (BT, Eircom and Vodafone) expressed views on the proposed obligation that SLAs include a comprehensive set of terms and conditions governing SLA suspension and the process for the suspension of SLAs. These views are summarised in paragraphs 7.578 to 7.582 below.
- 7.578 BT explained that, in its view, Reference Offers do not include an SLA suspension clause, other than a Force Majeure clause. BT considered that, as a result, contractually there is no agreement to suspend SLAs other than by triggering the Force Majeure clause, which is triggered at Eircom's discretion. In BT's view, the situation has caused confusion and has been of concern to BT for some time.
- 7.579 Eircom disagreed with ComReg's proposal that the SLA should include, where appropriate, a comprehensive set of terms and conditions governing the circumstances giving rise to the suspension of an SLA, and the process for invoking suspension of the SLA. Eircom also disagreed with the proposal that the terms and conditions for suspension of the SLA must be objectively defined with measurable parameters.
- 7.580 Eircom also stated that no change is necessary because, in its view, the current Reference Offer is adequate, as it sets out objective exclusion criteria where an SLA would not be applied to provisioning and repair orders.
- 7.581 Furthermore, Eircom noted that a review of Eircom's RGM is in progress, with part of this review including the processes for declaring 'storm mode'.⁹¹³ Eircom suggested that the application of SMP remedies to address competition problems in the WLA Market should wait until a review of Eircom RGM process has concluded.

⁹¹³ Storm mode means "suspending SLA in extreme circumstances" – refer to Eircom Submission, page 47, within the section entitled 'Suspensions of an SLA'.

7.582 Vodafone supported ComReg's proposal that Access Seekers should be able to influence the rules and processes that are used to suspend SLAs, and that the decision to suspend SLAs should be based on objective criteria that are clearly documented in the SLA.

ComReg's Assessment of Respondents' Views

7.583 ComReg agrees with the Respondents' views (BT and Vodafone as set out in paragraphs 7.577 and 7.582 above) that the process and criteria for the suspension of SLAs needs to be clearly documented and agreed with Access Seekers. If the criteria and process for suspension of an SLA is not clearly documented and shared with Access Seekers, then it is possible that the suspension of SLAs could be invoked in an inconsistent manner.

7.584 The suspension of SLAs has consequences for Access Seekers and End Users in terms of the level of service that can be expected from Eircom, which in turn can have consequences with respect to the Access Seekers' contractual commitments to End Users in downstream and retail markets.

7.585 ComReg considers it reasonable that Access Seekers should be able to influence and clearly understand the process and criteria for the suspension of SLAs. This allows Access Seekers to reconcile the commitments in terms of service quality and performance offered by the Access Seeker to End Users with the commitments received from Eircom with respect to upstream inputs.

7.586 Because the SLA and the associated metrics are important for Access Seekers in setting End Users' expectations, ComReg considers that it is imperative to providing clarity and certainty to Access Seekers on the criteria and the process for suspension of SLAs, including suspensions arising from the temporary exclusion (Force Majeure) of SLA parameters.

7.587 ComReg is not imposing the specific criteria or processes for the suspension of the SLA at this time, as this is a matter for Eircom. However, Eircom must provide Access Seekers with sufficient clarity and detail with respect to the criteria applicable and the process for the suspension of SLAs. This will enable Access Seekers to clearly understand the process and the criteria for suspension of SLAs.

7.588 ComReg disagrees with Eircom's views (as set out in paragraph 7.579, 7.580 and 7.581 above) that a more detailed description of the criteria and processes that can trigger suspension of the SLA is not required, because the current Reference Offers contain a clause describing the exclusion of parameters from SLAs arising from Force Majeure events.

7.589 ComReg's position is that the current SLAs lacks sufficient detail to objectively assess whether the suspension of an SLA is justified in particular circumstances.

7.590 ComReg also notes, for clarity, that the temporary exclusion of an SLA parameter(s) due to a Force Majeure event,⁹¹⁴ for example, will result in non-payment of Service Credits and therefore constitutes a suspension of the SLA with respect to that SLA parameter(s).

7.591 ComReg's assessment of Respondents' views with respect to RGM is described in paragraphs 6.42 to 6.64.

Proposed amendments to the Draft Decision Instrument⁹¹⁵

Respondents' Views

7.592 Eircom proposed amendments to the Draft WLA Decision Instrument.

7.593 Eircom proposed that:

*"Definition of 'Service Level Agreements' - the last two and a half lines should be deleted as the Decision Notice sets out how an SLA is determined but not its content."*⁹¹⁶

7.594 Eircom proposed that:

*"8.3(v) that 'the word 'direct' should be inserted before 'costs' in the 3rd line. This is accepted in (viii). Eircom should not be responsible for any indirect costs. The word 'reasonably' should be inserted before 'incur' in the same line. If AOAs [sic] want to make additional promises to End Users such as the provision of SLAs over and above those given by eircom or generally included in contracts for End Users then eircom should not be responsible. The costs have to be predictable."*⁹¹⁷

7.595 Eircom suggested that:

*"8.3 (viii) insert 'reasonable' before 'loss' in the second last line for the reasons set out above."*⁹¹⁸

7.596 Eircom proposed that:

*"8.6 – this should be amended so that the obligations in relation to SLAs are complied with prior to the launch of any product."*⁹¹⁹

⁹¹⁴ There may be a number of reasons defined for the temporary non-payment of Service Credits. It is ComReg's view that all such temporary exclusions result in a suspension of the SLA for those SLA parameter(s).

⁹¹⁵ In general, references in this Decision to 'Draft Decision Instrument(s)' or 'draft Decision Instrument(s)' refer to the Decision Instrument(s) as set out in Appendix 14 and Appendix 15 of the Consultation.

⁹¹⁶ Page 75, of Eircom's Submission.

⁹¹⁷ *Ibid.*

⁹¹⁸ *Ibid.*

⁹¹⁹ *Ibid.*

ComReg's Assessment of Respondents' Views

- 7.597 ComReg disagrees with Eircom's proposed amendment (noted in paragraph 7.593 above) to the definition of SLAs by deleting the last two and half lines of the definition. In ComReg's view the existing definition of SLAs is appropriate to provide certainty in case there is a conflict between the SLAs and Eircom's obligations.
- 7.598 ComReg agrees with Eircom's proposed amendments (noted in paragraphs 7.594 and 7.595 above).
- 7.599 As noted in paragraph 7.596 above, Eircom raised concerns regarding the timing for compliance with requirements in Sections 8.3 to 8.5 of the draft WLA Decision Instrument. ComReg recognises Eircom's concerns, but disagrees with Eircom's proposed amendment to change the requirement to comply with Sections 8.3 to 8.5 of the Draft Decision Instrument prior to notify to ComReg. ComReg is of view that these requirements should be compiled prior to notification.
- 7.600 However, in exceptional circumstances it may not always be possible to comply with all the requirement prior to notification. Therefore, ComReg considers that it is appropriate to amend the obligation so that the relevant SLA requirements must be complied prior to notification unless otherwise agreed with ComReg.

Moving the obligation to provide individual SLA reports from transparency to conditions of access**Respondents' Views**

- 7.601 ComReg proposed in the Consultation that Access Seekers should be provided with individual reports as to how Eircom performs in relation to the committed service levels in the relevant SLAs.⁹²⁰ On further consideration ComReg is now of the view that this requirement would be more appropriately included in the condition of Access obligations.

ComReg's Assessment of Respondents' Views

- 7.602 The requirement to provide individual reports on committed service levels to undertakings was originally included in the transparency requirements section of the Consultation. Transparency is the appropriate remedy to facilitate the publication of information to address competition problems such as information asymmetry. In ComReg's view, individual reports on committed service level performance for relevant SLAs should only be provided to the relevant undertaking. Therefore, the requirement to provide individual reports on committed service level performance has been moved from transparency to conditions access because it is more appropriate.

⁹²⁰ Paragraph 8.503 of the Consultation.

ComReg's Position

- 7.603 Having considered Respondents' views as summarised and assessed in paragraphs 7.528 to 7.602 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on the requirements governing fairness, reasonableness and timeliness in respect of SLAs, as set out in the Consultation,⁹²¹ with the exception of the amendments specified in paragraphs 7.605 below.
- 7.604 The obligation with respect to fairness, reasonableness and timeliness being imposed upon Eircom regarding SLAs are particularly set out in the Decision Instrument in Appendix: 20.
- 7.605 The amended requirements are summarised in the following paragraphs:
- (a) Revised wording of the SLA obligation text (discussed in paragraph 7.606 to 7.607 below)
 - (b) Revised wording of the requirement to comply with SLA obligations prior to notification to ComReg (discussed in paragraph 7.608 below); and
 - (c) Moving the obligation to provide individual SLA reports from Transparency to conditions of Access (discussed in paragraphs 7.609 to 7.610 below).

Revised wording of the SLA obligation text

- 7.606 ComReg's position is that the SLA obligation text shall be amended such that the obligation imposed on Eircom shall include the following text:

Where an SLA is amended resulting in minimal changes to existing products, services or facilities, or where there is no development of a new product, service or facility, Eircom shall ensure that the amended SLA is implemented and is made available to Undertakings within three (3) months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg).

- 7.607 ComReg has also, in light of comments received with respect to the Decision Instrument, taken on board some other suggested changes, including amendments to the Draft Decision Instrument in the Consultation, such that the reference in Section 8.3(v) now refers to 'direct costs' (rather than just 'costs') and, and the reference in Section 8.3(viii) now refers to 'reasonable loss' rather than just 'loss'.⁹²²

Revised wording of the requirement to comply with SLA obligations prior to notification to ComReg

- 7.608 As noted in paragraph 7.599 to 7.600 above, in exceptional circumstances it may not be possible to comply with all the SLA requirements prior to notification to ComReg. Therefore, ComReg has added "*unless otherwise agreed with ComReg*" so that the point in time where with SLA requirements must be complied can change with the prior agreement of ComReg.

⁹²¹ Paragraphs 8.302 to 8.353 of the Consultation.

⁹²² Now set out in Section 8.3(viii) of the WLA Decision Instrument set out in Appendix 21 of this Decision.

Obligation to provide individual SLA reports to Access Seekers

7.609 As noted in the assessment section (paragraph 7.602) above, ComReg considers that it is more appropriate to include this obligation to provide individual SLA reports as an SLA requirement.

7.610 Eircom shall provide individual reports to undertakings on their committed service level performance on a quarterly basis. In addition, the reports shall include the methodology and a description of the source data used to determine the actual performance achieved. This will enable the undertakings to interpret the reports. In the case where the source data or methodology is changed, the reasons for changes to the source data and methodology used in the preparation of these reports shall be clearly explained in that report.

Conditions of Access: Requirement regarding Timeliness of Product Development**Position set out in the Consultation**

7.611 In the Consultation, ComReg proposed that certain conditions should apply to the provision of Access with respect to timeliness for product development. ComReg outlined in the Consultation that obligations are needed to ensure Access is provided in a fair, reasonable and timely manner. The obligations further ensure efficient and timely product development and the availability of accurate information to Access Seekers to progress all product developments.⁹²³ The obligations proposed in the Consultation were as follows:⁹²⁴

Following a request from an undertaking (including a request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall, from the date of receipt of such a request (unless otherwise agreed with ComReg) within:

- (a) three (3) working days confirm in writing that the request has been received;
- (b) ten (10) working days inform the undertaking whether or not the request falls within the scope of Eircom's obligations contained in the Draft Decision Instrument. Eircom shall comply with Section 8.9 of the Draft Decision Instrument⁹²⁵ in this regard and provide a unique reference to identify the request;

⁹²³ The reasoning and proposed requirements with respect to timeliness of product development are set out in paragraphs 8.354 to 8.374 of the Consultation.

⁹²⁴ As set out in section 8.10 of the Draft Decision Instrument contained in Appendix 14 of the Consultation.

⁹²⁵ Section 8.9 of the Draft Decision Instrument stated that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of the Draft Decision Instrument), or a request by an Undertaking for provision of information is refused or met only in part, Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.

- (c) twenty five (25) working days confirm that the undertaking has provided it with sufficient information to process the request including the undertaking's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that undertaking. During the twenty five (25) day period Eircom may seek clarification from the undertaking;
- (d) fifty five (55) working days confirm in writing to the undertaking whether it agrees to provide the requested product, service or facility or amendment thereto. Where the request is refused Eircom shall comply with Section 8.9 of the Draft Decision Instrument in its response to the undertaking;
- (e) seventy five (75) working days provide the undertaking with a detailed description of the relevant product, service or facility and the associated procedures.

7.612 ComReg also proposed in paragraph 8.372(f) of the Consultation that within seventy five (75) working days, unless otherwise agreed with ComReg, Eircom shall also provide the undertaking with a forecast date by which it expects to provide the requested products, services or facilities.

7.613 In addition, ComReg proposed⁹²⁶ that without prejudice to the obligation to grant Access in a fair, reasonable and timely manner where Eircom receives a request for Access (including Access to those products, services and facilities referred to in Sections 7 and 8 of the Draft Decision Instrument) in accordance with the requirements of the Draft Decision Instrument at the same point in time as a request for another wholesale access product, service or facility, on foot of another Decision Instrument issued by ComReg, Eircom shall ensure that both Access requests are met concurrently.

Respondents' Views

7.614 Two of the eight Respondents to the Consultation (Eircom and Vodafone), expressed views on ComReg's proposed requirements regarding timeliness of product development.

7.615 ComReg has summarised the Respondents' views on proposed obligations governing timeliness of product development, grouping together views into the following themes:

- (a) Product development timelines (discussed in paragraphs 7.617 to 7.639 below);
- (b) Justification and reasonableness of product development timelines (discussed in paragraphs 7.640 to 7.644);
- (c) Requirements sought with respect to oversight of product development (discussed in paragraphs 7.645 to 7.647);
- (d) Concerns with respect to product development timelines (discussed in paragraphs 7.648 to 7.650);

⁹²⁶ As set out in Section 8.2 of the Draft Decision Instrument, contained in Appendix 14 of the Consultation.

- (e) Absolute deadlines for the proposed timelines (discussed in paragraph 7.651);
- (f) Hard wiring of current processes into the decision (discussed in paragraph 7.652);
- (g) Proportionality of proposed requirements (discussed in paragraph 7.653); and
- (h) Meeting concurrent Access requests (discussed in paragraph 7.654).

7.616 In its Submission, Eircom had, in some cases, commented on issues that related to the obligations concerning the timeliness of product development, but these comments were set out in those parts of Eircom's Submission dealing with transparency obligations. Where appropriate these aspects of Eircom's Submission are, therefore, addressed in this section.

Summary view of proposed requirements with respect to timeliness of product development

7.617 To explain ComReg's approach to the proposed obligations relating to timeliness of product development and to assist the reader in better understanding the points raised by Respondents, before summarising the Respondents' views, ComReg provides the following information by way of background.

7.618 The Eircom Regulated Access Product ('**RAP**') Product Development Process⁹²⁷ includes a series of steps from the Access Seeker's initial request for Access, through to the provision of Access via the product launch. ComReg has provided a high-level overview of Eircom's RAP Product Development Process, as illustrated in Figure 18 below.

7.619 Figure 18 illustrates five key stages of Eircom's RAP Product Development Process, namely those steps identified as 'Request', 'Concept', 'Under Review', 'In Development' and 'Delivered'⁹²⁸ and the associated Product Development Council⁹²⁹ ('**PDC**') gates.⁹³⁰

⁹²⁷ The RAP Product Development Process is the Eircom process that includes a series of steps to bring an Access request from initial request through the analysis, design, development and launch of the new or amended product, service or facility.

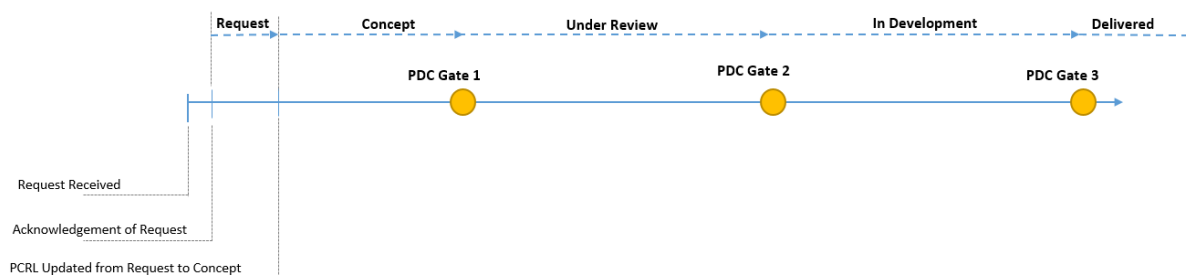
⁹²⁸ The key stages of the RAP Product Development Process and their relationship to PDC gates are described in Eircom document 'open eir RAP Product Development Process' V3.0, dated 19/09/2017.

⁹²⁹ In the Eircom document: 'Wholesale PDC Terms of Reference, Wholesale PDC PMO, 1st Jan 2015 –v3.0', the role of the PDC is described as follows: [

[REDACTED]

⁹³⁰ Three decision points are shown in Figure 18, each corresponding to a meeting of the Eircom PDC where decisions are made at particular milestones. These decision points are referred to by Eircom as PDC Gates.

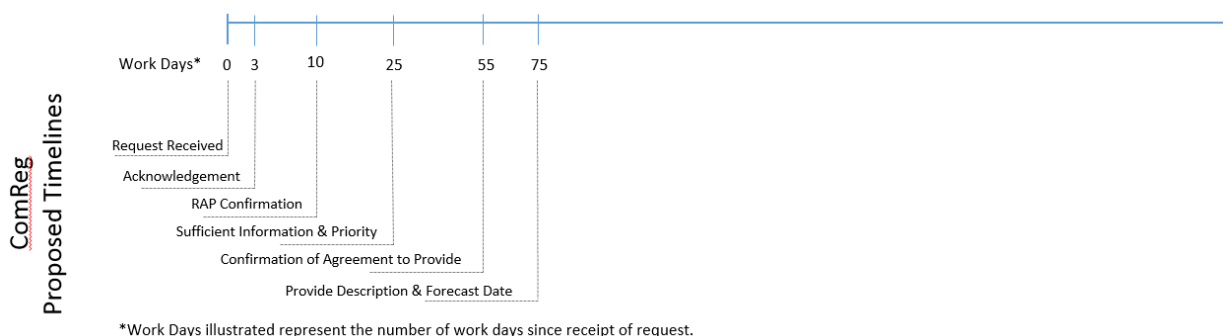
Figure 18: Illustrated view of Eircom’s gated RAP Product Development Process



7.620 ComReg has cited Eircom’s RAP Product Development Process in order to provide perspective on the proposed product development timelines and because Eircom has referred to and relied upon this process in its Submission. In ComReg’s view, the proposed obligations with respect to timelines relate to Milestones⁹³¹ that would reasonably be required for the management and execution of any RAP Product Development Process.⁹³² Therefore, these or similar milestones are likely to be required independent of Eircom’s current or any future RAP Product Development Process.

7.621 An illustration of ComReg’s proposed obligations regarding timelines for product development is set out in Figure 19 below.

Figure 19: Summary illustration of proposed requirements with respect to timeliness of product development



*Work Days illustrated represent the number of work days since receipt of request.

⁹³¹ Milestones are the key points in Eircom’s Product Development Process that Access Seekers would reasonably rely upon so as to track the progress of a request in that process, including, *inter alia*, decision points and points of transition associated with analysis, design, development and launch stages for the request and the date that the product, service or facility will be made available to Access Seekers.

⁹³² ComReg’s position is that any product development process must include a number of steps which commence with a request for a new or amended product or service, i.e. an Access request. This request must be reviewed by Eircom to confirm it relates to a regulatory obligation imposed in a regulated market. If the regulatory basis for the request is confirmed, the request must then be analysed to determine its feasibility and reasonableness and then subsequently designed, developed and launched. Therefore, ComReg has considered the imposition of obligations that are not specific to any particular product development process but which reflects generic steps which must be taken on foot of a request for Access, and which, therefore, must be common to any product development process that may be implemented by Eircom.

Product development timelines

7.622 Vodafone stated that it fully supports the product development remedies proposed by ComReg,⁹³³ including what Vodafone described as the more detailed specification of timelines that will, in its view, improve the product development process and set expectations of what constitutes acceptable behaviour.⁹³⁴

7.623 Eircom's views on each of the proposed obligations (as summarised in paragraph 7.611 and 7.612) with respect to the requirements for product development timelines are described in paragraphs 7.624 to 7.639.

3 working days: Acknowledgement of the Request

7.624 Eircom noted⁹³⁵ that this proposed requirement⁹³⁶ is only considered acceptable by Eircom if the request has been provided to Eircom via a Customer Requirements Capture Document ('CRCD')⁹³⁷ sent to a generic mailbox. In Eircom's view, it would be unfair to expect it to provide written confirmation for an undocumented and, in its view, often under-researched verbal request that may be raised at a meeting.

10 working days: RAP confirmation

7.625 Eircom provided its view that it was unreasonable⁹³⁸ for ComReg to propose a timeline of 10 working days⁹³⁹ for Eircom to inform an Access Seeker whether or not the request falls within the scope of Eircom's obligations. Eircom stated that, on average, this task is completed within [§< ██████████] working days and suggested that [§< ██████████] working days would be a preferable time period to cater for exceptions.

⁹³³ Vodafone Submission, page 21, paragraph 149.

⁹³⁴ Vodafone Submission, page v, paragraph xliii.

⁹³⁵ Eircom Submission, page 46, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

⁹³⁶ As set out in paragraph 7.611(a).

⁹³⁷ Section 2.1 of the Eircom document 'open eir RAP Product Development Process' V3.0, dated 19/09/2017, describes that a Customer Requirements Capture Document is a document submitted to an Eircom RAP mail box in which an operator defines and documents a new request.

⁹³⁸ Eircom Submission, page 46 and 47, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

⁹³⁹ As set out in paragraph 7.611(b).

7.626 Eircom disagreed with the proposed wording of Section 8.10(ii)⁹⁴⁰ of the Draft Decision Instrument set out in Appendix 14 of the Consultation.⁹⁴¹ In Eircom's view, it should only have to comply with the obligation to provide reasons under Section 8.9 of the Draft Decision Instrument in the event of a refusal or partial grant of the Access request. Section 8.9 of the Draft Decision Instrument sets out that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of the Draft Decision Instrument), or a request by an undertaking for provision of information is refused or met only in part, Eircom shall, at the time of the refusal or partial grant, provide in detail to the undertaking each of the objective reasons for such refusal or partial grant. In addition Section 8.9 sets out that Eircom's response shall be provided in a fair, reasonable and timely manner. In Eircom's view, if Eircom is in agreement that the Access request would be met, it should not be obliged to provide objective reasons for its agreement to provide same.

25 working days: Confirmation of sufficient information and Access Seeker's view of priority

7.627 Eircom disagreed⁹⁴² with the proposed requirement⁹⁴³ that within 25 working days of receipt of the Access Seeker's request, Eircom must confirm that the requesting Access Seeker has provided it with sufficient information to process the request.

7.628 Eircom explained that it would not be possible for it to say that it has sufficient information to process the request within 25 working days of receipt of the request. However, Eircom indicated it would be able to confirm that it had sufficient information to "*proceed with next steps*"⁹⁴⁴ during that period.

⁹⁴⁰ Section 8.10(ii) of the Draft Decision Instrument states that Eircom shall (unless otherwise agreed with ComReg) within ten (10) working days inform the Undertaking whether or not the request falls within the scope of Eircom's obligations contained in this Decision Instrument. Eircom shall comply with Section 8.9 above in this regard and provide a unique reference to identify the request.

⁹⁴¹ As summarised in paragraph 7.611(b).

⁹⁴² Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁴³ As set out in paragraph 7.611(c) of this Decision.

⁹⁴⁴ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

7.629 However, in a later section of its Submission,⁹⁴⁵ Eircom acknowledged that a time limit of 25 working days is possible, but only when a request is specific and detailed to the point that no further business specification clarification is required or in the case of a minor development. Eircom elaborated on its view by explaining that in the case of what Eircom refers to as a '*bespoke solution*',⁹⁴⁶ more time should be given to discuss and clarify the requirement. Eircom considered that 25 working days is not enough time to do so.

7.630 Eircom disagreed with the wording of Section 8.10(iii)⁹⁴⁷ of the Draft Decision Instrument.⁹⁴⁸ Eircom was of the view that the word '*that*' in the first line of this proposed obligation should be deleted and replaced with the words '*whether or not*'. In Eircom's view, it is the Access Seeker's responsibility to provide the relevant information and Eircom should not be responsible or liable if it does not do so.

55 working days: Confirmation of whether to provide the request

7.631 Eircom disagreed⁹⁴⁹ with the proposed requirement⁹⁵⁰ to confirm to the Access Seeker, within 55 working days of receipt of the request, whether Eircom agrees to provide the requested new or amended product, service or facility.

⁹⁴⁵ Eircom Submission, page 49, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

⁹⁴⁶ In Eircom's 8 June 2017 response to SIR issued from ComReg to Eircom 17 May 2017, Eircom clarified its use of the term bespoke solution as follows: [redacted].

⁹⁴⁷ Section 8.10(iii) of the Draft Decision Instrument sets out that Eircom shall (unless otherwise agreed with ComReg) within twenty five (25) working days confirm that the Undertaking has provided it with sufficient information to process the request including the Undertaking's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Undertaking. During the twenty five (25) day period Eircom may seek clarification from the Undertaking.

⁹⁴⁸ As summarised in paragraph 7.611(c).

⁹⁴⁹ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁵⁰ As set out in paragraph 7.611(d) of this Decision.

- 7.632 In its submission Eircom considered that the 55 working day timeline was equivalent to its 'Under Review' stage⁹⁵¹ of the RAP Product Development Process (as illustrated above in Figure 18). In Eircom's view, where it has progressed the request to functional design within the 'Under Review' stage, the probability of delivering the request within what it referred to as the 'agreed timeline'⁹⁵² set at the start is more certain.
- 7.633 Eircom stated that it would not be possible to be tied to a specific 55 day timeline because of the number of inputs and complexities that arise in developments. Eircom stated that such inputs and complexities include SME availability, internal governance (including capex allocation), competing demands on scarce IT development resources and agreement by other operators which, in Eircom's view, only meet monthly.
- 7.634 Eircom explained that it takes, on average, [~~] working days to meet this 'gate' and this timeframe is more reasonable. Via a subsequent SIR, Eircom provided the following clarification with respect to the term 'gate':~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]⁹⁵³~~

7.635 Eircom disagreed with the proposed wording of Section 8.10(iv)⁹⁵⁴ of the Draft Decision Instrument.⁹⁵⁵ In Eircom's view the words '*provided it has been provided with sufficient information as referred to in (iii) above*' should be inserted at the beginning of Section 8.10(iv).

⁹⁵¹ A description of the 'Under Review' stage is provided in section 2.2.3 of the Eircom document: 'open eir RAP Product Development Process, V3.0, dated 19/09/2017.

⁹⁵² In a 6 December 2017 response to an email requesting clarification sent to Eircom by ComReg on 16 November 2017, Eircom clarified the meaning of the term 'agreed timeline' [~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

[~~]~~

⁹⁵³ Eircom's 14 June 2017 response to a 3 May 2017 SIR.

⁹⁵⁴ Section 8.10(iv) of the Draft Decision Instrument sets out that Eircom shall (unless otherwise agreed with ComReg) within fifty five (55) working days confirm in writing to the Undertaking whether it agrees to provide the requested product, service or facility or amendment thereto. Where the request is refused Eircom shall comply with Section 8.9 above in its response to the Undertaking.

⁹⁵⁵ As summarised in paragraph 7.611(d).

75 working days: Provision of detailed description and forecast date***Provision of detailed description***

- 7.636 Eircom disagreed⁹⁵⁶ with the proposed requirement⁹⁵⁷ to provide the Access Seeker, within 75 working days following receipt of the request, a detailed description of the relevant product, service or facility and the associated procedures to be developed between Eircom and the Access Seeker. Eircom considered this was equivalent to its 'In Development' stage.⁹⁵⁸
- 7.637 Eircom stated the following with respect to the proposed 75 working day timeline:

'In the present development process this is the industry "In Development" stage. At this stage open eir commit and the development is signed off at its Portfolio Board⁹⁵⁹ and has secured the IT resource for the next IT release. It assumes all other dependencies are secured, be it Capex, Service Commitment, PDC⁹⁶⁰ approval. Today it takes on average [3< [REDACTED]] Working days to meet this gate and this is a more reasonable time period'.

Provision of forecast date

- 7.638 Eircom also disagreed⁹⁶¹ with the proposed requirement to provide the Access Seeker, within 75 working days following receipt of the request, with a forecast date by which it expects to provide the requested products, services or facilities.
- 7.639 Eircom provided its view that a forecast date is given at the start of the request, with updates given along the way and that it is at the 'In Development' gate that a committed date is given.⁹⁶²

⁹⁵⁶ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

⁹⁵⁷ As set out in paragraph 7.611(e).

⁹⁵⁸ A description of the 'In Development' stage is provided in section 2.2.4 of the Eircom document: 'open eir RAP Product Development Process, V3.0', dated 19/09/2017.

⁹⁵⁹ The Eircom document 'Terms of Reference of the Portfolio Board of Eircom Holdings (Ireland) Limited' (Ver ComReg) describes Eircom's Portfolio Board as the [3< [REDACTED]

⁹⁶⁰ In the Eircom document: 'Wholesale PDC Terms of Reference, Wholesale PDC PMO, 1st Jan 2015 –v3.0', the role of the Product Development Council ('PDC') is described as follows: [3< [REDACTED]

⁹⁶¹ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

⁹⁶² Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

Justification and reasonableness of product development timelines

- 7.640 In the Consultation, ComReg noted that the proposed obligations were modelled on the timelines for product development included in Eircom's Wholesale Bitstream Access Reference Offer⁹⁶³ ('**WBARO**') (relating to its WCA products) and the Eircom Reference Interconnect Offer ('**RIO**').⁹⁶⁴ In ComReg's view, these proposed product development obligations should, therefore, not create an undue burden on Eircom, but should serve to reinforce the practical application and operation of Access obligations.
- 7.641 In Eircom's view,⁹⁶⁵ ComReg's justification for the product development timelines based on the WBARO timelines is inappropriate because the WBARO timelines are redundant and out of date. Eircom states that the WBARO should have been amended accordingly a number of years ago.
- 7.642 Eircom considered⁹⁶⁶ that ComReg has used the WBARO as the wrong starting point to, in Eircom's view, enshrine redundant contractual terms into the RAP Product Development Process. Eircom also noted that Cartesian⁹⁶⁷ was undertaking a detailed analysis of Eircom's company-wide RAP Product Development Process.
- 7.643 Eircom suggested that the conclusions of the Cartesian RGM Report should form the basis of the consideration of what milestones should be enshrined in regulation, if any. In Eircom's view, any milestones must be realistically achievable, otherwise Eircom would be in "*perpetual non-compliance*."⁹⁶⁸ Eircom stated that ComReg should, in its view, consult properly on this item after the Cartesian RGM Report is completed, rather than "*precipitately proposing unsuitable deadlines*."⁹⁶⁹

⁹⁶³ The WBARO is the offer of contract by Eircom to OAOs in relation to Current Generation and Next Generation WCA as may be amended from time-to-time. For the avoidance of doubt the WBARO includes the documents which are expressly referred to as being part of the WBARO. To the extent that there is any conflict between the WBARO and Eircom's obligations now set out herein, it is the latter which shall prevail.

⁹⁶⁴ The RIO is the offer of contract by Eircom to Undertakings in respect of the provision of Access in accordance with the requirements of the 2015 FACO Decision. The RIO sets out products, services and facilities including, but not limited to, service descriptions, associated terms and conditions and standards to be offered in accordance with the requirements set out in the 2015 FACO Decision.

⁹⁶⁵ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁶⁶ Eircom Submission, page 47 and 48, in section entitled 'Requirement regarding Timeliness of Product Development, paragraphs 8.354 – 8.374'.

⁹⁶⁷ In December 2015, ComReg decided to conduct a review of the scope and quality of Eircom's regulatory governance structures and the operation of the associated processes and procedures, including but not limited to Eircom's Regulatory Governance Model ('**RGM**'). In May 2016, Cartesian was appointed to perform an Operations Review and KPMG was appointed to perform a Governance Review. On 13 July 2017 ComReg published the Cartesian document 'Operational Assessment of eir's Regulatory Governance Model, 7 July 2017, Prepared for Commission of Communications Regulation'.

⁹⁶⁸ Eircom Submission, page 46, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁶⁹ Eircom Submission, page 48, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

7.644 In addition, Eircom suggested⁹⁷⁰ that the timelines proposed in the Consultation are unreasonable in that they make no provision for the differing size or complexity of requests and projects.

Requirements sought with respect to oversight of product development

7.645 Vodafone stated⁹⁷¹ it has experienced difficulties with Eircom with respect to product development and that there needs to be far better transparency and oversight of Eircom's product development, particularly where Eircom itself has initiated development requests.

7.646 Vodafone argued⁹⁷² that, in addition to the obligations placed on Eircom for timeliness of product development, more is needed by way of direct oversight by ComReg of the RAP Product Development Process.

7.647 Vodafone called on ComReg to provide this oversight rather than rely on updates provided by Eircom via what it referred to as the 'Styles Report'.⁹⁷³ In Vodafone's view, this will serve two purposes:

- (a) ComReg's presence will help guide the discussion where obstacles emerge; and
- (b) Where the issue ends in formal referral to ComReg, ComReg will be able to push forward with resolution far more quickly given its direct familiarity with the issues and a stronger ready-made evidence base.

Concerns with respect to product development timelines

Evidence of concerns regarding product development timelines

7.648 In the Consultation⁹⁷⁴ ComReg noted that Access Seekers have continually raised concerns with Eircom regarding the RAP Product Development Process with respect to transparency and timeliness.

7.649 Eircom stated⁹⁷⁵ that ComReg failed to provide any evidence for such concerns.

⁹⁷⁰ Eircom Submission, page 46, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁷¹ Vodafone Submission, page 21, paragraph 149.

⁹⁷² Vodafone Submission, page 21 and 22, paragraph 151.

⁹⁷³ Industry Updates on eir's Regulatory Governance Model (RGM) are sometimes referred to by Access Seekers as 'The Styles Reports'.

⁹⁷⁴ Paragraph 8.357 of the Consultation.

⁹⁷⁵ Eircom Submission, page 45, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

Delays to finalising product SLAs

7.650 In addition, Eircom noted⁹⁷⁶ that in the Consultation⁹⁷⁷ ComReg referenced an example of delays occurring in finalising product SLAs, in particular, concerning difficulties with respect to agreeing product specifications in a timely manner. Eircom considered that it was misleading for ComReg to reference the example of product SLAs since it was of the view that ComReg was considering SLA remedies separately.

Absolute deadlines for the proposed timelines

7.651 Eircom stated that ComReg is proposing absolute deadlines for the proposed product development milestones and that certain circumstances (as outlined below) can result in the pace of the development varying from one case to another. Eircom made the following points:

- (a) The achievement of the milestones will depend on a number of factors including the complexity of the request and the co-operation of the requesting party, e.g. the responsiveness of the requesting party to requests for clarity.
- (b) If targets are to be mandated, they should be based on averages and be capable of being suspended if there is failure to respond to Eircom requests for clarification.
- (c) The business need of the requestor at the start may change throughout the course of the development and, as such, the priority can change.
- (d) Product development requests received can be complex and many requests can require multiple bilateral engagements with other operator(s).
- (e) Each product development request is different, but the final solution must satisfy all operators should they require it.
- (f) Any milestones must be realistically achievable, otherwise Eircom would be in perpetual non-compliance.

Hard wiring of current processes into the decision

7.652 Eircom stated⁹⁷⁸ that ComReg is hard wiring current product development processes into its proposed regulatory obligations. Eircom stated further that the product development processes have developed over time and that ComReg's approach will constrain further evolution that may be of benefit to all Access Seekers.

⁹⁷⁶ Eircom Submission, page 45, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

⁹⁷⁷ ComReg raised such concerns in paragraph 8.357 of the Consultation.

⁹⁷⁸ Eircom Submission, page 3, in section entitled 'Executive Summary'.

Proportionality of proposed requirements

7.653 Eircom stated⁹⁷⁹ that to require it to alter its processes as proposed in the Consultation is disproportionate given Eircom's size and resources, particularly when compared to those of other operators.

Meeting concurrent Access requests

7.654 With respect to the proposed requirement as summarised in paragraph 7.613 above Eircom expressed its view⁹⁸⁰ that it should only be required to provide concurrent access if this is reasonable. In addition, Eircom expressed the view that if an Access request requires it to undertake further work that work should only be required to be undertaken in accordance with Eircom's published product prioritisation request procedures.

ComReg's Assessment of Respondents' Views

7.655 Below, ComReg addresses Respondents' views under each of the themes identified in paragraphs 7.614 to 7.654 above, namely:

- (a) Product development timelines (discussed in paragraphs 7.656 to 7.711);
- (b) Justification and reasonableness of product development timelines (discussed in paragraphs 7.712 to 7.720);
- (c) Requirements sought with respect to oversight of product development (discussed in paragraphs 7.721 to 7.724);
- (d) Concerns with respect to product development timelines (discussed in paragraphs 7.725 to 7.732);
- (e) Absolute deadlines for the proposed timelines (discussed in paragraphs 7.733 to 7.734);
- (f) Hard wiring of current processes into the decision (discussed in paragraph 7.735);
- (g) Proportionality of proposed requirements (discussed in paragraphs 7.736 to 7.739); and
- (h) Meeting concurrent Access requests (discussed in paragraphs 7.740 to 7.741 below).

Product development timelines**3 working days: Acknowledgement of the Request**

7.656 Eircom raised issues concerning this milestone⁹⁸¹ stating that in its view, it would be unfair to expect a written confirmation of an undocumented verbal request.

⁹⁷⁹ Eircom Submission, page 49, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

⁹⁸⁰ Eircom Submission, page 73, in section entitled 'WLA: Draft Decision Instrument'.

⁹⁸¹ As noted in paragraph 7.624.

- 7.657 Having considered Eircom's response, ComReg has decided that the timelines for acknowledgement of the request as described in paragraph 7.611(a) above shall apply from the point in time when a written request is made by the Access Seeker. The written request from the Access Seeker should document the request in a clear and understandable manner.
- 7.658 Such an approach allows for the Access Seeker to document its requirements and provides for a clear point in time from which timelines can be measured. ComReg notes that it is incumbent upon Eircom to ensure that it clearly explains to all Access Seekers and Eircom's downstream arm, that a written request must be submitted in all cases.
- 7.659 ComReg has therefore decided to amend the requirement described in paragraph 7.611(a) above, such that the acknowledgement is to be provided by Eircom to the Access Seeker within three (3) working days of receipt of a request, with the request to be in the form of a written request made by the Access Seeker.
- 7.660 A written request could, for example, take the form of the submission of a Statement of Requirements ('**SOR**')⁹⁸² or Customer Requirement Capture Document ('**CRCD**'). The date that a written request is sent by an Access Seeker to Eircom is considered by ComReg to be the reference point from which the timeline for acknowledgement of the request and subsequent timelines shall be measured.
- 7.661 In ComReg's view, the obligation set out in paragraph 7.611(a) and as amended in paragraph 7.659 aligns with Eircom's current RAP Product Development Process. ComReg also notes that it is reasonable to expect that an acknowledgement of an Access request would be part of any product development process.

10 working days: RAP confirmation

- 7.662 Eircom raised issues concerning this timeline⁹⁸³ as in its view it was unreasonable for ComReg to propose a timeline of 10 working days for Eircom to inform an Access Seeker whether or not the request falls within the scope of Eircom's obligations. In addition, Eircom noted the current average timeline of [§< ██████████] working days for it to inform an Access Seeker whether or not the request falls within scope of Eircom's obligations and stated that Eircom considered a preferable time period to be ([§< ██████████] working days).
- 7.663 As set out in section 2.2.2 of the Eircom RAP Product Development Process Document,⁹⁸⁴ requests are reviewed by Eircom at weekly RAP Product Change Request Process ('**PCRP**') meetings.

⁹⁸² Statement of Requirements/SOR is a document prepared by one or more Access Seekers in which the requirements of an Access request are specified.

⁹⁸³ As noted in paragraphs 7.625 to 7.626.

⁹⁸⁴ 'open eir RAP Product Development Process', V3.0, dated 19/09/2017.

- 7.664 To allow for a scenario where a complex request may require additional time to evaluate whether the request falls within the scope of Eircom's regulatory obligations, ComReg has decided that it is reasonable to extend this timeline to 15 working days from receipt of request, rather than the originally proposed 10 working days.
- 7.665 ComReg's position is that the additional time now provided i.e. allowing a total of 15 working days, allows Eircom to seek clarification from the Access Seeker, where required, in order for Eircom to determine whether the request falls within the scope of Eircom's regulatory obligations.
- 7.666 Eircom disagreed⁹⁸⁵ with the proposed wording of the obligation set out in paragraph 7.611(b). In Eircom's view it should only have to comply with the obligation to provide reasons under Section 8.9 of the Draft Decision Instrument in the event of a refusal or partial grant, as in its view that is what Section 8.9⁹⁸⁶ of the Draft Decision Instrument relates to. In Eircom's view if there is agreement it should not be under obligations to provide objective reasons. For the avoidance of doubt, ComReg's position is that objective reasons are only required to be provided to Access Seekers when a request is refused or refused in part. As well as informing Access Seekers of its decision to refuse or partially grant Access, it is ComReg's position that it is necessary for Eircom also to inform ComReg of its decision and the associated reasons. In ComReg's view, this obligation is proportionate because Eircom will be providing the same information to ComReg and to Access Seekers. Therefore, the incremental burden on Eircom is low and is less burdensome to Eircom than ComReg exercising its information gathering powers.

25 working days: confirmation of sufficient information and priority

- 7.667 Eircom raised issues concerning this timeline⁹⁸⁷ stating that a timeline of 25 working days would only be possible when a request is specific and sufficiently detailed such that it requires no further business specification clarification, or alternatively in the case of a minor development.

⁹⁸⁵ As noted in paragraph 7.626.

⁹⁸⁶ Section 8.9 of the Draft Decision Instrument states that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of the Draft Decision Instrument), or a request by an Undertaking for provision of information is refused or met only in part, Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.

⁹⁸⁷ As noted in paragraphs 7.627 to 7.630.

- 7.668 In the proposed requirement,⁹⁸⁸ ComReg has allowed for such scenarios (where it is not possible for Eircom to confirm that it has sufficient information or to seek clarifications that it may reasonably require from an Access Seeker within 25 working days of receipt of a request)⁹⁸⁹ by enabling an extension of the timeline, subject to the agreement of ComReg. Therefore, the timeline is not absolute, but has a degree of controlled flexibility, in that requests for extensions to this timeline by Eircom will be considered by ComReg.
- 7.669 In the Consultation, ComReg proposed a duration of 15 working days between a) the proposed obligation for Eircom to inform the Access Seeker whether or not the request falls within the scope of Eircom's obligations⁹⁹⁰ and b) the proposed obligation for Eircom to confirm whether or not the Access Seeker has provided it with sufficient information including the Access Seeker's view on the priority of the request.⁹⁹¹
- 7.670 As noted in paragraph 7.664 above, ComReg's position is that the timeline for the obligation for Eircom to inform the Access Seeker whether or not the request falls within the scope of Eircom's obligations will be 15 working days rather the timeline of 10 working days originally proposed. Therefore, ComReg considers that it is reasonable that the timeline for Eircom to confirm whether or not the Access Seeker has provided it with sufficient information on the technical, process or other aspects of the Access request, including the Access Seeker's view on the priority of the request, will be extended to 30 working days rather the duration of 25 working days originally proposed.
- 7.671 In cases where Eircom is seeking an extension to the 30 working day timeline due to a need to seek additional information or clarifications from Access Seekers, then a request for such an extension shall be made in sufficient time in advance of this timeline to allow ComReg to reasonably assess the request. At the time of making such a request, Eircom shall provide a precise description to ComReg of the information required from the Access Seeker(s) and why it is required.
- 7.672 In addition, Eircom shall demonstrate, at the time of making the request, that this information has been requested prior to the expiry of the 30 working day timeline. ComReg expects Eircom to engage in good faith with the Access Seeker making the request to obtain all necessary information within the 30 working day period.
- 7.673 In considering whether to grant an extension to the 30 working day timeline, at Eircom's request, ComReg will, *inter alia*, assess the level and quality of engagement between Eircom and the Access Seeker(s) during the 30 working day period.

⁹⁸⁸ As summarised in paragraph 7.611(c).

⁹⁸⁹ Including the Access Seeker's view on the priority of the requesting relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker.

⁹⁹⁰ As summarised in paragraph 7.611(b).

⁹⁹¹ As summarised in paragraph 7.611(c).

7.674 Eircom disagreed⁹⁹² with the wording of the obligation set out in paragraph 7.611(c), namely that the word *‘that’* in the first line of this proposed obligation should be deleted and replaced with the words *‘whether or not’*. ComReg considers Eircom’s suggestion to be reasonable and the obligation as set out in paragraph 7.611(c) will accordingly be amended so that the word *‘that’* in the first line of this obligation is deleted and replaced with the words *‘whether or not’*.

55 working days: confirmation of whether to provide the request

7.675 Eircom raised issues concerning this timeline.⁹⁹³ Eircom had interpreted the proposed obligation⁹⁹⁴ to be equivalent to the “Under Review” stage of the current Eircom RAP Product Development Process. In addition, Eircom stated that where it has progressed the request to functional design within the ‘Under Review’ stage, the probability of delivering the request within what it referred to as the ‘agreed timeline’ set at the start is more certain. Eircom described that on average it currently takes [redacted] to reach this stage.

7.676 With reference to Eircom’s current internal RAP Product Development Process, [redacted]
[redacted]
[redacted]
[redacted]
(a) [redacted]
[redacted]
[redacted]
(b) [redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted].

⁹⁹² As noted in paragraph 7.630 above.

⁹⁹³ As noted in paragraphs 7.631 to 7.635.

⁹⁹⁴ The proposed obligation as summarised in paragraph 7.611(d).

⁹⁹⁵ [redacted].

⁹⁹⁶ [redacted].

⁹⁹⁷ [redacted].

- 7.677 ComReg considers that although this decision making process is specific to the current Eircom RAP Product Development Process, it describes a decision point at which the initial analysis with respect to the request [redacted]. ComReg considers that it is likely that at this decision point Eircom will have sufficient information in order to determine whether a request is reasonable and therefore whether the Access request should be met.⁹⁹⁸ ComReg notes however that should Eircom not have sufficient information at this decision point that it may request a derogation on the timeline to inform the Access Seeker as to whether the request is reasonable.
- 7.678 ComReg is of the view that providing certainty to Access Seekers in a timely manner on whether the wholesale inputs that they have requested will be made available to them is important in providing Access Seekers with the ability to perform the planning and preparations necessary to utilise such inputs efficiently and effectively. This ultimately benefits not only Access Seekers but competition and therefore also End Users. It is therefore important that Eircom informs the Access Seeker in a timely manner whether the Access request is deemed reasonable and whether it intends to proceed with its design and development. Meeting reasonable requests for Access in the WLA market is a regulatory obligation which arises in response to a competition problem in the WLA market. Therefore, ComReg expects that Access requests would be treated with the appropriate level of priority and this consideration has also informed ComReg's determination of the appropriate timelines.
- 7.679 Eircom argued that, on average, it takes it an elapsed time of [redacted] working days to reach the point when functional design has commenced⁹⁹⁹ within the 'Under Review' stage of its RAP Product Development Process. In Eircom's view it is at this point that the probability of delivering the request within the agreed timeline is more certain. ComReg notes however that the requirement, as set out in paragraph 7.611(d) above, is for Eircom to confirm in writing to the Access Seeker whether it agrees to provide the requested new or amended product, service or facility and not for Eircom to provide a view to the Access Seeker on the certainty of making the requested product, service or facility available at a specific date.
- 7.680 ComReg also notes that the period of time referred to by Eircom of [redacted] working days within which it would make an Access Seeker aware of its decision regarding whether Eircom agrees to provide the requested product, service or facility is likely to have a negative impact on competition.

⁹⁹⁸ In the current Eircom Product Development process this equates to PDC Gate 1, per Figure 18.

⁹⁹⁹ As described in paragraph 7.634.

7.681 In its Submission,¹⁰⁰⁰ Eircom suggested that ComReg should consider Cartesian’s detailed analysis of Eircom’s company-wide RAP Product Development Process and the conclusions of that review should form the basis of the consideration as to what product development milestones should be enshrined in regulatory obligations, if any.

7.682 ComReg agrees that Cartesian’s analysis which is now¹⁰⁰¹ available to ComReg, and which arises from an analysis of Eircom’s current Product Development process, allows further consideration of the proposed timelines.

7.683 To obtain an understanding of the average duration for an Access request to progress from being entered into the Eircom Product Change Request Log (‘PCRL’)¹⁰⁰² to the point that the Access request is considered for PDC Gate 1 approval, ComReg has reviewed the data provided by Eircom to Cartesian during the course of the RGM project.¹⁰⁰³

7.684 Based on this data¹⁰⁰⁴ ComReg observed the average elapsed calendar days for the following project phases that are required to have happened prior to the Access request being considered for PDC Gate 1 approval: [3<

- (a) [REDACTED]
- (b) [REDACTED]

¹⁰⁰⁰ Eircom Submission, page 48, in section entitled ‘Requirement regarding Timeliness of Product Development’, paragraphs 8.354 – 8.374.

¹⁰⁰¹ The Cartesian Report was published after ComReg had published its initial Consultation. ComReg has addressed the points made by Respondents relating to ComReg’s review of Eircom’s RGM in paragraphs 6.42 to 6.64.

¹⁰⁰² The PCRL is an Eircom document that tracks the progress of developments and requests relating to new or amended regulated products, services or facilities against a unique RAP ID assigned to such developments and requests by Eircom.

¹⁰⁰³ Cartesian analysed the time required for particular milestones associated with Eircom’s Product Development Process to be reached for a number of RAP developments as part of the RGM project. ComReg is satisfied that the time period over which the developments took place, and the statistical significance of the data is such that the data provides a good indication of the typical time taken to reach particular milestones.

¹⁰⁰⁴ [3< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]].

- 7.685 [REDACTED]
- 7.686 [REDACTED]. In other words, in the Eircom Product Development Process it takes, on average, [REDACTED] working days from the date of receipt of a request to Eircom being in a position to consider an Access request for PDC Gate 1 approval.
- 7.687 In ComReg's view, the initial analysis leading up to the assessment of an Access request for a PDC Gate 1 decision point equates to the activities that would be required in an assessment by Eircom as to whether a request is reasonable. ComReg is therefore of the view that in Eircom's current RAP Product Development Process Eircom is likely to be in a position to consider whether a request is reasonable when such an Access request is assessed for PDC Gate 1 approval.
- 7.688 ComReg considers that an additional [REDACTED] working days, after the initial analysis of the Access request, would be reasonably required by Eircom to complete the decision making process¹⁰⁰⁷ for assessing whether PDC Gate 1 should be approved for such an Access request. Combining these [REDACTED] working days with the [REDACTED] working days described in paragraph 7.686 above provides a total elapsed time of 85 working days from the date the initial request was sent to Eircom. Following that 85 working day period, Eircom should confirm to the Access Seeker whether it agrees to provide the requested product, service, facility or amendment. Therefore, ComReg has decided to amend the requirement from 55 working days to 85 working days.
- 7.689 By this 85 working day timeline, Eircom will inform the Access Seeker whether or not it agrees to meet the Access request. If Eircom does not intend to fully meet the requirement(s) (i.e., where, for example, Eircom agrees to the development but some elements of the requirement are not being met) the Access Seeker should be made aware of this by Eircom within the 85 working day timeline. Within the same 85 working days, Eircom shall provide a written description of such divergence in sufficient detail to allow the Access Seeker to be reasonably aware of the differences in the proposed key features, functionality, the geographic reach of the product and any relevant limitations of the product. In addition, the objective reasons for any such divergence shall be documented and provided by Eircom to the Access Seeker within the same 85 working days in a fair and reasonable manner.

¹⁰⁰⁵ Working Days have been derived from multiplying the calendar days by 73% (monthly average 22 working days divided by monthly average 30 calendar days). [REDACTED]

¹⁰⁰⁶ i.e. the period of time considered as being reasonable by ComReg in paragraph 7.664.

¹⁰⁰⁷ [REDACTED].

- 7.690 ComReg has therefore decided that the requirement described in paragraph 7.611(d) shall be amended so that the timeline shall be 85 working days rather than the originally proposed 55 working days. In addition, the requirement described in paragraph 7.611(d) shall be further specified to provide that in the case of any divergence in Eircom's product proposal compared to what was originally requested, Eircom shall, within the same 85 working days, provide a written description of such divergence in sufficient detail to allow the Access Seeker to be reasonably aware of the differences in the proposed key features, functionality, the geographic reach of the product and any relevant limitations of the product. In addition, the objective reasons for any such divergence shall be documented and provided by Eircom to the Access Seeker within the same 85 working days in a fair and reasonable manner.
- 7.691 As described in paragraph 7.690 above ComReg has lengthened the timelines for Eircom to provide confirmation to Access Seekers on whether Eircom agrees to provide a request from 55 working days to 85 working days. This should also allow for the documentation referred to in paragraph 7.689 if required, to be produced.
- 7.692 Eircom disagreed¹⁰⁰⁸ with the proposed wording of the obligation set out in paragraph 7.611(d). ComReg disagrees with Eircom's suggestion that the words '*provided it has been provided with sufficient information as referred to in (iii) above*'¹⁰⁰⁹ should be inserted in the wording of this obligation. Where Eircom requests an extension to this 85 working day timeline, ComReg will, *inter alia*, consider the level and quality of engagement between Eircom and Access Seekers, as set out in paragraphs 7.671 to 7.673 during the thirty (30) working day timeline.¹⁰¹⁰

Impact assessment of increased timelines for product development
Increase from 10 working days to 15 working days

- 7.693 As described in paragraph 7.664 above ComReg has lengthened the timeline for Eircom to inform the Access Seeker whether or not the request falls within the scope of Eircom's obligations from 10 working days to 15 working days.
- 7.694 As per the reasoning set out in paragraph 7.664, 15 working days is considered by ComReg to be a reasonable period within which Eircom shall meet the conditions of this requirement. In addition, ComReg does not consider the increase between the timeline proposed in the Consultation and what will now be imposed as an obligation on Eircom to have a material impact on Access Seekers.

¹⁰⁰⁸ As noted in paragraph 7.635.

¹⁰⁰⁹ This related to the obligation set out in paragraph 7.611(c) that within twenty five (25) working days Eircom must confirm that the Access Seeker has provided it with sufficient information to process the request including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker. During the twenty five (25) day period, Eircom may seek clarification from the Access Seeker.

¹⁰¹⁰ The timeline for Eircom to confirm whether or not the Access Seeker has provided it with sufficient information to process the request, including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker.

Increase from 25 working days to 30 working days

- 7.695 As described in paragraph 7.670 above ComReg has lengthened the timeline for Eircom to confirm whether or not the Access Seeker has provided it with sufficient information to process the request (including the Access Seekers' view on the priority of the request relative to other requests submitted by that Access Seeker pertaining to the Relevant Market) from 25 working days to 30 working days.
- 7.696 As per the reasoning set out in paragraph 7.670, 30 working days is considered by ComReg to be a reasonable period within which Eircom shall meet the conditions of this requirement. In addition, ComReg does not consider the increase between the timeline proposed in the Consultation and what will now be imposed as an obligation on Eircom to have a material impact on Access Seekers.

Increase from 55 working days to 85 working days

- 7.697 As described in paragraph 7.688 above ComReg has lengthened the timeline for Eircom to provide confirmation to Access Seekers on whether Eircom agrees to provide a request from 55 working days to 85 working days.
- 7.698 ComReg has considered the potential impact on Access Seekers in extending the timeline to 85 working days compared to 55 working days, as proposed in the Consultation. ComReg has also reviewed the data analysed by Cartesian and Eircom's response to a ComReg SIR¹⁰¹¹ on product development. In addition, ComReg has reviewed Eircom's RAP Product Development Process and given consideration to Respondents' Submissions.
- 7.699 From its analysis, ComReg has concluded that in light of the complexities associated with product development, a reasonable period of time must be allowed in order for Eircom to complete the required analysis of requests for Access. Compared to what was originally proposed in the Consultation, the extensions to the timelines will increase the maximum timeframe within which Eircom can progress an Access request through the initial phases of the RAP Product Development Process.
- 7.700 However, it is important for Access Seekers and for competition that sufficient time is provided in order to allow an Access request to be considered and an initial analysis undertaken by Eircom prior to a decision being made by Eircom regarding its development. In ComReg's view, such time is necessary to allow for the requirements relating to Access Seekers' requests to be clearly understood and analysed by Eircom in order to mitigate the risks of requests being unduly declined or partially granted by Eircom or developed by Eircom in a manner that does not align with such requirements.

¹⁰¹¹ Eircom's response of 12 May 2017 to a ComReg 3 May 2017 SIR.

- 7.701 ComReg is aware that there are risks which can materialise during the RAP Product Development Process and, in particular, after the point at which Eircom is required to communicate whether it agrees to meet an Access Seeker's request for Access. However, ComReg considers that these risks must be balanced against the risk to competition that can arise from Access Seekers being uncertain for protracted periods of time as to whether Eircom will meet their Access request.
- 7.702 Therefore, ComReg considers that Eircom must provide a sufficient degree of certainty to Access Seekers regarding the planned development of an Access request within a reasonable period of time after the Access Seeker has submitted the Access request.¹⁰¹² ComReg considers, however, that should further analysis by Eircom during the RAP Product Development Process give rise to new issues or concerns which bring into question the reasonableness of the Access request, then Eircom should fully explain (i.e. objectively justify) to Access Seekers why a particular product development, which it previously considered was reasonable and had agreed to develop, requires amendment or cannot progress to completion.
- 7.703 ComReg considers that after 85 working days Eircom must provide assurances to Access Seekers, that it will develop the requested product, service or facility. However, ComReg considers it reasonable that Eircom retains the ability to stop the development, should further analysis give rise to new issues or concerns which bring into question the reasonableness of the Access request.

75 working days: Provision of detailed description and forecast date

Provision of detailed description

- 7.704 Eircom raised issues concerning the 75 working day timeline by which ComReg proposed that it be required to provide a detailed description of the relevant product, service or facility and the associated procedures to be developed.¹⁰¹³ Eircom had interpreted this timeline to be equivalent to the 'In Development' stage of the current Eircom RAP Product Development Process and stated that it currently takes Eircom an average [x< [REDACTED]] working days to reach this stage.
- 7.705 Having considered Eircom's response and from ComReg's analysis of the Eircom RAP Development Process, ComReg has decided that the proposed requirement described in paragraph 7.611(e) will not be imposed.

¹⁰¹² ComReg is aware that any product development process is likely to include a phased approach to the analysis of Access requests and ComReg is not being prescriptive as to the design of Eircom's RAP Product Development Process. However, ComReg considers that it is reasonable that Eircom should carry out an analysis of the reasonableness of an Access request in a timely.

¹⁰¹³ As noted in paragraph 7.637.

7.706 In ComReg's view the requirement¹⁰¹⁴ for Eircom to provide the Access Seeker with a detailed description of the relevant product, service or facility within 75 working days would be disproportionate in light of the obligations that will be imposed with respect to Eircom providing documentation for each request. These are the obligations for Eircom to document and provide the relevant details such as the objective reasons for any divergence in Eircom's product proposal compared to what was originally requested¹⁰¹⁵ and with respect to its transparency obligations as set out in paragraphs 7.1209(e) and 7.1209(f).

Provision of forecast date

7.707 Eircom disagreed with the proposed requirement¹⁰¹⁶ that, within seventy five (75) working days, unless otherwise agreed with ComReg, Eircom shall provide the Access Seeker with a forecast date by which it expects to provide the requested products, services or facilities. In its Submission¹⁰¹⁷ Eircom stated that a forecast date is given at the 'start of a request' with updates given along the way, and that at the 'In Development' stage, a forecast date becomes a committed date.

7.708 Eircom subsequently clarified¹⁰¹⁸ the meaning of the terms 'forecast date' and 'committed date' as follows:

[§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]].

7.709 In addition Eircom clarified that the term 'start of request', as referred to in paragraph 7.707 above, has the following meaning:

[§< [REDACTED]
[REDACTED]
[REDACTED]].

¹⁰¹⁴ As summarised in paragraph 7.611(e).

¹⁰¹⁵ As described in paragraph 7.689.

¹⁰¹⁶ As summarised in paragraphs 7.638 and 7.639.

¹⁰¹⁷ Eircom Submission, page 47, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

¹⁰¹⁸ Clarification provided by Eircom to ComReg via email, dated 25 August 2017.

7.710 The transparency requirement, as set out in paragraph 7.1202(d), requires Eircom to provide the milestones and associated target dates required to develop and launch the product, service or facility to meet the Access request. Both the forecast date and committed date referred to in paragraph 7.708 above would, *inter alia*, be included in the milestones and associated target dates that Eircom will be obliged to provide. In consideration of this ComReg has decided that the transparency requirement, as set out in paragraph 7.1202(d), is the minimum needed to meet ComReg's objectives¹⁰¹⁹ and to support the requirement to provide access to Eircom's network in a fair, reasonable and timely manner, and is sufficient to meet those objectives.

7.711 Having regard to the transparency requirement, as set out in paragraph 7.1202(d), the Respondents' views, the analysis set out in the Consultation and ComReg's analysis of the Eircom RAP Product Development Process, ComReg has therefore decided not to impose the requirement¹⁰²⁰ on Eircom to provide a forecast date to the Access Seeker within 75 working days following receipt of request.

Justification and reasonableness of product development timelines

7.712 Eircom raised concerns¹⁰²¹ with respect to the justification of the proposed timelines on product development as it considered the WBARO timelines to be redundant and out of date. In addition, Eircom was of the view that the conclusions of the Cartesian RGM Report should form the basis of the consideration of what milestones should be enshrined in regulation, if any.

7.713 ComReg disagrees with Eircom's comments as summarised above, in particular that the timelines in the WBARO are outdated.

7.714 ComReg expects that the internal Eircom process for approval of the WBARO would be subject to the appropriate level of governance to ensure that Access Seekers can reasonably rely on the information provided in Eircom's reference offers. ComReg further notes that the WBARO is contractually binding between Access Seeker(s) and Eircom.

7.715 Eircom was of the view¹⁰²² that the conclusions of the Cartesian RGM Report should form the basis of the consideration of what milestones should be enshrined in regulation, if any.

7.716 ComReg notes that the Cartesian RGM Report forms part of a wider RGM project, which is a separate workstream, independent of the market analysis process. However, where information comes to ComReg's attention which can reasonably be used as an input into the market analysis process, it will be relied upon when available and where appropriate.

¹⁰¹⁹ As set out in the Communications Regulation Act 2002 (No. 20 of 2002) as amended, and the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), in particular with respect to the promotion of competition.

¹⁰²⁰ As summarised in paragraph 7.612 above.

¹⁰²¹ As noted in paragraphs 7.641 to 7.644.

¹⁰²² As noted in paragraph 7.643.

- 7.717 ComReg has now taken account of the data analysed by Cartesian, which was not available at the time of the Consultation and has taken this into account in ComReg's analysis of the timelines for product development, as discussed in paragraphs 7.656 to 7.711.
- 7.718 Eircom also raised concerns¹⁰²³ with respect to the reasonableness of the proposed timelines, in that they make no provision for the differing size or complexity of requests and projects. ComReg disagrees with Eircom's view because the requirements set out in paragraph 7.611(a) to 7.611(e) includes the text '*unless otherwise agreed with ComReg*' as a preface to the timelines that are subsequently set out.
- 7.719 The text '*unless otherwise agreed with ComReg*' is also included in the requirement set out in paragraph 7.612. This provides for a degree of flexibility for the timelines, via a request from Eircom to ComReg for an extension to these timelines which can be granted at ComReg's discretion. It is therefore ComReg's intention that these timelines are not absolute.¹⁰²⁴
- 7.720 In addition in coming to its position, ComReg has considered its approach in light of the data analysed by Cartesian, Eircom's current Product Development Process, Respondents' views and Eircom's response to a ComReg SIR.¹⁰²⁵ From this consideration, ComReg has amended the proposed obligations where appropriate.

Requirements sought with respect to oversight of product development

- 7.721 ComReg notes Vodafone's request¹⁰²⁶ that ComReg takes a more proactive role in the Eircom RAP Product Development Process. ComReg's role is to monitor the market to, *inter alia*, identify potential and actual competition problems and to ensure that those competition problems are appropriately addressed.
- 7.722 ComReg's role in the execution of Eircom's RAP Product Development Process is in the context of monitoring Eircom's compliance with its obligations. ComReg considers that in the current context, taking an oversight role, beyond monitoring compliance, as proposed by Vodafone would not be appropriate.
- 7.723 In ComReg's view, the proposed remedies on timeliness of product development, as described in paragraphs 7.656 to 7.711 above and other proposed remedies such as the transparency requirements with respect to product development, as described in paragraphs 7.1200 to 7.1210, are sufficient measures to address potential or actual competition problems.
- 7.724 ComReg will continue to monitor the market. If appropriate, ComReg may propose additional remedies or further specify existing remedies when justified by ComReg's objectives as and when those remedies are necessary and proportionate.

¹⁰²³ As noted in paragraph 7.644.

¹⁰²⁴ As described in paragraph 7.711 ComReg has decided not to impose the requirement on Eircom to provide a forecast date to the Access Seeker within 75 working days following receipt of request.

¹⁰²⁵ Eircom's response of 12 May 2017 to a 3 May SIR issued by ComReg to Eircom.

¹⁰²⁶ As set out in paragraphs 7.645 to 7.647.

Concerns with respect to product development timelinesEvidence of concerns with respect to product development timelines

- 7.725 As noted in paragraph 7.649 Eircom states that although ComReg mentions concerns expressed by some Access Seekers regarding timelines, it considered that ComReg had failed to provide any evidence to support these concerns.
- 7.726 ComReg is aware through industry product forums¹⁰²⁷ that Access Seekers have expressed concerns regarding the pace of product development. Developments concerning the CEI (Duct and Pole Access) and Regional Handover Access request are two such examples.
- 7.727 In its response to the Consultation, Vodafone stated that
- “Vodafone has serious misgivings with respect to existing arrangements for product development.”*¹⁰²⁸
- “Vodafone believes that the Eircom product development process is failing. As a retailer wishing to serve our customers well, we need to have the ability to develop and improve services and work with our suppliers to receive the inputs needed to secure these improvements. The product development process does not allow us to have these conversations productively with Eircom. Negotiations proceed slowly and without transparency.”*¹⁰²⁹
- 7.728 ComReg’s view is that engagement with Access Seekers at all stages of the Eircom RAP Product Development Process, including engagement with Eircom’s downstream arm, must be carried out in a comprehensive, transparent and non-discriminatory manner. This includes the level of support Eircom makes available to Access Seekers to enable them to prepare Access requests. ComReg considers that a reasonable level of support is necessary to ensure information regarding Eircom’s network and processes that Access Seekers may require in order to prepare an Access request is provided to them.
- 7.729 For example, Access Seekers do not have access to the same technical information and detailed knowledge of the capability and potential of Eircom’s network, compared to Eircom’s engineering and technical personnel given they operate, manage and maintain the network which supports the delivery of wholesale access products and services. Eircom having engineering and technical personnel with access to such information and detailed knowledge is not discriminatory but it is important that these information asymmetries do not, for example, give rise to concerns regarding Eircom’s compliance with its non-discrimination obligations. ComReg expects that Eircom puts in place appropriate regulatory governance processes to ensure that such concerns do not arise.

¹⁰²⁷ ComReg hosts meetings, which are attended by industry representatives including Eircom, with the aim of facilitating discussions by operators on the development of wholesale products. These are referred to as Industry Product Forums.

¹⁰²⁸ Vodafone Submission, page 29, paragraph 214.

¹⁰²⁹ Vodafone Submission, page v, paragraph xxxviii.

Delays to finalising product SLAs

- 7.730 Eircom considered¹⁰³⁰ that it was misleading for ComReg to reference the example of delays in finalising product SLAs in the context of the concerns ComReg raised in the Consultation with respect to difficulties in agreeing product specification in a timely manner.
- 7.731 ComReg does not accept that the reference provided in the Consultation is misleading. It is ComReg's view that although SLAs are the subject of a discrete obligation, they are integral to RAPs and of particular importance to Access Seekers as they are required in order to incentivise Eircom to provide RAPs to the required standard. ComReg also notes that SLAs are developed through the standard Product Development Process.
- 7.732 ComReg considers that delays in concluding a new or amended SLA have the potential to impact on product quality and are therefore integral to the product.¹⁰³¹ It is reasonable therefore for ComReg to refer to delays in the conclusion of SLAs when considering delays in Product Development generally.

Absolute deadlines for the proposed timelines

- 7.733 Eircom stated¹⁰³² that ComReg is proposing absolute deadlines for the proposed timelines relating to product development. ComReg disagrees with Eircom's view as the requirements set out in paragraph 7.611(a) to 7.611(e) include the proviso '*unless otherwise agreed with ComReg*' as a preface to the timelines that are subsequently set out. The text '*unless otherwise agreed with ComReg*' is also included in the requirement set out in paragraph 7.612. This provides for a degree of flexibility for the timelines, via a request from Eircom to ComReg for an extension to these timelines which can be granted at ComReg's discretion; therefore, it is ComReg's intention that these timelines are not absolute.¹⁰³³
- 7.734 Eircom also expressed¹⁰³⁴ the view that any timelines must be realistically achievable because otherwise Eircom would be in perpetual non-compliance. As a result of ComReg's review of the data analysed by Cartesian, Eircom's response received from ComReg's SIR,¹⁰³⁵ Eircom's RAP Product Development Process documentation, and in considering Eircom's Submission, ComReg is amending the timelines. These amendments have been made so that the timelines are reasonable and can be achieved efficiently.

¹⁰³⁰ As described in paragraph 7.650.

¹⁰³¹ ComReg's assessment of Respondents' views with respect to the relationship between SLAs and requests for new or amended products, services or facilities is set out in paragraphs 7.556 to 7.576 of this Decision.

¹⁰³² As noted in paragraph 7.651.

¹⁰³³ As noted in paragraph 7.719.

¹⁰³⁴ As noted in paragraph 7.651.

¹⁰³⁵ Eircom's 12 May 2017 response to a 3 May 2017 SIR issued from ComReg to Eircom.

Hard wiring of current processes into the decision

7.735 ComReg disagrees with Eircom's views¹⁰³⁶ that RAP Product Development Processes are being hardwired into regulatory obligations. In summary, the obligations being imposed on Eircom with respect to timelines have four key sub-milestones – acknowledgement of receipt of an Access request; informing whether an Access request falls within a regulated market; obtaining any additional information that is needed to progress the Access request;¹⁰³⁷ and confirmation as to whether the request is accepted or rejected. In ComReg's view, these process steps are sufficiently generic to be applicable to almost any structured product development process.

Proportionality of proposed requirements

7.736 Eircom stated¹⁰³⁸ that requiring it to alter its RAP Product Development Process as proposed in the Consultation is disproportionate, given Eircom's size and resources, particularly when compared to those of other operators.

7.737 ComReg disagrees with Eircom that the proposed obligations are disproportionate. In coming to its position, ComReg has considered its approach in light of the data analysed by Cartesian, Respondent's views, Eircom's current RAP Product Development Process, and Eircom's response to a ComReg SIR.¹⁰³⁹ From this consideration, ComReg has amended the proposed obligations where appropriate.¹⁰⁴⁰

7.738 In ComReg's view, it is reasonable for an Access Seeker to expect from a wholesale product development process that, in a timely manner, it will be provided with an acknowledgement of receipt of an Access request; informed as to whether the request falls within a regulated market; receive confirmation that it has provided any additional information that is needed to progress the request;¹⁰⁴¹ and confirmation as to whether the request is accepted or rejected.

7.739 ComReg's position is that the proposed obligations are proportionate as they are the minimum necessary to achieve ComReg's objectives. The proposed obligations are justified to achieve these objectives with respect to product development by ensuring that Access is provided in a fair, reasonable and timely manner, to ensure efficient and timely product development and the accuracy and availability of information to Access Seekers with respect to the progress of all product developments.

¹⁰³⁶ As noted in in paragraph 7.652.

¹⁰³⁷ Including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker.

¹⁰³⁸ As noted in paragraph 7.653.

¹⁰³⁹ Eircom's response of 12 May 2017 to a 3 May 2017 SIR issued by ComReg to Eircom.

¹⁰⁴⁰ As also noted in paragraph 7.720.

¹⁰⁴¹ Including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker.

Meeting concurrent Access requests

- 7.740 Eircom raised concerns¹⁰⁴² with respect to the proposed requirement for it to meet a request, received on foot of another Decision Instrument issued by ComReg, for a wholesale access product, service or facility concurrently with a request received on foot of this Decision.¹⁰⁴³
- 7.741 ComReg has reflected further on the proposed obligation and considers that since the complexity of Access requests may vary it would not be reasonable to impose an obligation on Eircom to meet concurrent Access requests in all circumstances. ComReg has therefore decided not to impose such an obligation on Eircom. At this time, ComReg considers that the transparency requirement with respect to product development, as summarised in paragraph 7.1209(g), and the timeliness of product development requirements, as summarised in paragraphs 7.742 to 7.761 should be adequate to address the potential competition problems that could arise in the WLA Market.

ComReg's Position

- 7.742 Having considered Respondents' views as summarised and assessed in paragraphs 7.614 to 7.741 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on timeliness of product development, as set out in the Consultation,¹⁰⁴⁴ with the exception of the amendments specified in paragraphs 7.745 to 7.763.
- 7.743 In addition, ComReg has decided not to impose an obligation on Eircom to meet concurrent Access requests arising on foot of another Decision Instrument issued by ComReg.¹⁰⁴⁵
- 7.744 The obligations with respect to timeliness of product development being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 8.

Objective reasons for at the time of refusal or partial grant of Access

- 7.745 Having regard to the position set out in the Consultation¹⁰⁴⁶ and having considered Respondents' views in paragraphs 7.662 to 7.666 above, ComReg has amended the requirement as set out in Section 8.9 of the Draft Decision Instrument with respect to providing objective reasons. The amended requirement is set out in paragraph 7.746 below.

¹⁰⁴² As noted in paragraph 7.654.

¹⁰⁴³ As summarised in paragraph 7.613.

¹⁰⁴⁴ Paragraphs 8.354 to 8.374 of the Consultation.

¹⁰⁴⁵ As summarised in paragraph 7.613.

¹⁰⁴⁶ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

- 7.746 Where a request by an Access Seeker for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of the Decision Instrument), or a request by an Access Seeker for provision of information, is refused or met only in part (including any refusal or partial grant arising under Sections 8.10(ii)/8.10(iv) of the Decision Instrument), Eircom shall, at the time of the refusal or partial grant, provide in detail to the Access Seeker and to ComReg each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.
- 7.747 The text as amended in paragraph 7.746 is now reflected in Section 8 of the Decision Instrument.

3 working days: Acknowledgement of the Request

- 7.748 Having regard to the position set out in the Consultation¹⁰⁴⁷ and having considered Respondents' views in paragraphs 7.656 to 7.661 above, ComReg has amended the reference point from which the timescales within which Eircom must write to the Access Seeker to confirm receipt of the request and for all subsequent timelines¹⁰⁴⁸ shall be measured from. This reference point will now be following the receipt of a written request from an Access Seeker. The amended requirement is set out in paragraph 7.749 below.
- 7.749 Following a written request from an Access Seeker (or a written request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall not later than three (3) working days from the date of receipt of such a request (unless otherwise agreed with ComReg), confirm in writing to the Access Seeker that the request has been received.
- 7.750 The text as amended in paragraph 7.749 is now reflected in Section 8 of the Decision Instrument.

10 working days: RAP confirmation

- 7.751 Having regard to the position set out in the Consultation¹⁰⁴⁹ and having considered Respondents' views in paragraphs 7.662 to 7.666 above, ComReg has amended the requirement relating to Eircom having to inform the Access Seeker whether or not the request falls within the scope of Eircom's obligations so that the elapsed time for Eircom to meet this requirement shall be within fifteen (15) working days. In addition, Eircom shall comply with Section 8.9 of the Decision Instrument only where an Access request is refused in full or in part. The amended requirement is set out in paragraph 7.752 below.

¹⁰⁴⁷ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

¹⁰⁴⁸ As summarised in paragraphs 7.611(a) to 7.611(d).

¹⁰⁴⁹ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

7.752 Not later than fifteen (15) working days, from the date of receipt of a request (unless otherwise agreed with ComReg), confirm in writing the Access Seeker whether or not the request falls within the scope of Eircom's obligations contained in the Decision Instrument and provide a unique reference to identify the request. Where an Access request is refused in full or in part, Eircom shall comply with Section 8.9 of the Decision Instrument¹⁰⁵⁰ in this regard.

7.753 The text as amended in paragraph 7.752 is now reflected in Section 8 of the Decision Instrument.

25 working days: confirmation of sufficient information and priority

7.754 Having regard to the position set out in the Consultation¹⁰⁵¹ and having considered Respondents' views in paragraphs 7.667 to 7.674 above, ComReg has amended the requirement in relation to Eircom having to confirm to the Access Seeker that it has provided it with sufficient information to process the request (including the Access Seeker's view on the priority of the request relative to other requests already submitted by the Access Seeker pertaining to the Relevant Market). The amended requirement is set out in paragraph 7.755 below.

7.755 Not later than thirty (30) working days, from the date of receipt of a request (unless otherwise agreed with ComReg), confirm in writing to the Access Seeker whether or not the Access Seeker has provided it with sufficient information to process the request including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker. During the thirty (30) working day period Eircom may seek clarification from the Access Seeker.

7.756 The text as amended in paragraph 7.755 is now reflected in Section 8 of the Decision Instrument.

55 working days: confirmation of agreement to provide request

7.757 Having regard to the position set out in the Consultation¹⁰⁵² and having considered Respondents' views in paragraphs 7.675 to 7.692 above, ComReg has amended the requirement in relation to Eircom having to confirm in writing to the Access Seeker whether it agrees to provide the new or amended requested product, service or facility. The amended requirement is set out in paragraphs 7.758 to 7.760 below.

¹⁰⁵⁰ Section 8.9 of the Decision Instrument states that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument), or a request by an Undertaking for provision of information, is refused or met only in part (including any refusal or partial grant arising under Sections 8.10(ii) or 8.10(iv) below), Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking and to ComReg each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.

¹⁰⁵¹ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

¹⁰⁵² The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

- 7.758 Not later than eighty five (85) working days, from the date of receipt of a request (unless otherwise agreed with ComReg), confirm in writing to the Access Seeker whether it agrees to provide the requested product, service or facility or amendment thereto. Where the request is refused in full or in part Eircom shall comply with Section 8.9¹⁰⁵³ of the Decision Instrument in its response to the Access Seeker.
- 7.759 In the case of any divergence in Eircom's product proposal compared to what was originally requested, Eircom shall, within the same 85 working days, provide the Access Seeker with a written description of such divergence in sufficient detail to allow the Access Seeker to be reasonably aware of the differences in the proposed key features, functionality, the geographic reach of the product and any relevant limitations of the product. In addition, the objective reasons for any such divergence shall be documented and provided by Eircom to the Access Seeker within 85 working days in a fair and reasonable manner.
- 7.760 Should further analysis, by Eircom, during the RAP Product Development Process give rise to new issues or concerns which bring into question the reasonableness of the Access request, then Eircom should fully explain (i.e. objectively justify) to Access Seekers why a particular development, which it previously considered was reasonable and that it had previously agreed to develop, requires amendment or cannot progress to completion.
- 7.761 The text as amended in paragraphs 7.758 to 7.760 is now reflected in Section 8 of the Decision Instrument.

75 working days: Provision of detailed description and forecast date

Provision of detailed description

- 7.762 Having regard to the position set out in the Consultation¹⁰⁵⁴ and having considered Respondents' views in paragraphs 7.704 to 7.706 above, ComReg has decided not to impose the requirement for Eircom to provide the Access Seeker with a detailed description of the relevant product, service or facility and the associated procedures within seventy five (75) working days of a receipt of a request.

¹⁰⁵³ Section 8.9 of the Decision Instrument states that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument), or a request by an Undertaking for provision of information, is refused or met only in part (including any refusal or partial grant arising under Sections 8.10(ii) or 8.10(iv) below), Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking and to ComReg each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.

¹⁰⁵⁴ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

Provision of forecast date

7.763 Having regard to the position set out in the Consultation¹⁰⁵⁵ and having considered Respondents' views in paragraphs 7.707 to 7.711 above, ComReg has decided not to impose the requirement for Eircom to provide to the Access Seeker a forecast date by which it expects to provide the requested products, services or facilities within seventy five (75) working days of a receipt of a request.

Withdrawal of specific Access Obligations imposed in 2013 NGA Decision**Respondents' Views**

7.764 One of eight Respondents (Vodafone) provided views on ComReg's proposal to withdraw¹⁰⁵⁶ the following obligations:

- (a) Cabinet space;
- (b) Backhaul;
- (c) Access to buildings; and
- (d) Notification of co-investment.

7.765 Vodafone has no objection to ComReg's proposals.¹⁰⁵⁷

ComReg's Assessment of Respondents' Views

7.766 ComReg note the Respondents' view set out in paragraph 7.765 above, is supportive of ComReg proposal to withdraw specific Access obligations as outlined in paragraph 7.764 above.

ComReg's Position

7.767 Having considered Respondents' views as summarised and assessed in paragraphs 7.764 to 7.766 above, and having regard to the analysis set out in the Consultation,¹⁰⁵⁸ ComReg has decided to maintain its view as set out in the Consultation.

7.768 ComReg withdraw the following Access obligations:

- (a) Cabinet space;
- (b) Backhaul;
- (c) Access to buildings; and
- (d) Notification of co-investment.

¹⁰⁵⁵ The reasoning and justification for the proposed requirements regarding timeliness of product development is set out in paragraphs 8.354 to 8.374 of the Consultation.

¹⁰⁵⁶ Paragraph 8.391 of the Consultation.

¹⁰⁵⁷ Vodafone Submission, paragraph 154.

¹⁰⁵⁸ Paragraphs 8.375 to 8.380 of the Consultation.

Non-Discrimination Obligations

Position set out in the Consultation

7.769 In the Consultation ComReg, proposed to impose a range of non-discrimination obligations upon Eircom¹⁰⁵⁹ having regard to identified competition problems, including requirements that Eircom:

- (a) applies equivalent conditions in equivalent circumstances to other undertakings requesting, or being provided with Access (including access to WLA and associated facilities) or requesting or being provided with information in relation to such access;¹⁰⁶⁰
- (b) provides Access (including access to WLA and associated facilities) and information to all other undertakings under the same conditions and of the same quality as Eircom provides to itself or to its subsidiaries, affiliates or partners;¹⁰⁶¹
- (c) provides Migrations¹⁰⁶² to at least a standard of Equivalence of Outputs ('**EoO**').¹⁰⁶³ However, the non-discrimination standard to be applied is dependent on the standard of non-discrimination applied to the destination product or service which is being migrated to; and
- (d) provides WLA Access on, at least, an Equivalence of Outputs ('**EoO**') basis, with the exception of VUA¹⁰⁶⁴ and access to CEI¹⁰⁶⁵ which are to be provided on an Equivalence of Inputs ('**EoI**')¹⁰⁶⁶ basis.

7.770 The above remedies are intended to ensure that Eircom does not favour its downstream arm, or unduly favour any particular wholesale customer, to the detriment of competition and ultimately consumers.

¹⁰⁵⁹ See paragraphs 8.392 to 8.441 of the Consultation.

¹⁰⁶⁰ See paragraphs 8.399 to 8.412 of the Consultation.

¹⁰⁶¹ See paragraphs 8.399 to 8.412 of the Consultation.

¹⁰⁶² See paragraphs 8.415 to 8.418 of the Consultation.

¹⁰⁶³ "Equivalence of Outputs" means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers in a manner which achieves the same standards in terms of functionality, price, terms and conditions, service and quality levels as the SMP Undertaking provides to itself, albeit potentially using different systems and processes.

¹⁰⁶⁴ See paragraphs 8.413 to 8.414 of the Consultation.

¹⁰⁶⁵ See paragraphs 8.419 to 8.441 of the Consultation.

¹⁰⁶⁶ "Equivalence of Inputs" means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers within the same timescales, at the same price, functionality, service and quality levels and on the same terms and conditions and by means of the same systems and processes as the SMP Undertaking provides to itself. The systems and processes shall operate in the same way and with the same degree of reliability and performance as between Access Seekers and the SMP Undertaking's provision to itself.

Respondents' Views

- 7.771 Five Respondents (ALTO, BT, Eircom, Sky and Vodafone) expressed views on ComReg's approach to the imposition of non-discrimination remedies.
- 7.772 Four Respondents (ALTO, BT, Eircom, and Vodafone) expressed views on Eircom's RGM and enforcement issues.¹⁰⁶⁷ ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following themes, namely:
- (a) The effectiveness of the non-discrimination remedy (discussed in paragraphs 7.773 to 7.780 below);
 - (b) Non-discrimination standard of Eol for CEI access (discussed in paragraphs 7.781 to 7.816 below); and
 - (c) Non-Discrimination obligation for Migrations (discussed in paragraph 7.817 below).

The effectiveness of the non-discrimination remedy

- 7.773 Sky disagreed with ComReg's preliminary view that the EoO standard of equivalence should apply to legacy WLA Products, Services and Associated Facilities. In Sky's view an Eol standard should have been imposed in the NGA Remedies Decision in 2013 and should now be imposed as part of the current WLA market review.
- 7.774 Sky argued that many of the issues brought to light in the 'Styles Report'¹⁰⁶⁸ could have been avoided if the Eol equivalence standard had been imposed on Eircom. Therefore, in Sky's opinion, an Eol standard of equivalence is proportionate and should be imposed upon Eircom for legacy WLA products, services and facilities to help detect and prevent potential discriminatory practices.
- 7.775 ALTO supported the need for non-discrimination obligations and stated that given the expanse of issues discovered through the RGM process as published by eir, ComReg should be mandating Eol for all broadband products.
- 7.776 ALTO argued it is unacceptable that in effect similar access products are regulated to different standards of equivalence, which in its opinion has not been properly justified.
- 7.777 Vodafone expressed the view that effective non-discrimination remedies are the key to the prospects of downstream competition, noting the relationship between competition and investment and how discriminatory practices could negatively impact competition and investments.

¹⁰⁶⁷ Please refer to paragraphs 6.9 to 6.21 above for a summary of Respondents' main views and refer to section 6.42 to 6.64 for ComReg's assessment of Respondents' main views on this topic.

¹⁰⁶⁸ Eircom's Industry Update on Eircom's RGM is sometimes referred to, by Access Seekers, as the Styles Report or the Eircom Regulatory Governance Report.

- 7.778 Vodafone stated that it supports ComReg's proposal to extend the requirement for EoI to an increased product set, now covering CEI products as well as VUA and extending over time to some key aspects of CGA products in the WCA and WLA markets. Vodafone considers EoI to be a key component in securing adherence to non-discrimination principles.
- 7.779 Vodafone references the May 2016 Styles Report as evidence to support its view that the non-discrimination remedy is insufficient to prevent potential discriminatory practices.
- 7.780 BT supported the move to EoI standard of equivalence for NGA WLA services and expressed concerns on the effectiveness of the non-discrimination remedies to date.

Non-discrimination standard of EoI for CEI access

- 7.781 Three of the eight Respondents (BT, Eircom and Vodafone) expressed views on ComReg's proposed requirement for EoI for CEI access.
- 7.782 BT and Vodafone stated that they supported ComReg's proposed obligation of a standard of EoI for CEI access. Vodafone supports ComReg's proposals for the non-discrimination obligation for CEI and stated that:
- "in particular we support the move from EoO to EoI"*¹⁰⁶⁹
- 7.783 Vodafone stated that the current CEI offering is sub-standard and that Vodafone considers that:
- "the EoO standard is insufficient to ensure effective equivalence for CEI access"*¹⁰⁷⁰
- 7.784 Vodafone further stated:
- "We would advise caution as the imposition of EoI alone will not be sufficient to secure the timely development of a useable set of CEI products"*¹⁰⁷¹
- 7.785 Vodafone urged ComReg to therefore continue to participate in the product development process with industry and stated that ComReg should *"stand ready to intervene formally if sufficient progress is not being made."*¹⁰⁷²
- 7.786 Vodafone also considered a 10 month development period from the date of ComReg's Decision for the introduction of EoI for CEI to be the maximum acceptable.¹⁰⁷³
- 7.787 BT welcomed the introduction of EoI into more aspects of the WLA market.¹⁰⁷⁴

¹⁰⁶⁹ Vodafone Submission, paragraph 170.

¹⁰⁷⁰ Vodafone Submission, paragraph 172.

¹⁰⁷¹ Vodafone Submission, paragraph 176.

¹⁰⁷² Vodafone Submission, paragraph 177.

¹⁰⁷³ Vodafone Submission, page 25.

¹⁰⁷⁴ BT Submission, page 3.

7.788 Eircom disagreed with ComReg's proposed obligation of EoI for CEI access. ComReg has grouped and considered Eircom's submission using the following themes:

- (a) Eircom assessment of the Cartesian Report on CEI Service Delivery¹⁰⁷⁵ (see paragraphs 7.790 to 7.794 below);
- (b) ComReg's assessment of the proportionality of EoI for CEI (see paragraphs 7.795 to 7.800);
- (c) Eircom's reference to Ofcom's approach (see paragraphs 7.801 to 7.802);
- (d) Eircom's concerns regarding the implementation of an EoI solution (see paragraphs 7.803 to 7.810 below);
- (e) Impact of EoI on Access Seekers (see paragraphs 7.811 to 7.813 below); and
- (f) Lack of demand for CEI (see paragraphs 7.814 to 7.816 below).

7.789 ComReg notes that while it has used the above themes for convenience, there are certain overlaps between the themes. For example, ComReg's assessment of the proportionality of EoI for CEI is related to various other themes, including the impact of EoI on Access Seekers, and alleged lack of demand for CEI.

Eircom assessment of the Cartesian Report on CEI Service Delivery

7.790 Eircom disagreed with Cartesian's analysis, as set out in the Cartesian Report on CEI Service Delivery, on the systems and process changes required to implement EoI stating that Cartesian's analysis is a "*desk top analysis*" and is therefore superficial, in Eircom's view, and only appears to consider the development of some of Eircom's system elements. Eircom claimed that Cartesian's assumptions on the required IT development to implement the proposed obligation were "*completely understated*".

7.791 Eircom stated that Cartesian did not engage in any manner with Eircom's IT department or Eircom's service design function in preparing these figures,¹⁰⁷⁶ and so has no basis in relation to any possible IT development costs, including payments to the system supplier that may be incurred by Eircom to address Cartesian's recommendations. Eircom considers that the majority of the costs provided by Cartesian appear to be "*process*" change related.

¹⁰⁷⁵ CEI Service Delivery Process Equivalence Options - Analysis of alternative service delivery approaches. Reference Number: 16/96d. This report is referred to as the '**Cartesian Report on CEI Service Delivery**' throughout this Decision. As part of ComReg's proportionality assessment of the appropriate standard of equivalence for CEI access, ComReg engaged Cartesian Ltd. to review and assess Eircom's CEI products. Cartesian reviewed a range of information including Eircom's published CEI product documentation and other information gathered using Statutory Information Requests ('SIRs').

¹⁰⁷⁶ Eircom Submission, page 32.

- 7.792 Eircom stated that the systems development costs are likely to be multiples of the Cartesian estimates. Eircom also stated that Cartesian's estimated cost, limited to system development costs, is entirely misleading as it fails to consider other significant costs¹⁰⁷⁷ that would be incurred to implement a 'self-service'/Eol model.
- 7.793 Furthermore, Eircom stated that the Cartesian Report on CEI Service Delivery appears to contemplate that all the data which is described in its report on Eircom's physical network infrastructure is collected and included in Eircom's systems. Eircom stated that if such data is required, a point ComReg needs to clarify, then it has not been collected by Eircom to date.
- 7.794 Eircom referred to Cartesian's use of the term 'resource inventory', noting that if Eircom were to develop a 'resource inventory' system it does not have accurate or complete occupancy information on ducts or similar information on poles required to populate such a system, and that the effort required (cost/time) to gather the required information is "staggering."

ComReg's Assessment of the proportionality of Eol for CEI

- 7.795 Eircom disagreed with ComReg's proposal to impose an Eol obligation for CEI access because it considered that the proportionality assessment was not properly carried out and that ComReg has not attempted to assess whether the Eol obligation for CEI is appropriate. Eircom explained that, in its view, the cost of implementing Eol for CEI (i.e. the burden on Eircom) means that Eol is disproportionate. Eircom stated as follows:

"As we discuss in this response the application of Eol to CEI access will be costly and unjustifiable relative to commercial market interest in the products and that [sic] it will not assist Access Seekers. It would be based on an artificial construct as eir only has one network and whilst all parts of the company use that network there is no second operator and treating the company as if that were the case is inherently economically inefficient and disproportionate."¹⁰⁷⁸

"Cartesian provide a list of estimated costs to implement what they term EoO improvement options for ducts and poles with an overall cost estimated in the region of €365k to €425k. Cartesian estimate that further costs in the region of €100k to €118k would be required to implement Eol. Cartesian concludes that "If Eircom were to transition to EOI without making the potential improvements identified for the EOO approach, then the system and process costs would be expected to be similar or less than the combined cost range of €465,000 to €543,000"

¹⁰⁷⁷ Approximately [redacted]] to migrate to a new GIS system and [redacted]] per annum for ordnance survey licence.

¹⁰⁷⁸ Eircom Submission, page 31.

7.796 Eircom stated that ComReg has not considered any approach other than Eol, and that the implementation of a self-service/Eol model for CEI access will be extremely costly with no benefit to Eircom, other operators or consumers. Eircom claimed the ComReg has not considered the full impact of implementing Eol for CEI on Eircom's organisational structure and that ComReg should have evaluated this as part of ComReg's proportionality assessment. Eircom also claimed that it is not clear what market failure is intended to be remedied by the obligation.

7.797 Eircom noted ComReg's preliminary conclusion in respect of CGA WLA (as set out in paragraph 8.411 of the Consultation) that

*“OSS and wholesale interfaces are likely to require substantial investment to upgrade or replace them in order to achieve an Eol standard of non-discrimination. In ComReg's preliminary view, this may not be justifiable or proportionate with respect to CG WLA products, as this would likely involve costly systems re-development with little incremental benefit.”*¹⁰⁷⁹

7.798 In Eircom's view, the same conclusion applies in respect of the proposed CEI non-discrimination remedy.

7.799 In relation to the implementation effort required to implement Eol for CEI. Eircom stated¹⁰⁸⁰ in its Submission that it is difficult to see how ComReg can conclude that 10 months is a reasonable timeframe to implement Eol for CEI without undertaking any analysis itself or engaging with Eircom. Eircom also claimed that significant Eircom resources would be diverted to implementing Eol for CEI at the expense of other Eircom product developments.

7.800 Eircom made reference to ComReg's Wholesale Physical Network Infrastructure Access (WPNIA)¹⁰⁸¹ market review noting that ComReg's position at the time was that EoO was the appropriate equivalence standard for CEI. Eircom noted that ComReg stated at that time that EoO was a more proportionate remedy and that ComReg indicated that it would consider imposing an Eol standard for CEI at a later stage if the EoO standard of equivalence proved to be unsatisfactory.

Eircom's reference to Ofcom's approach

7.801 Eircom's Response to a May 2017 SIR¹⁰⁸² made reference to Ofcom not opting to impose Eol for CEI in the UK. Eircom stated that Ofcom believed that imposing Eol on BT for the provision of duct access would require BT to significantly re-engineer its own internal processes and systems, and therefore would not be proportionate.

7.802 Eircom stated:

¹⁰⁷⁹ Eircom Submission, page 34.

¹⁰⁸⁰ Eircom Submission, page 34.

¹⁰⁸¹ ComReg Document No. 10/39 (ComReg Decision D05/10); Response to Consultation and Decision Document: Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4); 20 May 2010 ('**2010 WPNIA Decision**').

¹⁰⁸² Eircom's Response to May 2017 SIR, dated 23 June 2017, page 2.

“As a starting point, given Ofcom’s strategic focus is on the deployment of new ultrafast broadband networks, it considered whether it should impose EOI but limit its application only to BT’s use of PIA¹⁰⁸³ for products and services that consume duct access for deploying new ultrafast broadband networks, for example, G.fast services beyond its current cabinet footprint or the deployment of FTTP services.

However, having considered this, Ofcom is concerned that the following issues may emerge:

- Potentially complex boundaries may be needed inside Openreach to ensure EOI is applied appropriately. In particular Ofcom foresees the need for a boundary between the supply of duct access for ultrafast broadband services and for other products, and an additional boundary between downstream ultrafast broadband products and other Openreach products. These boundaries could lead to complexity and the risk of regulatory failure as, for example, roles that are currently combined would have to be separated, potentially leading to a loss in existing efficiency attributable to vertical integration. Monitoring compliance of these boundaries may be difficult and lead towards a type of functional separation, where for example a network planner must use different systems with different logins, depending on the reason why they are considering duct access.*
- Additionally, Ofcom believes that EOI would be most effective when both BT and other telecoms providers have aligned requirements for a workable duct access product. Since BT’s own demand for a duct access product to support FTTP fibre deployment is not fully established there is a risk that the incentives EOI introduces will differ between BT and other telecoms providers, and may undermine the effectiveness of the EOI requirement. Furthermore, in such a situation, an EOI requirement may even incentivise BT to reduce the deployment of its own FTTP services compared to what might otherwise have been the case.”¹⁰⁸⁴*

Eircom’s concerns regarding the implementation of an Eol solution

7.803 Eircom argued in its Submission that imposing a non-discrimination obligation to the standard of Eol for CEI is disproportionate because ComReg did not articulate in the Consultation what Eol means in the context of CEI. Eircom asserted that ComReg cannot propose any such remedy without being clear on what is required and what market failure is intended to be remedied by this particular obligation.

¹⁰⁸³ Passive Infrastructure Access ('PIA') is the term used by Ofcom to describe CEI access.

¹⁰⁸⁴ Eircom’s Response to May 2017 SIR, dated 23 June 2017, page 2.

- 7.804 Eircom asserted that ComReg is not following the practice of other European NRAs by not precisely defining what would represent compliance with an Eol non-discrimination standard for CEI. Eircom claimed that ComReg's requirements are unclear.
- 7.805 Eircom also stated that it is inherently inefficient to require Eircom to consume its own CEI products in the same manner as Access Seekers, as some teams, for example, the network design team, would effectively need to be duplicated in order to implement Eol for CEI in Eircom's opinion.
- 7.806 In the context of providing CEI information to Access Seekers, Eircom stated that a significant issue is establishing CEI capacity information (through carrying out surveys), particularly in relation to buried ducts and chambers. Eircom considers that this alone is a major piece of work and even if Eircom had all the necessary data to hand (which it states it does not) collating such information is a pre-requisite to 'automating' the ordering and fulfilment processes, which would require significant systems development.
- 7.807 Eircom states that making this data available to OAOs in a 'usable' format on a self-service basis and subsequently receiving and recording 'OAO Designs' and documentation for import and update into Smallworld¹⁰⁸⁵ is a very significant undertaking. In light of the overheads of implementing the proposed Eol for CEI obligation, the obligation is, in Eircom's view, disproportionate.
- 7.808 Eircom claimed that ComReg has insufficiently justified the imposition of Eol for CEI on the basis of Eircom's view that Eol is an exceptional measure and under Article 13a of the Access Directive¹⁰⁸⁶ it should be thoroughly justified as to its necessity and its proportionality.
- 7.809 Eircom also argued that the imposition of an Eol obligation for CEI would be based on an artificial construct. Eircom has only one network and whilst all parts of the company use that network there is no second operator and treating the company as if that were the case is inherently economically inefficient and disproportionate.
- 7.810 Eircom stated that it would seem that ComReg is seeking to introduce a new concept of a downstream arm that sits upstream of other downstream arms, if the 'generally accepted and understood' meaning of Eol is to apply in respect of CEI.¹⁰⁸⁷ Eircom claimed that by implication it must set up a new division to fulfil this role. Eircom claims that this is an artificial construct that introduces significant duplication of resource.

¹⁰⁸⁵ This is a commercial Geographical Information System ('GIS') supplied by GEC, which Eircom use to store details of duct routes, chamber locations and pole routes.

¹⁰⁸⁶ Article 13a of the Access Directive has been transposed by Regulation 14 of the Access Regulation and concerns Functional Separation.

¹⁰⁸⁷ Eircom Submission, page 30.

Impact of Eol on Access Seekers

- 7.811 In its Submission, Eircom makes reference to a particular approach to the implementation of Eol for CEI which includes the provision of an interface/portal that would provide access to all of Eircom's physical network inventory information which is stored on Smallworld. Eircom stated that the CEI network designs of Access Seekers would be received and recorded and updated in Smallworld. Eircom stated that the proposed approach is likely to be unreasonable from the Access Seekers' perspectives.
- 7.812 Eircom also states that neither Eircom nor ComReg can insist on other Access Seekers abandoning their GIS systems to use Smallworld so that they have the same view of ducts and poles as Eircom (as Eircom believes would be required by Eol). Eircom stated that Access Seekers are likely to incur significant costs¹⁰⁸⁸ if required by the imposition of an Eol obligation on Eircom to migrate to the same system as Eircom, or a compatible system.
- 7.813 Eircom stated that there will also be substantial on-going licensing fees payable by each Access Seeker. Eircom claims that for Access Seekers to have a similar view to Eircom in respect of OSI electronic background mapping, Access Seekers will also need to subscribe annually to the OSI.

Lack of Demand for CEI

- 7.814 In its submission, Eircom discussed a possible solution for Eol for CEI which included automation of order fulfilment and stated that a key consideration in deciding whether or not to automate a process is the level of activity and volumes of service requests/orders associated with the activity. Eircom stated that it would appear that there is a distinct lack of commercial interest in these passive infrastructure services (i.e. CEI access) from other operators and it would be difficult to justify the CAPEX expenditure Eircom would incur to implement automation of the order/fulfilment process with absolutely no guarantee of demand for CEI access.
- 7.815 Eircom stated in its Submission that:

*"...there are no unreasonable restrictions in place for access to CEI and the only restrictions are the absence of the amendments which ComReg is seeking to impose"*¹⁰⁸⁹

- 7.816 In its Submission Eircom also stated that:

*"It is entirely unreasonable for ComReg to impose such a burdensome obligation irrespective of whether there is any demand for the products and the demand would need to be of substantial scale to justify any major development of the product and processes. Otherwise the recovery of the implementation costs would make the CEI products disproportionately expensive and choke any potential market demand that might emerge in time."*¹⁰⁹⁰

¹⁰⁸⁸ Eircom Submission, page 33.

¹⁰⁸⁹ Eircom Submission, page 22.

¹⁰⁹⁰ Eircom Submission, page 31.

Non-discrimination obligation for Migrations

7.817 Vodafone supported ComReg's proposal for a non-discrimination remedy for migrations.

ComReg's Assessment of Respondents' Views

7.818 ComReg's Assessment of Respondents' Views is set out below, grouping the key issues raised into the following themes, namely:

- (a) The effectiveness of the non-discrimination remedy (discussed in paragraphs 7.819 to 7.828 below);
- (b) Non-discrimination standard of EoI for CEI access (discussed in paragraphs 7.829 to 7.935 below); and
- (c) Non-Discrimination obligation for Migrations (discussed in paragraphs 7.936 to 7.937 below).

The effectiveness of the non-discrimination remedy

7.819 ComReg agrees with the Respondents' views, as noted above, that effective non-discrimination obligations are required to ensure that Eircom does not favour its downstream arm, or unduly favour any particular wholesale customer. Without effective non-discrimination remedies the development of long-term sustainable competition in the WLA Market could be hindered to the ultimate detriment of End Users.

7.820 ComReg remains of the view that EoI is an effective way to minimise non-discrimination concerns, particularly with respect to operational issues such as pre-provisioning, provisioning and service assurance for Regulated Access Products (RAP). However, prior to the imposition of all regulatory obligations it is of fundamental importance to consider their reasonableness, justification and proportionality.

7.821 These considerations have particular relevance when considering an EoI obligation or changing from an existing obligation of EoO to an obligation of EoI. The imposition of an EoI obligation, rather than an obligation of EoO, can be significant, in terms of the required changes that can arise as a result, particularly in the context of legacy systems.

7.822 ComReg also notes that the evolution of technology and services allows consideration to be more readily given to an obligation of EoI as legacy systems and services are replaced or their replacement is being considered.

7.823 Furthermore, the transition of the downstream market towards higher speed services provided over next generation infrastructure and the associated decline in volume of current generation services is another factor which requires consideration when assessing the proportionality of the imposition of an EoI obligation.

- 7.824 In particular ComReg disagrees with Sky and ALTO that the imposition of an Eol based equivalence standard is appropriate for all WLA products, services and Associated Facilities. ComReg's position is that an Eol based equivalence standard is disproportionate for legacy WLA products, services and Associated Facilities. ComReg considers the potential investment required to implement Eol for legacy WLA services in a declining market would not be conducive to long-term sustainable competition.
- 7.825 ComReg does not accept that the Eol based equivalence standard is proportionate, for all WLA products, services and Associated Facilities, given the burden it would place upon Eircom, as was set out in the Consultation.
- 7.826 ComReg notes that the requirement for regulatory obligations to be proportionate has resulted in ComReg proposing that both standards of non-discrimination, i.e. Eol and EoO, are imposed on Eircom in the WLA Market in different circumstances. In proposing the non-discrimination standard, in each case, ComReg considered, *inter alia*, the implications of imposing the standard with a view to determining whether the proposed obligation was proportionate.
- 7.827 ComReg also notes that an EoO standard of equivalence for legacy WLA products is consistent with the European Commission recommendation non-discrimination obligations and costing methodologies ('**2013 Non-Discrimination Recommendation**').¹⁰⁹¹
- 7.828 ComReg has considered Respondents' views and at this time ComReg does not consider that the Respondents' views merit a change in the proposed obligation i.e. an EoO standard of equivalence for legacy WLA products, services and Associated Facilities.

Non-discrimination standard of Eol for CEI access

- 7.829 ComReg notes that BT and Vodafone supported ComReg's proposed obligation of a standard of Eol for CEI access.
- 7.830 ComReg notes Vodafone's view that a 10 month product development period from the date of ComReg's Decision is the maximum acceptable to Vodafone for Eircom to implement Eol for CEI.
- 7.831 In the following section, ComReg assesses Eircom's views under each of the themes identified in paragraph 7.788 above, as follows:
- (a) Eircom assessment of the Cartesian Report on CEI Service Delivery (see paragraphs 7.832 to 7.845 below);
 - (b) ComReg's assessment of the proportionality of Eol for CEI (see paragraphs 7.846 to 7.905 below);
 - (c) Eircom's reference to Ofcom's approach (see paragraphs 7.906 to 7.911 below);
 - (d) Eircom's concerns regarding the implementation of an Eol solution (see paragraphs 7.912 to 7.927 below);

¹⁰⁹¹ 2013/466/EU: Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (the '**2013 Non-Discrimination Recommendation**').

- (e) Impact of Eol on Access Seekers (see paragraph 7.928 below); and
- (f) Lack of demand for CEI (see paragraphs 7.929 to 7.935 below).

Eircom assessment of the Cartesian Report on CEI Service Delivery

- 7.832 ComReg's proportionality assessment included consideration of the outcome of the analysis carried out by Cartesian. ComReg disagrees with Eircom's statement that the Cartesian analysis is superficial and only appears to consider development of some of Eircom's system elements, and that Cartesian's assumed IT development effort is completely understated. ComReg also disagrees with Eircom's opinion that Cartesian has underestimated the systems development costs.
- 7.833 Before engaging Cartesian to review Eircom's CEI service delivery processes, ComReg undertook its own analysis of Eol for CEI. As part of that analysis, ComReg requested information¹⁰⁹² from Eircom using its statutory information gathering powers.
- 7.834 As part of its analysis,¹⁰⁹³ Cartesian undertook a detailed analysis of the requirements of the possible equivalence standards, namely Eol and EoO, reviewed Eircom's published reference offer¹⁰⁹⁴ and associated documents for CEI access, reviewed Statements of Compliance submitted to ComReg by Eircom, conducted international case studies, reviewed minutes of industry product workshops and meetings, and reviewed correspondence between Access Seekers and Eircom. In addition, Cartesian was given access to the information which ComReg requested from Eircom using its statutory information gathering powers.¹⁰⁹⁵
- 7.835 Cartesian analysed the information which was made available to it by ComReg and requested additional information in order to complete its analysis. ComReg subsequently requested this information¹⁰⁹⁶ from Eircom and provided it to Cartesian. Therefore, both ComReg and Cartesian are satisfied that Cartesian had sufficient information to complete its analysis without additional further engagement with Eircom. Cartesian made it clear in their report that they had all the process and system information they required and that the cost estimates were based on their experience.¹⁰⁹⁷

¹⁰⁹² Eircom's Response to Feb 2016 SIR, dated 3 March 2016.

¹⁰⁹³ Cartesian Report on CEI Service Delivery.

¹⁰⁹⁴ [https://www.openeir.ie/Reference Offers/?selectedtab=proposals%20-%20wbaro](https://www.openeir.ie/Reference%20Offers/?selectedtab=proposals%20-%20wbaro) ARO V7 service schedules 107 and 108.

¹⁰⁹⁵ Eircom's Response to Feb 2016 SIR, dated 3 March 2016.

¹⁰⁹⁶ Eircom's Response to April 2016 SIR, dated 20 May 2016.

¹⁰⁹⁷ Cartesian Report on CEI Service Delivery, page 67.

“The impact assessment carried out allows for a clear identification of the necessary process and system changes to either enhance the current EOO CEI service delivery model or transition to an EOI CEI service delivery model. However, it is important to recognise that these estimates were developed externally to Eircom. Cartesian did not seek input from Eircom in developing the assumptions and our estimates have not been validated by Eircom. As such, the estimates should be viewed as directionally correct rather than absolute.....The estimates of development effort are based on Cartesian’s experience in supporting service providers in business change projects”.

- 7.836 Based on process and system information received from Eircom, Cartesian estimated the cost to Eircom of (a) upgrading the current CEI access product to the required EoO standard and (b) the additional cost of implementing an Eol model. ComReg notes that the cost of implementing Eol for CEI as estimated by Cartesian is considerably less than the cost of improving the current CEI product to the required standard. ComReg considered the Cartesian estimate of the cost of moving to an Eol standard when carrying out its proportionality assessment.
- 7.837 ComReg agrees with Cartesian’s assessment that the majority of the changes¹⁰⁹⁸ are CEI process related. Cartesian considered how the CEI processes could be improved in addition to considering how CEI could be delivered to the standard of Eol.
- 7.838 ComReg also agrees with Cartesian's assessment that while some changes are required for the order interface (i.e. changes to order acceptance and acknowledgement) overall there is minimal systems impact, since once the order has been received and acknowledged, the systems that support Eircom’s self-supply could be re-used to support Access Seekers’ CEI access requests.¹⁰⁹⁹

¹⁰⁹⁸ See paragraph 7.836 (a) and (b).

¹⁰⁹⁹ Refer to paragraphs 7.846 to 7.905 in this section where ComReg’s analysis supporting this position is detailed.

- 7.839 Having reviewed Eircom's Submission to the Consultation, ComReg provided Cartesian with Eircom's Submission and additional responses to SIRs¹¹⁰⁰ to allow Cartesian to assess the information provided in the SIR responses and to review the points made in Eircom's Submission, including Eircom's views on Cartesian's analysis of CEI service delivery. Cartesian concluded from its review that the documentation from Eircom did not provide any additional information that would cause Cartesian to reconsider its findings or the approach to its analysis. After assessing the information provided and considering the points made by Eircom in its Submission, Cartesian rejected Eircom's contention that it had significantly underestimated the costs involved and maintained its position and findings as detailed in the Cartesian Report on CEI Service Delivery.¹¹⁰¹
- 7.840 Eircom appears to have interpreted the Cartesian Report on CEI Service Delivery as detailing the specific Eol solution which is required to be implemented by Eircom. Eircom states that in order to implement a particular 'self-service' process delivery model significant changes to Eircom's systems are required.¹¹⁰²
- 7.841 After considering Cartesian's analysis ComReg's position is that there are a number of options which can be considered for the design and implementation of Eol for CEI, one of which is the self-service model.¹¹⁰³ However, ComReg reiterates that it has not been prescriptive regarding how Eircom meets the Eol obligation. ComReg also notes that the Cartesian Report on CEI Service Delivery merely supports and informs ComReg's overall proportionality analysis, rather than setting out how Eol for CEI must be implemented by Eircom.

¹¹⁰⁰ Eircom's Response to March 2017 SIR, dated 10 April 2017.

Eircom's Response to April 2017 SIR, dated 26 May 2017.

Eircom's Response to May 2017 SIR, dated 23 June 2017.

Eircom's response to November 2017 SIR, dated 9 December 2017.

¹¹⁰¹ Cartesian Report: CEI Service Delivery Process Equivalence Options - Review of additional information provided by Eircom, ComReg Document 18/94c, Version 1.0, 8 March 2018.

Cartesian Report: CEI Service Delivery Process Equivalence Options - Accelerated MARTIS Provisioning Data Services Tool ('AMP DST'), ComReg Document 18/94c, Version 1.0, 8 March 2018.

¹¹⁰² Eircom Submission, page 32.

¹¹⁰³ Refer to the Cartesian Report on CEI Service Delivery, page 41. Cartesian documented possible improvements to CEI Access (service delivery) whereby the Access Seekers could (a) carry out desktop survey using online tools, carry out field survey (including rod, rope, test duct) and install sub-duct or (b) carry out desktop survey using online tools, and install sub-duct based on Eircom field survey (including rod, rope, test duct) and Eircom design. Option (a) provides the Access Seekers with the greatest level of 'Self-Serve' with option (b) providing the lesser level.

- 7.842 Furthermore, ComReg disagrees with Eircom's view that the implementation of Eol for CEI would require extensive development.¹¹⁰⁴ ComReg considers that the CEI information that Eircom should provide in the context of Eol for CEI is the information that is available to Eircom and that it provides to itself, i.e. that it self-supplies. ComReg does not consider that Eol for CEI requires Eircom to carry out an additional network-wide assessment of the availability of CEI capacity.¹¹⁰⁵
- 7.843 Eircom appears to interpret Cartesian's view on the availability of the CEI data¹¹⁰⁶ (e.g. duct space) as constituting a set of requirements which are necessary in order for Eircom to comply with the proposed standard of Eol for CEI. Eircom stated in its Submission that it has incomplete data on its systems. ComReg notes that Eircom's processes used for the self-supply of CEI allow for the fact that not all data, including the available capacity in ducts, is stored on Eircom's systems.
- 7.844 ComReg notes that field surveys are a standard approach to providing information in such circumstances and that, as not all data is available on Eircom's systems, Eircom's self-supplied CEI processes must include a step whereby a survey can be invoked if necessary. ComReg considers that in order to comply with the proposed Eol obligation, Eircom would have to provide Access Seekers, when required as part of a CEI access request, with access to survey data records that it provides to itself, in particular any survey data records which may be stored on systems (or paper form) other than Smallworld and which Eircom self-supplies.
- 7.845 Therefore, ComReg does not agree that the imposition of an obligation of Eol for CEI necessarily requires gathering data in the manner described by Eircom with the consequent implications for cost and time, as this information is already available to Eircom for the purposes of self-supply.

ComReg's assessment of the proportionality of Eol for CEI

- 7.846 ComReg disagrees with Eircom's assertion¹¹⁰⁷ that ComReg has not attempted to conduct an assessment of whether the obligation of Eol for CEI is proportionate, or that ComReg's assessment of proportionality is inadequate. ComReg's consideration of the proportionality of Eol for CEI is based on, *inter alia*, the analysis and findings of its independent advisors¹¹⁰⁸ and separately on a detailed analysis by ComReg of information received from Eircom under ComReg's information gathering powers:

¹¹⁰⁴ Eircom's response stated that it considered that Cartesian's reference to 'resource inventory' system capabilities required as part of the automation of the ordering and fulfilment process included, *inter alia*, the assessment of available duct and chamber capacity and making this information available on a portal via the Universal Gateway and the automated export and import of design plans onto Smallworld.

¹¹⁰⁵ See paragraphs 7.494 to 7.500 of this Decision.

¹¹⁰⁶ Eircom Submission, page 37.

¹¹⁰⁷ Eircom Submission, page 31.

¹¹⁰⁸ Cartesian Report on CEI Service Delivery.

“As a starting point to inform the EOI proportionality assessment, ComReg engaged independent consultants, Cartesian, to review Eircom’s CEI service delivery processes. This analysis was completed by reviewing Eircom’s published reference offer and associated documents for CEI access including Eircom’s relevant statements of compliance (‘SOC’) (as provided to ComReg) and other information provided by Eircom in response to a SIR.”¹¹⁰⁹

7.847 ComReg sought and received information¹¹¹⁰ from Eircom regarding the CEI elements of Eircom’s internal planning, design and build processes and the supporting systems.¹¹¹¹ This information was used by ComReg as an input into its assessment¹¹¹² of the proportionality of imposing an obligation of Eol for CEI access. ComReg included access to PAR in its analysis of the proportionality assessment¹¹¹³ of Eol for CEI.

7.848 As part of its analysis of proportionality ComReg considered three distinct but inter-related aspects of Eol for CEI:

- (a) The access to PAR stage;¹¹¹⁴
- (b) The Order Acceptance and Acknowledgement (‘**OAA**’) stage; and
- (c) The Post Order Acceptance (‘**POA**’) stage i.e. post order acceptance process steps¹¹¹⁵ for both Eircom self-supply and Access Seekers’ CEI access.¹¹¹⁶

7.849 As part of its analysis of the OAA stage ComReg considered the issues associated with the provision of a common interface for order acceptance and acknowledgement for both Eircom’s self-supply of CEI and Access Seekers’ CEI access requests.

7.850 ComReg also considered the scope for the use of the same processes for Eircom self-supply and CEI access for Access Seekers at the POA stage for small-scale and, separately, large-scale CEI requirements, in arriving at its view of the proportionality of imposing the obligation of Eol for CEI access.

¹¹⁰⁹ Paragraph 8.424 of the Consultation.

¹¹¹⁰ Eircom’s Response to Feb 2016 SIR dated 3 March 2016.

Eircom’s Response to April 2016 SIR, dated 20 May 2016.

¹¹¹¹ ComReg also assessed information provided to it in Statements of Compliance received from Eircom on July 2015, January 2016 and March 2016.

¹¹¹² ComReg carried out an assessment and also provided this information to Cartesian.

¹¹¹³ Access to PAR is a fundamental component of CEI access. ComReg notes that Eircom has access to PAR for planning and high level design purposes. Eircom must provide CEI access, including access to PAR, to the standard of Eol and having regard to its non-discrimination obligation.

¹¹¹⁴ Refer to paragraphs 7.459 to 7.510 of this Decision.

¹¹¹⁵ The design and build stages.

¹¹¹⁶ ComReg considered both CEI access requirements which are small-scale e.g. CEI access on a single or a small number of CEI routes and larger CEI requirements associated with infrastructure rollout on a larger scale where a greater degree of project and programme management is required.

7.851 As part of its analysis of small-scale CEI access ComReg considered the order process and work flow associated with the delivery of regulated services such as NGN Ethernet.¹¹¹⁷ In relation to the POA element ComReg considered the design¹¹¹⁸ and build¹¹¹⁹ stages (of the CEI component)¹¹²⁰ for NGN Ethernet provision and CEI access. Through this analysis, ComReg's confirmed that the POA delivery steps of CEI access were directly comparable to the delivery steps of the POA element of the NGN Ethernet provision (i.e. the CEI component).

7.852 Having considered Eircom's Submission, ComReg sought additional information from Eircom to confirm its understanding in relation to the OAA stage and in order to further understand issues raised by Eircom in its Submission. ComReg enquired¹¹²¹ whether Eircom considered that there was any reason why the same processes currently used for processing the CEI component of NGN Ethernet orders could not be used for processing an Access Seeker's CEI order. In its response to the SIR¹¹²² Eircom stated:

"The alternative approach is potentially to systemise the order capture and acknowledgment elements of the existing manual CEI access Products processes. This would allow all order capture for Provide, Change, Cease and Fault Handling to be entered via the UG interface. All other steps in the order processes (survey, validation, delivery, completion) would be delivered manually, as per existing processes"

7.853 In its response to a SIR¹¹²³ Eircom further elaborated on a possible solution to systemise the order capture and acknowledgement elements of the existing manual CEI access products processes:

¹¹¹⁷ NGN Ethernet is a remedy in Market 4: Wholesale High Quality Access (WHQA) at a Fixed Location. ComReg considers that it is instructive to examine the processes used to deliver such orders as there is an assessment of the availability of CEI required to be carried out by Eircom on receipt of an NGN Ethernet (provide) order.

An NGN Ethernet provide order is typically sub-divided into two parts:

(a) Site survey, Sub-Duct design, installation of Sub-Duct, which is referred to as "the CEI component", and

(b) Installation of fibre and the active element i.e. installation and configuration of the Ethernet equipment.

¹¹¹⁸ The term "Design" in the context of the CEI element of an NGN Ethernet order refers to the assessment carried out by Eircom designers in determining the availability of CEI on a particular route in order to deliver the NGN Ethernet service this includes a desktop survey of a CEI route.

¹¹¹⁹ The term "Build" in the context of the CEI element includes the CEI related works orders such as the "rod and rope" survey of a CEI route to determine whether space is available to install a sub-duct, for example, (there is an equivalent survey process for aerial routes). A duct route, may need to be surveyed to determine whether there is sufficient capacity such that a sub-duct can be installed, other Build related works orders include the installation of a sub-duct.

¹¹²⁰ In this Decision, the Design and Build of the CEI elements of NGN Ethernet provision are collectively referred to as "the CEI component". The CEI component includes Site Survey, Sub-Duct Design and installation of Sub-Duct.

¹¹²¹ Eircom's Response to May 2017 SIR, dated 23 June 2017.

¹¹²² Eircom's Response to May 2017 SIR, dated 23 June 2017, page 12.

¹¹²³ Eircom's Response to May 2017 SIR, dated 23 June 2017.

“The current NGN Ethernet Order types (PDC, CDC, HDC, and FDC) could be updated to include the CEI Products by capturing the current required details recorded manually.

The CEI access Products in question are Pole Access, Duct Access and Physical Co-Location Access.”

- 7.854 ComReg notes Eircom’s proposal that systemising the current order acceptance and acknowledgement elements for CEI access by updating the current Ethernet order types (or creating new order types) was a possible option. It is ComReg’s position that while there is a degree of development required to support the OAA stage, updating the NGN Ethernet order types could be considered as the possible starting point of an EoI solution for CEI access. However, consideration of such an approach or alternative approaches, and implementation details, would be a matter for Eircom.
- 7.855 It is ComReg’s position that an EoI solution must also include a standardised common approach to the remainder of the service delivery, post order acceptance, i.e. the design and delivery process steps for both Access Seekers and Eircom’s self-supply of CEI must be the same.
- 7.856 At the start of the POA stage, on receipt of an NGN Ethernet order from an Access Seeker, Eircom may carry out an assessment of the availability of passive infrastructure (i.e. ducts and poles) in order to deliver the required NGN Ethernet service. ComReg considered how Eircom processes are executed in order to deliver an NGN Ethernet service in an effort to establish whether the processes followed by Eircom to determine whether CEI infrastructure is available to deliver an NGN Ethernet service, or similar processes, could reasonably be used to assess whether CEI infrastructure is available generally.¹¹²⁴
- 7.857 A NGN Ethernet provide order is typically sub-divided into two parts:
- (a) Site survey, Sub-Duct design and installation of Sub-Duct, which is referred to as the ‘CEI component’; and
 - (b) Installation of fibre and the active element i.e. installation and configuration of the Ethernet equipment.
- 7.858 ComReg notes that, in terms of determining CEI infrastructural build requirements, Eircom’s planning, design and build processes include a significant manual element in order to assess the availability of CEI infrastructure. For example, an assessment of the availability of CEI on a particular route may require a physical survey of the Duct route using a ‘Rod and Rope’ test.
- 7.859 In ComReg’s opinion, the steps which need to be undertaken for such an assessment are very similar, if not identical, to the steps needed to be undertaken to assess the requirements to meet a request for CEI access from an Access Seeker, because, in both cases, the objective is to determine whether CEI is available.

¹¹²⁴ On receipt of a CEI access request from an Access Seeker or for Eircom’s self-supply of CEI in scenarios where the request relates to a small-scale requirement e.g. one or a small number of orders and not a Major Infrastructure Project.

- 7.860 Therefore ComReg considers that the steps required to carry out the CEI infrastructural assessment in order to determine the availability of CEI arising from an Access Seeker's request for an NGN Ethernet service are the same as the steps required for Eircom's self-supply of CEI generally.
- 7.861 In ComReg's opinion, based on its assessment of, *inter alia*, information received from Eircom,¹¹²⁵ the same or very similar processes used to assess the availability of CEI in order to deliver an NGN Ethernet order, could be used in order to fulfil an Access Seeker's request for CEI access or to meet Eircom's own requirements for the self-supply of CEI, for small-scale CEI access. It is ComReg's position that this demonstrates that there are options which can be considered by Eircom in order to design and implement a solution that meets the requirements of EoI for CEI access.¹¹²⁶
- 7.862 ComReg further notes that for larger scale deployments of infrastructure which rely on CEI access some of the CEI access sub-processes may be different to smaller scale deployments, by virtue of the scale of such projects. However it is ComReg's position that these differences arising from the scale of the deployment of infrastructure are primarily in the area of project and programme management. The tasks associated with assessing a CEI access request, either from an Access Seeker or in terms of Eircom's self-supply of CEI access¹¹²⁷ are essentially the same as those required to be completed for smaller scale CEI access requests.
- 7.863 It is ComReg's position that the output¹¹²⁸ of the processes which support large-scale self-supply projects such as Eircom's FTTH rollout must be the same as the output of the processes which are required to support an Access Seeker's request for large-scale CEI access. Therefore, in ComReg's opinion, if the order placement and acknowledgement is automated,¹¹²⁹ the same processes post order acceptance and acknowledgement could be used for Eircom's self-supply of CEI and Access Seeker's requests for CEI for large-scale projects.
- 7.864 ComReg considered Eircom's confirmation, via its Statement of Compliance ('SoC')¹¹³⁰ for Duct Access – Major Infrastructure Programme ('MIP')¹¹³¹ that for Duct Access pre-ordering and ordering, that there was no difference between the CEI access Eircom self-supplies and CEI access provided to Access Seekers. Eircom stated in the SoC for Duct Access that there was:

¹¹²⁵ Eircom's Response to May 2017 SIR, dated 23 June 2017.

¹¹²⁶ ComReg notes that these options are in addition to the Self Service delivery model considered by Cartesian.

¹¹²⁷ For example, determining the availability of CEI on particular routes, desktop surveys, rod and rope tests etc.

¹¹²⁸ E.g. features, information, timelines, and quality.

¹¹²⁹ Possibly supported by a File Transfer Protocol ('FTP') component due to the scale of the requests.

¹¹³⁰ The SoC is a document where Eircom provide confirmation that a detailed review and assessment of systems and processes has been completed to identify potential risks of non-compliance between what has been delivered to Eircom downstream arms and Access Seekers.

¹¹³¹ Eircom's WPNIA Statement of Compliance, open eir Wholesale Duct Access Product – Major Infrastructure Programme, March 2016.

“No difference as all Major Infrastructure Programme participants (incl eir) will follow the same process.”¹¹³²

7.865 The only difference highlighted in Duct Access provisioning was that:

“The final duct route design will be agreed jointly between the Operator and open eir (or eir’s Infrastructure Access Team for NBP) during the programme management stage. The jointly agreed project plan will be used as the basis for workflow and billing. The duct routes will be prepared as per the agreed arrangements with the project team. The Operator will prepare all local and private requests for consent from the licencing authorities. Open eir will submit the requests where open eir infrastructure is involved.”¹¹³³

7.866 ComReg notes that while there may be some minor differences with respect to the process for confirmation of and finalising the duct route design, the processes that enable CEI access such as preparation of the duct routes and the workflow arrangements etc. can be the same for Eircom’s self-supply of CEI access and for CEI access requests from Access Seekers.

7.867 Furthermore, ComReg notes that Eircom has confirmed via its SoC for Pole Access – MIP¹¹³⁴ that for Pole Access pre-ordering, ordering and provisioning there are

“No difference as all Major Infrastructure Programme participants (incl eir) will follow the same process”¹¹³⁵

7.868 Based on the information provided by Eircom in its SoCs (noted in paragraphs 7.864 to 7.867 above) it is ComReg’s understanding that Eircom’s self-supply of CEI access for major infrastructure rollout¹¹³⁶ is the same as that involved in providing Access Seekers with CEI access requests of the same scale i.e. for MIPs. Therefore, ComReg is of the view that while the implementation of Eol for CEI access for large-scale projects may require the development of common order handling processes¹¹³⁷ the post order acceptance stages can be the same.

¹¹³² Eir’s WPNIA Statement of Compliance, open eir Wholesale Duct Access Product – Major Infrastructure Programme, March 2016, pages 9-10.

¹¹³³ Eir’s WPNIA Statement of Compliance, open eir Wholesale Duct Access Product – Major Infrastructure Programme, March 2016, page 10.

¹¹³⁴ Eir’s WPNIA Statement of Compliance, open eir Wholesale Pole Access Product – Major Infrastructure Programme, March 2016.

¹¹³⁵ Eir’s WPNIA Statement of Compliance, open eir Wholesale Duct Access Product – Major Infrastructure Programme, March 2016, pages 9-10.

¹¹³⁶ For example, the CEI access related processes used by Eircom to support the rollout of fibre infrastructure as part of its FTTH programme.

¹¹³⁷ Some development may be required for the order interface also but, similar to developments required for smaller scale CEI access, ComReg considers that the development required will not be over burdensome.

- 7.869 ComReg's assessment of Eircom's SoC aligns with ComReg's further analysis of a number of Eircom's responses to SIRs.¹¹³⁸ ComReg has concluded that a significant portion of the processes required to meet a CEI access request are already in place either for the delivery of NGN Ethernet services or for Eircom's self-supply of CEI for FTTH rollout. ComReg has considered this as part of its assessment of the proportionality of imposing an obligation of EoI for CEI.
- 7.870 ComReg has considered the level of effort likely to be required for Eircom to implement EoI for CEI and notes that there are a number of options available to Eircom on how it implements EoI for CEI.
- 7.871 Large-scale pole access requests could follow a similar process to Eircom's self-supply of pole access in its rollout of FTTH. For example,
- (a) the Access Seeker could provide Eircom with the High Level Plan ('**HLP**'), similar in format to the HLP provided by the Eircom FTTH programme manager;
 - (b) the Eircom designer would then arrange route survey and revert to the Access Seeker with the proposed High level Design ('**HLD**'), similar to the Eircom designer engagement with the Eircom FTTH programme manager;
 - (c) once the Access Seeker approves the HLD, the Eircom designer creates the detail design which includes work orders ('**WOs**') for pole route preparation (e.g. pole replacement, tree trimming, etc.) similar to the process steps undertaken by the Eircom designer in creating the detailed design for FTTH;
 - (d) the WOs are issued to the Build function to implement the route preparation similar to the process steps followed in issuing comparable FTTH WOs; and
 - (e) when the route is prepared, it is handed over to the Access Seeker which commences the installation of its fibre on the route.
- 7.872 Large-scale duct access requests could also follow a similar process to Eircom self-supply of duct access in its rollout of FTTH. For example,
- (a) the Access Seeker could provide Eircom with the HLP similar in format to the HLP provided by the Eircom FTTH programme manager;

¹¹³⁸ ComReg sent a number of SIRs to Eircom prior to the Consultation and ComReg used these responses in its assessment of the proportionality of the EoI for CEI obligation.

Eircom's Response to Feb 2016 SIR, dated 3 March 2016.

Eircom's Response to April 2016 SIR, dated 20 May 2016.

After reviewing Eircom's submission ComReg sent further SIRs to Eircom and in this Decision Eircom's responses are also considered:

Eircom's Response to March 2017 SIR, dated 10 April 2017.

Eircom's Response to April 2017 SIR, dated 26 May 2017.

Eircom's Response to May 2017 SIR, dated 23 June 2017.

Eircom's Response to November 2017 SIR, dated 20 November 2017.

Eircom's Response to November 2017 SIR, dated 19 December 2017.

- (b) the Eircom designer would then arrange the duct route survey and revert to the Access Seeker with the proposed HLD, similar to the Eircom designer engagement with the Eircom FTTH programme manager;
- (c) once the Access Seeker approves the HLD, the Eircom designer creates the detail design which includes WOs for duct route preparation (e.g. rod rope & test, install sub-duct) similar to the process steps undertaken by the Eircom designer in creating the detailed design for FTTH;
- (d) the WOs are issued to the Build function to implement the route preparation similar to the process steps followed in issuing comparable FTTH WOs; and
- (e) when the sub-duct is available, it is handed over to the Access Seeker which commences the installation of its fibre on the route.

7.873 ComReg also accepts that justifiable differences between Eircom's CEI self-supply and the CEI access offered to Access Seekers may, in limited circumstances, be required (see paragraphs 7.912 to 7.926 below).

7.874 ComReg considers that, the changes to systems or processes that Eircom would have to make to implement EoI in relation to CEI, including the changes required for the OAA stage are not unreasonably burdensome. However, ComReg is also of the view that existing processes such as the processes that currently exist for the assessment of CEI for the delivery of NGN Ethernet orders or CEI self-supply by Eircom could be considered by Eircom as a possible option for the basis of an EoI solution for CEI.

7.875 ComReg has based its proportionality assessment on, *inter alia*, this analysis, on the Cartesian Report on CEI Service Delivery, and analysis carried out after it received the Eircom Submission. ComReg has also taken account of the matters outlined in the paragraphs below in its proportionality assessment.

7.876 ComReg notes that Eircom has had a non-discrimination obligation to the standard of EoO for CEI access since the publication of the 2013 NGA Decision,¹¹³⁹ and an obligation to provide duct access on a non-discriminatory basis since 2010.¹¹⁴⁰ ComReg notes that there has been numerous correspondence¹¹⁴¹ (some examples) between (a) Access Seekers and Eircom; and (b) Access Seekers and ComReg, detailing Access Seekers' concerns with respect to the shortcomings of the CEI access products offered by Eircom on the basis of EoO.

¹¹³⁹ ComReg Decision D03/13, Document number 13/11, dated 31/01/2013 (the '**2013 NGA Decision**').

¹¹⁴⁰ Response to Consultation - Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4), Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision, ComReg Document: 10/39 ComReg Decision Number: 05/10, dated 20 May 2010.

¹¹⁴¹ [REDACTED]

7.877 Access Seekers have made requests for improvements to Eircom’s CEI access products through representations at the ComReg industry (LLU) forum, and during the product development process for Duct and Pole Access. Access Seekers have also made formal Access requests for improvements to the Duct and Pole Access products which have been refused¹¹⁴² by Eircom. Access Seekers have reiterated their concerns with the CEI product set in response to the Consultation.¹¹⁴³

7.878 ComReg has also received correspondence¹¹⁴⁴ from potential NBP bidders¹¹⁴⁵ regarding issues and concerns with CEI access products. ComReg has also met with NBP bidders where bidders provided additional detail regarding their concerns with the CEI access products.¹¹⁴⁶ A number of these bidders made Access requests to Eircom relating to improvements to the existing regulated Duct and Pole products¹¹⁴⁷ a number of which were declined by Eircom. ComReg has concerns regarding Eircom’s refusal to meet these Access requests and these requests are under consideration by ComReg.

7.879 As detailed in the Consultation,¹¹⁴⁸ Cartesian identified a significant number of issues relating to the quality of Eircom’s current wholesale CEI access product, offered to the standard of EoO.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹¹⁴² Eircom Customer Requirements Document (‘CRD’) 315 ‘Request for changes to Duct Pole offers’ submitted by [REDACTED] & Eircom CRD 319 Request for changes to Duct Access submitted by [REDACTED].

¹¹⁴³ Vodafone stated that it believes that “Eircom’s CEI products are not fit-for-purpose”. BT noted that “the previous industry forum discussion for Duct and Pole services concluded after circa 18 months with an explicit *disagreement* that the offer was fit for publication, but Eir published anyway.” BT Submission, page 8, paragraph 7.2(a) bullet (ii).

¹¹⁴⁴ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹¹⁴⁵ The DCCAIE published the NBP in August 2012. This is a Government wide initiative to deliver high-speed broadband services to all businesses and households in Ireland. The Department’s National Broadband Plan (NBP) team received detailed solutions from two NBP bidders in September 2017.

¹¹⁴⁶ [REDACTED]

[REDACTED]

¹¹⁴⁷ [REDACTED]

[REDACTED]

[REDACTED]

¹¹⁴⁸ Paragraphs 8.427 to 8.430 of the Consultation.

- 7.880 ComReg is of the opinion, therefore, that there are various indicators that suggest the current CEI access products offered by Eircom on the basis of EoO are problematic and below the standard required. EoI for CEI provides a number of benefits to Access Seekers and competition such as the avoidance of a divergence in standard between CEI access offered to Access Seekers and Eircom's self-supply of CEI access. An obligation of EoI would result in the same CEI access product that Eircom supplies to itself, which is well developed and mature, being made available to Access Seekers, thereby ensuring effective non-discrimination and allowing Access Seekers to ultimately compete effectively in downstream markets.
- 7.881 EoI for CEI also provides greater assurances to Access Seekers (than EoO) that there is no discrimination in the provision of CEI access. This encourages Access Seekers to consider investment in new infrastructure and also benefits competition as Access Seekers are more confident that they can compete with Eircom in the provision of products and services.
- 7.882 The indicative costs for the improvements to the current CEI access products were estimated by Cartesian to be in the region of €365K.¹¹⁴⁹ Cartesian also estimated that an additional €100K to €118K would be required for a further transition to CEI access delivered to the standard of EoI.¹¹⁵⁰ While Cartesian state that these costs should be considered as "*directionally correct rather than absolute*",¹¹⁵¹ ComReg agrees with the order of magnitude of the costs and the level of effort required to implement changes to deliver an EoI solution,¹¹⁵² as estimated by Cartesian, and considers that Cartesian's findings are a valid input into ComReg's proportionality assessment.
- 7.883 ComReg considers that Cartesian's analysis of the effort required to implement an EoI solution aligns with ComReg's understanding that the primary changes required are likely to be at the order management stage.
- 7.884 ComReg notes that the Eircom response to the SIR¹¹⁵³ acknowledges that the order acceptance and acknowledgement could be implemented on its Unified Gateway ('UG'). However, it is ComReg's view that the remainder of the design and delivery CEI access process steps including the Access Seeker interactions must be aligned with Eircom self-supply of CEI in order to achieve EoI for CEI.

¹¹⁴⁹ Cartesian Report on CEI Service Delivery, Page 68.

¹¹⁵⁰ Cartesian Report on CEI Service Delivery, Page 70.

¹¹⁵¹ Cartesian Report on CEI Service Delivery, Page 7.

¹¹⁵² ComReg notes that there are a number of options (refer to paragraphs 7.831 to 7.855) which Eircom can consider with respect to the design and implementation of EoI for CEI access. These options include modifications to existing processes with limited system development (e.g. UG development).

¹¹⁵³ Eircom's Response to May 2017 SIR, dated 23 June 2017.

- 7.885 In the Consultation, ComReg considered continuing the obligation of EoO but has decided that EoI is more effective than an EoO obligation in addressing the risks of non-discrimination in the provision of CEI access. Furthermore, ComReg and Cartesian's assessment of the effort required to transition to EoI for CEI is such that ComReg considers that it is not overly burdensome and that the imposition of an obligation of EoI for CEI would be proportionate. ComReg would also note that during the period since the 2013 NGA Decision was published, Eircom has used self-supplied CEI access as an input in the rollout of both FTTC and FTTH infrastructure.¹¹⁵⁴
- 7.886 That period coincided with continued concerns being raised by Access Seekers¹¹⁵⁵ regarding the quality of the CEI access product being offered by Eircom to Access Seekers on the basis of EoO. As noted in the Consultation.¹¹⁵⁶
- 7.887 ComReg notes that Eircom compares ComReg's position with respect to CGA WLA (where ComReg considered that an obligation of EoI would be disproportionate),¹¹⁵⁷ with ComReg's proposed EoI obligation for CEI access. Referencing the Consultation, Eircom states that due to similarities between the costs and complexity associated with imposing EoI for CGA WLA and imposing EoI for CEI access that ComReg should also conclude that an obligation of EoI for CEI is disproportionate.¹¹⁵⁸
- 7.888 In ComReg's opinion the comparison by Eircom, as summarised in paragraph 7.797 above, is not valid as CGA WLA services are being offered over a copper network using legacy systems that are fully developed. More significantly, the market is in transition from CGA Services to NGA services as Access Seekers increasingly migrate to VUA services and the demand for CGA WLA services decreases.
- 7.889 ComReg's assessment of proportionality with respect to the standard of non-discrimination to be applied to CGA WLA¹¹⁵⁹ considered these factors. In comparison (and contrary to the assertions in Eircom's Submission) the demand for a fit-for-purpose CEI access product remains significant as discussed in paragraphs 7.326 to 7.357 of this Decision.

¹¹⁵⁴ Eircom's Response to March 2017 SIR, dated 10 April 2017 and Eircom's Response to April 2017 SIR, dated 26 May 2017.

¹¹⁵⁵ Refer to paragraphs 7.876 to 7.878 of this Decision.

¹¹⁵⁶ Market Reviews Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products Consultation and Draft Decision Reference: ComReg 16/96 Date: 11/11/2016. Page 339 Footnote 651.

¹¹⁵⁷ Paragraph 8.411 of the Consultation.

¹¹⁵⁸ Eircom Submission, page 31.

¹¹⁵⁹ Paragraph 13.218 of the Consultation.

- 7.890 In ComReg's view there are potentially significantly more benefits to competition arising from the imposition of an obligation of Eol for CEI access when compared with a similar obligation being required for CGA WLA where the market is in decline. Competition is enhanced when undertakings invest in their own networks in order to offer services to End Users when compared to competition based on regulated access to active services available on Eircom's network.
- 7.891 It is ComReg's position that competition at the network level provides greater scope for product differentiation, e.g. investing in their own networks gives undertakings full control over the quality of service provided. It is ComReg's position that this enhanced competition and increased product differentiation has the potential to result in significant benefits to End Users.
- 7.892 Eircom is correct when it states that in the NGA Consultation,¹¹⁶⁰ ComReg considered imposing an obligation of Eol for CEI access and in the 2013 NGA Decision, ComReg imposed an obligation of EoO.
- 7.893 Since the publication of the 2013 NGA Decision, ComReg has reassessed its position regarding the standard of equivalence for CEI access. ComReg's current position is informed by Eircom's refinement of its CEI self-supply processes and systems¹¹⁶¹ in order to improve the efficiency of the rollout of FTTC and FTTH. Eircom implemented efficient and effective processes in order to operationalise the rollout of FTTC and FTTH, with these developments occurring after the 2013 NGA Decision was published.
- 7.894 As a result of these developments, such as Smallworld, access to information is more efficient and flexible.¹¹⁶² ComReg also notes, as demonstrated by its analysis, that it is less difficult to identify the process flow and systems elements which may need to be changed in order to develop an Eol solution for CEI.
- 7.895 ComReg considers that there are a number of options which can be considered by Eircom for implementing Eol for CEI, a number of which do not require significant system changes and can be enabled by Eircom potentially leveraging existing system developments. In addition, the processes which underpin Eircom's self-supply of CEI access are already well developed and mature. Eircom has implemented information management solutions such as Smallworld that provide a flexible and scalable solution for third party access to inventory information. Therefore, ComReg considers that an obligation of Eol is proportionate.

¹¹⁶⁰ Consultation Document No. 12/27: Next Generation Access ('NGA'): Proposed Remedies for Next Generation Access Markets.

¹¹⁶¹ For example, eir's Smallworld GIS system was implemented in early [REDACTED] and existing recorded data with respect to overhead and underground routes was transferred to the new system.

¹¹⁶² Smallworld offers a range of options for sharing CEI information with Access Seekers thereby allowing easier implementation of Eol.

- 7.896 ComReg disagrees with Eircom that ComReg's timeframe for the implementation of Eol for CEI is unreasonable. ComReg again notes that Eircom has had an obligation of EoO for CEI access since the publication of the 2013 NGA Decision,¹¹⁶³ and an obligation to provide duct access on a non-discriminatory basis since 2010.¹¹⁶⁴ The initial Duct Access product was not developed until 27 February 2015, approximately five years after the obligation was imposed and during the intervening period Access Seekers and potential NBP Bidders have raised numerous concerns regarding the effectiveness and quality of the CEI access products offered by Eircom.
- 7.897 ComReg considers that the absence of an effective CEI access product is likely to have had a significant impact on uptake of CEI access by Access Seekers and a subsequent impact on competition. ComReg considers that the timeline of 10 months is reflective of the importance of the availability of effective CEI access products and services to Access Seekers, competition and ultimately End Users. ComReg also notes Vodafone's view that a 10 month product development period from the date of ComReg's Decision is the maximum acceptable to Vodafone for Eircom to implement Eol for CEI.¹¹⁶⁵
- 7.898 ComReg is also aware that product development requires a significant degree of planning preparation and analysis; however, ComReg notes that Eircom has already undertaken sufficient analysis of CEI access in order to develop effective CEI access to underpin the rollout of FTTH and FTTC.
- 7.899 Therefore, ComReg considers that while there is additional development required in order to develop Eol for CEI access, there are a number of options available to Eircom and the development of Eol for CEI access is possible in a 10 month period. ComReg also notes that should Eircom consider that additional time is required, Eircom can document the reasons for this and request an additional period from ComReg. ComReg will consider such a request and the supporting documentation at the relevant time.
- 7.900 Therefore, ComReg maintains its position that the Eol for CEI product development should be time-bound and should be implemented with 10 months unless otherwise agreed by ComReg.
- 7.901 In a response to an SIR,¹¹⁶⁶ Eircom clarified its position expressed in its Submission. In ComReg's opinion, Eircom appears to have misunderstood ComReg's proposals surrounding Eol for CEI. In Eircom's Submission it considered that the obligation requires it to implement a specific form of Eol for CEI access.

¹¹⁶³ ComReg Decision D03/13, Document number 13/11, dated 31/01/2013 (the '**2013 NGA Decision**').

¹¹⁶⁴ Response to Consultation - Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4), Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision, ComReg Document: 10/39 ComReg Decision Number: 05/10, dated 20 May 2010.

¹¹⁶⁵ Vodafone Submission, page 25.

¹¹⁶⁶ Eircom's Response to May 2017 SIR, dated 23 June 2017.

- 7.902 Eircom appears to interpret the references to “*a Self Service Delivery Model*” in the Cartesian Report on CEI Service Delivery,¹¹⁶⁷ as being the solution which Eircom must implement in order to offer CEI access to the standard of Eol. In Eircom’s view, an implementation of “*a Self Service Delivery Model*” for Eol would require the full systemisation and automation of CEI access.
- 7.903 For the avoidance of doubt, in proposing an obligation of Eol for CEI, ComReg was not prescriptive regarding any particular Eol design or technical solution. ComReg also notes that there are a number of options (refer to paragraphs 7.848 to 7.872 above) which Eircom can consider with respect to the design and implementation of Eol for CEI access.
- 7.904 ComReg commissioned the Cartesian Report on CEI Service Delivery in order to, *inter alia*, consider how the existing CEI access product could be improved and to examine the feasibility of moving to an Eol solution for CEI and also to understand the estimated order of magnitude of the associated costs. Cartesian based its analysis on a particular approach to Eol using the information which ComReg had received from Eircom as one of the inputs to the analysis.
- 7.905 ComReg does not consider that the approach to the analysis undertaken by Cartesian should be interpreted as being the only solution by which Eol for CEI access could be implemented. However, in ComReg’s opinion the order of magnitude of the costs detailed in the Cartesian Report on CEI Service Delivery is indicative of the costs associated with any reasonable Eol for CEI solution (see ComReg’s analysis with respect to the cost of implementing Eol for CEI in paragraph 7.934 of this Decision).

Eircom’s reference to Ofcom’s approach

- 7.906 ComReg notes Eircom’s statement that, given Ofcom’s strategic focus on the deployment of new ultrafast broadband networks, Ofcom considered whether it should impose Eol but limit its application only to BT’s (UK) use of CEI access (termed Physical Infrastructure Access by Ofcom) for products and services that consume duct access for deploying new ultrafast broadband networks. The delivery of other services, therefore, such as Ethernet based services, would be delivered to an EoO standard giving rise to two different standards of non-discrimination for CEI and therefore, in Ofcom’s view, the emergence of a complex boundary within Openreach.¹¹⁶⁸
- 7.907 ComReg did not propose to limit the Eol obligation on Eircom’s use of CEI for particular products and services that consume CEI access e.g. FTTH. ComReg’s proposal is to impose an Eol obligation on Eircom’s use of CEI access in order to build new infrastructure in Eircom’s access network generally. Typically Eircom uses CEI in order to:
- (a) provide NGN Ethernet services (on an order by order basis); and

¹¹⁶⁷ <https://www.comreg.ie/publication/cei-service-delivery-process-equivalence-options-analysis-alternative-service-delivery-approaches/> Executive summary page 6.

¹¹⁶⁸ BT (UK) wholesale division.

- (b) build new fibre infrastructure in the Access Network for the provision of fibre based services.¹¹⁶⁹

7.908 ComReg's proposed Eol remedy would apply to both of the above and to any other service the delivery of which requires new fibre infrastructure to be built. Hence, in Eircom's case, ComReg considers that the imposition of Eol does not give rise to the complex boundaries similar to those considered by Ofcom.¹¹⁷⁰

7.909 As these boundaries do not arise, complexity and the risk of regulatory failure does not arise. For example, the Eircom access network design role, undertaken by the Eircom designer and the processes to be relied upon do not have to be separated. The designer follows the same process, using the same systems, in order to process the following:

- (a) CEI access requests (on an order by order basis) and the CEI access elements used for the provision of NGN Ethernet services (on an order by order basis) – **Scenario 1**; and
- (b) CEI access requests (on a Major Infrastructure Project ('MIP') basis) and the CEI access elements used for FTTH build (on a programme basis) – **Scenario 2**.

7.910 The Eircom designer carries out the desktop and on-site survey function in order to generate the relevant CEI Work Orders ('WOs') for the Eircom network build function. The Eircom designer can therefore interact with Access Seekers and/or Eircom project/programme managers in the same way, in the case of either Scenario 1 or 2.

7.911 ComReg also notes that Eircom has included in its response to a ComReg SIR,¹¹⁷¹ references to Ofcom's concerns regarding Eol for PIA¹¹⁷² negatively impacting on the effectiveness of the requirement for Eol and on BT's incentive to deploy fibre infrastructure. ComReg's position is that Eircom's own demand for CEI access to support its fibre deployment is fully established and Eircom's FTTH rollout programme is at an advanced stage. ComReg considers that there is little or no risk, therefore, that the incentives Eol introduces would undermine the effectiveness of the requirement for Eol or for Eircom's deployment of FTTH.

¹¹⁶⁹ The large-scale rollout of FTTH for example.

¹¹⁷⁰ Ofcom considered whether it should impose Eol to BT's use of CEI access for the deployment of new ultrafast broadband networks. Therefore, CEI access for other services and for copper infrastructure rollout, which is still being undertaken in the UK, would potentially require different designers and the consumption of CEI access to the standard of EoO. Therefore, with both Eol and EoO standards of non-discrimination for CEI in place and separate network design roles complex boundaries emerge which potentially raises the risk of regulatory failure.

¹¹⁷¹ Eircom's Response to May 2017 SIR, dated 23 June 2017, page 2.

¹¹⁷² Passive Infrastructure Access which is equivalent to Access to CEI.

Eircom's concerns regarding the implementation of an Eol solution

- 7.912 As noted in paragraphs 7.803 to 7.810 above, Eircom claimed that ComReg did not articulate what Eol means in the context of CEI and asserted that ComReg cannot propose such a remedy without being clear on what is required. ComReg does not accept these assertions. ComReg defined what Eol means,¹¹⁷³ and this definition clearly details what Eol should achieve. ComReg uses the same definition for Eol as was used in the 2013 NGA Decision where Eol was imposed for VUA and NG Bitstream.
- 7.913 ComReg agrees with Eircom that it has not proposed the imposition of a particular form of Eol. By providing detail on the analysis that underpins its assessment of proportionality in this Decision, ComReg has outlined a number of options for the implementation of Eol for CEI which Eircom could consider.¹¹⁷⁴ However, the implementation of Eol for CEI access is a matter for Eircom. ComReg also does not agree that other NRAs are prescriptive as regards the implementation of regulatory obligations.
- 7.914 Furthermore, ComReg notes that in the NGA remedies imposed in the 2013 NGA Decision and as proposed in the Consultation, it was made clear that Eol could be implemented with justifiable differences between the service offered to Access Seekers and Eircom's self-supply. This is acceptable once these differences are justified and their effect is minor.¹¹⁷⁵
- 7.915 ComReg maintains its view that the obligation of Eol for CEI can be met, although it notes there may be permissible differences in the processes and systems used by Access Seekers and by Eircom for self-supply of CEI access as long as these differences are justifiable, i.e. they have insignificant or no impact on the delivery of an Eol based CEI service.
- 7.916 ComReg considers that there are two categories of justifiable differences:
- (a) where differences are minor and can arise in limited circumstances and where it is reasonable to retain these differences; and

¹¹⁷³ Page 26 of the Consultation:

“Equivalence of Inputs” means the provision of products, services, facilities, and information by the SMP Undertaking to Access Seekers such that such products, services, facilities, and information are provided to Access Seekers within the same timescales, at the same price, functionality, service and quality levels and on the same terms and conditions and by means of the same systems and processes as the SMP Undertaking provides to itself. The systems and processes shall operate in the same way and with the same degree of reliability and performance as between Access Seekers and the SMP Undertaking’s provision to itself.”

¹¹⁷⁴ In addition to the options detailed in the Cartesian Report on CEI Service Delivery.

¹¹⁷⁵ Consultation Document No. 12/27: Next Generation Access ('NGA'): Proposed Remedies for Next Generation Access Markets, paragraph 8.45.

(b) justifiable differences in terms of the processes, system and product specification borne out of Access Seekers' additional requirements for CEI access. Due to the fact that the Access Seeker's network topology is independent of Eircom's network topology, the Access Seekers' and Eircom's requirements may differ in some circumstances.¹¹⁷⁶

- 7.917 ComReg's position is that the justifiable differences, as described in paragraph 7.916 (a) above, are allowable as they can reasonably exist while maintaining the standard of Eol.¹¹⁷⁷ The Statement of Compliance obligation¹¹⁷⁸ requires Eircom to provide ComReg with detailed information where Eircom asserts that a justifiable difference arises in the context of Eol. When considering whether a difference can be deemed justifiable ComReg will consider whether the presence of the difference materially impacts the delivery of CEI access to the standard of Eol.
- 7.918 ComReg also notes that it expects that where such differences arise Eircom must implement the appropriate level of regulatory governance in order to ensure that risks of non-compliance associated with such differences are identified and controls implemented to mitigate such risks.
- 7.919 In relation to the second category, as described in paragraph 7.916 (b) above, ComReg considers that the minimum requirements for Eol for CEI is the CEI access that Eircom self-supplies. ComReg notes that Access Seekers may have additional requirements which Eircom does not necessarily self-supply; these differences are justifiable. For the avoidance of doubt ComReg also notes that delivering CEI access to a standard of Eol does not preclude Access Seekers making reasonable requests for CEI access which Eircom could also self-supply.
- 7.920 In its Submission, Eircom interprets the obligation of Eol for CEI to require a significant degree of re-organisation and that Eircom's structure must be altered and resources duplicated. While the implementation of an Eol solution for CEI is a matter in the first instance for Eircom, ComReg considers that there are implementation options which do not require re-organisation.
- 7.921 ComReg does not consider that the consumption of the same service by Access Seekers and by Eircom, through a common interface, for example, constitutes the re-organisation of Eircom or could be considered to amount to functional separation. The use of the same interface by Eircom and Access Seekers is, at most, a change to the way that Eircom transactions take place from a process and system (interface) perspective and does not require a change in the Eircom organisational structure. Therefore, ComReg does not agree that Eol could be considered an exceptional measure imposing functional separation as provided for in Article 13a of the Access Directive.

¹¹⁷⁶ Examples of justifiable differences in this category is Co-Location for CEI and CEI Tie Connection Service. ComReg notes that although Eircom do not self-supply Co-Location for CEI and CEI Tie Connection Services Access requests for these services should be delivered in an efficient and timely manner.

¹¹⁷⁷ For example, billing could be a justifiable difference in the implementation of Eol for CEI. Implementing billing of Eircom CEI self-supply would have no impact on the comparative level of service provided to Access Seekers.

¹¹⁷⁸ Refer to paragraphs 7.1396 to 7.1403 of this Decision.

7.922 Furthermore, ComReg does not consider that re-organisation of Eircom is necessary, as less complex solutions are possible which do not require the re-organisation of Eircom or duplication of resources. ComReg refers again to Eircom's response to ComReg's SIR of May 2017 where Eircom stated:

“As noted in eir's response to the consultation the implications of fully systemising and automating the CEI access Products would come at high cost to eir and other operators, with little or no benefit.

The alternative approach is potentially to systemise the order capture and acknowledgment elements of the existing manual CEI access Products processes. This would allow all order capture for Provide, Change, Cease and Fault Handling to be entered via the UG interface. All other steps in the order processes (survey, validation, delivery, completion) would be delivered manually, as per existing processes”

7.923 ComReg is of the view that, when considering Eol for CEI, the interface offered to Access Seekers as an entry point into the CEI access processes and that used by Eircom for self-supply is a matter for Eircom. The engagement with the requester for CEI access, i.e. either an Access Seeker or an internal Eircom programme, for example, at the point where the request is first generated, can be systemised or manual¹¹⁷⁹ once the differences between the Access Seeker order journey and the burden imposed on the Access Seeker is equivalent to that experienced by the Eircom internal requestor, and both processes are equally effective.

7.924 ComReg would also note that once an Access Seeker's CEI access request or an internally generated CEI request has been received, the planning, survey and build processes are likely to be very similar i.e. some amendments to the internal processes may be required as identified by Cartesian.¹¹⁸⁰ ComReg would again note that while the processes and systems used for self-supply of CEI access and those available to Access Seekers can be different - these differences are allowable when and where they are justified.

7.925 In ComReg's view, the design and operation of the regulatory governance processes and oversight are important in general and particularly important for CEI where there are justifiable differences.

7.926 In its proportionality assessment,¹¹⁸¹ ComReg came to the view that an Eol implementation (with justifiable differences where permissible), whereby Access Seekers avail of the same systems and processes as Eircom, is justified and proportionate.

¹¹⁷⁹ Eircom could decide to implement different interfaces, some manual, some systemised, with the same interfaces being used for Access Seekers and for self-supply depending on the scale of the Access request, for example.

¹¹⁸⁰ There are a number of possible solutions for Eol for CEI access, ComReg notes that Cartesian identified process changes may be required.

¹¹⁸¹ See paragraphs 8.419 to 8.441 of the Consultation.

7.927 Having considered Respondents' views as set out in paragraph 7.781 to 7.814 above, ComReg maintains its position set out in the Consultation that CEI is to be provided to the standard of Eol and that this is appropriate, justified and proportionate.

Impact of Eol on Access Seekers

7.928 ComReg disagrees with Eircom's assertion that ComReg is insisting that Access Seekers abandon their GIS systems¹¹⁸² to use Smallworld so that they have the same view of ducts and poles, as would be required, according to Eircom, by Eol. ComReg has taken this position for the following reasons:

- (a) As already stated, ComReg is not imposing a particular Eol solution and ComReg reiterates that, save where there are justifiable and permissible differences, information must be provided that is to the same standard and timeliness as that provided to Eircom for the purposes of self-supply of CEI access.
- (b) ComReg would also note that there is a range of standardised data formats and commercial gateway access tools available for GIS systems, which would allow a variety of solutions to be considered for CEI access to an Eol standard. These data formats and access tools may or may not include justifiable differences between the CEI data access offered to Access Seekers and that which Eircom uses for self-supply. Therefore, ComReg disagrees with Eircom that Access Seekers will have to incur significant costs migrating to the same systems as Eircom.
- (c) ComReg notes that Eircom stated that due to the imposition of an Eol obligation, for all Access Seekers to have a similar view of CEI data they will each need to subscribe annually to the Ordnance Survey Ireland ('OSI') for electronic background mapping. ComReg is of the view that Access Seekers who wish to access Eircom's CEI are Access Seekers who rollout infrastructure and therefore are likely to subscribe to services offered by the OSI. ComReg considers that any such OSI related costs which may arise are independent of the standard of non-discrimination applied to the CEI access obligation.

Lack of Demand for CEI access

7.929 ComReg disagrees that there is a lack of demand for CEI access. Already noted in paragraphs 7.276 to 7.377 above are the views of the Respondents with respect to CEI access. A number of respondents made significant comments with respect to their concerns regarding the quality of the current CEI access product on offer from Eircom. ComReg has previously addressed CEI demand in paragraphs 7.326 to 7.357 of this Decision.

7.930 ComReg notes that Eircom stated that:

*"there are no unreasonable restrictions in place for access to CEI and the only restrictions are the absence of the amendments which ComReg is seeking to impose"*¹¹⁸³

¹¹⁸² Eircom Submission, page 33.

¹¹⁸³ Eircom Submission, page 22.

- 7.931 ComReg has concerns regarding the standard of the CEI access products and also notes that concerns have been raised by Access Seekers regarding CEI access. ComReg has imposed obligations on Eircom regarding CEI access as detailed in paragraphs 7.272 to 7.516. These obligations reflect necessary improvements to the CEI access product which are reasonably required. ComReg also notes that Eircom considers that the CEI access obligations proposed by ComReg arise from restrictions which are currently in place for Access to CEI.
- 7.932 ComReg disagrees with Eircom that the recovery of the implementation costs of Eol for CEI would, according to Eircom,
*“...make the CEI products disproportionately expensive and choke any potential market demand that might emerge in time”*¹¹⁸⁴
- 7.933 While ComReg is not imposing any particular solution for Eol for CEI, ComReg considers, based on its analysis and Cartesian’s analysis of Eol for CEI that the development costs for implementation of a solution would not result in a disproportionately expensive CEI access product which would choke demand for CEI access.
- 7.934 With respect to the cost of implementing Eol for CEI, it is instructive to briefly summarise,¹¹⁸⁵ and restate ComReg’s response, to the following points in Eircom’s Submission:
- (a) Eircom stated that the cost of implementing Eol for CEI would be significantly higher than Cartesian’s estimate of €100,000 to €118,000, as Cartesian’s analysis is superficial. Eircom stated that Cartesian’s costs appeared to be process change related and Cartesian did not consider IT development costs.
 - (b) ComReg disagrees with Eircom. ComReg agrees with Cartesian’s analysis and considers that the majority of changes are process related and that the development costs are in the order of the costs set out in the Cartesian Report on CEI Service Delivery.
 - (c) Eircom stated that the Eol solution required occupancy information to be gathered on ducts and similar information to be gathered on poles and that the cost to gather this information would be “*staggering*”, Eircom provided an estimated survey cost of [§< ██████████].
 - (d) ComReg disagrees with Eircom as this survey is not required in order to implement Eol. However ComReg considers that, as an important component of CEI access, the CEI related information that is currently available to Eircom, and that allowed Eircom to successfully and efficiently rollout FTTC and FTTH, should be made available to Access Seekers.

¹¹⁸⁴ Eircom Submission, Page 31.

¹¹⁸⁵ Note these points have already been addressed in this Decision (in paragraphs 7.832 to 7.905) and are included here in summary fashion in order to provide further context to ComReg’s response to the point made by Eircom regarding the impact of the cost of a CEI access product, provided on the basis of Eol, on demand for such a product.

- (e) Eircom stated that Access Seekers are likely to incur significant costs if required by the imposition of an Eol obligation on Eircom to migrate to the same system as Eircom, or a compatible system. Eircom suggested a cost of [€< ██████████] per Access Seeker.
- (f) ComReg does not agree that the imposition of Eol requires Access Seekers to migrate to the same GIS system as Eircom and that Access Seekers would have to incur such costs.
- (g) Eircom stated that the imposition of Eol would result in OSI related licence fees payable by each Access Seeker, in the order of [€< ██████████] each year.
- (h) ComReg disagrees with Eircom that OSI costs arise due to the imposition of Eol for CEI. ComReg is of the view that Access Seekers who wish to access Eircom's CEI are Access Seekers who rollout telecoms infrastructure and therefore are likely to subscribe to services offered by the OSI. ComReg considers that any such OSI related costs which may arise are independent of the standard of non-discrimination applied to the CEI access obligation.
- (i) Eircom stated that there is "*significant outlay*"¹¹⁸⁶ in terms of cost for both new modules software and end-user licences required to access Eircom's GIS Smallworld solution.
- (j) ComReg disagrees with Eircom that the outlay will be significant for software and licences to enable third party access to Eircom's GIS system Smallworld. ComReg notes that there is a web portal tool available to access Smallworld and other tools such as FME¹¹⁸⁷ to export GIS data. Typical licence fees for FME to enable the export of GIS data from Smallworld to a third party would be in the order €20-30K. There are cost effective GIS data access solutions available to facilitate third party access to Eircom's GIS data.
- (k) Eircom stated that the implementation of a self-service/Eol model for CEI access will be extremely costly with no benefit to Eircom, other operators or consumers.
- (l) ComReg disagrees with Eircom that the requirement to implement a Self Service model arises directly from the imposition of an obligation of Eol for CEI. It is ComReg's opinion that there are a number of options for implementing Eol for CEI and that Eircom, in its Submission, discussed a particular approach to Eol for CEI, mainly a solution based on a particular implementation of a Self-Service model. ComReg notes that the implementation proposed by Eircom gives rise to costs which are either unnecessary or can be avoided by the implementation of alternative solutions.

¹¹⁸⁶ Eircom Submission, Page 32.

¹¹⁸⁷ <https://www.safe.com/>.

7.935 ComReg considered, *inter alia*, the above points, raised by Eircom regarding costs, and the EoI for CEI implementation options, considered by Eircom, Cartesian and arising from ComReg's own analysis when carrying out its proportionality assessment. Furthermore, ComReg has taken due account of the European Commission's 2010 NGA Recommendation.¹¹⁸⁸ Point 13 of the Recommendation provides that where duct capacity is available, NRAs should mandate access to civil engineering infrastructure and this access should be provided in accordance with the principle of equivalence as set out in Annex II.¹¹⁸⁹ ComReg position remains that the imposition of an obligation of EoI for CEI is justified, proportionate and will benefit, competition, Access Seekers and End-Users.

Non-Discrimination obligation for Migrations

7.936 ComReg has considered Vodafone's views on the need for a non-discrimination obligation and the appropriate standard of equivalence for Migrations. ComReg agrees with Vodafone that a non-discrimination obligation for Migrations is required and ComReg considers that the appropriate standard of equivalence for Migrations should be determined by the destination product and service which is being migrated to.¹¹⁹⁰

7.937 ComReg position is that a non-discrimination obligation for Migrations is required and that standard of equivalence applicable for Migrations will be determined by destination product and service which is being migrated to.

ComReg's Position

7.938 Having considered Respondents' views as set out in paragraph 7.773 to 7.817 above, and having regard to the Consultation, ComReg maintains its position set out in the Consultation that CEI is to be provided to the standard of EoI.

7.939 The obligation with respect to EoI for CEI being imposed upon Eircom is particularly set out in the Decision Instrument in Appendix: 20, Section 9 of this document.

¹¹⁸⁸ EC, October 2010, Commission Recommendation 25.9.2010 on regulated access to Next Generation Access Networks (NGA) (2010 EC Recommendation on NGA)

<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32010H0572&from=EN>.

¹¹⁸⁹ "Access to civil engineering infrastructure of the SMP operator can represent an important input for the deployment of NGA networks. In order to create a level playing field among entrants and the SMP operator, it is important that such access is provided on a strictly equivalent basis. NRAs should require the SMP operator to provide access to its civil engineering infrastructure under the same conditions to internal and to third-party access seekers. In particular the SMP operator should share all necessary information pertaining to infrastructure characteristics, and apply the same procedures for access ordering and provisioning. Reference offers and service level agreements are instrumental to ensuring a proper application of the principle of equivalence. Conversely, it is important that any asymmetric knowledge the SMP operator possesses of the rollout plans of third-party access seekers is not used by the SMP operator to gain undue commercial advantage."

¹¹⁹⁰ For example, a migration to VUA would always be provided on the basis of EoI whereas a migration from VUA to LLU would be provided on the basis of EoO.

Transparency Obligations

Position set out in the Consultation

7.940 In the Consultation, ComReg set out its preliminary view that Eircom should be required to comply with a range of transparency obligations in order to minimise information asymmetries and facilitate effective access to WLA products, services and facilities and to ultimately promote effective competition in downstream and related markets.

7.941 These obligations are discussed below and include the following:¹¹⁹¹

- (a) maintenance and publication of an Access Reference Offer ('**ARO**'), which is to contain a minimum list of items (discussed in paragraphs 7.942 to 7.946 below);
- (b) publish a revised ARO within a specified period (discussed in paragraphs 7.947 to 7.950);
- (c) requirements governing ARO change management (discussed in paragraphs 7.951 to 7.952 below);
- (d) provide, in accordance with specified timeframes, advance notification to Access Seekers and to ComReg of proposed changes in respect of the ARO, prices and the introduction of products, services and facilities (discussed in paragraphs 7.953 to 7.964 below);
- (e) specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the ARO and associated documents (discussed in paragraphs 7.965 to 7.966 below);
- (f) meet requirements concerning wholesale billing (discussed in paragraphs 7.967 to 7.968 below);
- (g) publish on its publicly available website Key Performance Indicators ('**KPIs**'), SLAs and associated reports relating to WLA products, services and facilities (discussed in paragraphs 7.969 to 7.972 below);
- (h) transparency requirement for KPIs for CEI (discussed in paragraphs 7.973 to 7.974 below);
- (i) meet requirements concerning network rollout (discussed in paragraphs 7.975 to 7.980 below);
- (j) meet requirements with respect to planning information regarding physical network build (discussed in paragraphs 7.981 to 7.984 below);
- (k) meet requirements with respect to CEI Engineering Planning and Design Rules¹¹⁹² (discussed in paragraph 7.985 to below);

¹¹⁹¹ The reasoning and justification for the proposed transparency requirements is set out in paragraphs 8.444 to 8.586 of the Consultation.

¹¹⁹² CEI Engineering, Planning and Design Rules means the engineering and design rules that relate to the management of duct, chambers and pole space.

- (l) publish information with respect to the development of products, services and facilities (discussed in paragraphs 7.986 to 7.991 below);
- (m) adhere to certain criteria to ensure a standardised process is in place before a trial can commence¹¹⁹³ (discussed in paragraphs 7.992 to 7.993 below);
- (n) provide advance notification of proposed product trials (discussed in paragraph 7.994 below);
- (o) provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities (discussed in paragraphs 7.995 to 7.997 below); and
- (p) meet requirements concerning access to confidential and/or commercial information (discussed in paragraph 7.998 below).

Maintenance and publication of an ARO, which is to contain a minimum list of items

7.942 ComReg proposed in the Consultation¹¹⁹⁴ that Eircom should make publicly available and keep updated on its publicly available website, an ARO,¹¹⁹⁵ which should contain a specified minimum list of items as further described below.

7.943 More specifically, ComReg considered that the ARO should include at least the following items:

- (a) A description of the offer of contract for access broken down into components according to market needs;
- (b) A description of any associated contractual or other terms and conditions for supply of Access and use, including prices (the latter being an '**ARO Price List**');
- (c) A description of the technical specifications, processes and network characteristics of the Access being offered; and
- (d) At least the elements set out in the Schedule to the Access Regulations.¹¹⁹⁶

¹¹⁹³ In paragraph 8.571 of the Consultation ComReg described criteria regarding the establishment of trials and stated that at the time of the Consultation it was not proposing imposing these as obligations but welcomed feedback from Respondents with respect to such criteria.

¹¹⁹⁴ The proposed obligations with respect to transparency requirements concerning ARO are set out in paragraphs 8.462 to 8.468 of the Consultation.

¹¹⁹⁵ For the avoidance of doubt, for the purposes of this transparency obligation, the ARO is taken to mean the ARO document itself and any associated or sub-ordinate documents used to describe the items listed in paragraph 7.943. This includes but is not limited to the Industry Process Manual ('IPM'), the Product Descriptions and other documents relied upon by Eircom to meet its Access obligations.

¹¹⁹⁶ i.e., the Schedule to the Access Regulations entitled "Minimum list of items to be included in a reference offer for wholesale network infrastructure access, including shared or fully unbundled access to the local loop at a fixed location to be published by notified operators with significant market power".

- 7.944 Apart from the above, ComReg also considered that the ARO should be sufficiently unbundled so as to ensure that Access Seekers are not required to pay for products, services or facilities which are not necessary for the Access requested. In addition, Eircom shall ensure that the ARO and related contracts only relate to products, services and facilities which fall within the scope of the Relevant Market.¹¹⁹⁷
- 7.945 ComReg considered that the format of the ARO itself should be based on the version that is currently published¹¹⁹⁸ on Eircom's wholesale website, amended as necessary to meet the obligations set out in the Consultation.
- 7.946 ComReg also considered that for the avoidance of doubt, in the event of any conflict between the ARO and associated documentation such as the ARO Price List (including where represented as updated for the purposes of the Draft Decision Instrument), and Eircom's obligations as set out under the Draft Decision instrument, it is the latter which should prevail.¹¹⁹⁹

Transparency requirement to publish a revised ARO within a specified period

- 7.947 In the Consultation¹²⁰⁰ ComReg was of the preliminary view that the necessary updates to the ARO should be published within six (6) months of the effective date of ComReg's final decision on the WLA market, unless otherwise agreed with ComReg.
- 7.948 This proposed timeline, however, would not apply in the case of some amendments relating to the provision of CEI and its associated obligations. ComReg was of the view that the necessary changes to the ARO with respect to certain proposed changes to the CEI obligation can and should be implemented within three (3) months of the effective date of ComReg's final decision on the WLA market given the nature of the changes required. The changes in scope in this regard are listed below:
- (a) Removal of all undue restrictions with respect to usage of CEI, specifically restrictions limiting the usage of CEI for "fixed broadband services"; and
 - (b) Access to Ingress and Egress points.

¹¹⁹⁷ As set out in Section 10.4 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹¹⁹⁸ The ARO can be found at the following location at https://www.openeir.ie/Reference_Offers/.

¹¹⁹⁹ As set out in Section 10.6 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²⁰⁰ The proposed obligations with respect to the transparency requirement to publish a revised ARO within a specific period are set out in paragraphs 8.469 to 8.473 of the Consultation and Section 10.2 - 10.3 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

7.949 ComReg also proposed that Eircom should, within ten months of the effective date of the final Decision (or as otherwise agreed with ComReg) update the ARO to reflect the proposed obligations with respect to providing pre-ordering, ordering, provisioning, fault reporting and repair for CEI on an Equivalence of Inputs basis.¹²⁰¹

7.950 In order to comply with this obligation, ComReg noted that Eircom will need to update the existing ARO documentation to reflect any changes required.

Transparency requirements governing ARO change management

7.951 In the Consultation¹²⁰² ComReg proposed to impose various transparency requirements governing change management of the ARO and its associated elements/documentation.¹²⁰³ The proposals were deemed necessary in order to enable Access Seekers to have visibility of any changes made or planned to be made to the ARO and its associated elements/documentation.

7.952 In this respect, ComReg proposed that Eircom should publish and keep updated on its public website the following:

- (a) a clean (unmarked) and tracked change (marked) version of the ARO. The tracked change version of the ARO must also be sufficiently clear to allow Access Seekers to identify all actual and proposed amendments from the preceding version of the ARO;
- (b) an accompanying ARO change matrix which lists all of the amendments incorporated in or to be incorporated in any amended ARO (the 'ARO Change Matrix');
- (c) clean (unmarked) and tracked changed (marked) versions of the ARO Price List(s) of regulated products. The tracked change version of the ARO Price List(s) must also be sufficiently clear to allow Access Seekers to clearly identify all actual and proposed amendments from the preceding version of Eircom's ARO Price List of regulated products;
- (d) an ARO price list change matrix, which lists all of the amendments made to regulated products or to be incorporated in any amended ARO Price List (the '**Price List Change Matrix**'); and

¹²⁰¹ As set out in Section 10.2 and 9.4 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²⁰² The proposed obligations with respect to transparency requirements governing ARO change management are set out in paragraphs 8.474 to 8.478 of the Consultation.

¹²⁰³ For the avoidance of doubt, the associated documentation includes the IPM and any other document referred to in the ARO and the changes in scope are those which will have a material effect on the product processes, services or associated facilities. A material effect is any change to an existing product, service or facility that will impact on the product functionality or technical specifications, the process supporting the product and the pricing and terms and conditions associated with the product. Examples of such material changes are the introduction of new order types, retirement of old order types or changes to process steps. Text changes and minor updates to existing products, services or facilities which fall outside the definition of "material" above are not subject to this obligation. This will also support monitoring and enforcement of compliance with SMP obligations.

- (e) maintain and make publicly available on its wholesale website a copy of historic versions of its ARO, ARO Price List, ARO Change Matrix and ARO Price List Change Matrix.¹²⁰⁴

Advance notification timeframes for ARO and price changes

- 7.953 In the Consultation,¹²⁰⁵ in accordance with Regulation 9 of the Access Regulations¹²⁰⁶ ComReg proposed that Eircom be subject to obligations with respect to proposed non-price changes/ amendments.¹²⁰⁷
- 7.954 ComReg was of the preliminary view that such obligations will provide sufficient notification to Access Seekers to allow them to factor such proposed changes into their commercial decision-making activities and to make any necessary adjustments or developments to billing or other systems, as appropriate. These advance notification requirements also provide a mechanism according to which ComReg can monitor compliance by Eircom with its access, non-discrimination, pricing and other obligations proposed in the Consultation.
- 7.955 ComReg considers that in some cases shorter advance notification periods may be in the interest of Access Seekers who may wish to avail of a new or amended product, service or facility at an earlier point in time than under the standard proposed timelines for advance notification. For this reason, ComReg included in the Consultation the proviso that the advance notification periods may be varied with the agreement of ComReg or at ComReg's discretion.¹²⁰⁸
- 7.956 ComReg considers that such variance in advance notification periods, made at ComReg's discretion, does not create a burden on Eircom as it makes the advance notification periods less onerous when an earlier availability of a new or amended product, service or facility is in the interest of Access Seekers.

¹²⁰⁴ As set out in Section 10.7(vi) of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²⁰⁵ The proposed obligations with respect to advance notification timeframes for ARO and price changes are set out in paragraphs 8.479 to 8.486 of the Consultation.

¹²⁰⁶ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the '**Access Regulations**').

¹²⁰⁷ The transparency requirements described in paragraphs 7.953 to 7.964 require Eircom to notify ComReg in the event of proposed changes to the ARO. However, it should be noted that this notification does not include a ComReg approvals process.

¹²⁰⁸ As set out in Section 10.9(ii) and 10.10(ii) of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

- 7.957 In addition, ComReg considers that when an amendment or change to an existing product¹²⁰⁹ is so significant that it would constitute a new product, then in such a case, this de facto new product should be notified using the new product notification requirement (i.e. the 7 month timeline) rather than the existing product¹²¹⁰ amendment/change timeline of 3 months. ComReg considers that such a requirement is proportionate as it is the minimum requirement needed to prevent first mover advantage for such significant amendments or changes and does not create a burden on Eircom beyond that of the notification requirements for new products.
- 7.958 In this regard, ComReg proposed the obligations with respect to advance notification periods as summarised¹²¹¹ in paragraph 7.959 to 7.964 below.
- 7.959 In respect of non-pricing amendments or changes to the ARO resulting from the offer of a new product, service or facility which falls within the scope of the WLA market, the following obligations will apply:
- (a) Eircom shall, unless otherwise agreed by ComReg, make publicly available and publish on Eircom's publicly available wholesale website at least six (6) months in advance of coming into effect, any proposed amendments or changes to the ARO or the making available of any product, service or facility, pertaining to non-price information in respect of product specification, services, facilities and processes resulting from the offer of a new product, service or facility.
 - (b) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, seven (7) months prior to any amendments or changes coming into effect. The periods referred to in this paragraph 7.959 may be varied with the agreement of ComReg or at ComReg's discretion.
- 7.960 In respect of material non-pricing amendments or changes to the ARO resulting from an amendment or change to an existing product, service or facility which falls within the scope of the WLA market, the following obligations will apply:
- (a) Eircom shall, unless otherwise agreed by ComReg, make publicly available and publish on Eircom's publicly available wholesale website at least two (2) months in advance of coming into effect, any proposed amendments or changes to the ARO pertaining to non-price information in respect of product specification, services, facilities and processes resulting from an amendment or change to an existing product, service or facility (including details of any amendment or change in the functional characteristics of an existing product, service or facility); and

¹²⁰⁹ Or service or facility.

¹²¹⁰ As set out in section 10.10(ii) of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²¹¹ And as set out in Section 10.9 to 10.12 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

- (b) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, three (3) months prior to any amendments or changes coming into effect. The periods referred to in this paragraph may be varied with the agreement of ComReg or at ComReg's discretion. Material changes or material amendments constituting a new product shall, however, be notified and published in accordance with paragraph 7.959 above or as otherwise agreed with ComReg or at ComReg's discretion.

7.961 ComReg also proposed in the Consultation that Eircom be subject to the obligations as summarised in paragraphs 7.962 to 7.963 with respect to proposed price changes/amendments.

7.962 In respect of pricing amendments or changes pertaining to prices in the ARO and/or ARO Price List, Eircom shall make publicly available and publish on its publicly available wholesale website information relating to:

- (a) proposed changes to the prices of existing products, services or facilities set out in the ARO Price Lists and which are offered or provided in accordance with the obligations set out in the Draft Decision Instrument, for price decreases at least two (2) month in advance of such changes coming into effect and for price increases at least three (3) months in advance, unless otherwise determined by ComReg; and
- (b) the pricing of a new product, service, or facility that will be offered or provided in accordance with the obligations set out in the Draft Decision Instrument at least two (2) months in advance of the commercial launch of a new retail service by Eircom, unless otherwise determined by ComReg.

7.963 For the purpose of paragraph 7.962 above, Eircom shall, unless otherwise agreed with ComReg, notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place.

7.964 ComReg also noted that in circumstances where proposed changes¹²¹² to existing products are likely to have a material impact on related markets (including having regard to the timeframes which an Access Seeker would reasonably require to make any operational and/or technical adjustments in order to avail of such amended products), ComReg reserves the right to extend the timeframes set out above.¹²¹³

¹²¹² For the avoidance of doubt, changes proposed by Eircom are not automatically incorporated into existing Access Seekers' contracts; Eircom can negotiate with Access Seekers regarding any such changes.

¹²¹³ As set out in paragraph 8.484 of the Consultation.

Specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the ARO and associated documents

- 7.965 ComReg proposed¹²¹⁴ that Eircom should be required, as specified by ComReg in writing from time-to-time, to make public on its publicly available wholesale website information that may be reasonably requested by ComReg that is relevant to the provision of WLA services and associated facilities such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices.
- 7.966 In addition, ComReg proposed¹²¹⁵ that in accordance with Regulation 9(3) of the Access Regulations, ComReg may issue directions requiring Eircom to make changes or amendments to its SLAs, the ARO (and its associated documents), ARO Price List, ARO Change Matrix or ARO Price List Change Matrix to give effect to obligations proposed in the Consultation and to publish such documents with such changes. In addition, ComReg noted that in accordance with Regulation 18 of the Access Regulations, ComReg may issue directions to Eircom from time-to-time requiring it to publish information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices.

Transparency requirements on wholesale billing

- 7.967 In the Consultation,¹²¹⁶ ComReg proposed that Eircom would be required to provide transparency in its billing of WLA charges and to ensure that its wholesale invoices for WLA products, services and facilities are sufficiently disaggregated, detailed and clearly presented so that an Access Seeker can reconcile the invoice to Eircom's ARO and ARO Price Lists.
- 7.968 In this respect, ComReg proposed to introduce a requirement on Eircom to ensure that any invoices and the associated contracts relate only to products, services or facilities falling within the WLA market. Any services falling outside the WLA market should be contained in a separate contract and be invoiced separately. This requirement facilitates greater transparency for Access Seekers and also makes it easier to detect any undue cross-subsidisation in the pricing of services.

Transparency requirements regarding KPIs, SLAs and reporting

- 7.969 In the Consultation,¹²¹⁷ ComReg proposed that Eircom shall publish Key Performance Indicators (KPIs) on its publicly available wholesale website. The specification of the content of the KPIs would be in accordance with the obligations set out in ComReg Decision D05/11.

¹²¹⁴ As set out in paragraph 8.458 of the Consultation.

¹²¹⁵ As set out in Section 10.15 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²¹⁶ The proposed obligations with respect to transparency requirements on wholesale billing are set out in paragraphs 8.487 to 8.489 of the Consultation.

¹²¹⁷ The proposed obligations with respect to transparency requirements regarding KPIs, SLAs and reporting are set out in paragraphs 8.490 to 8.505 of the Consultation.

- 7.970 ComReg also proposed that Eircom shall make publicly available on its wholesale website all SLAs relating to the provision of the products, services and facilities that are to be provided under Eircom's obligations.
- 7.971 ComReg's preliminary view was that Eircom should be obliged to publish on its publicly available website a report showing Eircom's actual performance in respect of Access Seekers on an aggregate basis with respect to the committed service levels contained in the relevant SLAs. ComReg proposed that Eircom should in addition describe in detail the methodology used to calculate the actual performance, describe the data sources used and provide worked examples as to how the source data relates to the reported performance achieved.
- 7.972 ComReg also proposed that the information with respect to the aggregate performance should be provided each quarter showing the monthly performance for the previous three (3) months. In addition, Access Seekers should be provided with individual reports as to how Eircom has performed for them covering the committed service levels in the relevant SLAs.¹²¹⁸

Transparency requirement for KPIs for CEI

- 7.973 In the Consultation,¹²¹⁹ ComReg set out its view that it is necessary to develop a set of KPIs with respect to CEI access and stated that ComReg would consider whether to consult separately on the specific CEI KPIs, at the appropriate time.
- 7.974 ComReg invited comment from Access Seekers, Eircom and other interested parties with a view to considering which KPIs are critical with respect to CEI, noting that the set of KPIs may be influenced by SLA negotiations and the method chosen by Eircom to achieve EoI.

Transparency requirement with respect to network rollout and network development

- 7.975 In the Consultation,¹²²⁰ ComReg proposed to continue with the existing transparency obligations for FTTC¹²²¹ based services and further proposed additional transparency obligations for FTTH. In this respect, ComReg proposed the requirements as described in paragraphs 7.976 to 7.979.

¹²¹⁸ As described in paragraph 7.601 ComReg is now of the view that the requirement for Access Seekers to be provided with individual reports as to how Eircom has performed for them covering the committed service levels in the relevant SLAs would be more appropriately included in the condition of Access obligations.

¹²¹⁹ ComReg views with respect to transparency requirements for KPIs for CEI are set out in paragraphs 8.506 to 8.508 of the Consultation.

¹²²⁰ The proposed obligations with respect to transparency requirements for network rollout and network development are set out in paragraphs 8.509 to 8.537 of the Consultation.

¹²²¹ As set out in ComReg Document No 13/11: 'Next Generation Access ('NGA'): Remedies for Next Generation Access Markets - Response to Consultation and Final Decision' dated 31 January 2013.

7.976 At a time not later than six (6) months prior to the Ready For Order ('**RFO**')¹²²² Date, for each Exchange area included in Eircom's NGA rollout plan, the following details should be made available on Eircom's publicly available wholesale website:

- (a) A list of cabinets with their associated geographic coordinates;
- (b) The location and name of the exchange which houses the Metropolitan Point of Presence ('**MPOP**')¹²²³ for each cabinet and for each proposed FTTH network;¹²²⁴
- (c) The expected Ready for Order date ('**RFO Date**') for each cabinet or fibre based FTTH; and
- (d) For each Exchange the number of premises that Eircom forecasts will be passed by FTTH.

7.977 At a time not later than three (3) months prior to the RFO Date, provide, for each exchange area listed at the six (6) month stage, sufficient information to enable Access Seekers to identify the addresses which will be passed by FTTH. This could take the form of a detailed map or cross references to Eircom's address database which would allow Access Seekers to readily identify such premises.

7.978 At a time no later than 28 calendar days prior to the RFO Date provide a data file which should include the following information:

- (a) a list of the premises, as uniquely identified, that are capable of receiving FTTC and the associated Pre-Qualification Value for each such line/premise;
- (b) a list of all addresses passed by FTTH categorised by the exchange area above and showing the MPoP for each address; and
- (c) Provide any other information as may reasonably be required by ComReg for the purposes of ensuring transparency.

¹²²² The Eircom document 'Next Generation Access - Bitstream Plus and Virtual Unbundled Access Industry Process Manual' V9.0, describes the RFO Date as indicating the date from which orders can be placed for an address present in the APQ file.

¹²²³ Metropolitan Point of Presence or MPoP means the point of inter-connection between the access and core networks of an undertaking.

¹²²⁴ For the avoidance of doubt, an FTTH network in the context of this transparency requirement means a fibre optic cable(s) that is part of a passive optical network or point-to-point fibre network and is either connected or planned to be connected to an OLT.

- 7.979 For Exchange areas included in Eircom's NGA rollout plan Eircom shall publish on its publicly available wholesale website on a monthly basis, or as reasonably required by ComReg, in advance of particular cabinets becoming enabled or any FTTH fibre routes being completed, information to update, reconcile or revise any previous announcements or notifications, projections or plans, regarding NGA rollout, as matters progress in order that accurate, clear and current information is made available in respect of plans for particular cabinets or plans for particular FTTH fibre routes (however material amendments or changes to information may not be notified by way of such an update but shall be notified in accordance with paragraphs 7.976 to 7.979 or by agreement with ComReg, or at ComReg's discretion).¹²²⁵
- 7.980 ComReg considers that the requirement summarised in paragraph 7.979 is necessary so that Access Seekers are provided with up to date information with respect to network rollout so as to efficiently and effectively plan for and deliver products and services on a wholesale basis or to End Users. ComReg considers that it would not be a burdensome requirement for Eircom to have a process in place to keep its network rollout information up to date for use by it and by Access Seekers.

Transparency requirement with respect to physical network planning information

- 7.981 In the Consultation,¹²²⁶ ComReg proposed to impose an obligation on Eircom requiring it to provide information to Access Seekers with respect to planning for WLA networks. The specifications of the proposed obligation are described in paragraphs 7.982 to 7.984.
- 7.982 ComReg was of the view that the timing of the release of information with respect to new CEI infrastructure build by Eircom should correspond to the earliest decision to deploy the infrastructure (for example, the issue of a works order for deployment of infrastructure might be an appropriate trigger point)¹²²⁷ and should include planned and actual RFO dates. This will provide a high degree of certainty to Access Seekers and should lead to improved co-operation and planning of infrastructure build and utilisation.
- 7.983 The revised CEI build plan should be updated every 28 calendar days and published on Eircom's publicly available website.
- 7.984 ComReg was of the preliminary view that the information to be provided at a minimum should contain the following items:
- (a) a map showing the proposed CEI routes which includes in the case of poles, the x, y co-ordinates of the poles and, in the case of ducts, the location of the proposed ducts;

¹²²⁵ As set out in Section 10.23(iv) of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²²⁶ The proposed obligations with respect to transparency requirements for physical network planning information are set out in paragraphs 8.538 to 8.8.547 of the Consultation.

¹²²⁷ Typically, works orders are used to provide detailed instructions to build CEI and are only issued when approval for the project has been granted.

- (b) with respect to ducts, the proposed number and size of ducts on each proposed route; and
- (c) the planned and actual RFO dates for the infrastructure.

Transparency with Respect to CEI Engineering Planning and Design Rules

7.985 In the Consultation,¹²²⁸ ComReg was of the preliminary view that Eircom should have an obligation of transparency with respect to the provision of Engineering Planning and Design Rules,¹²²⁹ or the equivalent, for CEI i.e. the engineering planning and design rules with respect to the management of duct and chamber space and pole space should be provided to Access Seekers that have signed a CEI agreement with Eircom for CEI access.

Transparency requirement with respect to Product Development

7.986 In the Consultation,¹²³⁰ ComReg proposed to oblige Eircom to provide information to Access Seekers with respect to the development of regulated products, services or facilities. The requirements proposed for transparency of product development were in addition to the timelines for product development, proposed as part of the suite of obligations setting out conditions of Access as discussed in paragraphs 7.611 to 7.612.

7.987 ComReg was of the preliminary view that Access Seekers should be given an opportunity, at an early stage of a proposed development, to provide their views as to the priority of the development. Access Seekers must have their priorities fully taken into account by Eircom when decisions with respect to product development resourcing are being made.

7.988 The requirements proposed for transparency of product development are described in paragraphs 7.989 to 7.991.

7.989 Eircom shall publish and keep updated, on its publicly available website, a description of its product development process, including a description of all process steps and activities, identifying all key milestones and decision points, starting from the receipt of a request from an Access Seeker, through to the launch of a new or amended wholesale product, service or facility.

¹²²⁸ The proposed obligations with respect to transparency requirements for CEI Engineering Planning and Design Rules are set out in paragraphs 8.538 to 8.8.547 of the Consultation.

¹²²⁹ Engineering, Planning and Design Rules means the engineering and design rules that relate to the management of duct, chambers and pole space.

¹²³⁰ The proposed obligations with respect to transparency requirements for product development are set out in paragraphs 8.553 to 8.566 of the Consultation.

7.990 For each proposed development, Eircom shall, at the earliest possible time but in any event not later than ten (10) working days after the receipt of an access request for the development of a product, service or facility, provide and keep updated on its publicly available website a Product Development Roadmap¹²³¹ listing all of the accepted access requests¹²³² with the following details for each proposed development:

- (a) a unique identifier for each access request,
- (b) a description of each access request including a copy of or links to all documents relevant to each request;
- (c) the last date by which proposed amendments from Access Seekers relating to a development project can be accepted by Eircom as being included in that development;
- (d) the milestones and associated target dates to develop and launch each proposed product, process or service;
- (e) a method for tracking the progress of developments against those dates;
- (f) the identification and communication to Access Seekers of the proposed date by which Access Seekers can notify Eircom of the degree of priority to be given to each particular development; and
- (g) the priority given by Eircom to the development of each request relative to other requests pertaining to the Relevant Market. Eircom shall include the prioritisation process and the criteria used by it in this regard.

7.991 In addition, ComReg proposed that Eircom shall publish the following information (the publication deadlines proposed here correspond to those summarised in the proposed access obligation on product development described in paragraphs 7.611 to 7.612):

- (a) For each Access request received by Eircom and accepted by Eircom as being in a regulated market Eircom shall, at the earliest possible time, but not later than ten (10) working days after the receipt of the Access request, advise all Access Seekers that the request has been received and provide them with information regarding the request;
- (b) The information provided to Access Seekers should include a unique reference number which will allow tracking of the request and all known details relevant to the request including but not limited to a copy of the request, where a written request has been made, and in all cases a description of the key features and functionality requested;

¹²³¹ In the Consultation a Product Development Roadmap is a document containing a list of all proposed, planned and in progress developments and related information as required of Eircom.

¹²³² An accepted access request is a request deemed by Eircom to be related to a product service or facility in the WLA market. An Access request can be made by an Access Seeker or by Eircom.

- (c) Not later than twenty five (25) working days, unless otherwise agreed with ComReg, after receipt of the Access request, Eircom shall agree with the Access Seeker an accurate description of the requirement(s) and shall publish a description of the requested product or service on its publicly available website;
- (d) Within fifty five (55) working days, unless otherwise agreed with ComReg, confirm in writing to the Access Seeker whether it agrees to provide the requested new or amended product, service or facility. Where the request is refused, Eircom shall comply with its obligations to give written reasons for its decision at the time of refusal. In addition Eircom shall advise all other Access Seekers that the request has been refused;
- (e) For any Access request accepted by Eircom as being in a regulated market and agreed by Eircom to be developed, Eircom must, at the earliest possible stage in the product development process, but not later than seventy five (75) working days after receipt of the Access request, provide to Access Seekers a detailed description and specification for the new or changed wholesale product, service or facility. Eircom must in addition, identify the degree of priority that it proposes to assign to each proposed development. Eircom shall also provide a forecast date by which it expects to provide the requested product, service or facility;
- (f) In addition, Eircom will for each development provide Access Seekers with all other relevant documentation including but not necessarily limited to any revised industry process manual, price lists or technical manuals;
- (g) At all stages of the wholesale product development process Eircom shall make publicly available and keep updated on its website, all relevant documentation describing the product, service or facility which will be delivered for each development in sufficient detail such that an operator could reasonably be aware of the key features and functionality proposed, and the proposed geographic reach of the product and any relevant limitations of the product.
- (h) Eircom must publish the process and criteria used by Eircom in reaching decisions with respect to the prioritisation of product developments with each other; and
- (i) Provide any other information as may reasonably be required by ComReg for the purposes of ensuring transparency.

Standardised process before a trial can commence

7.992 In the Consultation,¹²³³ ComReg set out its view that the process for establishing trials follows a standard process and should meet specific criteria before a trial can commence. The criteria that ComReg considers to be relevant are set out below:

- (a) All SPs and/or Access Seekers should be invited to participate in the trial;

¹²³³ ComReg's preliminary views with respect to transparency requirements regarding trials are set out in paragraphs 8.567 to 8.572 of the Consultation.

- (b) The objectives of the trial and the requirements for participation in the trial must be clearly stated and provided to all Access Seekers in sufficient time to allow participation; and
- (c) The trial must be for a reasonable period, sufficient only¹²³⁴ to achieve the objectives of the trial.

7.993 ComReg was not, at the time of the Consultation, proposing these criteria as an obligation as the nature of trials can vary significantly and in many cases trials can benefit all of industry in assessing the proposed changes to products or processes. ComReg stated however that it would welcome feedback from Respondents on this.

Provide notification with respect to proposed trials

7.994 In the Consultation,¹²³⁵ ComReg's preliminary view was to impose an obligation that certain timelines should apply to trials which involve the participation of Access Seekers. In this regard ComReg proposed the following obligations with respect to trials.

- (a) The trial must be notified to ComReg one (1) month in advance of its commencement;
- (b) The trial must be notified to all Access Seekers in sufficient time to allow Access Seekers to participate. At a minimum, ComReg was of the view that a three (3) month advance notice period is appropriate, unless otherwise agreed with ComReg;¹²³⁶ and
- (c) The trial must terminate at least one (1) month before notification of the product to ComReg, unless otherwise agreed with ComReg.

Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities

7.995 In the Consultation,¹²³⁷ ComReg considered that Eircom, as the proposed SMP operator, should be required to provide information regarding technical developments, network rollout and wholesale services, insofar as it affects the provision of WLA products, services and facilities (subject to the proposed obligations set out in the Consultation). Eircom should do so in sufficient detail in order to allow Access Seekers to be able to prepare business or operational plans.

¹²³⁴ In the Consultation ComReg set out its preliminary view that such trials should not be of a nature that the product or process being trialled is effectively being launched. In addition, that trialling a fully operational system for a prolonged period may have the effect of bypassing the normal notification process for product changes and could therefore potentially give rise to compliance issues, it may also confer an unfair first mover advantage on Eircom.

¹²³⁵ The proposed obligations with respect to transparency requirements for trial notifications are set out in paragraphs 8.573 to 8.576 of the Consultation.

¹²³⁶ Trials which would require an Access Seeker to modify their OSS for the purposes of participating in the trial may require a longer notification period to allow Access Seekers to participate in such trials.

¹²³⁷ As set out in paragraph 8.578 of the Consultation.

- 7.996 Pursuant to the proposed obligations of non-discrimination and transparency as set out in the Consultation, ComReg proposed¹²³⁸ that Eircom shall make available on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg), information regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies, as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WLA (or such other information as reasonably required by ComReg), including as regards such products, services or facilities to be offered to Eircom's retail or downstream division. Eircom shall keep this information updated on its publicly available wholesale website; however material amendments and changes to information may not be notified by way of such an update, but shall be notified by at least six (6) months in advance as set out herein, or by agreement with ComReg, or at ComReg's discretion.
- 7.997 ComReg considers that the requirement as summarised in paragraph 7.996 is necessary so to provide sufficient notification to Access Seekers to allow them to factor in such proposed changes into their commercial decision-making activities and to make any necessary adjustments or developments to billing or other systems, as appropriate. ComReg expects that such changes would be subject to existing governance within Eircom with respect to network changes and network evolution and that providing sufficient notification to Access Seekers with respect to such changes would not be burdensome on Eircom.

Transparency requirement to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement

- 7.998 In the Consultation, ComReg noted¹²³⁹ that in some cases circumstances may arise where Eircom considers that certain information to be provided by it pursuant to its non-discrimination obligations is of a confidential and/or commercially sensitive nature. To cater for such circumstances, ComReg proposed to require Eircom to meet the following requirements, which largely mirror those which have been imposed in other markets (such as the 2013 NGA Decision)¹²⁴⁰ where Eircom has SMP:

¹²³⁸ As set out in Section 10.22 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

¹²³⁹ As set out in paragraph 8.579 of the Consultation.

¹²⁴⁰ See "Next Generation Access (NGA): Remedies for Next Generation Access Markets, Response to Consultation and Decision, ComReg Document 13/11, Decision D03/13, January 2013" in particular, paragraph 9.12 set out in Annex 2.

- (a) Eircom shall, without delay, provide ComReg with complete details of information along with objective reasons justifying why it considers it is confidential and/or commercially sensitive. ComReg will consider the information in accordance with its Confidentiality Guidelines¹²⁴¹ as relevant or otherwise. If ComReg considers that the information is not confidential and/or commercially sensitive, it shall be published by Eircom in accordance with its transparency obligations.
- (b) If ComReg concludes that the information in 7.998 above is confidential and/or commercially sensitive, Eircom shall publish general details which are not considered confidential as to the nature of such information and shall make it available to an Access Seeker that has signed a Non-Disclosure Agreement ('NDA') the terms and conditions of which shall be fair, reasonable and non-discriminatory.
- (c) The NDA shall be published on Eircom's publicly available website. Any confidential and/or commercially sensitive information shall not be made available by Eircom to its downstream operations until such time as it is made available to an Access Seeker, or as otherwise agreed with ComReg.
- (d) If and when the commercially sensitive and/or confidential information is no longer considered by Eircom to be commercially sensitive and/or confidential, it shall make it available on its publicly available wholesale website without undue delay and without the need for an NDA to be signed.

Respondents' Views

7.999 Four of the eight respondents to the Consultation (Eircom, Vodafone, Sky and BT) expressed views on ComReg's proposed requirements regarding the transparency obligations summarised in paragraph 7.942 to 7.998 above.

7.1000 In paragraphs 7.1001 to 7.1061 below ComReg has summarised the Respondents' views on each specific transparency remedy, and has grouped Respondents' views into relevant themes, as follows:

- (a) maintenance and publication of an ARO, which is to contain a minimum list of items (discussed in paragraphs 7.1001 to 7.1004 below);
- (b) provision of an updated ARO within a specified time period following the final decision notice (discussed in paragraphs 7.1005 to 7.1009 below);
- (c) associated ARO change management process (discussed in paragraphs 7.1010 to 7.1013 below);
- (d) advance notification timeframes for ARO and price changes (discussed in paragraphs 7.1014 to 7.1017 below);
- (e) specification of information to be made publicly available and issuing of directions by ComReg regarding changes to ARO and associated documents (discussed in paragraph 7.1018 below);

¹²⁴¹ See "Guidelines on the treatment of confidential information" ComReg Document 05/24, March 2005.

- (f) transparency in the billing of WLA wholesale charges (discussed in paragraphs 7.1019 to 7.1023 below);
- (g) publication of KPIs, SLAs and reporting (discussed in paragraphs 7.1024 to 7.1028 below);
- (h) publication of KPIs for CEI (discussed in paragraphs 7.1029 to 7.1030 below);
- (i) publication of geographic detail for planned network rollout (discussed in paragraphs 7.1031 to 7.1037 below);
- (j) provision of information with respect to the Planning and Development of Physical Network Infrastructure (CEI build plan) (discussed in paragraphs 7.1038 to 7.1039 below);
- (k) provision of information with respect to the Engineering planning and Design Rules for CEI (discussed in paragraphs 7.1040 to 7.1041 below);
- (l) publication of information with respect to the development of products, services and facilities (discussed in paragraphs 7.1042 to 7.1048 below);
- (m) standardised process before a trial can commence (discussed in paragraphs 7.1049 to 7.1050 below);
- (n) provide notification with respect to proposed trials (discussed in paragraphs 7.1051 to 7.1054 below);
- (o) provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities (discussed in paragraph 7.1055 below);
- (p) provisions to cater for commercially sensitive or confidential information (discussed in paragraphs 7.1056 to 7.1058 below);
- (q) impact of notification periods on timeline for product development (discussed in paragraph 7.1059 to 7.1060); and
- (r) impact of SLA development on product development (discussed in paragraph 7.1061 below).

Maintenance and publication of an ARO, which is to contain a minimum list of items

- 7.1001 Eircom agreed with the requirements for the maintenance and publication of an ARO containing a minimum list of requirements, as summarised in paragraphs 7.942 to 7.946 above. Eircom stated that the proposed requirements align with the FACO, WBA and WPNIA markets.¹²⁴²
- 7.1002 Vodafone supported¹²⁴³ ComReg's requirement for Eircom to publish an ARO as it provides Access Seekers with the required and relevant information regarding WLA products and that without this information it would not be possible for Access Seekers to compete effectively in the downstream markets nor would it be possible to make timely business decisions.
- 7.1003 Vodafone also agreed¹²⁴⁴ that the ARO should contain the minimum set of information as set out in the Consultation, noting that without this level of specification, Eircom would be in a position to publish an ARO that may not contain the minimum level of necessary information.
- 7.1004 Respondents' views regarding the inclusion of the vectoring protocol in the ARO are summarised in paragraphs 7.251 to 7.255 above.

¹²⁴² Eircom Submission, page 49, in section entitled 'ARO timelines', Eircom stated that 'Requirements for publishing and timeframes outlined in paragraphs 8.462 – 8.486 are acceptable and align with the FACO and NGA markets'. On 29 September 2017, in response to a request for clarification sent to Eircom from ComReg on 26 September, Eircom clarified that the intended paragraph references with respect to timeframes should have been 8.479 to 8.486 of the Consultation. On 6 December 2017, in response to a request for clarification sent to Eircom from ComReg on 16 November 2017, Eircom clarified that the term 'NGA markets' referred to WPNIA and WBA obligations as imposed in the 2013 NGA Decision.

¹²⁴³ Vodafone Submission, page 26, paragraph 184.

¹²⁴⁴ Vodafone Submission, page 26, paragraph 185.

Transparency requirement to publish a revised ARO within a specified period

- 7.1005 Eircom agreed¹²⁴⁵ with ComReg's proposal that the necessary updates to the ARO should be published within six (6) months of the effective date of ComReg's final decision on the WLA market. Eircom did not, however, agree with ComReg's proposal for a shorter timeframe with respect to: a) removal of all undue restrictions for usage of CEI, specifically restrictions limiting the usage of CEI for 'fixed broadband services'; and b) access to Ingress and Egress points. Eircom noted its view that the proposed requirement a) has already been addressed by it and objected to the proposed requirement b) for reasons set out in its Submission with respect to providing access to CEI Ingress and Egress points.¹²⁴⁶
- 7.1006 Eircom did not express views directly on the ComReg's proposal that within ten months of the effective date of the final Decision (or as otherwise agreed with ComReg) Eircom should update the ARO to reflect the proposed obligations with respect to providing pre-ordering, ordering, provisioning, fault reporting and repair for CEI on an Equivalence of Inputs basis.¹²⁴⁷ Eircom did however express views with respect to ComReg's non-discrimination proposal that Eircom shall implement Eol for CEI within ten months; these views are summarised in paragraphs 7.789 to 7.816 of this Decision.
- 7.1007 Vodafone stated¹²⁴⁸ that it supports ComReg's proposal regarding the provision of an updated ARO within a specified time period following the publication of the final Decision. Vodafone did, however, note that it did not understand why it should take six months following the publication of the Decision for the updated ARO to become available, and Vodafone urged ComReg to tighten its proposals in this area.
- 7.1008 Vodafone expressed its support¹²⁴⁹ for ComReg's proposed requirements around the removal of restrictions on the use of CEI for 'fixed broadband' in the ARO. Vodafone also agreed with ComReg's proposals regarding access to Ingress and Egress points being reflected in the ARO and published within a shorter timescale.
- 7.1009 Vodafone did note, however, that it considers the above adjustments to the ARO to be extremely simple changes for Eircom to implement and therefore did not agree with the three month timeframe provided by ComReg to make these amendments.

¹²⁴⁵ Eircom Submission, page 49, in section entitled 'ARO timelines', Eircom stated that 'Requirements for publishing and timeframes outlined in paragraphs 8.462 – 8.486 are acceptable and align with the FACO and NGA markets'. On 17 October 2017, in response to a request for clarification sent to Eircom from ComReg on 3 October 2017, Eircom clarified its view with respect to paragraphs 8.470 and 8.471 of the Consultation as now summarised in paragraph 7.1005.

¹²⁴⁶ Eircom Submission, pages 39 and 40, in section entitled 'Provide access to CEI Ingress and Egress points. (8.222)'. Eircom's views with respect to providing access to CEI Ingress and Egress points are summarised in paragraphs 7.408 to 7.412.

¹²⁴⁷ As summarised in paragraph 7.949.

¹²⁴⁸ Vodafone Submission, page 26, paragraph 186.

¹²⁴⁹ Vodafone Submission, page 26, paragraph 187.

Transparency requirements governing ARO change management

- 7.1010 Eircom agreed with the requirements for associated change management process, as described in paragraphs 7.951 to 7.952 Eircom stated that the proposed requirements align with the FACO, WBA and WPNIA markets.
- 7.1011 As per the reasons described in paragraphs 7.1012 to 7.1013 below Vodafone noted its agreement¹²⁵⁰ with ComReg's proposed obligations relating to ARO change management.¹²⁵¹
- 7.1012 Vodafone was of the view¹²⁵² that changes to product specifications have a real impact on Vodafone's use of Eircom WLA services and its provision of services to its own customers and that Eircom needs to improve its communication with other SPs in relation to updates to the ARO.
- 7.1013 Vodafone noted¹²⁵³ that having documentation in place that allows Vodafone to track changes made to the ARO over time is needed so that Vodafone can adapt operations and assess the impact of proposed or implemented changes.

Advance notification timeframes for ARO and price changes

- 7.1014 Eircom was in agreement with the advance notification timeframes for ARO and price changes, as summarised in paragraphs 7.953 to 7.964. Eircom stated that the proposed requirements align with the FACO, WBA and WPNIA markets.
- 7.1015 Eircom however expressed its view¹²⁵⁴ that the notification process should include an approvals process because it is neither good nor proportionate regulatory practice to propose, what it perceives to be, drawn out timescales without including ComReg's approval of changes to the ARO as part of the notification process. In other words, Eircom's view is¹²⁵⁵ that in the absence of an approval role there is no justification for changes to be notified to ComReg one month in advance of industry notification. Eircom stated that ComReg must therefore remove the one month advance notice requirement in the absence of an approval mechanism so as not to unduly delay product development and innovation. In addition, Eircom stated that it is unreasonable for ComReg to specify advance notice requirements while reserving its position on whether or not there is compliance.

¹²⁵⁰ Vodafone Submission, page 26, paragraph 188.

¹²⁵¹ As summarised in paragraphs 7.951 to 7.952.

¹²⁵² Vodafone Submission, page 26, paragraph 188.

¹²⁵³ Vodafone Submission, page 26, paragraph 189.

¹²⁵⁴ Eircom Submission, page 49, in section entitled 'ARO timelines'. Note that Eircom subsequently clarified that the reference provided in its Submission to paragraph 8.471 of the Consultation should have been to paragraph 8.485 of the Consultation.

¹²⁵⁵ Eircom Submission, page 49, in section entitled 'ARO timelines'.

- 7.1016 Vodafone stated its support¹²⁵⁶ for what it described as the specific and precise timeframes included in the proposals on advance notification timeframes for ARO and price changes as summarised in paragraphs 7.953 to 7.964. It was of the view¹²⁵⁷ that the introduction of standardised and precisely specified advance notification requirements for ARO and for price changes is important for Access Seekers. Vodafone stated¹²⁵⁸ that, without this requirement, there is a risk that Eircom will use any ambiguity to delay notification and therefore hinder its downstream competitors from being able to adapt and respond accordingly.
- 7.1017 Vodafone expressed concern¹²⁵⁹ with respect to the risk of key pieces of information being passed between Eircom's upstream and downstream businesses. Vodafone urged ComReg to consider this risk as part of its review of Eircom's governance,¹²⁶⁰ and noted that ComReg should seek to implement a model of functional separation that makes such an eventuality less likely to occur and more likely to be detected when it does occur.

Specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the ARO and associated documents

- 7.1018 Eircom disagreed¹²⁶¹ with the proposed wording of the requirement summarised in paragraph 7.966 above. In Eircom's view the words 'after a public consultation on the terms of such directions' should be inserted after the words 'from time-to-time' in the last sentence of this requirement.

Transparency requirements on wholesale billing

- 7.1019 Eircom explained¹²⁶² that ComReg's proposal on billing transparency in relation to the ARO (i.e., ComReg's proposals that any invoices and the associated contracts relate only to products, services or facilities falling within the WLA market) would present major billing challenges for Eircom. Eircom described that it invoices based on product usage, not market, and provided an example that a Wholesale Interconnect Link ('WEIL')¹²⁶³ is multipurpose and can simultaneously carry traffic from multiple markets.

¹²⁵⁶ Vodafone Submission, page 27, paragraph 192.

¹²⁵⁷ Vodafone Submission, page 26, paragraph 190.

¹²⁵⁸ *Ibid.*

¹²⁵⁹ Vodafone Submission, page 26, paragraphs 190 and 191.

¹²⁶⁰ In December 2015, ComReg decided to conduct a review of the scope and quality of Eircom's regulatory governance structures and the operation of the associated processes and procedures, including but not limited to Eircom's Regulatory Governance Model ('RGM'). In May 2016, Cartesian was appointed to perform an operations review and KPMG was appointed to perform a governance review.

¹²⁶¹ Eircom Submission, page 74, in section entitled 'WLA: Draft Decision Instrument'.

¹²⁶² Eircom Submission, page 49, in section entitled 'ARO timelines'.

¹²⁶³ Wholesale Ethernet Interconnection Link ('WEIL') is the interconnection service provided by Eircom, which provides a handover for various wholesale products including its NGA and NGN wholesale products.

- 7.1020 Vodafone broadly supported¹²⁶⁴ ComReg's view that greater billing transparency is required. Vodafone explained that the information currently provided on wholesale invoices is insufficient for Vodafone to reconcile its wholesale usage charges efficiently.
- 7.1021 Vodafone did however suggest¹²⁶⁵ that ComReg require Eircom to provide each Access Seeker with a detailed table view, with respect to wholesale billing, of all the regulated products it provides.
- 7.1022 Vodafone also suggested that detailed information on billing process, formats and systems be captured in all product descriptions, which should be updated and maintained by Eircom's wholesale division.
- 7.1023 In addition, Vodafone suggested that Eircom should not seek to give effect to changes with respect to wholesale billing through a unilateral specification of the changes to be made but should communicate all changes to the Access Seeker well in advance and engage and agree with Access Seekers prior to deployment.

Transparency requirements regarding KPIs, SLAs and reporting

- 7.1024 Eircom stated¹²⁶⁶ that, in general, it had no objection to the transparency requirements outlined in the Consultation regarding the publication of KPIs and SLA reporting.
- 7.1025 Vodafone stated¹²⁶⁷ that it fully supported ComReg's proposed transparency requirements regarding KPIs, SLAs and reporting.
- 7.1026 BT noted¹²⁶⁸ that strong KPIs will be required for Eircom to ensure EoI and that the timescales are met. In addition, BT sought a transparency remedy with respect to the timescales being met and the justification for missed timescales. Subsequent to its Submission BT provided clarification¹²⁶⁹ that the timescales it was referring to are the timescales for Eircom to complete developments relating to Access requests. BT also clarified that the remedy that it sought was a remedy that would measure and document (in a single report in the public domain) the progress of development for requests and that such a report should be made available either every six months or annually. BT described the purpose of the report to be ensure that development is performed in a fair and transparent manner and to allow for discrimination in the pace of development to more easily be identified and addressed through compliance.

¹²⁶⁴ Vodafone Submission, page 27, paragraphs 193 and 194.

¹²⁶⁵ Vodafone Submission, page 27, paragraphs 197 and 198.

¹²⁶⁶ Eircom Submission, Page 50, in section entitled 'Transparency requirements regarding KPIs, SLAs and reporting'.

¹²⁶⁷ Vodafone Submission, page 27, paragraph 199.

¹²⁶⁸ BT Submission, pages 10 and 11.

¹²⁶⁹ BT's 18 December 2017 response to an email requesting clarification sent to it by ComReg on 10 November 2017.

- 7.1027 Vodafone noted¹²⁷⁰ that, in its view, it is vital that the level and type of data published, or shared with Access Seekers, is sufficient to allow effective comparison between the level of service provided to Eircom's downstream operations and the level of service provided by Eircom to its competitors. Vodafone suggested that ComReg should carry out an analysis of the data currently published by Eircom to ensure that relevant data is published to enable a comparison to be made.
- 7.1028 Vodafone also outlined that all parties must have full confidence in the metrics published by Eircom under its transparency obligation. It therefore considered that ComReg should impose an additional requirement to ensure that all SLA, KPI and related performance metrics published by Eircom are fully audited by an independent expert third party who is able to certify their accuracy and veracity.

Transparency requirement for KPIs for CEI

- 7.1029 Eircom set out its view¹²⁷¹ that it is not appropriate to consult on KPIs with respect to CEI access¹²⁷² until it has been established that there is commercial demand for the products and that all parties have had some experience of their operation. Furthermore, Eircom stated that until such time as the relevant products are tested it is not possible to produce robust KPIs.
- 7.1030 Vodafone¹²⁷³ agreed with ComReg's view that it is necessary to develop a set of KPIs with respect to CEI access, and signalled its intention to support the development of KPIs for this product set. Vodafone emphasised that as the product set for CEI is re-developed to make it fit-for-purpose, a full set of KPIs should be available at re-launch. It considers that this must cover the full set of metrics that are relevant to monitor performance, and must allow for effective comparison of performance attained by Eircom and by its downstream competitors.

¹²⁷⁰ Vodafone Submission, page 28, paragraphs 201 and 202.

¹²⁷¹ Eircom Submission, pages 43 and 44, in section entitled 'Transparency requirement for KPIs for CEI'.

¹²⁷² Paragraph 8.508 of the Consultation states '*The 2011 KPI Decision identified the importance of KPIs as a means of monitoring performance of the SMP operator with respect to its non-discrimination obligations. ComReg is of the view that it is necessary to develop a set of KPIs with respect to CEI access. ComReg will consider whether to consult separately on the specific CEI KPIs, at the appropriate time*'.

¹²⁷³ Vodafone Submission, page 28, paragraph 205.

Transparency requirement with respect to network rollout and network development

- 7.1031 Vodafone agreed¹²⁷⁴ with ComReg's preliminary view that it is necessary for Eircom to provide network rollout information for both FTTC and FTTH developments using a phased approach¹²⁷⁵ in advance of access network deployment.
- 7.1032 Vodafone also agreed¹²⁷⁶ with ComReg's proposal with respect to the requirements for transparency for network rollout information. Vodafone noted that the availability of network rollout information is necessary for Access Seekers to compete effectively in downstream retail markets. Vodafone added that, in order for Access Seekers to compete effectively, they need to be able to plan their network (backhaul, interconnection etc.), marketing and sales activities on an equal footing with Eircom.
- 7.1033 Sky broadly agreed¹²⁷⁷ with ComReg's preliminary views surrounding the requirement upon Eircom to disclose information about its network rollout, noting in particular the need for an amendment to the existing transparency obligation, as proposed by ComReg, with respect to FTTH network rollout and developments.
- 7.1034 While broadly agreeing with ComReg's preliminary views with respect to network rollout, Sky raised the issue of standard and non-standard FTTH service provisioning. Sky referred¹²⁷⁸ to what it described as Eircom's planned approach for FTTH service delivery, whereby a customer with a premises over 50 metres from a fibre distribution point will need to perform their own civil works to accommodate fibre towards this premises. Sky explained that not knowing definitely at the initial point-of-sale whether their prospective customer is in the category of standard service delivery and price (within 50 metres of existing poles)¹²⁷⁹ or non-standard service delivery will cause significant customer management issues for Sky.
- 7.1035 Sky, referencing the issue referred to in paragraph 7.1034 above, noted that its customer sales representatives will not know, at the point-of-sale, whether a potential customer will fall into the standard or non-standard category of service delivery and price. It will therefore not know at the point-of-sale what installation charge will apply or what civil works must be completed by the customer, such as installation of poles or ducts on their property to accommodate the fibre cable.

¹²⁷⁴ Vodafone Submission, page 28, paragraph 207.

¹²⁷⁵ As per the network rollout information proposed to be provided at six (6) months, three (3) months and twenty eight (28) calendar days prior to the RFO date, as summarised in paragraphs 7.976 to 7.978 above.

¹²⁷⁶ Vodafone Submission, page 28, paragraphs 206 – 209.

¹²⁷⁷ Sky Submission, page 10, paragraph 42.

¹²⁷⁸ Sky Submission, pages 10 to 12, paragraphs 43 - 49.

¹²⁷⁹ Or greater than 50 metres providing suitable poles or ducts are present on the private property to be served.

- 7.1036 Sky urged¹²⁸⁰ ComReg to include an obligation on Eircom to clearly delineate in its Advanced Prequal ('APQ')¹²⁸¹ file information on whether FTTH can be provided to a customer via standard service delivery. Sky set out its view that failure by ComReg to impose such an obligation would greatly enhance the scope for Eircom to engage in discriminatory practices, due to information asymmetries.
- 7.1037 Sky was of the view¹²⁸² that the proposed obligation with respect to FTTH, and specifically regarding the information to be provided at least 28 calendar days before the RFO date, was not sufficient for marketing and business planning purposes. Sky, therefore, suggested that a more appropriate timeframe would be 50 calendar days before the RFO date for making FTTH rollout information available.

Transparency requirement with respect to physical network planning information

- 7.1038 Eircom stated¹²⁸³ that information regarding its CEI rollout plans is already available on its publicly available wholesale website and in advance of implementation. It noted that this includes information relating to wholesale products, services, and facilities such as the expected time for service availability.¹²⁸⁴
- 7.1039 Vodafone stated¹²⁸⁵ that it supports ComReg's preliminary views surrounding the introduction of a transparency requirement for new CEI deployments by Eircom. Vodafone explained that this is necessary to prevent Eircom from gaining a first mover advantage and to allow downstream competitors to plan their own network rollout in addition to subsequent sales and marketing activities.

¹²⁸⁰ Sky Submission, page 12, paragraph 49.

¹²⁸¹ The Eircom document 'Next Generation Access - Bitstream Plus and Virtual Unbundled Access Industry Process Manual' V9.0, describes the Advanced PreQual ('APQ') file as containing the addresses of all lines that are expected to pass on pre-qualification for an operator and is provided 28 calendar days in advance of the first date for orders.

¹²⁸² Sky Submission, page 12, paragraph 50.

¹²⁸³ Eircom Submission, page 43, in section entitled 'Proposed Transparency requirement with respect to Physical Network Planning Information'.

¹²⁸⁴ As proposed in Section 10.24 of Appendix 14 of the Consultation.

¹²⁸⁵ Vodafone Submission, page 29, paragraph 212.

Transparency with Respect to CEI Engineering Planning and Design Rules

- 7.1040 Referring to the proposed requirement as summarised in paragraph 7.985 above, Eircom stated¹²⁸⁶ that it has such rules but that they have been designed for use by Eircom or its sub-contractors. Eircom argued that use by third parties would necessitate a review of such rules by Eircom which would take time and involve considerable cost. It was of the view that the justification for such cost being incurred has not been considered by ComReg in the Consultation.
- 7.1041 Vodafone stated¹²⁸⁷ that it supports ComReg's proposal to impose an obligation on Eircom with respect to transparency around the engineering and design rules for management of its duct, chambers and pole space. Vodafone further noted that this is needed to allow Access Seekers to determine the implementation of their own network build.

Transparency requirement with respect to Product Development

- 7.1042 Eircom noted¹²⁸⁸ that material outlining the product development process has been shared on number of occasions at its Industry Product Development Workshop.¹²⁸⁹ Eircom added that the product development prioritisation process¹²⁹⁰ has also been presented by Eircom to industry on a number of occasions.
- 7.1043 Eircom stated¹²⁹¹ that the criteria proposed by ComReg, as described in paragraph 7.990 above, with respect to transparency of product development timelines is in place today. Eircom further stated that it agreed with the additional requirements proposed by ComReg whereby it is required to provide Access Seekers with a date by which a development will be completed and allow Access Seekers notify Eircom of the degree of priority to be given to each particular development.¹²⁹²

¹²⁸⁶ Eircom Submission, page 43, in section entitled 'Proposed Transparency requirement with respect to Physical Network Planning Information'

¹²⁸⁷ Vodafone Submission, page 29, paragraph 213.

¹²⁸⁸ Eircom Submission, page 48, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

¹²⁸⁹ Since February 2016, Eircom has hosted a series of product roadmap and technical workshops.

¹²⁹⁰ The full list of material that Eircom referred to in its Submission with respect to the prioritisation process was as follows: a) February 2016 Industry Product Development Workshop, b) SIEG May 2016, c) Roadmap Workshop January 2014, d) Industry Engagement Seminar August 2012 and e) Product Development and Software Development lifecycle.

¹²⁹¹ Eircom Submission, page 48, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

¹²⁹² Clarified by Eircom in its response to an SIR issued to it by ComReg on 18 May 2017.

- 7.1044 Eircom questioned¹²⁹³ whether the proposal, (as described in paragraph 7.987 above), that Eircom must fully take into account Access Seekers priorities when making product development resourcing decisions, would mean that a development in train should be stopped or suspended if an Access Seeker deems a new product to have a higher priority.
- 7.1045 Eircom expressed views in the transparency section of its Submission¹²⁹⁴ that relate to both proposed requirements with respect to timeliness of product development¹²⁹⁵ and transparency of product development.¹²⁹⁶ These views are set out and addressed in the section of this Decision addressing requirements with respect to timeliness of product development.¹²⁹⁷
- 7.1046 Vodafone supported¹²⁹⁸ ComReg's proposed requirements, and agreed with ComReg that this is particularly important for the promotion of competition.¹²⁹⁹ Vodafone expressed its support for what it described as the move towards greater transparency around the development of regulated wholesale products.
- 7.1047 Vodafone stated¹³⁰⁰ that it is hard to fully understand product development activity as discussed at Industry Forums.¹³⁰¹ Vodafone was of the view that the engagement at the Eircom Industry Product Development Workshops¹³⁰² and ComReg-hosted Industry Forums provides an overview of the product development process and that the details are set out on the open eir website.¹³⁰³ However, Vodafone remained concerned that there is limited transparency around prioritisation and development decisions, including those that appear to have been requested by, or to arise from, the requirements of Eircom's downstream retail business.

¹²⁹³ *Ibid.*

¹²⁹⁴ Eircom Submission, pages 48 and 49, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

¹²⁹⁵ As described in paragraphs 7.611 to 7.612.

¹²⁹⁶ As described in paragraphs 7.990 to 7.991.

¹²⁹⁷ Paragraphs 7.611 to 7.763.

¹²⁹⁸ Vodafone Submission, page 29, paragraph 216.

¹²⁹⁹ As stated by ComReg in paragraph 8.555 of the Consultation.

¹³⁰⁰ Vodafone Submission, page 29, paragraph 215.

¹³⁰¹ ComReg has for some years hosted a series of meetings with the aim of facilitating discussions by operators on the development of wholesale products.

¹³⁰² Vodafone provided a clarification to ComReg, via email 25 September 2017, that the term used by it on page 29, paragraph 215 of its Submission of 'product forum' referred to Eircom's hosted Industry Product Development Workshop.

¹³⁰³ The publicly accessible open eir website can be found at <https://www.openeir.ie/home/> and portal for Access Seekers at <https://www.openeir.ie/rap-customer-portal/>.

7.1048 Vodafone was of the view¹³⁰⁴ that Access Seekers are limited in their ability to innovate to meet their customers' needs and are often restricted to pursuing only those developments that Eircom retail is pursuing. Vodafone added that the inadequacies of the current system regarding product development and prioritisation mean that Eircom's ability to differentiate in favour of its own downstream businesses is further strengthened.

Standardised process before a trial can commence

7.1049 Vodafone¹³⁰⁵ agreed with ComReg's preliminary view on the requirement¹³⁰⁶ to have a standardised process in place and accompanying criteria before a trial can commence. Vodafone set out¹³⁰⁷ its view that trials are a key part of new product development and that it is therefore vital that Access Seekers have the opportunity to participate in trials. Vodafone further noted that to enable this to happen, Access Seekers need sufficient information on proposed trials, in a timely manner, so that they can make an informed decision on whether to participate in the trial. Vodafone suggested that ComReg's proposed criteria¹³⁰⁸ with respect to trials should constitute an obligation because in Vodafone's view,¹³⁰⁹ Eircom has the ability and incentive to use trials to favour its own downstream businesses.

7.1050 Sky strongly endorsed¹³¹⁰ ComReg's preliminary view set out in the Consultation¹³¹¹ that trials should not be of a nature that the product or process being trialled is effectively being launched. Sky referenced Eircom's introduction of its Enhanced Provisioning Process¹³¹² as an example where Sky considered that Eircom claimed to be involved in a trial but was actually processing its entire new line provisioning sales through the new product and did not observe the notification periods for new products that it was subject to.

¹³⁰⁴ Vodafone Submission, page v, paragraphs xxxix and xl.

¹³⁰⁵ Vodafone Submission, page 29, paragraph 220.

¹³⁰⁶ At the time of the Consultation ComReg did not propose an obligation with respect to the process and criteria for the establishment of trials but suggested that, in its view, trials for new products or services should follow a standard process and should meet specific criteria. ComReg stated that it would welcome feedback from Respondents on this.

¹³⁰⁷ Vodafone Submission, page 29, paragraph 219.

¹³⁰⁸ The criteria with respect to trials is described in paragraph 8.570 of the Consultation.

¹³⁰⁹ Vodafone Submission, page 29, paragraph 221.

¹³¹⁰ Sky Submission, page 12, paragraph 51.

¹³¹¹ In paragraph 8.568 of the Consultation, ComReg set out its preliminary view that trials should not be of a nature that the product or process being trialled is effectively being launched. In addition ComReg was of the preliminary view that trialling a fully operational system for a prolonged period may have the effect of bypassing the normal notification process for product changes and could therefore potentially give rise to compliance issues as well as conferring an unfair first mover advantage on Eircom.

¹³¹² In the Eircom document 'Next Generation Access, Bitstream Plus and Virtual Unbundled Access Industry Process Manual', version 9.0, the Enhanced Provisioning Process is described by Eircom as follows: 'In this process open eir will take responsibility to confirm and possibly reschedule provisioning appointments with the end customer'.

Provide notification with respect to proposed trials

- 7.1051 Eircom disagreed¹³¹³ with ComReg's proposed imposition of transparency requirements on product trials in the form of notifications of timelines for Access Seekers. Eircom set out its view that, in doing so, ComReg would disrupt the product development cycle and delay the launch of market-ready products. Eircom stated¹³¹⁴ that all Access Seekers will a) be aware of product developments from the date of the request, b) have provided input and c) track developments, innovations and initiatives such as trials. Eircom noted that three months advanced notice prior to a trial commencing is unacceptable.
- 7.1052 Eircom also considered¹³¹⁵ that ComReg's proposals surrounding the requirement for notifications of trials would mean that the Access Seekers and customers who have participated in the trial could face a seven month break in service due to the proposal for terminating a trial of a new product one month in advance of the existing obligation of six months notification to industry before a new product can be launched.
- 7.1053 Eircom stated¹³¹⁶ that ComReg has not provided any explanation for its proposed requirement with respect to notification of proposed trials, nor has ComReg justified why it is either appropriate or proportionate.
- 7.1054 Vodafone supported¹³¹⁷ the proposed obligation for the notification of trials, as summarised in paragraph 7.994.

Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities

- 7.1055 None of the Respondents expressed views with respect to the requirement as summarised in paragraph 7.996 above.

¹³¹³ Eircom Submission, page 50, in section entitled 'Transparency regarding trials' (discussed in paragraphs 8.567 to 8.576).

¹³¹⁴ *Ibid.*

¹³¹⁵ *Ibid.*

¹³¹⁶ *Ibid.*

¹³¹⁷ Vodafone Submission, page 30, paragraph 222.

Transparency requirement to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement

- 7.1056 Vodafone agreed¹³¹⁸ with ComReg's proposal, referred to in paragraph 7.998¹³¹⁹ above, to ensure that obligations are in place to govern the necessary sharing of confidential information.
- 7.1057 In its submission, Eircom disagreed¹³²⁰ with the proposed requirement as summarised in paragraph 7.998 above. In Eircom's view, this requirement should be consistent with the Commitment Agreement¹³²¹ between Eircom the Department of Communications, Climate Action and Environment ('DCCA'). In Eircom's view, this agreement provides for publication more frequently and subject to anything agreed in any NBP contract. In Eircom's view, it would be disproportionate to have conflicting regimes and ComReg, as an advisor the NBP, will be aware of the relevant obligations.
- 7.1058 In its submission, Eircom disagreed¹³²² with the wording of the requirement as summarised in paragraph 7.998(b) above. In Eircom's view, the word 'it' in this requirement should be deleted and replaced with 'appropriate extracts of such information'. In Eircom's view, it would not be appropriate for it to provide confidential wholesale information about one operator to another operator and that in addition some information regarding Eircom may not be appropriate to publish, for example, if it relates to content or other unregulated services.

Impact of notification periods on timelines for product development

- 7.1059 Eircom argued¹³²³ that the current notification period¹³²⁴ of six months to Access Seekers can mean that a developed product requested by Access Seekers may not be launched until this notice period has been observed.

¹³¹⁸ Vodafone Submission, page 30, paragraph 223.

¹³¹⁹ As noted in paragraph 7.995 above, ComReg considered in the Consultation that Eircom, as the proposed SMP operator, should be required to provide developments, network rollout and wholesale services, insofar as it affects the provision of WLA products, services and facilities (subject to the proposed obligations set out in the Consultation) and to do so with sufficient visibility to ensure that Access Seekers are in a position to prepare business or operational plans. In this respect ComReg specified a proposed obligation to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement.

¹³²⁰ Eircom Submission, page 74, under the section entitled 'WLA: Draft Decision Instrument'.

¹³²¹ The agreement between Eircom and the DCCA to deliver, on a fully commercial basis, high-speed broadband access to 300,000 rural premises by the end of 2018.

¹³²² Eircom Submission, page 74, under the section entitled 'WLA: Draft Decision Instrument'.

¹³²³ Eircom Submission, page 74, in section entitled 'Requirement regarding Timeliness of Product Development', paragraphs 8.354 – 8.374.

¹³²⁴ The current notification periods for non-pricing amendments or changes to the ARO resulting from the offer of a new Next Generation WPNIA product, service or facility in the WPNIA market are set out in Section 9.3 of the Decision Instrument contained in Annex 1 of ComReg Decision D03/13. The current notification periods for any changes to the ARO for Current Generation products, services or facilities in the WPNIA market are set out in Section 10.3 of the Decision Instrument contained in Appendix C of ComReg Decision D05/10.

7.1060 In addition, Eircom argued¹³²⁵ that in the absence of ComReg having an approval role there is no justification for changes in relation to the ARO to be notified to ComReg one month in advance of industry notification. Eircom stated further that ComReg must remove the one month advance notice requirement in the absence of an approval mechanism so as not to unduly delay product development and innovation.

Impact of SLA development on product development

7.1061 Eircom submitted¹³²⁶ that the proposed notification and SLA development requirements will impact on the pace of development of regulated products. ComReg's assessment of Eircom's response regarding SLA development is addressed in the section of this Decision on SLAs.¹³²⁷

ComReg's Assessment of Respondents' Views

7.1062 In paragraphs 7.999 to 7.1061 above, ComReg has summarised the key issues raised by Respondents in relation to the proposed transparency requirements set out by ComReg in the Consultation. ComReg addresses Respondents' views under each of the themes identified in paragraph 7.1000 above, namely:

- (a) maintenance and publication of an ARO, which is to contain a minimum list of items (discussed in paragraphs 7.1063 to 7.1066 below);
- (b) provision of an updated ARO within a specified time period following the final decision notice (discussed in paragraphs 7.1067 to 7.1072 below);
- (c) associated ARO change management process (discussed in paragraphs 7.1073 to 7.1074 below);
- (d) advance notification timeframes for ARO and price changes (discussed in paragraphs 7.1075 to 7.1079 below);
- (e) specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the ARO and associated documents (discussed in paragraphs 7.1080 to 7.1081 below);
- (f) transparency in the billing of WLA wholesale charges (discussed in paragraphs 7.1082 to 7.1084 below);
- (g) publication of KPIs, SLAs and reporting (discussed in paragraphs 7.1085 to 7.1090 below);
- (h) publication of KPIs for CEI (discussed in paragraphs 7.1091 to 7.1095 below);

¹³²⁵ Eircom Submission, page 49, in section entitled 'ARO timelines'.

¹³²⁶ Eircom Submission, page 48, in section entitled 'Proposed Transparency requirement with respect to Product Development', Eircom noted that the proposed notification and SLA development requirements will slow all development. On 7 December 2017 Eircom, in a response to a request for clarification sent to it by ComReg on 16 November 2017, provided clarification that the term 'will slow all development' refers to the impact on the pace of development of regulated products.

¹³²⁷ Refer to paragraphs 7.539 to 7.545 of this Decision.

- (i) publication of geographic detail for planned network rollout (discussed in paragraphs 7.1096 to 7.1101 below);
- (j) provision of information with respect to the Planning and Development of Physical Network Infrastructure (CEI build plan) (discussed in paragraphs 7.1102 to 7.1109 below);
- (k) provision of information with respect to the engineering planning and design rules for CEI (discussed in paragraphs 7.1110 to 7.1117 below);
- (l) publication of information with respect to the development of products, services and facilities (discussed in paragraphs 7.1118 to 7.1157 below);
- (m) standardised process before a trial can commence (discussed in paragraphs 7.1158 to 7.1164 below);
- (n) provision of notification with respect to proposed trials (discussed in paragraphs 7.1165 to 7.1178 below);
- (o) provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities (discussed in paragraphs 7.1179 to 7.1180 below);
- (p) provisions to cater for commercially sensitive or confidential information (discussed in paragraphs 7.1181 to 7.1185 below); and
- (q) impact of notification periods on timeline for product development (discussed in paragraphs 7.1186 to 7.1190).

Maintenance and publication of an ARO, which is to contain a minimum list of items

- 7.1063 As noted in paragraph 7.1001 Eircom considered that the proposed requirements, as summarised in paragraphs 7.942 to 7.946, with respect to the maintenance and publication of an ARO, which is to contain a minimum list of items, are acceptable and align with the FACO, WBA and WPNIA markets.
- 7.1064 As noted in paragraphs 7.1002 and 7.1003, Vodafone also supported the proposed requirements within respect to the maintenance and publication of an ARO, which is to contain a minimum list of items.
- 7.1065 ComReg's assessment of Respondents' views with respect to the inclusion of the Vectoring Protocol in the ARO is set out in paragraphs 7.256 to 7.265.
- 7.1066 Having regard to the analysis set out in the Consultation,¹³²⁸ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as summarised in paragraphs 7.942 to 7.946 above as obligations on Eircom. In addition, having reflected further on the proposed obligation with respect to inclusion of the Vectoring Protocol ComReg considers that this obligation¹³²⁹ would be more appropriately be imposed as transparency obligation rather than an Access obligation.

¹³²⁸ ComReg's preliminary views with respect to the maintenance and publication of an ARO, which is to contain a minimum list of items, are set out in paragraphs 8.462 to 8.468 of the Consultation.

¹³²⁹ As summarised in paragraph 7.42(i).

Transparency requirement to publish a revised ARO within a specified period

- 7.1067 ComReg notes the support of Vodafone, as summarised in paragraph 7.1007 and 7.1008, for the requirements with respect to the provision of an ARO within a specified time period following the final decision.
- 7.1068 ComReg has also considered Vodafone's views, summarised in paragraph 7.1007, that changes to the ARO should be implemented in a timeframe shorter than the six months proposed (see paragraph 7.947).
- 7.1069 ComReg is of the view that six months is a reasonable period of time to allow Eircom to prepare such changes and that a shorter duration is unlikely to have a material effect on the market. ComReg is also guided by the European Commission's 2010 NGA Recommendation¹³³⁰ regarding timeframes for amendments to reference offers with respect to CEI.
- 7.1070 ComReg has considered Vodafone's response, as described in paragraph 7.1009, seeking a shorter timeframe than the three months proposed in the Consultation¹³³¹ for amendments to the ARO with respect to Access to Ingress and Egress points. ComReg considers that three months is a reasonable period of time to allow Eircom to prepare the specific changes required and that a shorter duration is unlikely to have a material effect on the market.
- 7.1071 ComReg notes that since the publication of the Consultation Eircom has removed restrictions limiting the usage of CEI to "fixed broadband services."¹³³² The proposed requirement for Eircom to remove restrictions limiting the usage of CEI to "fixed broadband services" within three (3) months of the effective date of ComReg's final Decision is therefore no longer applicable. For the avoidance of doubt, as set out in the Consultation,¹³³³ ComReg's position is that there should be no unreasonable restrictions on access to Eircom's CEI for the purposes of provision of services in either downstream and/or retail markets.

¹³³⁰ Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (Text with EEA relevance) (2010/572/EU) (the "**NGA Recommendation**") (page 41).

¹³³¹ Paragraph 8.471 of the Consultation describes, *inter alia*, a three month duration for implementation of changes to the ARO for access to additional Ingress and Egress points.

¹³³² On 21 December 2016, ComReg published Information Notice (ComReg reference 16/117) that granted a derogation to Eircom from the required notification periods for changes to the ARO with respect to Eircom's intention to implement and publish an updated ARO for duct and pole access that subsequently removed restrictions on the use of duct and pole for the purposes of providing fixed broadband services only. On 3 January 2017 Eircom launched product changes for duct and pole access and removed restrictions limiting the usage of CEI to "fixed broadband services".

¹³³³ As set out in paragraph 8.213 of the Consultation.

7.1072 Having regard to the analysis set out in the Consultation,¹³³⁴ along with ComReg's consideration of the Respondents' views, ComReg has decided, to impose the requirements as set out in the Consultation and summarised in paragraphs 7.947 to 7.950 above as obligations on Eircom, with the exception of the proposed requirement to publish a revised ARO without restrictions on the usage of CEI for "fixed broadband services".

Transparency requirements governing ARO change management

7.1073 As noted in paragraphs 7.1012 to 7.1013 Vodafone considered that changes to product specifications have a real impact on its use of Eircom WLA services and it is necessary that documentation is in place that allows it to track changes made to the ARO over time. Vodafone therefore supported the proposed requirements for an associated ARO change management process, as summarised in paragraphs 7.951 to 7.952.

7.1074 Having regard to the analysis set out in the Consultation,¹³³⁵ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as set out in the Consultation and as summarised in paragraphs 7.951 to 7.952 as obligations on Eircom.

Advance notification timeframes for ARO and price changes

7.1075 ComReg notes the support of Vodafone, as summarised in paragraph 7.1016, with respect to the proposed requirements for advance notification timeframes for changes to the ARO and prices.

7.1076 As noted in paragraph 7.1015, Eircom disagreed with the proposed requirements for advance notification timeframes for the ARO and price changes, because in its view the notification process should include a ComReg approvals process. ComReg disagrees that the notification process should include a ComReg approvals process. ComReg's role is to, *inter alia*, identify competition problems *ex ante*, impose obligations to minimise the risk of these occurring and pursue compliance and enforcement activities if these obligations are not met. Providing an approval process for Eircom's ARO would not be appropriate as it is incumbent upon Eircom to ensure that it complies with its regulatory obligations.

7.1077 ComReg disagrees with Eircom that the requirement for one (1) month advance notification to ComReg in writing, in the absence of an approval mechanism, should be removed. ComReg notes that the timing of the one (1) month advance notification is not absolute: ComReg reserves the discretion to agree a different timeframe. This is provided for in the text of the obligations set out in the Consultation¹³³⁶ and as summarised in paragraphs 7.959 to 7.963 via the proviso that the advance notification periods may be varied with the agreement of ComReg or at ComReg's discretion.

¹³³⁴ ComReg's preliminary views with respect to the transparency requirements to publish a revised ARO within a specified period of time, are set out in paragraphs 8.469 to 8.473 of the Consultation.

¹³³⁵ ComReg's preliminary views with respect to the maintenance and publication of an ARO, which is to contain a minimum list of items, are set out in paragraphs 8.462 to 8.468 of the Consultation.

¹³³⁶ Paragraphs 8.482 to 8.483 of the Consultation.

- 7.1078 As noted in paragraph 7.1017 above, in addition to providing support for the proposed requirements, Vodafone urged ComReg to consider the risk of information passing between Eircom's upstream and downstream businesses as part of its review of Eircom's governance, and to seek the implementation of a model of functional separation that makes such an eventuality less likely to occur and more likely to be detected when it does occur. ComReg's assessment of Respondents' views with respect to RGM is described in paragraphs 6.42 to 6.64.
- 7.1079 Having regard to the analysis set out in the Consultation,¹³³⁷ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as set out in the Consultation and as summarised in paragraphs 7.953 to 7.964, as obligations on Eircom.

Specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the ARO and associated documents

- 7.1080 As described in paragraph 7.1018 above Eircom disagreed with the proposed wording of the proposed requirement summarised in paragraph 7.966 above. Eircom suggested a drafting change to make specific reference to consultation within the Decision Instrument.
- 7.1081 ComReg's position is that the amendment proposed by Eircom is neither appropriate nor necessary, but notes that it will comply with any consultation obligations arising in respect of such directions.

Transparency requirements on wholesale billing

- 7.1082 ComReg noted in paragraph 7.1019 above that Eircom stated that the proposed requirement that any invoices and the associated contracts should relate only to products, services or facilities within the WLA market would present major billing challenges for Eircom. ComReg understands, based on Eircom's Submission and subsequent Eircom clarification¹³³⁸ that the implementation of the proposed invoicing and associated contract requirement may currently be difficult for Eircom because some infrastructure products are used to deliver services related to a number of regulated markets. Eircom noted, for example, that WEIL rental bills include Bitstream Plus Uicast ('**BPU**')¹³³⁹ and Bitstream Ethernet Connection Service ('**BECS**') via WEIL.¹³⁴⁰ In other words, such products and product components, which are relevant to the WCA Market, are included in WEIL rental bills even though the WEIL product may also be used with products that exist in other markets.

¹³³⁷ ComReg's preliminary views with respect to the transparency requirements for advance notification for ARO and price changes are set out in paragraphs 8.479 to 8.486 of the Consultation.

¹³³⁸ Minutes of meeting between ComReg and Eircom 14 June 2017, shared with Eircom 14 July 2017.

¹³³⁹ https://www.openeir.ie/Products/Broadband/Next_Generation_Access/ NGA Product Description Bitstream Plus V3.0.

¹³⁴⁰ https://www.openeir.ie/Products/Broadband/Bitstream_Connection/ BECS via WEIL Product Description V2.0.

- 7.1083 Having considered Eircom's views, as summarised in paragraph 7.1019 above, and having reflected further on the proposed obligations, ComReg considers that the resulting burden on Eircom arising from an obligation that any invoices and the associated contracts should relate only to products, services or facilities within WLA Market would outweigh the benefits to competition. ComReg has therefore decided not to impose such an obligation.
- 7.1084 In ComReg's view, the issues raised in Vodafone's Submission,¹³⁴¹ could potentially be resolved by existing transparency remedies¹³⁴² and by requests from Access Seekers being considered by Eircom in the context of its obligation to meet reasonable requests for Access.

Transparency requirements regarding KPIs, SLAs and reporting

- 7.1085 As described in paragraph 7.1024 above, Eircom stated that it had no objection to the proposed requirements regarding KPIs and SLA reporting. Other Respondents who provided views were also supportive of the proposed KPI requirements.
- 7.1086 ComReg notes the support of Vodafone, as summarised in paragraph 7.1025, for the proposed requirements. Having also considered Vodafone's response in paragraph 7.1027 above, ComReg is of the view that a re-specification of existing requirements for the publication of KPIs would be more appropriately addressed via a separate consultation, if required.
- 7.1087 ComReg has considered the point raised by Vodafone with respect to it being essential that all parties have full confidence in the metrics published by Eircom. ComReg notes the suggestion¹³⁴³ for an independent expert third party review of such metrics. As part of its statutory functions, ComReg will continue to monitor compliance by Eircom with its obligations and ComReg may consider an independent audit of metrics published by Eircom should such an audit be required.

¹³⁴¹ As described in paragraphs 7.1021 to 7.1023 above.

¹³⁴² Reference the remedies of transparency as set out in Appendix C of ComReg Document No 10/39: 'Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4) – Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision', dated 20 May 2010 and in Annex 1 of ComReg Document No 13/11: 'Next Generation Access ('NGA'): Remedies for Next Generation Access Markets - Response to Consultation and Final Decision' dated 31 January 2013.

¹³⁴³ Paragraph 7.1028 above.

- 7.1088 As noted in paragraph 7.1026, BT sought a remedy that a report on the progress of developments relating to Access requests would be provided. In BT's view this would ensure that such development is performed in a fair and transparent manner and allow for discrimination in the pace of development to more easily be identified and addressed through compliance. ComReg has considered BT's suggestion and is of the view that the transparency obligations, with respect to Eircom providing the milestones and associated target dates for each development¹³⁴⁴ and a method for tracking the progress of developments against those dates,¹³⁴⁵ are sufficient measures to address potential or actual competition problems in this regard.
- 7.1089 ComReg will continue to monitor the market. If appropriate, ComReg may propose additional remedies or further specify existing remedies when justified by its objectives as and when those remedies are necessary and proportionate.
- 7.1090 Having regard to the analysis set out in the Consultation,¹³⁴⁶ along with ComReg's consideration of the Respondents' views, ComReg has decided to maintain its position as set out in the Consultation and summarised in paragraphs 7.969 to 7.972.

Transparency requirement for KPIs for CEI

- 7.1091 ComReg notes Vodafone's support for the proposed requirements with respect to publication of KPIs for CEI, as summarised in paragraph 7.1030 above.
- 7.1092 As noted in paragraph 7.1029, Eircom set out its view that it is not appropriate to consult on KPIs with respect to CEI access until it has been established that there is commercial demand for the products and that all parties have had some experience of their operation. In addition, Eircom stated that until such time as the relevant products are tested it is not possible to produce robust KPIs.
- 7.1093 ComReg has considered Eircom's view as described in paragraph 7.1029 on the appropriate timing for consultation on KPIs with respect to CEI access. ComReg disagrees that either evidence of commercial demand for CEI products or operational experience of the products or testing are prerequisites for a consultation on specific CEI KPIs.
- 7.1094 Delaying a consultation on specific KPIs for CEI, until what Eircom consider to be prerequisites¹³⁴⁷ are met, would be counterproductive in ComReg's view. There are benefits for Access Seekers to have a degree of oversight of CEI access through KPIs at the early stages of uptake, in particular, in order to allow the comparative performance of CEI access and Eircom self-supply of CEI.

¹³⁴⁴ As summarised in paragraph 7.990(d).

¹³⁴⁵ As summarised in paragraph 7.990(e).

¹³⁴⁶ ComReg's preliminary views with respect to the transparency requirements regarding KPIs, SLAs and reporting are set out in paragraphs 8.490 to 8.496 of the Consultation.

¹³⁴⁷ As summarised in paragraph 7.1029.

7.1095 Having regard to the analysis set out in the Consultation,¹³⁴⁸ along with its consideration of the Respondents' views, ComReg retains its view that it is necessary to develop a set of KPIs with respect to CEI access and it will consider consulting separately on specific CEI KPIs, at the appropriate time.

Transparency requirement with respect to network rollout and network development

- 7.1096 ComReg notes the support of Vodafone as described in paragraphs 7.1031 to 7.1032 above with respect to proposed transparency requirements for network rollout and network development for FTTH.
- 7.1097 ComReg also notes the broad support provided by Sky as summarised in paragraph 7.1033 above with respect to proposed transparency requirements for network rollout and network development for FTTH.
- 7.1098 ComReg has considered Sky's request¹³⁴⁹ for an obligation which requires that Eircom's APQ file¹³⁵⁰ would delineate the information for premises that can receive what Sky has described as a standard delivery FTTH service at a standard price and those premises that cannot.
- 7.1099 Through its facilitation of Industry Forums and attendance at Eircom Industry Product Development Workshops, ComReg is aware that Eircom has recently delivered a Regulated Access Product ('**RAP**')¹³⁵¹ which will provide new status information to Access Seekers indicating the estimated degree of difficulty in order to serve premises with FTTH. ComReg considers that Sky's request for delineation of information in the APQ file may be achieved via this RAP development and therefore ComReg does not consider it necessary to impose this additional obligation upon Eircom at this time. ComReg notes that requests for information by Access Seekers with respect to network rollout shall be considered by Eircom in the context of whether such requests are reasonable.
- 7.1100 As described in paragraph 7.1037 above, Sky suggested that the RFO date should be provided 50 calendar days in advance of RFO, rather than the 28 calendar days as proposed by ComReg. ComReg has engaged with Eircom to further understand Eircom's current process and timeframes with respect to the creation of the APQ file. From this engagement, ComReg is of the view that it would not be proportionate, at this time, to impose an obligation on Eircom to provide the APQ file in a timeframe greater than 28 calendar days. For the avoidance of doubt, Eircom should provide information with respect to planned network rollout information as soon as it is possible to do so and also having regard to its non-discrimination obligations.

¹³⁴⁸ ComReg's preliminary views with respect to the transparency requirement for KPIs for CEI are set out in paragraphs 8.506 to 8.508 of the Consultation.

¹³⁴⁹ As summarised in paragraphs 7.1033 to 7.1036 above.





¹³⁵⁰ The Eircom document 'Next Generation Access - Bitstream Plus and Virtual Unbundled Access Industry Process Manual' V9.0, describes the Advanced PreQual ('**APQ**') file as containing the addresses of all lines that are expected to pass on pre-qualification for an operator and is provided 28 calendar days in advance of the first date for orders.

¹³⁵¹ RAP ID 371 'FTTH Prequal Additional Details'.

7.1101 Having regard to the analysis set out in the Consultation,¹³⁵² along with ComReg's consideration of the Respondents' views, ComReg has decided to maintain its positions as set out in the Consultation and as summarised in paragraphs 7.975 to 7.979 as obligations on Eircom. The obligation summarised at paragraph (b) to "*provide any other information as may reasonably be required by ComReg for the purposes of ensuring transparency*", while noted in the Consultation, was intended as a reflection of ComReg's powers to direct the provision of information in appropriate cases rather than a standalone obligation and was, accordingly, not included in the Draft Decision Instrument consulted upon. ComReg does not intend to impose such an obligation at this time but will monitor the position and, if appropriate, may issue directions or further specify Eircom's transparency obligations in this regard.

Transparency requirement with respect to physical network planning information

7.1102 ComReg notes Vodafone's support, as described in paragraph 7.1039, with respect to the proposed requirements for providing information for the planning and development of physical network infrastructure (CEI build plans).

7.1103 In its Submission, Eircom stated¹³⁵³ that the requirement¹³⁵⁴ with respect to information on CEI rollout plans is already met. Eircom did not state in its Submission how this requirement was met. Eircom did, however, subsequently provide clarification¹³⁵⁵ [


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7.1104 ComReg disagrees with Eircom's view as described in paragraph 7.1103 above, as the requirements proposed in the Consultation¹³⁵⁶ are specific to CEI and are not covered by the NGA rollout information currently made available by Eircom.¹³⁵⁷

¹³⁵² ComReg's preliminary views with respect to the transparency requirements regarding publication of geographic detail for planned network rollout 8.509 to 8.537 of the Consultation.

¹³⁵³ Eircom Submission, page 43, in section entitled 'Proposed Transparency requirement with respect to Physical Network Planning Information'.

¹³⁵⁴ The requirements proposed with respect to Transparency with Respect to CEI Engineering Planning and Design Rules are described in paragraphs 8.538 to 8.547 of the Consultation. Eircom made specific reference to the text present in 10.24 of Appendix 14 of the Consultation that Eircom '*shall, in particular, make available on its publically available wholesale website in advance of implementation, information regarding its CEI roll out plans, and information relating to wholesale products, services, and facilities such as the expected time for service availability.*'

¹³⁵⁵ Minutes of ComReg meeting with Eircom 14 June 2017, shared with Eircom 14 July 2017.

¹³⁵⁶ Paragraphs 8.538 to 8.547 of the Consultation.

¹³⁵⁷ Including, *inter alia*, the Eircom Order of Magnitude, NGA Deployment, Advanced PreQual files.

- 7.1105 As set out in the Consultation,¹³⁵⁸ Eircom uses information systems to manage its inventory of physical network inventory and these systems can provide the information described in paragraphs 7.982 to 7.984 above and the provision of this information to other entities is currently possible.
- 7.1106 In its Submission, Eircom confirmed that its Smallworld Geographical Information System ('GIS')¹³⁵⁹ stores details of duct routes, chamber locations and pole routes.¹³⁶⁰
- 7.1107 Subsequent to its Submission, Eircom also clarified¹³⁶¹ that the capability to record CEI inventory was introduced in [§< ██████████] via its GIS. CEI inventory is now recorded in GIS when a fibre route is initially planned, at what is referred to as the 'proposed state'¹³⁶² and subsequently updated when the CEI inventory reaches what is referred to as 'final post state',¹³⁶³ which is when the as built information for the fibre route is available.
- 7.1108 Eircom is therefore in a position to provide information with respect to proposed CEI routes to Access Seekers as it is recorded, in GIS and other sources.¹³⁶⁴ ComReg also notes the information that is currently available in GIS as set out in Table 21. In ComReg's view it will therefore not be overly burdensome on Eircom to provide the information as summarised in paragraphs 7.982 to 7.984 as it has the systems with the capability to provide this information.
- 7.1109 Having regard to the analysis set out in the Consultation,¹³⁶⁵ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as set out in the Consultation and summarised in paragraphs 7.982 to 7.984 as obligations on Eircom.

Transparency with Respect to CEI Engineering Planning and Design Rules

- 7.1110 ComReg notes the support of Vodafone, as described in paragraph 7.1041, for the provision of information with respect to the Engineering Planning and Design Rules for CEI.

¹³⁵⁸ Paragraph 8.545 of the Consultation.

¹³⁵⁹ A commercial product supplied by GEC.

¹³⁶⁰ Eircom Submission, page 32, in section entitled 'The Cartesian estimates of cost to implement Eol are gross under-estimations'.









¹³⁶¹ Minutes of meeting between ComReg and Eircom 14 June 2017, shared with Eircom 14 July 2017.

¹³⁶² Also referred to as 'To Be Built', i.e. planned CEI build not yet complete.

¹³⁶³ Also referred to as 'As Built', i.e. after the CEI has been built.

¹³⁶⁴ [§< ██████████
██████████
██████████]].

¹³⁶⁵ ComReg's preliminary views with respect to the transparency requirements regarding Planning and Development of Physical Network Infrastructure (CEI build plan) are set out in paragraphs 8.538 to 8.547 of the Consultation.

- 7.1111 As noted in paragraph 7.1040, Eircom stated that it has Engineering Planning and Design Rules for CEI but that they have been designed for use by Eircom or its sub-contractors. Eircom argued that use by third parties would necessitate a 'review' of such rules by Eircom which would take time and involve considerable cost. In addition, Eircom argued that the justification for incurring such cost has not been set out by ComReg in the Consultation.
- 7.1112 In the Consultation,¹³⁶⁶ ComReg set out its preliminary view that it is important that Access Seekers are aware of, and kept informed of, the Engineering Planning and Design Rules that are currently used by Eircom when making decisions with respect to the installation of CEI. ComReg also set out its preliminary view¹³⁶⁷ that Access Seekers having knowledge of engineering rules will enable them to utilise the CEI access product with a greater degree of certainty.
- 7.1113 Subsequent to its Submission and as a result of discussion with ComReg,¹³⁶⁸ Eircom provided clarification [§< 


]. Eircom also clarified¹³⁶⁹ [§< 


].¹³⁷⁰
- 7.1114 For the avoidance of doubt, ComReg did not propose in the Consultation and does not expect that Eircom conduct a detailed review of, or make amendments to, the existing Engineering Planning and Design Rules before it shares such rules with Access Seekers. To align with ComReg's preliminary view set out in the Consultation that Access Seekers must be made aware of, and kept informed of, the Engineering Planning and Design Rules that are currently used by Eircom, the latest available versions of such Engineering Planning and Design Rules shall be shared with Access Seekers as they become available within Eircom.

¹³⁶⁶ Paragraph 8.549 of the Consultation.

¹³⁶⁷ Paragraph 8.550 of the Consultation.

¹³⁶⁸ Minutes of ComReg meeting with Eircom 14 June 2017, shared with Eircom 14 July 2017.

¹³⁶⁹ *Ibid.*

¹³⁷⁰ Eircom's 7 April 2017 response to an 8 March 2017 SIR issued by ComReg to Eircom.

- 7.1115 Therefore, in ComReg's opinion, based on information obtained from Eircom via an SIR¹³⁷¹ and as further clarified in paragraph 7.1113 above, there would be no significant costs for Eircom to share Engineering Planning and Design Rules for CEI with Access Seekers. This aligns with ComReg's preliminary view as set out in the Consultation,¹³⁷² that given that Eircom already has and is using such rules internally, the proposed obligation is proportionate in that the cost of providing such information to Access Seekers is outweighed by the benefits to competition and ultimately to End Users.
- 7.1116 ComReg therefore disagrees with the view that Eircom initially set out in its Submission,¹³⁷³ that use by third parties would necessitate a review of such rules which would take time and involve considerable cost and that the justification for the incurring of such cost has not been set out by ComReg in the Consultation.
- 7.1117 Having regard to the analysis set out in the Consultation,¹³⁷⁴ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as set out in the Consultation and as summarised in paragraph 7.985 as obligations on Eircom.

Transparency requirement with respect to Product Development

- 7.1118 ComReg notes the support of Vodafone, as described in paragraph 7.1046, for the publication of information with respect to the development of products services and facilities.
- 7.1119 ComReg also notes Vodafone's concerns summarised in paragraphs 7.1047 to 7.1048 above relating to the lack of transparency with regard to product development and the associated prioritisation by Eircom, including how this has the potential to weaken competition. ComReg agrees with Vodafone that greater transparency for prioritisation is required to safeguard competition and considers that the obligations it now is imposing will support this aim.
- 7.1120 Eircom stated¹³⁷⁵ that the proposed transparency criteria as described in paragraph 7.990 above are already in place. ComReg agrees that information equivalent to that described in paragraph 7.990(a) and 7.990(b) is, at the time of adoption of this Decision, provided by Eircom.¹³⁷⁶ However, ComReg does not agree that the requirements described in paragraph 7.990(c) to 7.990(g) are implemented (as argued by Eircom), in particular, those relating to Eircom providing the following to Access Seekers within 10 working days:

¹³⁷¹ Eircom's 7 April 2017 response to an 8 March 2017 SIR issued by ComReg to Eircom.

¹³⁷² Paragraph 8.551 of the Consultation.

¹³⁷³ As noted in paragraph 7.1040.

¹³⁷⁴ ComReg's preliminary views with respect to the transparency requirements regarding Engineering Planning and Design Rules for CEI are set out in paragraphs 8.548 to 8.552 of the Consultation.

¹³⁷⁵ As noted in paragraph 7.1043.

¹³⁷⁶ While ComReg agrees that Eircom currently provides Access Seekers with a unique identifier for each access request and that documentation relevant to requests is provided from the portal that it provides to Access Seekers, ComReg does not agree that Eircom necessarily provides these within 10 working days, as proposed in paragraph 7.990(a) and 7.990(b).

- (a) The last date by which proposed amendments from Access Seekers relating to a development project can be accepted by Eircom as being included in that development;
- (b) The milestones and associated target dates to develop and launch each proposed product, process or service;
- (c) A method for tracking the progress of developments against those dates;
- (d) The identification and communication to Access Seekers of the proposed date by which Access Seekers can notify Eircom of the degree of priority to be given to each particular development;
- (e) The priority given by Eircom to the development of each request relative to other requests pertaining to the Relevant Market, including the prioritisation process and the criteria used by it in this regard.

7.1121 In addition to the review of the Respondents' Submissions, ComReg has also reviewed the Eircom documentation¹³⁷⁷ previously presented to industry or readily available to Access Seekers with respect to the criteria as set out in the Consultation¹³⁷⁸ and summarised in paragraph 7.990(c) to 7.990(g). In paragraphs 7.1122 to 7.1154 ComReg sets out below its consideration of these criteria.

Requirement in paragraph 7.990 (a) - Unique identifier for each access request

- 7.1122 As described in paragraph 7.1120 above ComReg agrees¹³⁷⁹ that information equivalent to that described in paragraph 7.990(a) is, at the time of adoption of this Decision, provided by Eircom.
- 7.1123 Access Seekers need to be able to plan for the introduction of new products, services or facilities and therefore need information, with a reasonable degree of certainty, regarding the characteristics, timing and the availability of developed products, services or facilities.
- 7.1124 ComReg is of the view that it is reasonable that the information relevant to the request¹³⁸⁰ is provided to Access Seekers at the same time that the Access Seeker making the request is informed whether or not the request falls within the scope of Eircom's obligations.

¹³⁷⁷ The Eircom documents reviewed by ComReg in this regard were the following Eircom documents: a) Product Change Request Log ('PCRL'), b) Product Roadmap December 2016, c) LL/NGN Ethernet Product Roadmap February 2017, d) NGA Requirements Summary January 2017, e) Consolidated CGA Roadmap March 2017, f) February 2016 Industry Product Development Workshop, g) SIEG May 2016 (SIEG: Senior Industry Engagement Group Meeting), h) Roadmap Workshop January 2014, i) Industry Engagement Seminar August 2012 and j) Product Development and Software Development lifecycle.

¹³⁷⁸ As set out in paragraph 8.565 of the Consultation.

¹³⁷⁹ While ComReg agrees that Eircom currently provide Access Seekers with a unique identifier for each access request and that documentation relevant to requests is provided from the portal that it provides to Access Seekers, Eircom does not necessarily provide these within 10 working days, as proposed in the Consultation and as summarised in paragraph 7.990(a) and 7.990(b).

¹³⁸⁰ As summarised in paragraph 7.990.

- 7.1125 To provide for efficient and effective planning and to ensure that Access Seekers continue to be provided with a unique identifier for each access request, ComReg therefore intends to impose the requirement as summarised in paragraph 7.990(a) as an obligation on Eircom. The amendment as described in paragraph 7.1126 below shall however apply.
- 7.1126 As described in paragraph 7.664, ComReg has considered the elapsed time for the milestone for Eircom to inform the Access Seeker whether or not the request falls within the scope of Eircom's obligations and has adjusted this timescale from 10 working days to 15 working days. To align with this amendment and having regard to the analysis set out in the Consultation,¹³⁸¹ along with ComReg's consideration of the Respondents' views, it is ComReg's position that the obligations to provide a unique identifier for each Access request, as summarised in paragraph 7.990(a) shall be met by Eircom within 15 working days rather than 10 working days as proposed in the Consultation.

Requirement in paragraph 7.990 (b) - A description of each access request including a copy of or links to all documents relevant to each request

- 7.1127 As described in paragraph 7.1120 above ComReg agrees¹³⁸² that the information described in paragraph 7.990(b) is, at the time of adoption of this Decision, provided by Eircom.
- 7.1128 To align with the approach described in paragraph 7.1126, the requirements as set out in paragraph 7.990(b) shall be met by Eircom within 15 working days rather than the originally proposed 10 working days.
- 7.1129 Having regard to the analysis set out in the Consultation,¹³⁸³ along with ComReg's consideration of the Respondents' views, ComReg's position is that to provide efficient and effective planning and to ensure that Access Seekers continue to be provided with relevant documentation for each Access request the requirement summarised in paragraph 7.990(b), and as amended in paragraph 7.1128 above, shall be imposed as an obligation on Eircom.

Requirement in paragraph 7.990 (c) - Last date by which proposed amendments from Access Seekers relating to a development can be accepted by Eircom as being included in that development

- 7.1130 Having considered Respondents' views and from ComReg's analysis of the Eircom RAP Product Development Process, ComReg has decided that the proposed requirement, for Eircom within ten (10) working days to provide Access Seekers with the date by which Access Seekers can propose amendments to the development of the request,¹³⁸⁴ will not be imposed.

¹³⁸¹ The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

¹³⁸² While ComReg agrees that Eircom currently provide Access Seekers with a unique identifier for each access request and that documentation relevant to requests is provided on the portal that it provides to Access Seekers, Eircom does not necessarily provide these within 10 working days, as proposed in paragraph 7.990(a) and 7.990(b).

¹³⁸³ The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

¹³⁸⁴ As summarised in paragraph 7.990.

- 7.1131 ComReg noted in the Consultation that Eircom has a particular responsibility with regard to providing support to Access Seekers who require certain technical expertise and support in order to refine their requests for access and prepare the specification; in most cases, this can only be provided by Eircom (given its level of knowledge and expertise regarding its own network and systems).¹³⁸⁵ ComReg also considered that such support must be provided by Eircom¹³⁸⁶ in a proactive, fair, reasonable, timely and non-discriminatory manner to an Access Seeker who wishes to submit, or has submitted, an Access Request. This also allows clarification of the Access Request and facilitates agreement between the Access Seeker and Eircom on an accurate description of the Access Request.
- 7.1132 As summarised in paragraph 7.991(c) ComReg proposed that not later than twenty five (25) working days, unless otherwise agreed with ComReg, after receipt of the Access request, Eircom shall agree with the Access Seeker an accurate description of the requirement(s) and shall publish a description of the requested product or service on its publicly available website.
- 7.1133 Having considered the matter further, ComReg considers that it is proportionate that the time by which Eircom shall meet this requirement shall be extended by fifteen (15) working days. This additional time is to allow Eircom to document and publish the outcome of the conditions of Access requirement for Eircom to within thirty (30) working days confirm whether or not the Access Seeker has provided it with sufficient information to process the request, including the Access Seeker's view on the priority of the request relative to other requests already submitted by the Access Seeker pertaining to the Relevant Market.¹³⁸⁷ The requirement as summarised in paragraph 7.991(c) shall therefore be extended to forty (40) working days.
- 7.1134 ComReg also considers that it is proportionate that the wording of the requirement as summarised in paragraph 7.991(c) be amended to remove the explicit reference to Eircom agreeing with the Access Seeker an accurate description of the requirement. ComReg considers that during the thirty (30) working days period for Eircom to confirm whether or not the Access Seeker has provided it with sufficient information to process the request,¹³⁸⁸ Eircom will have obtained sufficient information and have engaged with the Access Seeker in such a manner that will allow it to produce an accurate description of the requirement which will be agreeable to the Access Seeker. The wording of this requirement shall therefore be amended to state that Eircom shall publish an accurate description of the requested product, service or facility on its publicly available wholesale website within forty (40) working days.

¹³⁸⁵ As set out in paragraphs 8.358 of the Consultation.

¹³⁸⁶ As set out in paragraphs 8.359 of the Consultation.

¹³⁸⁷ As summarised in paragraph 7.755.

¹³⁸⁸ Including the Access Seeker's view on the priority of the request relative to other requests already submitted by the Access Seeker pertaining to the Relevant Market.

7.1135 In ComReg's opinion imposing an obligation on Eircom to publish an accurate description of the requested product or service on its publicly available wholesale website within forty (40) working days adequately meets the objective of ensuring that the Access Seeker and Eircom have an accurate understanding of the requirement and that this is achieved in a timely manner. While ComReg considers that it may be good practice that Eircom inform Access Seekers if there is a date, within the 40 working day period, by which an Access Seeker can refine its request, ComReg considers that it is not necessary to impose this requirement as an obligation on Eircom and that the 40 working day timeline adequately meets the objective of ensuring that Eircom and Access Seekers having an accurate description of the Access Seeker's requirements.

Requirement in paragraph 7.990 (d) - Milestones and associated target dates to develop and launch each proposed product, process or service

- 7.1136 Based on its review, ComReg has concluded that the documents, at the time of adoption of this Decision, that include dates related to the development and launch of each proposed product, service or facility are the Eircom Product Change Request Log ('PCRL')¹³⁸⁹ and Eircom's Product Roadmaps.¹³⁹⁰
- 7.1137 ComReg notes that, at the time of adoption of this Decision, the only indication of a date in the PCRL or Eircom Product Roadmaps that would indicate that the request may or may not progress through the Product Development Process is the field in the PCRL for 'Next Status Decision'. There is, however, no description provided as to what decision is to be made on the 'Next Status Decision Date' and what are the further milestone dates relevant to the request.
- 7.1138 ComReg considers that dates should be initially set by Eircom so as to be reasonably achievable. For the avoidance of doubt target dates are not actual committed dates but must be provided by Eircom with a sufficient degree of accuracy so that Access Seekers can reasonably rely upon them.
- 7.1139 To align with the approach described in paragraph 7.1126, the requirements as set out in paragraph 7.990(d) shall be met by Eircom within 15 working days rather than the originally proposed 10 working days.
- 7.1140 Having regard to the analysis set out in the Consultation,¹³⁹¹ along with ComReg's consideration of the Respondents' views, ComReg's position is that to provide for efficient and effective planning the requirement summarised in paragraph 7.990(d) and as amended in paragraph 7.1139 shall be imposed as an obligation on Eircom.

¹³⁸⁹ The PCRL is made available by Eircom to Access Seekers via the Eircom portal provided at the following location: <https://www.openeir.ie/rap-customer-portal/>.

¹³⁹⁰ Eircom makes a number of Product Roadmaps available to Access Seekers via the Eircom portal provided at the following location: <https://www.openeir.ie/rap-customer-portal/>.

¹³⁹¹ The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

Requirement in paragraph 7.990 (e) - Method for tracking the progress of developments

- 7.1141 Based on its review, ComReg has concluded that a suitable method of tracking progress against milestones and associated target dates is not, at the time of adoption of this Decision, provided by Eircom. The PCRL, for example, does not provide Access Seekers with a forward-looking view of milestones and associated target dates. This does not in ComReg's view provide Access Seekers with an efficient and effective means of tracking the progress of developments.
- 7.1142 ComReg is also aware that target dates may change during the lifecycle of development of a product, service or facility. In order to allow Access Seekers to track developments Eircom shall therefore inform Access Seekers of any changes to target dates at the earliest point in time after the need for each such change is identified by Eircom.
- 7.1143 Having regard to the analysis set out in the Consultation,¹³⁹² along with ComReg's consideration of the Respondents' views, ComReg's position is that to provide for efficient and effective planning the requirement for tracking the progress of developments as summarised in paragraph 7.990(e) above shall be imposed as an obligation on Eircom.

Requirement in paragraph 7.990 (f) - Proposed date for notification of the degree of priority to be given to each particular development

- 7.1144 ComReg is aware that Eircom has, subsequent to its Submission,¹³⁹³ communicated details relating to its Prioritisation Model¹³⁹⁴ to Access Seekers. ComReg understands that the criteria currently applied via the Eircom Prioritisation Model do not include consideration of the Access Seeker's view of the degree of the priority to be given to a request.
- 7.1145 ComReg also notes that the review of Eircom's RGM has raised concerns with respect to the transparency of Eircom's prioritisation process.¹³⁹⁵

¹³⁹² The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

¹³⁹³ Details of Eircom's Prioritisation Model were present to Access Seekers at Eircom's Industry Product Development Workshop 14 June 2017.

¹³⁹⁴ A description of the Eircom Prioritisation Model can be found in slides 44 to 53 of the presentation 'Industry Product Development Workshops, open eir RAP_17, 14 June 2017', presented to industry 14 June 2017.

¹³⁹⁵ KPMG's RGM report notes that Eircom needs to enhance its RGM, *inter alia*, with respect to providing greater transparency on wholesale investment and the product development process (page 24 of the KPMG document 'Commission for Communications Regulation, Review of eir's Regulatory Governance Model, Final Report, Redacted – 7 July 2017'). Cartesian's RGM Report provides a key recommendation that Eircom increase visibility of the RAP prioritisation process (page 11 of the Cartesian document 'Operational Assessment of eir's Regulatory Governance Model, Redacted for Publication, 7 July 2017).

- 7.1146 Based on its review of the material referenced by Eircom in its Submission¹³⁹⁶ as well as other Eircom documentation¹³⁹⁷ readily available to Access Seekers at the time of receiving Eircom's Submission, ComReg has found no evidence that Access Seekers are informed of the proposed date by which Access Seekers can notify Eircom of the degree of priority to be given to each particular product development.
- 7.1147 To align with the approach described in paragraph 7.1126, the requirements as set out in paragraph 7.990(f) shall be met by Eircom within 15 working days rather than the originally proposed 10 working days.
- 7.1148 Having regard to the analysis set out in the Consultation,¹³⁹⁸ along with ComReg's consideration of the Respondents' views, ComReg's position is that to provide for efficient and effective planning the requirement summarised in paragraph 7.990(f), and as amended in paragraph 7.1147 above, shall be imposed as an obligation on Eircom.

Requirement in paragraph 7.990 (g) - The priority given by Eircom to the development of each request relative to other requests pertaining to the Relevant Market, including the prioritisation process and the criteria used in this regard

- 7.1149 Based on ComReg's review of the material referenced by Eircom in its Submission¹³⁹⁹ as well as other Eircom documentation¹⁴⁰⁰ readily available to Access Seekers at the time of receiving Eircom's Submission, ComReg found no evidence of Access Seekers being informed of the priority of each product development request relative to other requests in the WLA Market or of the prioritisation process and criteria used by Eircom for allocating a priority to a request.

¹³⁹⁶ The Eircom documents reviewed by ComReg in this regard were as follows: a) February 2016 Industry Product Development Workshop, b) SIEG May 2016, c) Roadmap Workshop January 2014, d) Industry Engagement Seminar August 2012 and e) Product Development and Software Development lifecycle.

¹³⁹⁷ The Eircom documents reviewed by ComReg in this regard were as follows: a) Product Change Request Log ('PCRL'), b) Product Roadmap December 2016, c) LL/NGN Ethernet Product Roadmap February 2017, d) NGA Requirements Summary January 2017 and e) Consolidated CGA Roadmap March 2017.

¹³⁹⁸ The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

¹³⁹⁹ The Eircom documents reviewed by ComReg in this regard were as follows: a) February 2016 Industry Product Development Workshop, b) SIEG May 2016, c) Roadmap Workshop January 2014, d) Industry Engagement Seminar August 2012 and e) Product Development and Software Development lifecycle.

¹⁴⁰⁰ The Eircom documents reviewed by ComReg in this regard were as follows: a) Product Change Request Log ('PCRL'), b) Product Roadmap December 2016, c) LL/NGN Ethernet Product Roadmap February 2017, d) NGA Requirements Summary January 2017 and e) Consolidated CGA Roadmap March 2017.

- 7.1150 Having considered the matter further, ComReg considers that Eircom should have an appropriate mechanism that manages and allows requests for changes to the prioritisation of Access requests after the initial priority has been set. However, it is important that there is an appropriate degree of transparency regarding prioritisation, changes to it and the reasons for such changes. Should changes in prioritisation be required, Eircom should include objective justification for the changes made in its Product Development Roadmap. As well as including this justification in its Product Development Roadmap, ComReg's position is that it is necessary for Eircom also to inform ComReg of the initial priority that has been assigned by Eircom for each Access request as well as objective justification if this priority should change. In ComReg's view, this obligation is proportionate because Eircom will be making the same information available to ComReg and to Access Seekers. Therefore, the incremental burden on Eircom is low and is less burdensome to Eircom than ComReg exercising its information gathering powers.
- 7.1151 ComReg's position is that it is also necessary that Access Seekers are made aware of the initial priority assigned to an Access request or if a change of prioritisation has occurred to a request and that the transparency requirement as summarised in paragraph 7.991(e) above is amended accordingly so that Eircom advises all Access Seekers of the initial priority assigned by Eircom to an Access request and advises all Access Seekers of a reprioritisation of such a request. In ComReg's view, this obligation is proportionate, as Eircom will updating its Product Development Roadmap with such information.
- 7.1152 As described in paragraph 7.758, ComReg has decided that Eircom, within 85 working days from receipt of a request, shall confirm to Access Seekers whether a request is considered reasonable. ComReg considers that Eircom, having performed an analysis of the feasibility of providing a request and having applied appropriate governance to its decision in confirming that a request is considered reasonable, is also in a position to assign a priority to such a request at this 85 working day milestone. ComReg is, therefore, amending the requirement summarised in paragraph 7.990(g) so that that Eircom shall, within 85 working days from receipt of a request, update its Product Development Roadmap with the priority being given to such a request.
- 7.1153 ComReg understands that the Eircom Product Development Process manages not just the progression of Access requests through this process but also other developments to RAPs. Such developments may arise, for example, from RAP developments arising from amendments proposed by Eircom. For the avoidance of doubt, ComReg's position is therefore to amend the requirement summarised in paragraph 7.990(g) above such that the priority given by Eircom to the development of each request shall be relative to other RAP related developments, including amendments and Access Requests, in the Relevant Market.

7.1154 Having regard to the analysis set out in the Consultation,¹⁴⁰¹ along with ComReg's consideration of the Respondents' views, ComReg's position is that to provide for efficient and effective planning the requirement summarised in paragraph 7.990(g) shall be imposed with the following amendments:

- (a) Eircom shall update its Product Development Roadmap to identify the degree of priority that it proposes to assign to each proposed development within 85 working days of receipt of such a request.
- (b) The priority given by Eircom to the development of each request shall be relative to all other developments of regulated products, services or facilities in the Relevant Market.
- (c) Eircom shall include objective justification for any reprioritisations of requests in its Product Development Roadmap and inform ComReg of such objective justification.

Product development prioritisation impact on 'in train' developments

7.1155 As noted in paragraph 7.1044 above, Eircom raised issues concerning whether the proposed requirement that Access Seekers must have their priorities fully taken into account by Eircom when decisions with respect to product development resourcing are being made, as described in paragraph 7.987 above, would mean that a development in train should be stopped or suspended if an Access Seeker deems a new product to have a higher priority.

7.1156 For the avoidance of doubt, ComReg has not proposed that existing product developments or work requests that are in progress should be suspended or stopped as a result of a subsequent request for a development¹⁴⁰² by an Access Seeker or Eircom's downstream arm.

7.1157 It is ComReg's position that product developments or work requests can however be re-prioritised by Eircom. However, if re-prioritisation is necessary and appropriate, it should be objectively justified to Access Seekers and to ComReg using a defined process and should also be transparent and non-discriminatory.

Standardised process before a trial can commence

7.1158 Vodafone was supportive¹⁴⁰³ of the criteria proposed by ComReg for the establishment of trials.

¹⁴⁰¹ The reasoning and justification for the proposed transparency requirements with respect to product development is set out in paragraphs 8.553 to 8.566 of the Consultation.

¹⁴⁰² Development includes tasks initiated, *inter alia*, by a) the receipt of Statement of Requirements (SoR) from Wholesale Customers, b) receipt of customer requirement from Wholesale Customers including downstream business units, c) receipt of request to modify a downstream product which requires a change to a RAP product from downstream business units, d) receipt of request change to a RAP product for operational reasons from Eircom TED or Eircom Networks, or e) requirement to change RAP product from Eircom Wholesale RAP for product enhancing, operational or compliance reasons, including the equivalent or similar from Eircom's downstream and upstream business units for items a) to e).

¹⁴⁰³ As per paragraph 7.1049 above.

- 7.1159 ComReg also notes that, as summarised in paragraph 7.1050 above, Sky strongly endorsed ComReg's view that trials should not be of a nature that the product or process being trialled is effectively being launched.
- 7.1160 In the Consultation, ComReg was of the preliminary view that the establishment of trials should meet specific criteria¹⁴⁰⁴ before a trial can commence. As described in the Consultation,¹⁴⁰⁵ ComReg was not proposing these criteria as an obligation but noted that it would welcome feedback from Respondents on this. ComReg has received such feedback from Sky as referred to above and has also received feedback from Vodafone. Vodafone supports the criteria and also considers, for various reasons, that the criteria should be imposed as an obligation. ComReg considers that this response supports ComReg's view that Eircom should meet specific criteria before a trial can commence.¹⁴⁰⁶
- 7.1161 Eircom raised no explicit concerns with respect to the criteria as summarised in paragraph 7.992.
- 7.1162 Having considered the matter further, and in light of the responses to the Consultation, ComReg is satisfied that imposing such criteria as an obligation is justified and proportionate in light of the importance of trials to new product development and in order to provide Access Seekers with sufficient information and certainty regarding the trial process. ComReg also considers that such criteria do not place an undue burden upon Eircom.
- 7.1163 ComReg considers that to provide greater legal certainty as to the scope of the obligation it is appropriate to require Eircom to invite Access Seekers to participate in the trial, by means of:
- (a) direct written invitation to each Access Seeker that has signed a contract with Eircom on the basis of the ARO; and
 - (b) the publication of a general invitation on Eircom's publicly available wholesale website.
- 7.1164 Having regard to the analysis set out in the Consultation,¹⁴⁰⁷ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the criteria as summarised in paragraph 7.992 and as amended in paragraph 7.1163 as an obligation on Eircom.

¹⁴⁰⁴ The criteria with respect to a standardised process before a trial can commence are set out in paragraph 8.570 of the Consultation.

¹⁴⁰⁵ Paragraph 8.571 of the Consultation.

¹⁴⁰⁶ As set out in paragraph 8.570 of the Consultation.

¹⁴⁰⁷ ComReg's preliminary views with respect to the transparency requirements regarding specific criteria to be met before a trial can commence are set out in paragraphs 8.567 to 8.572 of the Consultation.

Provide notification with respect to proposed trials

- 7.1165 ComReg has considered Eircom's response in paragraph 7.1051 that the proposed imposition of timelines outlined in the Consultation¹⁴⁰⁸ would disrupt the product development cycle and delay the launch of market ready products. ComReg has also considered the response from Eircom summarised in paragraph 7.1052 above that termination of a trial at least one month in advance of notification to ComReg¹⁴⁰⁹ would mean that operators and customers who participated in the trial could now face a total seven month 'break in service'.
- 7.1166 ComReg disagrees with Eircom's view that there would be a 'break in service', as service should only commence after a product is launched. ComReg notes that the intention of the notification requirements with respect to trials is to address potential competition problems that can arise due to a product being effectively launched prior to the effective date of notification for a new product.
- 7.1167 To provide flexibility on when trials can be conducted, ComReg is amending the text of the proposed requirements as described in paragraphs 7.1168 to 7.1178 below.
- 7.1168 Having further considered notification criteria with respect to trials, ComReg's position is that the requirement, as summarised in paragraph 7.994 (a), for notification to ComReg shall be one month in advance of notification of the trial to Access Seekers, rather than in advance of trial commencement. This provides a more consistent approach with other notification requirements¹⁴¹⁰ where ComReg is notified in advance of Access Seekers.
- 7.1169 ComReg considers that it is appropriate that the requirement as summarised in paragraph 7.994 (c) be amended so that termination of the trial shall be at least one month prior to the launch date of the new product, service or facility. Such a termination in a trial is required to prevent first mover advantage. With this amendment a trial may be run either in parallel or prior to the total notification period of seven months¹⁴¹¹ for new products, services, facilities or processes.

¹⁴⁰⁸ The proposed obligations regarding notification of trials are described in paragraphs 8.573 to 8.576 of the Consultation.

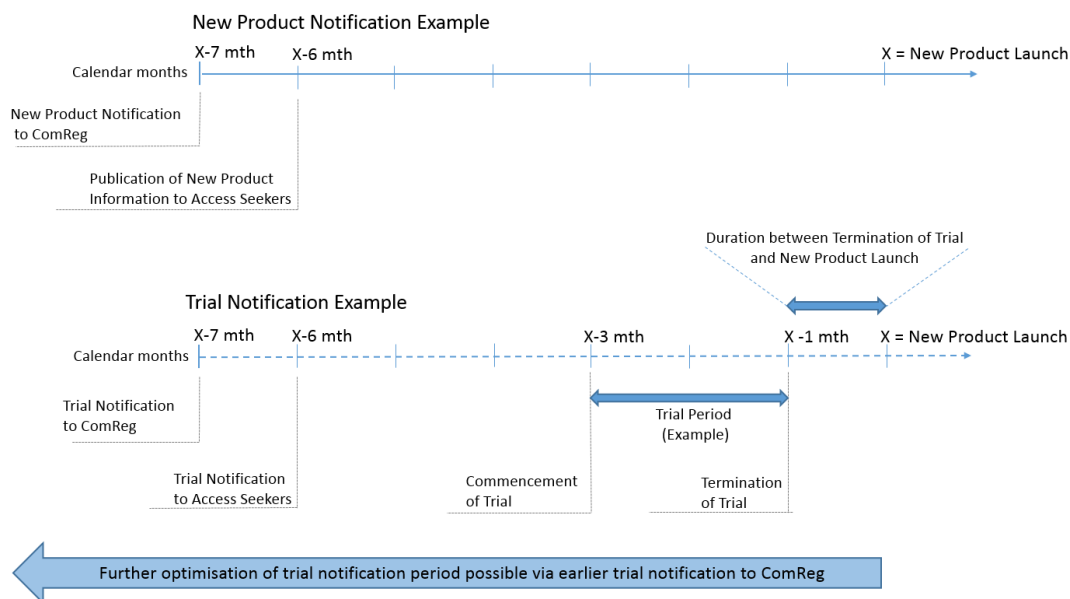
¹⁴⁰⁹ Paragraph 8.573 (c) of the Consultation states that the trial must terminate at least one month before notification of the product to ComReg, unless otherwise agreed with ComReg.

¹⁴¹⁰ With respect to the notification requirements as summarised in paragraphs 7.953 and 7.963.

¹⁴¹¹ A total of seven months notification is provided for in paragraph 9.3 of Annex 1 of ComReg Decision D03/13.

7.1170 Figure 20 below provides an illustrative view of a notification example where Eircom has notified ComReg of a trial for a new product and of the new product itself at the same time. In the example provided a trial with a duration of two months can be performed when both the notification of the trial and of the new product are run in parallel. It is possible that trials of longer duration can be achieved and that Access Seekers are provided with further advance notification of trials, by Eircom providing notification of trials at an earlier point in the product development cycle.¹⁴¹² This is expected to be the more likely scenario for notifications.

Figure 20: Example of notification of trial and product



7.1171 As per the illustrated example in Figure 20 above the duration between termination of the trial and the new product launch is one month. This is required in order to prevent first mover advantage and therefore to ensure that trials, particularly End User trials, do not effectively become a launch of the proposed product. To allow for a scenario where the continuation of a trial up until product launch may be of benefit to both Eircom and Access Seekers, ComReg will consider requests for derogations.

7.1172 The three month notification period to Access Seekers is proportionate and justified to ensure that Access Seekers have the opportunity to participate in trials and, to that end, that Access Seekers receive sufficient information with respect to any proposed trials in a timely manner to allow them make an informed decision as to their participation or otherwise in the trial.

7.1173 ComReg's position is that a request for a trial by Access Seekers should be considered by Eircom in the context of its obligation to meet reasonable requests for access and its non-discrimination obligations.

7.1174 As noted in paragraph 7.1054 above Vodafone supported the proposed obligation requiring the notification of trials.

¹⁴¹² At the time adoption of this Decision, Eircom has notified Access Seekers of a trial for use of V-Plus Super-vectoring (V35b profile) when this RAP development (RAP ID 437) was at its initial stages of the product development cycle.

- 7.1175 Having regard to the analysis set out in the Consultation,¹⁴¹³ along with ComReg's consideration of the Respondents' views above, ComReg has decided to impose the requirements as set out in the Consultation and as summarised in paragraph 7.994 as obligations on Eircom, with the amendments described in paragraphs 7.1176 and 7.1178 below.
- 7.1176 The requirement as summarised in paragraph 7.994 (a) above, that the trial must be notified to ComReg one month in advance of its commencement, will not be imposed as an obligation on Eircom. A requirement shall be imposed on Eircom that notification to ComReg shall be one month in advance of notification of the trial to Access Seekers rather than in advance of trial commencement.
- 7.1177 The requirement as summarised in paragraph 7.994 (c), that the trial must terminate at least one month before notification of the product to ComReg, shall be amended so that termination of the trial shall be at least one month prior to the launch date of the new product, service or facility.
- 7.1178 To provide for flexibility with respect to the notification periods for proposed trials each of the notification periods will allow for derogations by the inclusion of the text 'unless otherwise agreed' with ComReg.

Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities

- 7.1179 On further reflection, ComReg has decided to delete the words "*(or such other information as reasonably required by ComReg)*" from the requirement summarised in paragraph 7.996 above. The wording reflects ComReg's powers to direct the provision of information in appropriate cases but on reflection, ComReg considers that it is not appropriate or necessary to impose it as an obligation within this Decision. ComReg will monitor the position and, if appropriate, may issue directions or further specify Eircom's transparency obligations in this regard.
- 7.1180 As described in paragraph 7.997 ComReg considers that the requirement as summarised in paragraph 7.996 is necessary so to provide sufficient notification to Access Seekers to allow them to factor in such proposed changes into their commercial decision-making activities and to make any necessary adjustments or developments to billing or other systems, as appropriate. ComReg also expects that such changes would be subject to existing governance within Eircom with respect to network changes and network evolution and that providing sufficient notification to Access Seekers with respect to such changes would not be burdensome on Eircom. ComReg has therefore decided to impose the requirements as set out in the Consultation¹⁴¹⁴ and as summarised in paragraph 7.996 as an obligations on Eircom, with the exception of the amendment referred to in paragraph 7.1179 above.

¹⁴¹³ ComReg's preliminary views with respect to the transparency requirements for notification of trials are set out in paragraphs 8.567 to 8.569 and 8.573 to 8.576 of the Consultation.

¹⁴¹⁴ As set out in Section 10.22 of the Draft Decision Instrument, included as Appendix 14 of the Consultation.

Transparency requirement to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement

- 7.1181 ComReg notes Vodafone's support¹⁴¹⁵ for obligations to govern the necessary sharing of confidential information.
- 7.1182 As summarised in paragraph 7.1057 above, Eircom expressed its view that there should be consistency between the requirement proposed in paragraph 7.998 and the Commitment Agreement that Eircom has entered into with the DCCA.
- 7.1183 ComReg disagrees with the views expressed by Eircom in relation to this. ComReg's position is that obligations that are imposed on an SMP operator are independent of any existing or new commercial agreements that an SMP operator has or will enter into.
- 7.1184 As summarised in paragraph 7.1058 above, Eircom expressed its view that the wording of the requirement as summarised in paragraph 7.998(b) above should be amended so that appropriate extracts of confidential and/or commercially sensitive information is made available to Access Seekers who have signed an NDA. Having considered Eircom's views and upon further reflection, ComReg considers that the wording of this requirement should be amended so that the default position will be not to publish confidential or commercially sensitive information, but that in circumstances considered appropriate by ComReg, Eircom shall grant access to the information, or to extracts of the information to Access Seekers who have signed an NDA.
- 7.1185 Having regard to the analysis set out in the Consultation,¹⁴¹⁶ along with ComReg's consideration of the Respondents' views, ComReg has decided to impose the requirements as set out in the Consultation and as summarised in paragraph 7.998 as obligations on Eircom, with the exception of the amendment referred to in paragraph 7.1184 above which would not require Eircom to publish any confidential or commercially sensitive information unless ComReg considers it appropriate and the recipient of the information signs an NDA.

Impact of notification periods on timelines for product development

- 7.1186 As noted in paragraph 7.1059 above Eircom argued that the current notification period can mean that a developed product requested by Access Seekers may not be launched until the Access Seekers have been given a six (6) month advance notice period.
- 7.1187 ComReg is of the view that such notification is necessary to allow Access Seekers the opportunity to review documentation associated with products prior to them being made available, for preparation and planning purposes. This is required to allow Access Seekers to compete in downstream markets using new or amended RAPs as wholesale inputs and ensures that the potential for first mover advantage is reduced.

¹⁴¹⁵ See paragraph 7.1055 above.

¹⁴¹⁶ ComReg's preliminary views with respect to the transparency requirements to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement are set out in paragraphs 8.577 to 8.584 of the Consultation.

- 7.1188 As described in paragraph 7.1077, ComReg disagrees with Eircom's view that the requirement for one (1) month's prior notification to ComReg in advance of industry should be removed in the absence of an approval mechanism.
- 7.1189 ComReg notes that the requirements as summarised in paragraphs 7.959 to 7.963 includes the proviso that the advance notification periods may be varied with the agreement of ComReg or at ComReg's discretion and that requests by Eircom for a derogation on notification periods will therefore be considered by ComReg.
- 7.1190 Having regard to the analysis set out in the Consultation,¹⁴¹⁷ along with ComReg's consideration of the Respondents' views, ComReg's position is that proposed requirements for advance notification timeframes for ARO and price changes, as summarised in paragraphs 7.959 to 7.963, shall be imposed on Eircom as obligations.

ComReg's Position

- 7.1191 Having considered Respondents' views as summarised and assessed in paragraphs 7.999 to 7.1190 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on transparency, as set out in the Consultation,¹⁴¹⁸ with the exception of the amendments specified in paragraphs 7.1194 to 7.1221.
- 7.1192 The obligations with respect to transparency being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 20, Section 10 of this Decision. In certain cases, such as Section 10.9 of the Decision Instrument, ComReg expressly retains the option to vary the timelines set out in the relevant Decision Instrument whether by agreement or at its own discretion. Where Eircom wishes to avail of a derogation (where provided for) from these timelines the onus is on Eircom to notify ComReg (in writing) of its request and the basis for any such requested derogation. ComReg does not consider that any conflict arises from the transparency (or any other) obligations set out the Decision Instrument however if an issue arises from the practical implementation of these obligations Eircom should seek a derogation, as appropriate.
- 7.1193 The amended requirements are summarised in the following paragraphs:
- (a) maintenance and publication of an ARO, which is to contain a minimum list of items (discussed in paragraphs 7.1194 to 7.1195 below);
 - (b) meet requirements concerning wholesale billing (discussed in paragraphs 7.1196 to 7.1198 below);
 - (c) transparency requirement with respect to network rollout and network development (discussed in paragraph 7.1199).
 - (d) publish information with respect to the development of products, services and facilities (discussed in paragraphs 7.1200 to 7.1210 below);

¹⁴¹⁷ The reasoning and justification for the proposed requirements for advance notification timeframes for ARO and price changes is set out in paragraphs 8.479 to 8.486 of the Consultation.

¹⁴¹⁸ Paragraphs 8.444 to 8.586 of the Consultation.

- (e) adhere to certain criteria to ensure a standardised process is in place before a trial can commence (discussed in paragraphs 7.1211 to 7.1213 below);
- (f) provide advance notification of proposed product trials (discussed in paragraphs 7.1214 to 7.1216 below);
- (g) provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities (discussed in paragraphs 7.1217 to 7.1218 below); and
- (h) transparency requirement to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement (discussed in paragraphs 7.1219 to 7.1221 below).

Maintenance and publication of an ARO, which is to contain a minimum list of items

- 7.1194 As described in paragraph 7.1066 above ComReg has decided to impose the requirements as summarised in paragraphs 7.942 to 7.946 above as obligations on Eircom. In addition a transparency obligation for inclusion of the Protocol Vectoring in the ARO¹⁴¹⁹ shall be imposed on Eircom.
- 7.1195 The obligations as summarised in paragraph 7.1194 are reflected in Section 10 of the Decision Instrument.

Transparency requirements on wholesale billing

- 7.1196 As described in paragraph 7.1083 above, ComReg has decided not to impose the obligation that any invoices and the associated contracts should relate only to products, services or facilities within the WLA market. The requirement with respect to wholesale billing that will be imposed upon Eircom as an obligation is as summarised below in paragraph 7.1197.
- 7.1197 Eircom shall ensure that its wholesale invoices are sufficiently disaggregated, detailed and clearly presented such that an Access Seeker can reconcile invoices to Eircom's ARO and ARO Price Lists.
- 7.1198 The obligation as summarised in paragraph 7.1197 is reflected in Section 10 of the Decision Instrument.

Transparency requirement with respect to network rollout and network development

- 7.1199 As described in paragraph 7.1101 above ComReg does not intend to impose an obligation that Eircom shall "*provide any other information as may reasonably be required by ComReg for the purposes of ensuring transparency*", at this time but will monitor the position and, if appropriate, may issue directions or further specify Eircom's transparency obligations in this regard.

¹⁴¹⁹ Originally proposed as an Access obligation as summarised in paragraph 7.42(i).

Transparency requirement with respect to Product Development**Publish information with respect to the development of products, services and facilities – information to be provided to Access Seekers**

- 7.1200 As per ComReg's assessment set out in paragraphs 7.1118 to 7.1157 above, the requirements as summarised in paragraph 7.990 regarding publication of information for the development of products, services and facilities shall be amended such that the obligations as summarised in paragraphs 7.1201 to 7.1204 below are imposed on Eircom.
- 7.1201 Eircom shall publish and keep updated, on its publicly available wholesale website, a description of its product development process, including a description of all process steps and activities, identifying all key Milestones and Product Development Decision Points,¹⁴²⁰ starting from the receipt of a request from an Access Seeker or a request from Eircom itself, through to the launch of a new or amended wholesale product, service or facility.
- 7.1202 For each proposed development, Eircom shall, at the earliest possible time but in any event not later than fifteen (15) working days after the receipt of a written Access request for the development of a product, service or facility in the WLA market provide and keep updated on its publicly available wholesale website a Product Development Roadmap¹⁴²¹ listing all of the accepted Access requests¹⁴²² with the following details for each proposed development:
- (a) the unique reference to identify the request;
 - (b) a description of each Access request including a copy of or links to all documents relevant to each request;
 - (c) the date by which Access Seekers can submit their view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Access Seeker;
 - (d) the Milestones¹⁴²³ and associated target dates required to develop and launch the product, service or facility to meet the Access request.

¹⁴²⁰ A Product Development Decision Point is a point during the development process at which Eircom takes or is due to take a decision to advance, retard or terminate the development of a product, service or facility.

¹⁴²¹ A Product Development Roadmap contains a list of all proposed, planned and in progress developments for regulated products, services and facilities and related information as required of Eircom in accordance with Section 10 of the Decision Instrument. At a minimum, a Product Development Roadmap could take the form of an amended version of Eircom's PCRL. This does not preclude Eircom providing such a Product Development Roadmap in a format requested by Access Seekers, Eircom shall consider such requests in the context of whether such requests are reasonable.

¹⁴²² An accepted access request is a request deemed by Eircom to be related to a product service or facility in the WLA market. An Access Request can be made by an Access Seeker or by Eircom.

¹⁴²³ Milestones are the key points in Eircom's Product Development Process that Access Seekers would reasonably rely upon so as to track the progress of a request in this process, including, *inter alia*, decision points and points of transition associated with analysis, design, development and launch stages for the request and the date that the product, service or facility will be made available to Access Seekers.

- 7.1203 Eircom shall provide and keep updated on its publicly available wholesale website a Product Development Roadmap listing all of the accepted Access requests including the priority given by Eircom to the development of each request relative to other developments of regulated products, services or facilities within the WLA market. Eircom shall update its Product Development Roadmap so as to identify the degree of priority that it proposes to assign to the proposed development arising from a request within 85 working days of receipt of such a request and shall inform ComReg of the degree of priority assigned. Eircom shall provide objective justification in its Product Development Roadmap of any reprioritisation of a request that may occur from the time of its initial request until its launch and shall inform ComReg of the reprioritisation and the reasons therefor.¹⁴²⁴
- 7.1204 Eircom shall provide and keep updated on its publicly available wholesale website a Product Development Roadmap that includes a method for tracking the progress of developments against the Milestones and associated target dates to develop and launch each proposed product, service or facility. Eircom shall inform Access Seekers of any changes to such target dates at the earliest point in time after the need for such changes are identified by Eircom.
- 7.1205 The obligations as summarised in paragraphs 7.1201 to 7.1204 are now reflected in Section 10 of the Decision Instrument.

Publish information with respect to the development of products, services and facilities – publication timelines

- 7.1206 As noted in paragraph 7.1045 Eircom expressed views in the section of its Submission¹⁴²⁵ on transparency that relate to both proposed requirements with respect to timeliness of product development¹⁴²⁶ and transparency of product development.¹⁴²⁷ ComReg's position with respect to timeliness of product development has been set out in the section of this Decision regarding requirements with respect to timeliness of product development.¹⁴²⁸

¹⁴²⁴ The details of such objective justification may, for example, be provided in the form of an embedded file or hyperlink in the Product Development Roadmap.

¹⁴²⁵ Eircom Submission, pages 48 and 49, in section entitled 'Proposed Transparency requirement with respect to Product Development'.

¹⁴²⁶ As described in paragraphs 7.611 to 7.612.

¹⁴²⁷ As described in paragraphs 7.990 to 7.991.

¹⁴²⁸ As described in paragraphs 7.742 to 7.763.

- 7.1207 To align with ComReg's position on the corresponding criteria for timeliness of product development the requirements as summarised in paragraph 7.991 shall be amended such that the requirements as summarised in paragraph 7.1209 shall be imposed as obligations on Eircom. The obligation summarised at paragraph 7.991(i) to *"provide any other information as may reasonably be required by ComReg for the purposes of ensuring transparency"*, while noted in the Consultation, was intended as a reflection of ComReg's powers to direct the provision of information in appropriate cases rather than a standalone obligation and was, accordingly, not included in the Draft Decision Instrument consulted upon. ComReg does not intend to impose such an obligation at this time but will monitor the position and, if appropriate, may issue directions or further specify Eircom's transparency obligations in this regard.
- 7.1208 In addition, as summarised in paragraph 7.991(d), ComReg proposed that where a request is refused, Eircom shall give written reasons for its decision at the time of the refusal and advise all other Access Seekers that the request has been refused. ComReg has considered further that in the interest of efficiency and transparency an Access Seeker who may be considering raising a similar request to one that has previously been refused should be made aware of the reasons for such a refusal so that it may tailor its requirements accordingly. Therefore, ComReg's position is that the requirement as summarised in paragraph 7.991(d) will be amended so that Eircom shall advise all other Access Seekers when a request has been refused and give written reasons to them for the refusal to meet the request, at the time of refusal.
- 7.1209 Following a request from an Access Seeker (or a request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall, from the date of receipt of such a request (unless otherwise agreed with ComReg) provide the following:
- (a) For each Access request received by Eircom and accepted by Eircom as being in the Relevant Market Eircom shall, at the earliest possible time, but not later than fifteen (15) working days after the receipt of the Access request, advise all Access Seekers that the request has been received and provide them with information regarding the request;
 - (b) The information provided to Access Seekers should include a unique reference number which will allow tracking of the request and all known details relevant to the request including but not limited to a copy of the request, and in all cases a description of the key features and functionality requested;
 - (c) Not later than forty (40) working days, unless otherwise agreed with ComReg, after receipt of the access request, Eircom shall publish an accurate description of the requested product, service or facility on its publicly available wholesale website;

- (d) Not later than eighty five (85) working days, unless otherwise agreed with ComReg, confirm in writing to Access Seekers whether it agrees to provide the requested new or amended product, service or facility. Where the request is refused, Eircom shall comply with its obligations to give written reasons for its decision at the time of refusal. In addition, Eircom shall advise all other Access Seekers when the request has been refused and give written reasons for its decision to refuse to meet the request, at the time of refusal, to all other Access Seekers. In the case of any divergence in Eircom's product proposal compared to what was originally requested, Eircom shall, within the same 85 working days, provide Access Seekers with a written description of such divergence in sufficient detail to allow Access Seekers to be reasonably aware of the differences in the proposed key features, functionality, the geographic reach of the product and any relevant limitations of the product. In addition, the objective reasons for any such divergence shall be documented and provided by Eircom to Access Seekers within the same 85 working days in a fair and reasonable manner. Eircom shall, not later than eighty five (85) working days after receipt of the written request, identify the degree of priority that it proposes to assign to the development related to the Access request relative to all other developments, including Access requests and amendments proposed by Eircom, of regulated products, services or facilities in the WLA Market, and advise all Access Seekers of this degree of priority. In the event of the reprioritisation by Eircom of an Access request or requests, Eircom shall advise all Access Seekers of such a reprioritisation.
- (e) In addition, Eircom shall for each such development provide Access Seekers with all other relevant documentation including but not necessarily limited to any revised industry process manual, price lists or technical manuals;
- (f) At all stages of the wholesale product development process Eircom shall make publicly available and keep updated on its wholesale website, all relevant documentation describing the product, service or facility which will be delivered for each development in sufficient detail to allow an operator be reasonably aware of the proposed key features, functionality, and the geographic reach of the product and any relevant limitations of the product; and
- (g) Eircom must publish the process and criteria used by Eircom in reaching decisions with respect to the prioritisation of product developments relative to each other.

7.1210 The obligations as summarised in paragraph 7.1209 is now reflected in Section 10 of the Decision Instrument.

Standardised process before a trial can commence

7.1211 As described in paragraph 7.1164 above ComReg considers that the criteria with respect to the establishment of trials, as summarised in paragraph 7.992 above, should be imposed as a regulatory obligation. The requirements as summarised in paragraph 7.1212 below therefore shall be imposed on Eircom as obligations.

7.1212 Eircom shall ensure that the following criteria are adhered to in respect of any proposed trials, whether such trials are for the purposes of testing operational or technical issues:

- (a) Eircom shall invite all Access Seekers to participate in the trial, by means of:
 - i. direct written invitation to each Access Seeker that has signed a contract with Eircom on the basis of the ARO; and
 - ii. the publication of a general invitation on Eircom's publicly available wholesale website.
- (b) the objectives of the trial and the requirements for participation in the trial must be clearly stated and provided to all Access Seekers in sufficient time to allow participation; and
- (c) the trial must be for a reasonable period sufficient only to achieve the objectives of the trial.

7.1213 The obligations as summarised in paragraph 7.1212 is now reflected in Section 10 of the Decision Instrument.

Provide notification with respect to proposed trials

7.1214 As per ComReg's assessment and position set out in paragraphs 7.1165 to 7.1178 above, ComReg's position with respect to the notification requirements regarding trials¹⁴²⁹ shall be amended such that the requirements as summarised in paragraph 7.1215 below shall be imposed on Eircom as obligations.

7.1215 Eircom shall in respect of any proposed trials, whether such trials are for the purposes of testing operational or technical issues:

- (a) notify ComReg in writing at least one (1) month in advance of any proposed trials being notified to Access Seekers, unless otherwise agreed by ComReg;
- (b) notify Access Seekers at least three months in advance of the commencement of trials, unless otherwise agreed by ComReg;
- (c) unless otherwise agreed by ComReg, terminate all trials at least one month prior to the launch of the new or amended product, service or facility being trialled.

7.1216 The text as summarised in paragraph 7.1215 is reflected in Section 10 of the Decision Instrument.

¹⁴²⁹ As summarised in paragraph 7.994.

Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities

- 7.1217 As per ComReg's assessment and position set out in paragraphs 7.1179 to 7.1180 above, ComReg's position with respect to requirements to make information available regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies, as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WLA, as summarised in paragraph 7.996, shall be imposed as obligations on Eircom with the exception of the deletion of the words "*(or such other information as reasonably required by ComReg)*".
- 7.1218 The requirements to make information available regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies, as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WLA are more particularly set out in Section 10 of the Decision Instrument.

Transparency requirement to facilitate the legitimate sharing of confidential and/or commercial information through a non-disclosure agreement

- 7.1219 As per ComReg's assessment and position set out in paragraphs 7.1181 to 7.1185 above, ComReg's position with respect to requirements to facilitate the legitimate sharing of confidential and/or commercially sensitive information through a non-disclosure agreement is that the requirements as summarised in paragraph 7.998 shall be imposed as obligations on Eircom with the requirements summarised in 7.998(b) and 7.998(c) reworded as summarised in paragraphs 7.1220 and 7.1220 below.
- 7.1220 If, having considered a submission from Eircom, ComReg concludes that the information is confidential and/or commercially sensitive, the following provisions shall apply:
- (a) Eircom shall not be required to publish the information; or
 - (b) Notwithstanding paragraph 7.1220(a), in circumstances considered appropriate by ComReg, Eircom shall publish general non-confidential details as to the nature of such information and shall make the information or, as agreed with ComReg, extracts of such information, available to an Access Seeker that has signed a Non-Disclosure Agreement ('NDA'), the terms and conditions of which shall be fair, reasonable and non-discriminatory. The NDA shall also be published on Eircom's publicly available wholesale website; and
 - (c) Any confidential and/or commercially sensitive information (or, as agreed with ComReg, extracts thereof) shall not be made available by Eircom to its downstream operations until such time as it is made available to an Access Seeker, or as otherwise agreed with ComReg.

7.1221 The requirements to facilitate the legitimate sharing of confidential and/or commercially sensitive information through a non-disclosure agreement are more particularly set out in Section 10 of the Decision Instrument.

Price control and cost accounting remedies in the WLA Market

Position set out in the Consultation

- 7.1222 Given the ability and incentive for Eircom to engage in pricing-related vertical leveraging and exclusionary behaviours as identified in Section 7 of the Consultation, including excessive pricing/margin squeeze (with impacts in the relevant market and related markets), ComReg considered in Section 8¹⁴³⁰ of the Consultation that price control and cost accounting obligations were justified and proportionate in the WLA Market.
- 7.1223 In Section 8 of the Consultation, ComReg considered a number of options in determining the appropriate price control relevant to the WLA Market, including:
- (a) Regulatory forbearance;
 - (b) Benchmarking;
 - (c) Retail minus;
 - (d) Cost orientation obligations; and
 - (e) Margin squeeze obligations.
- 7.1224 Each one of the above options was discussed and considered in Section 8 of the Consultation.¹⁴³¹
- 7.1225 ComReg considered in Section 8 of the Consultation¹⁴³² that regulatory forbearance, benchmarking and retail minus¹⁴³³ were generally not appropriate price control remedies in the context of the WLA Market.
- 7.1226 ComReg set out its preliminary view in the Consultation that cost orientation (for NG FTTC and CG copper-based WLA services) and the obligation not to cause a margin squeeze were more appropriate price control remedies to consider, given the competition concerns and consumer impacts identified in the WLA Market and related markets.¹⁴³⁴
- 7.1227 ComReg's preliminary views in the Consultation are summarised below, as follows:
- (a) Cost orientation (discussed in paragraphs 7.1228 to 7.1232 below);

¹⁴³⁰ See paragraphs 8.587 to 8.590 of the Consultation.

¹⁴³¹ See paragraphs 8.596 to 8.673 of the Consultation.

¹⁴³² See paragraphs 8.596 to 8.606 of the Consultation.

¹⁴³³ Note the distinction between a retail minus price control, where the wholesale price is determined by subtracting a fixed percentage reflecting retail costs from the retail price, and a retail margin squeeze test, where retail costs are derived from modelled costs.

¹⁴³⁴ See paragraphs 8.607 to 8.673 of the Consultation.

- (b) Obligation not to cause a margin squeeze (discussed in paragraphs 7.1233 to 7.1242 below); and
- (c) Cost accounting obligations (discussed in paragraphs 7.1243 to 7.1244 below).

Cost orientation

- 7.1228 In Section 8 of the Consultation, ComReg was of the preliminary view that a cost orientation price control for NG FTTC/CG copper-based WLA services would prevent Eircom from charging excessive prices for wholesale inputs. It would ensure that Eircom can recover the efficiently incurred costs which are relevant to the provision of WLA products, services and facilities. This would in turn lead to efficient price and investment signals being provided to all market participants. It would promote efficient infrastructure investment and encourage SPs to climb the ladder of investment. Therefore, ComReg considered that cost orientation was an appropriate price control remedy for CG LLU-based WLA services, NG FTTC-based WLA services¹⁴³⁵ and ancillary services¹⁴³⁶ in the Relevant WLA Market.¹⁴³⁷
- 7.1229 ComReg also proposed in Section 8 of the Consultation to re-impose the pricing approaches specified for LLU, SLU, Line Share, CEI and Dark Fibre in the 2016 Access Pricing Decision,¹⁴³⁸ for the reasons set out in Section 8¹⁴³⁹ of the Consultation.
- 7.1230 For NG FTTC-based WLA services, ComReg considered that a stricter form of regulation was more appropriate than the current margin squeeze approach, as set out in Section 8 of the Consultation. Therefore, ComReg reached the preliminary view that a cost orientation price control was proportionate and justified for NG FTTC VUA-based WLA services for a number of reasons:
- (a) Demand and costs are now easier to forecast given the historic data available on FTTC services since rollout commenced in 2013.

¹⁴³⁵ References to FTTC-based WLA services and to FTTC-based VUA includes Exchange launched VUA.

¹⁴³⁶ These are associated facilities that include migrations, fault repair and connections.

¹⁴³⁷ See paragraphs 8.607 to 8.634 of the Consultation.

¹⁴³⁸ ComReg Document No. 16/39, ComReg Decision D03/16, 'Pricing of Eir's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision', dated 18 May 2016 ('**2016 Access Pricing Decision**').

¹⁴³⁹ See paragraphs 8.615 to 8.623 of the Consultation.

- (b) Wholesale and retail price changes from Eircom in July 2015 and September 2016 (e.g. Eircom increased the monthly wholesale rental price for FTTC-based VUA from €19.50 to €23 in September 2016) indicate that Eircom's ability to increase wholesale broadband prices is not effectively constrained and that existing price controls need to be updated to reflect new circumstances. Also the constraint posed by copper-based services is likely to have diminished as evidenced by the reduction in LLU volumes and the switch from copper to fibre based broadband services in Eircom's NGA network footprint. These developments demonstrated that Eircom's FTTC prices do not appear to be effectively constrained in the presence of the existing form of price regulation.
- (c) A cost orientation obligation for FTTC-based VUA would ensure a consistent regulatory approach with the pricing of CG SLU and LLU in the 2016 Access Pricing Decision which have been subject to a cost orientation obligation.
- (d) A cost orientation obligation for FTTC-based VUA would also provide the appropriate investment signals to market participants (i.e. that the prices set will incentivise efficient investment behaviour).
- (e) Having a cost oriented price for FTTC-based VUA would provide certainty to the SMP operator as to what it has to do in order to ensure compliance with its pricing obligations and also for the SPs that use the regulated products as to what the price will be for the service it is buying.
- (f) The cost orientation obligation takes into account the efficient investments made by the SMP operator and allows a reasonable rate of return on adequate capital employed, in line with Regulation 13 of the Access Regulations.

7.1231 The justification for a cost orientation obligation for FTTC-based VUA services was set out in full in Section 8¹⁴⁴⁰ of the Consultation.

7.1232 For CG and NG (both FTTC and FTTH) ancillary services associated with the WLA Market, ComReg reached the preliminary view in Section 8 of the Consultation that a cost orientation obligation remained appropriate.¹⁴⁴¹ In that regard, ComReg proposed to re-impose the cost orientation obligation already specified for WLA ancillary services in the 2016 Access Pricing Decision.

Obligation not to cause a margin squeeze

7.1233 Given ComReg's concerns set out in Section 8 of the Consultation that Eircom could leverage its market power into vertically or horizontally related markets, ComReg was of the preliminary view that the imposition of a margin squeeze obligation was also proportionate and justified in the WLA Market.¹⁴⁴²

¹⁴⁴⁰ See paragraphs 8.624 to 8.628 of the Consultation.

¹⁴⁴¹ See paragraphs 8.629 to 8.634 of the Consultation.

¹⁴⁴² See paragraphs 8.635 to 8.644 of the Consultation.

7.1234 ComReg considered that, in the absence of an appropriate price control on Eircom obliging it to maintain an economic space between its wholesale products, and between retail and wholesale products, by virtue of its market power, control of the underlying access infrastructure and its presence at both wholesale and retail levels, Eircom would have the ability and incentive to price its wholesale access inputs and/or retail prices in such a way that it would not allow an SP to cover the cost of provision in downstream retail markets, after acquiring the wholesale inputs from Eircom. If SPs cannot profitably replicate Eircom's retail offers, they may exit the wholesale or retail markets, and market entry may be deterred. This would be to the detriment of End Users because it would restrict choice and could eventually lead to higher prices. Therefore, ComReg reached the preliminary view that the obligation not to cause a margin squeeze was justified and proportionate in the WLA Market.

7.1235 ComReg considered specific Margin Squeeze Tests as follows:

- (a) Wholesale Margin Squeeze Test for FTTH-based VUA
- (b) Economic Space between WLA and WCA Markets
- (c) Retail Margin Squeeze Test in footprint of Urban WCA Market

Wholesale Margin Squeeze Test for FTTH-based VUA

7.1236 For FTTH-based VUA, ComReg proposed in Section 8 of the Consultation that a margin squeeze obligation should apply and that a cost orientation obligation was not appropriate given the uncertainty regarding the precise estimation of costs and the penetration levels for FTTH-based VUA services. FTTH-based VUA penetration levels were identified as being low and difficulties were noted with respect to the ability to forecast the future penetration rate. Given these cost and demand uncertainties, ComReg's preliminary view was that the FTTH price is likely to be very sensitive to the penetration rate, such that an incorrect forecast could distort future market developments — if the price is too high, it may deter purchasers of FTTH-based VUA from investing and if the price is too low, Eircom and indeed other infrastructure investors may reduce their investments in FTTH.¹⁴⁴³

¹⁴⁴³ See paragraphs 8.646 to 8.651 of the Consultation.

Economic Space between WLA Market and WCA Markets

- 7.1237 In addition, ComReg proposed a margin squeeze obligation to ensure a sufficient economic space exists between the prices charged for WLA services and WCA services. ComReg considered in the Consultation that End Users are best served in terms of product pricing and innovation where competition is based on deeper investment in infrastructure by competing operators, which is ultimately facilitated through the WLA Market (in the sense that purchasing WLA products requires deeper infrastructure investment by Access Seekers). This is because SPs can, for example, offer greater differentiation in services and products which are based on their own infrastructure elements, and where their reliance on the SMP operator's wholesale infrastructure is reduced. ComReg considered that if Eircom had the ability to set the price for WCA services too low (relative to WLA services) this could dis-incentivise efficient investment by SPs seeking to purchase WLA services and impact competition in downstream markets. This in turn would not be in the long-term interests of End Users as the WLA Market could be foreclosed and End Users could lose the potential benefit of the efficiency and innovation associated with such investments. Therefore, in order to ensure that appropriate incentives are maintained to encourage investment in LLU and VUA-based WLA services, ComReg proposed in Section 8 of the Consultation that a sufficient economic space should be maintained between the prices for WLA services and WCA services.
- 7.1238 In this regard, ComReg proposed, in line with the current obligation imposed in the 2013 Bundles Decision,¹⁴⁴⁴ that the price at which Eircom sells or offers a Downstream Wholesale Service¹⁴⁴⁵ must be greater than the sum of: (i) ULMP costs and (ii) the unavoidable costs of a reasonably efficient operator that must be incurred in order to provide a service equivalent to the relevant Downstream Wholesale Service. Therefore, the margin squeeze test should ensure that neither the pricing of SB-WLR (especially sold in combination with WCA services) nor standalone WCA services¹⁴⁴⁶ (i.e., WCA sold on its own without SB-WLR) will be priced at an excessively low level such that Service Providers purchasing LLU/VUA-based services could be foreclosed from downstream markets.¹⁴⁴⁷

¹⁴⁴⁴ ComReg Document No. 13/14, Decision04/13, Price Regulation of Bundled Offers: Further specification of certain price control obligations in Market 1 and Market 4 dated 8 February 2013 ('**2013 Bundles Decision**').

¹⁴⁴⁵ A Downstream Wholesale Service means a wholesale service which is on offer or on sale by Eircom to Access Seekers downstream from the WPNIA Market (now the WLA Market) and contains a Full Unbundling component (examples of such downstream wholesale services include, for example, SB-WLR and naked DSL (standalone broadband)).

¹⁴⁴⁶ See Section 10 of the 2017 Pricing Consultation.

¹⁴⁴⁷ See Section 8, paragraphs 8.653 to 8.660 of the Consultation.

7.1239 ComReg also considered in Section 8 of the Consultation whether Eircom may have an incentive to price below cost in certain circumstances where that would prevent the emergence of infrastructure competition that would otherwise be viable. Accordingly, ComReg considered in the 2017 Pricing Consultation whether Eircom's WLA services should be subject to a price floor, or as an alternative, a form of approval mechanism, to ensure that pricing below regulatory maximum prices does not cause competitive distortions.¹⁴⁴⁸

Retail margin squeeze test in footprint of Urban WCA Market

7.1240 In Section 8 of the Consultation, ComReg proposed to geographically differentiate the pricing remedies in the WLA Market such that a retail margin squeeze obligation would apply to Eircom in the area corresponding to the Exchange Areas falling within the downstream, Urban WCA Market and which ComReg has proposed be de-regulated. ComReg noted the proposal to de-regulate the Urban WCA Market was predicated, *inter alia*, on the existence of the remedies it was proposed to impose in the upstream WLA Market.¹⁴⁴⁹

7.1241 ComReg identified risks in Section 8 of the Consultation that, given the proposed deregulation of the Urban WCA Market, Eircom could price its retail broadband services in those geographic areas corresponding to the Urban WCA Market in such a way that it could foreclose by way of a margin squeeze other service providers using WLA wholesale inputs in similar geographic areas.

7.1242 Therefore, ComReg reached the preliminary view that Eircom should be subject, in the WLA Market, to a retail margin squeeze obligation in those Exchange Areas corresponding to the Urban WCA Market, such that there is a sufficient margin between prices for Eircom's standalone and bundled retail broadband services and the relevant upstream WLA inputs (in the Urban WCA Market area). This obligation would apply to all WLA services including copper and NG based WLA services.¹⁴⁵⁰

Cost accounting obligation

7.1243 As noted in Section 8 of the Consultation, in general, if price control obligations are to be meaningful, it is necessary to have a clear and comprehensive understanding of the costs associated with the SMP operator's provision of WLA services. Obligations to maintain appropriate cost accounting systems generally support obligations of price control (and accounting separation), and can also assist ComReg in monitoring the obligation of non-discrimination.

¹⁴⁴⁸ Subsequently addressed in the 2017 Pricing Consultation.

¹⁴⁴⁹ See paragraph 8.660 of the Consultation.

¹⁴⁵⁰ See paragraphs 8.662 to 8.668 of the Consultation.

7.1244 Having regard to the need to support the effectiveness of the proposed price control obligations set out above, ComReg reached the preliminary view that the imposition of cost accounting obligations on Eircom in the WLA Market is justified. In this respect, ComReg proposed in Section 8 of the Consultation¹⁴⁵¹ that Eircom should ensure that it maintains appropriate cost accounting systems to justify its prices / costs of WLA products, services and facilities. The detailed nature of these cost accounting obligations are those currently imposed upon Eircom, as specified in the 2010 Accounting Separation Decision.¹⁴⁵²

Respondents' Views

- 7.1245 ComReg notes that Respondents were asked in the Consultation whether they agreed with ComReg's proposed remedies in the WLA Market. Six of the eight Respondents to the Consultation expressed views on the proposed price control and cost accounting obligations in the WLA Market.
- 7.1246 ALTO, BT, Sky and Vodafone generally agreed with the proposed price control approach in relation to the WLA Market. Some of these Respondents also raised a number of issues for further consideration by ComReg.
- 7.1247 On the other hand, Eircom and Virgin Media did not agree, for the reasons set out further below.
- 7.1248 Colt and enet did not provide any specific views on the proposed price control and cost accounting obligations.
- 7.1249 The Respondents' views are discussed under the following themes:
- (a) Pricing Stability and Predictability (discussed in paragraphs 7.1250 to 7.1259 below);
 - (b) Consistency with EC Recommendations (discussed in paragraphs 7.1260 to 7.1263 below);
 - (c) Demand Uncertainty (discussed in paragraphs 7.1264 to 7.1265 below);
 - (d) Impact on Investment (discussed in paragraphs 7.1266 to 7.1268 below);
 - (e) Obligation not to cause a margin squeeze (discussed in paragraphs 7.1269 to 7.1271 below);
 - (f) Cost accounting (discussed in paragraph 7.1272 to 7.1273 below);
 - (g) Rate of return (discussed in paragraphs 7.1274 to 7.1276 below);
 - (h) Cost orientation for Ancillary Services (discussed in paragraphs 7.1277 to 7.1280 below); and
 - (i) Other points raised (discussed in paragraphs 7.1281 to 7.1287 below).

¹⁴⁵¹ See paragraphs 8.674 to 8.678 of the Consultation.

¹⁴⁵² Response to Consultation, and Final Decision: Accounting Separation and Cost Accounting Review of Eircom Limited, ComReg Document 10/67, dated 31 August 2010 ('**2010 Accounting Separation Decision**'). <http://www.comreg.ie/fileupload/publications/ComReg1067.pdf>.

Pricing Stability and Predictability

- 7.1250 ALTO welcomed ComReg's proposed cost orientation price control approach stating that it should go some way to prevent a recurrence of unexpected and unjustified price rises in broadband access. ALTO stated that its *"members are very unimpressed by the significant price increases in the WLA market"*¹⁴⁵³ announced by Eircom in May 2016 (21% and 35% increases for standalone FTTC and POTS-based FTTC respectively) and that those increases have resulted in an unjust financial transfer from Access Seekers to Eircom every month this *"above cost pricing level"* is maintained.
- 7.1251 BT also agreed with ComReg on the WLA price control proposals. BT stated that Eircom has implemented *"substantial price rises in this market"* which in its view were not justified, particularly those that followed the change in regulation of the SB-WLR services under the 2016 Access Pricing Decision. BT stated that the *"WLA price increases over the past two years clearly highlight the ability of eir to act independently of the market as there was in practice no alternative supply for WLA services."*¹⁴⁵⁴
- 7.1252 Sky agreed that the cost orientation obligation better provides for greater predictability on wholesale price levels for SPs as evidenced by outcomes in other markets e.g. FACO. Sky set out its view that *"the regulatory forbearance exercised by ComReg during the last review not to impose a cost orientation obligation on Eircom in the NGA WLA market in accordance with the NGA Recommendation has long since ceased to be appropriate, if it ever was."*¹⁴⁵⁵ Sky also added that Access Seekers have been subjected to significant wholesale price increases by Eircom in this market in the last 18 months which had resulted in upward pressure on retail prices and an unjust subsidy from Access Seekers to Eircom.
- 7.1253 Sky stated that the fact that Eircom was able to profitably increase prices in 2016 by 21% and 35% respectively for standalone FTTC and POTS-based FTTC was testament to its market power and to the fact that existing remedies and market forces were inadequate to act as a constraint on Eircom's prices. Sky also noted that the 21% standalone FTTC price increase followed on from an 11% price increase just 12 months earlier. Furthermore, Sky stated that the price increases had coincided with periods of exceptional take-up of Eircom's FTTC service, so much so that Eircom, for some time now, had advised industry on a regular basis on the status of NGA cabinets that were at 100% capacity - with Sky considering that this was something ComReg should take note of in assessing Eircom's costs during the 2017 Pricing Consultation.
- 7.1254 Vodafone agreed with the principle of imposing cost orientation remedies in the WLA Market and it supported ComReg's proposal to extend the cost orientation price control obligations to FTTC-based VUA, as it will provide price certainty to all SPs. Furthermore, Vodafone noted that it is now easier to forecast the demand and associated costs of these services.

¹⁴⁵³ ALTO's Submission, paragraph 2.

¹⁴⁵⁴ BT's Submission, Response 5.

¹⁴⁵⁵ Sky's Submission, paragraph 5.

- 7.1255 Vodafone stated that ComReg's own analysis shows that, based on recent price changes, Eircom's wholesale and retail prices are not effectively constrained in this market. Vodafone also noted that the wholesale price increases have had the effect of significantly increasing its cost of delivering voice and broadband services to their customers; however, given ComReg's decision to reduce the pricing of WLR products, Eircom's cost base for serving the same retail customers has not been affected.
- 7.1256 Vodafone also stated that these wholesale price increases were not supported by any evidence of increases in Eircom's cost base and were therefore a key example of Eircom's ability to 'squeeze' operators seeking to compete with Eircom based on alternative voice technologies. Vodafone urged ComReg to closely scrutinise Eircom's cost base when further specifying the details of the cost orientation obligation for FTTC-based VUA services in its 2017 Pricing Consultation.
- 7.1257 Eircom noted that a key driver in relation to ComReg's proposal to impose the new obligations appears to be Eircom's price increase for FTTC-based VUA and NG Bitstream in September 2016, while Eircom considered that the pricing analysis presented in the Consultation suggested that FTTC-based retail services are being effectively constrained by copper and cable based broadband. Eircom referred to paragraphs 4.21, 4.76 and 4.124 of the Consultation in relation to this point.
- 7.1258 Eircom stated that the €3.50 VUA price increase in September 2016, even if fully passed through to retail prices, would still have left FTTC-based broadband cheap compared with copper broadband. Furthermore, Eircom noted that the price increase for VUA should also be seen in the context of ongoing price rises imposed by Virgin Media, including a €5 increase in March 2016 and a €4 increase in January 2017, which Virgin Media attributed to "*increased operating costs and 'a near trebling of rates' payable across its network.*" Eircom considered that it is unsound to infer that Eircom's FTTC-based access prices are not effectively constrained as a result of a price increase.¹⁴⁵⁶
- 7.1259 Virgin Media disagreed with ComReg's proposal to impose a cost orientation obligation on the provision of FTTC-based VUA and dark fibre. Virgin Media noted that, in any case, the pricing of FTTC-based VUA and dark fibre would be constrained by the availability of cost oriented CG WLA products (as implied by ComReg's WLA product market definition, which includes CG access and NGA in the same market).

¹⁴⁵⁶ Eircom's Submission, page 54.

Consistency with EC Recommendations

- 7.1260 Eircom disagreed with the proposed price control approach in the WLA Market on the basis that, consistent with the European Commission's 2013 Non-Discrimination Recommendation,¹⁴⁵⁷ cost orientation should only be imposed where non-discrimination obligations are ineffective. According to Eircom, where an operator is found to have SMP, no wholesale access price regulation should be imposed on active or passive NGA wholesale inputs where non-discrimination obligations are imposed to achieve equivalence of inputs and a demonstrable retail price constraint exists through take-up of inputs and/or the presence of alternative infrastructure or the cost-based price regulation of legacy access products. Eircom concluded that NRAs should differentiate remedies and maintain or impose price control obligations only in those geographic areas where the conditions above in relation to non-discrimination and retail constraints are not fulfilled.
- 7.1261 In addition, Eircom stated that there is no justification for ComReg's proposed "*heavy-handed*" intervention to introduce cost-based pricing regulation for FTTC VUA in urban areas. Eircom stated that there is no basis for continuing regulation of Eircom's NGA services in urban areas given the '*dominance*' of cable in these areas and the additional constraint imposed by ongoing cost-based regulation on the legacy CG copper network. Eircom noted that the Consultation does not properly examine whether a competition problem would exist in the supply of FTTC-based access services, if copper access services are subject to cost-based price regulation. Eircom referred to the European Commission's 2013 Non-Discrimination Recommendation which establishes the expectation that copper is likely to exercise a demonstrable retail price constraint until at least 2020.
- 7.1262 Furthermore, Eircom stated that, as noted by the European Commission in its 2013 Non-Discrimination Recommendation, NGA pricing may need to be particularly dynamic to enable firms to identify how to efficiently recover costs across new products with uncertain demand and to support penetration (i.e., low prices initially can encourage customers to experience faster services before prices are moved to more sustainable levels as demand matures).
- 7.1263 Eircom stated that regulation is required to be proportionate to the problem being addressed, noting that the European Commission's 2013 Non-Discrimination Recommendation specifically requires that cost orientation not be imposed on NGA where economic replicability is effective precisely for the reason that NGA investments warrant greater pricing flexibility.

¹⁴⁵⁷ European Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU) (the '**2013 Non-Discrimination Recommendation**').

Demand Uncertainty

7.1264 Eircom also pointed out that demand for FTTC-based services remains highly uncertain as there is significant uncertainty in relation to migration of customers between Eircom's networks of different technologies. Eircom referred to ComReg's 2016 Pricing Information Notice¹⁴⁵⁸ which showed a range for the estimated cost of FTTC VUA from €14.50 to €18.50 depending on modelling parameters, including the rate of take-up. Eircom stated that there is a substantial range of uncertainty, with the upper end of the range being 28% higher than the lower end. Eircom noted that this range ignores key additional sources of uncertainty, including the likely loss of access lines to rival operator networks. In Eircom's view, large announced investments by Virgin Media and SIRO showed both the substantial demand uncertainty still impacting Eircom's FTTC network, and the vulnerability of demand being affected by further new announcements.

7.1265 Eircom considered that [§< [REDACTED]

Impact on Investment

7.1266 Eircom stated that cost orientation undermined certainty for the SMP operator by making its pricing subject to the regulator's view of costs. Eircom further noted that risks to the SMP operator are raised because it is now constrained from being able to adjust prices in response to cost changes. Furthermore, Eircom considered that the economics of Eircom's FTTC investment is heavily dependent on continued migration of customers to FTTC, which would be unachievable were FTTC prices raised, given that this would cause significant migration away from FTTC.

7.1267 Eircom stated that the new obligations would undermine and deter ongoing investments in NGA by Eircom and other players. Eircom also noted that ComReg's proposals to provide cost-based access to Eircom's FTTC network puts this level of investment at risk. By depressing the prices of access services, cost-based access renders investments in competing networks less attractive. Eircom questioned why a provider would incur the substantial demand, competition and technology risks of undertaking new network investment when it can obtain cost-based access to Eircom's fibre network. Furthermore, Eircom stated that cost-based regulation of FTTC critically undermined the migration path for customers from CG copper to FTTC and eventually to FTTH, and that the proposed regulation would bring down the price of FTTC and increase the price difference between FTTC and FTTH.

¹⁴⁵⁸ Information Notice, ComReg Document 16/110, Draft cost ranges for next generation access services, 12 December 2016 ('**2016 Pricing Information Notice**').

7.1268 Virgin Media stated that the imposition of cost oriented obligations on NGA services had the potential to undermine investment in competing broadband infrastructure. Virgin Media noted that the availability of regulated cost oriented access to Eircom's fibre network could impact on decisions by operators, including Virgin Media, to deploy network. Furthermore, Virgin Media is concerned that cost oriented obligations imposed on wholesale access to FTTC-based VUA and dark fibre have the potential to undermine investment in competing broadband infrastructure. For example, Virgin Media stated that it is planning to expand its broadband network to 200,000 households in a number of towns over the next four years, yet the business case for deciding whether to deploy new network infrastructure to a given town/location is sensitive to a number of factors related to the expected return on investment. Virgin Media also noted that imposing a cost oriented price cap could therefore jeopardise the profitability of NGA network deployments and, in some cases, this could directly influence a decision on whether to build new network, potentially leading to reduced commercial investment in NGA infrastructure by Eircom, Virgin Media, and other operators.

Obligation not to cause a margin squeeze

- 7.1269 Sky agreed with the preliminary view that an appropriate price control on Eircom obliging it to maintain an economic space between retail and wholesale products should be maintained. Sky noted that ComReg proposes to address margin squeeze obligations at the retail level for bundles through a separate consultation. Sky stated that the structure of the existing Margin Squeeze Tests ('MSTs') are inappropriate and fail to remedy the market failure they seek to address. It therefore looked forward to providing a more thorough response on this point during that consultation process.
- 7.1270 Vodafone called on ComReg to set out clearly in its 2017 Pricing Consultation: a) the competition concerns the different margin squeeze tests are aiming to address; and b) the reasons as to why the relevant (existing and/or proposed) cost orientation obligations would fail to provide adequate protection for the concerns identified.
- 7.1271 Eircom asserted that ComReg had not examined whether there would be a justification for retaining the current margin squeeze rules were the FTTC-based access services subject to cost orientation obligations. Eircom noted that a margin squeeze would require either (i) wholesale prices being set above costs; or (ii) retail prices set below cost. Eircom stated that cost-based regulation of wholesale FTTC access rules out the possibility of excessive wholesale prices being charged. Thus, Eircom considered that for it to engage in a margin squeeze would require Eircom to set retail prices below cost. Such loss-making pricing would only be rational if Eircom had a reasonable expectation of being able to set retail prices at excessive levels in the future for a sufficient period to recover the losses. However, Eircom stated that there would be no basis for such an expectation with Eircom already subject to intense competition from Virgin Media and competition increasing with SIRO as well as the ongoing presence of LLU-based operators with significant sunk costs and continuing access regulation supporting further entry.

Cost accounting

- 7.1272 Vodafone agreed with ComReg's proposal that Eircom should continue to be subject to a cost accounting obligation on the basis that ComReg can only effectively monitor Eircom's compliance with its cost orientation and margin squeeze obligations if it can assess in detail Eircom's costs associated with the provision of its regulated WLA services. Vodafone considered that this will ensure that Eircom continues to maintain appropriate cost accounting systems to justify its prices and costs of WLA services.
- 7.1273 Eircom suggested that ComReg should review all of its cost accounting obligations, particularly as current Decisions pre-date NGA.

Rate of Return

- 7.1274 Eircom stated that it is concerned that ComReg may fail to take into account the additional asymmetric risks associated with investments in FTTC-based VUA. Eircom added that the European Commission's 2010 NGA Recommendation requires that a risk premium be included to reflect any additional and quantifiable investment risk incurred in order to take into account the risk associated with NGA investments.
- 7.1275 BT stated that Eircom is currently making a WACC¹⁴⁵⁹ of 14% (source not provided) whereas the rate of return as determined by ComReg is set at 8.75%.¹⁴⁶⁰ In this regard, BT noted that there is no proposal or remedy to address what it considers a major non-compliance issue and it considered that ComReg, by not acting on these issues, creates the wrong culture towards compliance.
- 7.1276 Virgin Media stated that the introduction of a cost oriented price cap for wholesale access to Eircom's FTTC VUA and dark fibre WLA products would effectively cap the prevailing market price of NGA, and therefore limit the Return on Equity ('ROE') associated with investment in NGA.

Cost orientation for Ancillary Services

- 7.1277 Sky agreed that ancillary services associated with CG and NG WLA services ought to be subject to a cost orientation obligation. Sky stated that the cost orientation obligation is clearly required (as proposed by ComReg) for FTTH ancillary services and it referred to a recent Eircom 80% price increase in FTTH connection charges to €270, which was introduced in the absence of a cost control. Sky stated that Eircom's incentives around FTTH are not the same as was the case with respect to the circumstances relating to its FTTC rollout where it faced a degree of competition from a competing platform provider and so was motivated to have a deferred pay-back strategy on connection charges in order to drive take-up. Sky also suggested that it may be the case that restricting the take-up of FTTH is Eircom's short to medium strategy on this occasion, provided the areas targeted can be removed from the Government's National Broadband Plan ('NBP') intervention area.

¹⁴⁵⁹ Weighted Average Cost of Capital.

¹⁴⁶⁰ ComReg notes that the nominal pre-tax WACC set for Eircom is 8.18%. See ComReg Document No 14/136, D15/14, Cost of Capital dated 18 December 2014 ('**2014 WACC Decision**').

- 7.1278 Sky also noted that it had been well publicised that Eircom was contemplating an initial public offering ('IPO') in 2018 and short-term balance sheet considerations may therefore trump incentives to drive take-up with appropriately priced connection and installation (including in-premises work) charges. Sky stated that it was clear that Eircom enjoys a level of market power that allows it to act independently of its customers (wholesale and retail) in its pricing of its FTTH connection service, and this means Access Seekers are exposed to a significant degree of uncertainty from a business planning perspective.
- 7.1279 Furthermore, Sky explained that under the existing FTTC installation process, Access Seekers can carry out their own in-premises work and thus are not reliant on Eircom technicians, with this creating scope for competition for the in-premises connection/installation service. However, having explored numerous options, including dialogue with Eircom, Sky concluded that the feasibility for Access Seekers to carry out the in-premise connection element of FTTH service delivery is unlikely. In this respect, Sky noted that, in the majority of cases, customers would require two appointment based visits from technicians and, in many cases, three appointments would be required. Sky stated that in its experience it is difficult enough to get customers to commit to one appointment (that often requires them to take time off work), so the prospect of securing two or three appointments would result in a very poor customer experience, even before cancellations and rescheduling is considered. Sky concluded that, as such, in-premises installations for FTTH will be a bottleneck service in contrast to what is currently on offer for FTTC. Sky stated that ComReg should be aware of this distinction when setting the price for this ancillary service, given its potential impact on take-up rates and Access Seekers' Subscriber Acquisition Costs ('SAC').
- 7.1280 Vodafone agreed with ComReg's proposal that the current cost orientation obligations should continue to apply to CG and NG ancillary services (migrations, fault repairs and connections services and interconnection services (including WEILS)). Vodafone added that these are important components in the WLA Market which allow alternative SPs to compete with Eircom by interconnecting to its network and, if not subject to a price control obligation, would be at risk of excessive pricing.

Other points raised

- 7.1281 On the issue of VUA soft migrations as proposed by ComReg at paragraph 8.118 of the Consultation, Vodafone commented that the cost incurred for recovering 'jumpers' should not form part of the cost attributed to the migration should not therefore be recovered from Access Seekers. Vodafone was of the view that only the incremental cost of the soft migration should constitute the charge to be levied on the Access Seeker.
- 7.1282 Vodafone also requested ComReg to ensure that the overall proposed price control framework, including the specific cost orientation and margin squeeze obligations, is not overly complicated, both to ensure adequate monitoring once implemented and to avoid opportunities for gaming by Eircom.

- 7.1283 Sky stated that given the history of what has occurred with respect to NGA FTTC pricing in the absence of a cost control, it strongly cautioned ComReg with respect to its plans to adopt a similar policy on FTTH. Sky noted that this is not to suggest that a strict price control regime may be required from the outset on FTTH, but proposed that ComReg lay out in its final decision a clear contingency plan (that does not require waiting until the next market review) in the event that evidence of exploitative pricing practices begins to surface. Sky stated that, given Eircom's conduct in recent years, it is imperative that on-going monitoring of developments in an uncertain market is seen to be carried out by ComReg.
- 7.1284 Eircom stated that there is no sound basis for finding Eircom to have SMP in relation to either VUA or WCA in areas where it faces competition from Virgin Media given the latter's network has potentially twice as many customers as Eircom. Eircom referred to a statement at paragraph 4.128¹⁴⁶¹ of the Consultation in this regard. In addition, Eircom stated that ComReg is proposing to introduce highly intrusive regulation on Eircom while failing to consider whether any regulation should be imposed on Virgin Media despite its much higher market share in urban areas. Eircom believed that this is inconsistent with ComReg's duties under the Framework Directive and will distort and undermine competition including by providing more favourable investment conditions for Virgin Media despite its already very high share of the urban retail market.
- 7.1285 Eircom stated also that regulation of electronic communications is required to be proportionate to the problem being addressed, which requires that the least onerous obligation(s) be imposed that can effectively remedy any identified problem. In relation to NGA investments, Eircom referred to the European regulatory framework, in which it specifically requires that no *ex ante* regulation be imposed in markets which are assessed on a forward-looking basis to be tending towards effective competition, where entry can take place (i.e. such that there are not high and non-transitory barriers to entry) and where competition law alone would be adequate to address the market failure concerned.¹⁴⁶²

¹⁴⁶¹ Paragraph 4.128 of the Consultation stated "For those residential respondents on an FTTC network, 25% said that they would definitely or maybe change their behaviour in response to a hypothetical price increase. 47% of these respondents indicated that they would cancel their subscription and switch to an alternative network. 76% of these respondents reported that they would be very likely or fairly likely to follow through on this change. Of those residential respondents who indicated that they would cancel and switch in response to the hypothetical price increase and were likely or fairly likely to do so, 51% indicated they would switch to a broadband service provided over a CATV network." Of all respondents who had broadband in a bundle (N=976), 49 respondents had FTTC broadband. Of these 49, 25% (n=12) said they would definitely/maybe change their behaviour in response to a €2 price increase. This was noted as being a very small sample size from which to draw inferences. However, the market research showed that 47% of these 12 respondents (n=6) would cancel and switch some or all of their bundle elsewhere.

Of all those that would definitely/maybe switch, irrespective of their current broadband platform (n=89 of the overall n=976 sample) approx. 45% (n=40) would switch to either another fibre supplier or copper broadband supplier, with 15% switching to CATV BB (n=13).

Note, for presentation purposes, ComReg has removed footnote references from the above quotation, with these referring to Slides 109, 111, 114 and 117 of the WLA/WCA Market Research.

¹⁴⁶² Eircom referred to the EC's Recommendation on Relevant Markets.

- 7.1286 Eircom referred to paragraph 4.93¹⁴⁶³ of the Consultation, and referred to paragraph 4.79¹⁴⁶⁴ of the Consultation in order to claim that the Consultation is wrong to assume customers will not switch from FTTC to copper.
- 7.1287 Eircom also raised a possible pricing issue in terms of what it referred to as “reverse migration”, being migration by customers from an NGA service to a CG service. It stated that such migration should be penalised by charging as ComReg should be encouraging investment by operators and encouraging the adoption of new technology by consumers.

ComReg’s Assessment of Respondents’ Views

- 7.1288 ComReg has carefully considered Respondents’ views on appropriate price controls and cost accounting measures in the WLA market. Below, ComReg assesses Respondents’ views according to the themes identified in paragraph 7.1249 above, in particular:
- (a) Pricing Stability and Predictability (discussed in paragraphs 7.1289 to 7.1298 below);
 - (b) Consistency with EC Recommendations discussed in paragraphs 7.1299 to 7.1322 below);
 - (c) Demand Uncertainty (discussed in paragraphs 7.1323 to 7.1325 below);
 - (d) Impact on Investment (discussed in paragraphs 7.1326 to 7.1333 below);
 - (e) Obligation not to cause a margin squeeze (discussed in paragraphs 7.1334 to 7.1345 below);
 - (f) Cost accounting (discussed in paragraphs 7.1346 to 7.1348 below)
 - (g) Rate of return (discussed in paragraphs 7.1349 to 7.1356 below);
 - (h) Cost orientation for Ancillary Services (discussed in paragraphs 7.1357 to 7.1358 below); and
 - (i) Other points raised (discussed in paragraphs 7.1359 to 7.1366 below).

¹⁴⁶³ Paragraph 4.93 of the Consultation stated: “ComReg considers that substitution between copper-based broadband and FTTC based broadband is likely to be one-way (or asymmetric) due to the higher download/upload speeds available on broadband products offered over FTTC networks. Generally, a subscriber to a FTTC based 100Mb broadband product is unlikely to find a lower speed broadband product offered on a copper network to be an effective substitute”.

¹⁴⁶⁴ Paragraph 4.79 of the Consultation stated that: “In addition, 25% of residential respondents on an FTTC network said that they would definitely or maybe change their behaviour in response to a hypothetical price increase. 47% of these respondents indicated that they would cancel their subscription and switch to an alternative network. 76% of these respondents reported that they would be very likely or fairly likely to follow through on this change. Of those residential respondents who indicated that they would cancel and switch in response to the hypothetical price increase and were likely or fairly likely to do so, 49% indicated they would switch to a broadband service provided over a copper network”. Note, for presentation purposes, ComReg has removed footnote references from the above quotation.

Pricing Stability and Predictability

7.1289 ComReg notes that, of those Respondents who commented on pricing stability and predictability issues, ALTO and BT agreed with ComReg's preliminary views.

7.1290 The following table shows the evolution of Eircom's wholesale NG WLA prices since launch. It is notable that the price of standalone VUA has increased by 35% and POTS-based VUA by approximately the same percentage in a period when retail price levels in Ireland and the EU have been largely stable.

Table 22: Wholesale WLA prices

Rental Tariffs for FTTC WLA & POTS (€ per month)			
Period		NGA VUA	NGA POTS-based VUA
20/05/2013	30/06/2015	€17.50	€5.98
01/07/2015	31/08/2016	€19.50	€5.98
01/09/2016	Current	€23.00	€8.09

Rental Tariffs for FTTH WLA & POTS (€ per month)							
Period		NGA VUA			NGA POTS-based VUA		
		150m/b	300m/b	1000m/b	150m/b	300 m/b	1000m/b
31/08/2015	31/08/2016	€20.50	€25.50	€35.50	€6.98	€11.98	€21.98
01/09/2016	Current	€23.50	€28.50	€38.50	€9.09	€14.09	€24.09

Source: Eircom's Broadband Access Reference Offer (BARO)

7.1291 As outlined at paragraph 7.1359 above, Sky referred to the 'regulatory forbearance' exercised by ComReg during the last review (in the 2013 NGA Decision) where no cost orientation obligation was imposed. ComReg disagrees with this presentation of ComReg's approach. As a preliminary matter, as per Section 8.596 of the Consultation, in the context of possible pricing remedies 'regulatory forbearance' means that no price control measure would be imposed. This was not the case in the 2013 NGA Decision¹⁴⁶⁵ because an obligation not to cause a margin squeeze was imposed, and this is a price control measure.

¹⁴⁶⁵ ComReg Decision No D03/13, ComReg Document No 13/11 Remedies in Next Generation Access Markets; dated 31 January 2013 ('2013 NGA Decision').

- 7.1292 In the 2013 NGA Decision ComReg considered that a cost orientation obligation was not then appropriate given the level of uncertainty associated with the rollout of FTTC, both in terms of costs and penetration levels. ComReg notes that the market definitions have changed, in that at the time of the 2013 NGA Decision, VUA was considered to be part of the then WBA Market, whereas in this Decision, VUA is included in the WLA Market. In addition, ComReg considered at that time that there were sufficient retail pricing constraints from cable and prospectively from LLU-based retail and wholesale services (if the right regulatory protections were in place) to warrant a more flexible pricing approach. ComReg considered at the time that this could have been achieved by allowing the SMP undertaking flexibility on wholesale NGA pricing in the then WBA Market, subject to meeting a margin squeeze test against retail prices, while ensuring no foreclosure of LLU-based retail or wholesale services. Accordingly, a margin squeeze regime was implemented for Eircom's VUA services as a means of also encouraging investment in fibre networks. It is also worth noting that while the EC's 2010 NGA Recommendation¹⁴⁶⁶ recommends a cost orientation obligation, in the 2013 Non-Discrimination Recommendation a margin squeeze approach was noted as being an appropriate and justified price control approach where certain conditions were met, including the existence of a retail price constraint. ComReg also refers to paragraphs 7.1305 and 7.1306 below.
- 7.1293 ComReg notes Sky's comment as summarised at paragraph 7.1253 above that the NG VUA price increases by Eircom have coincided with periods of exceptional take-up of Eircom's FTTC services, such that Eircom has been required to advise industry on the status of NGA cabinets that are at 100% capacity, with Sky considering that this is something that ComReg should take note of in assessing Eircom's costs. At Sections 6 and 7 of the 2017 Pricing Consultation and Sections 6 and 7 of the 2018 Pricing Decision ComReg has determined the cost oriented prices for FTTC and EVDSL¹⁴⁶⁷ based WLA services and, in doing so, has taken account of current and forecasted levels of demand and the implications this demand has for network deployment and equipment utilisation.
- 7.1294 Further to Vodafone's comment summarised at paragraph 7.1256 above regarding the need to scrutinise Eircom's costs when setting the cost oriented FTTC-based VUA prices, ComReg notes that the 2017 Pricing Consultation and the 2018 Pricing Decision set out ComReg's approach regarding the cost modelling of FTTC-based VUA services.¹⁴⁶⁸

¹⁴⁶⁶ Commission Recommendation of 20 September 2010 on Regulated Access to Next Generation Access Networks (NGA), 2010/572/EU, 25.9.2010 ('**2010 NGA Recommendation**').

¹⁴⁶⁷ Exchange launched VDSL.

¹⁴⁶⁸ See Section 6 of the 2017 Pricing Consultation and Sections 6 and 7 of the 2018 Pricing Decision.

- 7.1295 ComReg notes that Virgin Media disagreed with ComReg's proposal to impose a cost orientation obligation on the provision of FTTC VUA and dark fibre. Virgin Media's main concern as summarised at paragraphs 7.1259 and 7.1276 was that a cost oriented price control on FTTC-based VUA and dark fibre would effectively cap the prevailing market price of NGA, and so limit the Return on Equity associated with investment in NGA. ComReg considers that its approach to price controls in the WLA Market has balanced measures to encourage infrastructure investment with measures to ensure that prices for Access Seekers are reasonable, and notes that the use of BU-LRIC should set the right balance between ensuring return on investment and setting the correct build or buy signals. The ultimate goal is to ensure that end users benefit from increased choice and fair prices.
- 7.1296 ComReg notes Eircom's views at paragraph 7.1258 where it considers that a key driver in relation to ComReg's proposal to impose the new obligations appears to be Eircom's price increase for FTTC-based services in September 2016, with Eircom considering that the pricing analysis presented in the Consultation suggests that FTTC-based retail services are being effectively constrained by copper and CATV broadband. ComReg's modelling exercise indicates that the Eircom price increases for NG WLA services are above cost oriented prices, and can therefore be considered to be excessive. This is supported by comments from four Respondents highlighting their views of Eircom's excessive wholesale price increases, and suggestions that these increases were not a consequence of increases in Eircom's cost base, but rather indicated a lack of effective constraint on Eircom's market power in the WLA Market.
- 7.1297 ComReg notes that Eircom comments on measures in the WLA Market with reference to its perception of trends in the retail broadband market. However, as discussed in this Decision,¹⁴⁶⁹ ComReg does not accept that some of Eircom's perceptions are a true reflection of the retail broadband market.
- 7.1298 In conclusion, ComReg is of the view that a reasonable level of predictability is desirable for all players. It is of the view that the pattern of wholesale price increases by Eircom as shown in Table 22 above has introduced substantial uncertainty for Access Seekers with a consequent risk to their investment levels. On the other hand, it is noteworthy that the prices now being set by ComReg are reasonably closely aligned with those set by Eircom between July 2015 and August 2016 when Eircom's NGA expansion continued uninterrupted. These considerations, in ComReg's view, support the move to cost orientation for FTTC-based services.

¹⁴⁶⁹ See Sections 3 and 4 of this Decision.

Consistency with EC Recommendations

- 7.1299 ComReg notes Eircom's view as summarised in paragraphs 7.1260 to 7.1263 above that, where an operator is found to have SMP, no wholesale access price regulation should be imposed on active or passive NGA wholesale inputs where non-discrimination obligations are imposed to achieve equivalence of inputs, and a demonstrable retail price constraint exists. Eircom claimed that ComReg's approach was not consistent with EC Recommendations. ComReg does not accept that claim.
- 7.1300 ComReg notes that paragraphs 48 and 49 of the 2013 Non-Discrimination Recommendation specify that NRAs should not impose or maintain regulated wholesale access prices on active or passive (or equivalent non-physical or virtual) NGA wholesale inputs in the case where non-discrimination obligations are imposed which are consistent with:
- (a) Equivalence of inputs ('Eol'), including a roadmap;
 - (b) Obligations relating to technical replicability, when Eol is not yet fully implemented; and
 - (c) Obligations relating to the economic replicability test.
- 7.1301 Paragraph 48 of the 2013 Non-Discrimination Recommendation is conditional on the creation of a demonstrable retail price constraint by virtue of the actual take-up of upstream passive wholesale inputs (or virtual equivalents) or of the presence of alternative infrastructures.
- 7.1302 Paragraphs 49(d) and 49(e) of the 2013 Non-Discrimination Recommendation indicate that the non-imposition of price regulation on passive NGA wholesale inputs is conditional on the NRA showing that a demonstrable retail price constraint is exercised either by the SMP operator's legacy network (subject to a cost oriented price control) constituting a copper anchor, or by operators providing retail services over alternative infrastructure.
- 7.1303 ComReg has considered Eircom's points regarding consistency with EC Recommendations in terms of the following:
- (a) Strength of a direct or indirect price constraint;
 - (b) Meeting non-discrimination obligations; and
 - (c) Economic replicability.

Strength of a direct or indirect price constraint

- 7.1304 ComReg in its 2013 NGA Decision took account of the 2013 Non-Discrimination Recommendation and summarised its position as follows "*... for pricing flexibility to be possible certain conditions must be in place. Firstly, there must be sufficient competitive pricing pressure from independent platforms. Such platforms, in our opinion, include cable and the constraint exercised by LLU (copper-based services having been defined as part of the same market as a chain substitute).*"¹⁴⁷⁰

¹⁴⁷⁰ Paragraph 2.14, 2013 NGA Decision.

- 7.1305 In its 2013 NGA Decision ComReg considered that a cost orientation obligation was not appropriate at that time for NG services given the then level of uncertainty associated with the rollout of FTTC, both in terms of costs and penetration levels. In addition, ComReg considered at that time (and in the context of the market as then defined)¹⁴⁷¹ that there was a sufficient degree of effective retail pricing constraint from cable and prospectively from LLU-based retail and wholesale services (if the right regulatory protections were in place) to warrant a more flexible pricing approach. ComReg considered that this could be achieved by implementing a margin squeeze regime which would allow the incumbent flexibility on wholesale NG pricing in the then WBA market, subject to complying with a margin squeeze test against retail prices, while ensuring no foreclosure of LLU-based retail or wholesale services.
- 7.1306 However, in the Consultation, ComReg considered that changes in the definition of the markets, in the development of competitive conditions, and in the nature of competition problems all indicated that an obligation not to cause a margin squeeze was no longer sufficient, and that a cost orientation price control is necessary, proportionate and justified for FTTC-based VUA in the WLA market.
- 7.1307 In considering the strength of any direct constraints on Eircom in the WLA market, ComReg noted in the Consultation¹⁴⁷² and in the Decision at paragraphs 4.113 to 4.157 that alternative networks are not likely to generate sufficiently effective competitive pressure on Eircom. Alternative networks such as SIRO's fibre to the building ('FTTB') and enet's coverage is currently limited, and while this is expected to grow somewhat over the lifetime of this market review, ComReg does not consider that alternative WLA services would sufficiently constrain Eircom's behaviour in the WLA Market, absent regulation. ComReg therefore considers that the conditions set out in Paragraph 48 of the 2013 Non-Discrimination Obligation is not met, because the actual take-up of upstream passive wholesale inputs offering equivalent functionalities or the presence of alternative infrastructures do not create a demonstrable retail price constraint.
- 7.1308 In considering the nature of any indirect constraint, ComReg does not agree with Eircom's view as summarised at paragraph 7.1261 that there is no justification for the new pricing obligations given the state of competition in the Irish market and, in particular, in urban areas given the '*dominance*' of cable and the additional constraint posed by the cost-based copper network, ComReg's preliminary view in the Consultation¹⁴⁷³ and confirmed in the Decision at paragraphs 4.11, 4.113 to 4.157 was that indirect constraints from the retail level are not likely to be sufficiently effective to constrain Eircom in the WLA Market.

¹⁴⁷¹ As noted earlier, at that time VUA was included in the WBA Market. It is now included in the WLA Market.

¹⁴⁷² See paragraphs 5.16 to 5.96 of the Consultation.

¹⁴⁷³ See paragraphs 5.98 to 5.170 of the Consultation.

- 7.1309 While ComReg regards copper-based offerings as chain substitutes for NGA services for the reasons set out in this Decision,¹⁴⁷⁴ the declining volume of such services means that prospectively the constraint on retail prices from such services is likely to diminish over time. With reference to CATV based broadband, while Virgin Media does have a substantial market share in certain regions, the degree to which it constrains Eircom in practice is unclear. As Eircom itself notes,¹⁴⁷⁵ Virgin Media has increased its retail prices on several occasions in recent times which seems to indicate that price competition is not a sufficient constraint.
- 7.1310 ComReg considers that price increases by Eircom for both standalone retail broadband services and for wholesale POTS-based NGA services¹⁴⁷⁶ support the view that pricing constraints from other retail operators have not been sufficiently effective to constrain Eircom's pricing in the WLA Market, and that existing price controls such as a margin squeeze obligation need to be updated to reflect new circumstances. ComReg's assessment of Eircom's costs shows that price increases for wholesale products in the WLA Market cannot be justified solely on the basis of increased costs. This issue is discussed in greater detail in the 2018 Pricing Decision.
- 7.1311 Eircom also considered, as summarised in 7.1261, that ComReg did not properly examine whether a competition problem would exist in the supply of FTTC-based VUA if copper-based WLA services are subject to cost-based price regulation. ComReg has explained above that indirect constraints from other operators at the retail level have not been sufficient to constrain Eircom's pricing of FTTC-based VUA, and ComReg's view is that this applies also to the lack of a demonstrable retail price constraint exercised by Eircom's legacy network (subject to a cost oriented price control) constituting a copper anchor. ComReg notes that the presence of regulation (i.e., regulation of LLU in the existing WPNIA market) was not sufficient to constrain Eircom's FTTC-based VUA pricing, and therefore a competition problem clearly exists even where copper access services are subject to cost-based pricing regulation.
- 7.1312 ComReg considers that the lack of a demonstrable retail price constraint exercised by Eircom's legacy network indicates that, over the lifetime of this market review, LLU will no longer be considered as an anchor product that would constrain the pricing of FTTC-based services in a way that would avoid a negative knock-on effect for retail broadband prices. ComReg notes that the 2013 Non-Discrimination Recommendation¹⁴⁷⁷ acknowledges that the copper anchor could, in principle, be replaced by an NGA-based product if the legacy access product is no longer able to exercise a demonstrable retail price constraint on the NGA product. In light of this, ComReg considers that the imposition of a cost orientation obligation on FTTC-based VUA has taken utmost account of the 2013 Non-Discrimination Recommendation.

¹⁴⁷⁴ See Sections 4 and 5 of this Decision.

¹⁴⁷⁵ Eircom Submission, page 54.

¹⁴⁷⁶ For example, on 1 September 2016 open eir increased FTTC-based VUA price from €19.50 to €23.00.

¹⁴⁷⁷ See Recital (56) of the 2013 Non-Discrimination Recommendation.

- 7.1313 While maintaining that there is a need for a cost orientation obligation for FTTC-based VUA, ComReg has decided to continue to allow Eircom pricing flexibility on FTTH-based VUA, subject to the obligation not to cause a margin squeeze. ComReg noted in the Consultation that, given cost and demand uncertainties, the FTTH price was likely to be very sensitive to the penetration rate, such that an incorrect forecast could distort future market developments. If the price is too high, it may deter actual or potential purchasers of FTTH-based VUA from purchasing, and if the price is too low, Eircom and, indeed, other infrastructure investors may reduce their investments in FTTH.¹⁴⁷⁸ In ComReg's view, this justifies continuing to allow pricing flexibility for FTTH-based services. However, ComReg considers that, absent regulation, Eircom would have the ability and incentive to price its wholesale access inputs and/or retail prices in such a way that it would not allow a SP to cover the cost of provision in downstream wholesale markets or in retail markets, after acquiring the wholesale inputs from Eircom. An obligation not to cause a margin squeeze is therefore required, and is discussed below.
- 7.1314 For the reasons set out above, ComReg considers that the conditions set out at Paragraph 49 (d) and (e) of the 2013 Non-Discrimination Obligation are not met, because products offered over the legacy copper network and retail services provided over alternative infrastructures do not create a demonstrable retail price constraint. This weakening constraint also means that the legacy copper product cannot be considered as an anchor product, in line with Recital (56) of the 2013 Non-Discrimination Recommendation.

Meeting non-discrimination obligations

- 7.1315 As cited at paragraph 7.1300 above, the decision not to impose or maintain regulated wholesale prices is conditional on several factors, including consistency with EoI (following a detailed roadmap) and economic and technical replicability. Taking account of the 2013 Non-Discrimination Recommendation, ComReg in its 2013 NGA Decision summarised its position on non-discrimination as follows "*...there must be adequate assurance that the incumbent's obligation of non-discrimination has been adequately and transparently implemented, such that the incumbent cannot discriminate against wholesale customers, and that there are assurances that there are sufficient safeguards to competition.*"¹⁴⁷⁹
- 7.1316 It is ComReg's view that some of the conditions set out in the 2013 Non-Discrimination Recommendation and underpinning ComReg's 2013 NGA Decision have not been adequately and transparently met.
- 7.1317 While Eircom did implement EoI for standalone NGA services on launch, it has never fully implemented EoI for the narrowband element of POTS-based NGA access. Implicit in the 2013 NGA Decision was the assumption that over time standalone NGA provision would predominate. This has not in practice happened and there is no indication that this will change in the near future.

¹⁴⁷⁸ See paragraphs 8.646 to 8.651 of the Consultation.

¹⁴⁷⁹ Paragraph 2.14, 2013 NGA Decision.

7.1318 ComReg also notes that a number of compliance breaches with respect to non-discrimination have been notified to Eircom and that litigation is ongoing in this regard.¹⁴⁸⁰

7.1319 ComReg also notes that concern with Eircom's inadequate implementation of its non-discrimination obligations is evidenced in the review of internal governance. While Eircom had in 2013 announced its intention to engage in a process of what it called 'Wholesale Reform', in practice this has not, to date, delivered the expected results. In 2016 and 2017 ComReg consulted¹⁴⁸¹ on a detailed review of Eircom's internal governance arrangements as they relate to regulatory compliance and it retained advisors, KPMG and Cartesian, to report to it on this matter. These reports were published in July 2017.¹⁴⁸² In summary, the KPMG report concluded:

"However, based upon the observations from our review, the maintenance and maturity of the RGM¹⁴⁸³ requires improvements, some of which will be significant, in the areas of governance structures, incentives, management of Confidential Regulated Information, pricing, product development and prioritisation, monitoring and independent oversight".

Cartesian stated:

"Our review findings highlighted significant deficiencies in the Risk Management and Control Framework. Examination of the RMCF¹⁴⁸⁴ supporting the operation, management and assurance of the RACM revealed significant flaws that call into question their overall effectiveness. The RMCF does not reliably mitigate risks, due to the inconsistent operation of controls. This is compounded by poor evidence maintenance, infrequent assurance, and a lack of trending and escalation mechanisms for dealing with defects in controls.....In the context of these findings, it is Cartesian's view that the Regulatory Governance Model is not sufficiently robust and reliable to enable regulatory risks to be assessed and controls to be applied in a reliable and consistent manner".

7.1320 ComReg considers that Eircom's failure to fully and transparently meet its non-discrimination obligations, as evidenced by compliance breaches and in the review of internal governance further confirm the need for additional price controls in the form of cost orientation applied to FTTC-based services.

¹⁴⁸⁰ See, for example, ComReg Information Notice 17/98 'Wholesale Compliance Cases 481 and 568', dated 5 December 2017, and ComReg Information Notice 18/27 'Opinion of Non-Compliance issued to Eircom Ltd for a breach of its Non-Discrimination Obligations Regarding Address Matching', dated 6 April 2018.

¹⁴⁸¹ The RGM Call for Input.

¹⁴⁸² The Consultants' RGM Reports.

¹⁴⁸³ Eircom's Regulatory Governance Model.

¹⁴⁸⁴ Eircom's Risk Management and Control Framework.

Economic replicability

- 7.1321 ComReg notes Eircom's views summarised in paragraphs 7.1262 to 7.1263 where it considered that NGA pricing may need to be particularly dynamic to enable cost recovery across new products with uncertain demand, and that cost orientation should not be imposed on NGA where economic replicability is effective. ComReg considers that, in contrast to the position in 2013, it is no longer the case that FTTC-based VUA is a new product with uncertain demand. The rollout of Eircom's fibre network now allows a comprehensive assessment of demand for FTTC-based VUA, and of the costs associated with its supply. ComReg notes that the level of access prices derived from the cost orientation obligation are sustainable as they allow for the recovery of costs as well as a reasonable rate of return (or WACC).¹⁴⁸⁵ Further, in ComReg's view, Eircom's points were valid when FTTC-based VUA was first introduced, and that is why ComReg initially imposed a margin squeeze regime. However, the absence of direct and indirect pricing constraints indicates that economic replicability on its own has not been sufficient to address competition problems in the WLA market, and that is why ComReg has now decided to impose cost orientation on FTTC-based VUA in the WLA Market.
- 7.1322 ComReg therefore concludes that its approach is consistent with the 2013 Non-Discrimination Recommendation. The 2013 Non-Discrimination Recommendation deals with the non-imposition of regulated wholesale access prices on NGA networks by making the imposition or maintenance of regulated prices conditional on certain conditions being met. ComReg has assessed these conditions as they apply to Eircom's provision of FTTC-based VUA services. There is not a demonstrable retail price constraint on FTTC-based VUA, either from alternative operators or from Eircom's own copper network, and economic replicability has been shown not to be sufficient to constrain Eircom's pricing. In addition it is ComReg's view that Eircom has not in the intervening period implemented sufficiently effective controls to ensure non-discrimination and that non-discrimination has not been ensured such that the conditions of the 2013 NGA Recommendation have been met.

Demand Uncertainty

- 7.1323 Eircom asserted, as summarised at paragraph 7.1264, that demand in the WLA market for FTTC-based VUA services remained highly uncertain and that ComReg's 2016 Pricing Information Notice showed a substantial range of uncertainty, with the upper end of the range for FTTC-based VUA being 28% higher than the lower end. ComReg does not agree. Eircom has been rolling out its FTTC network since 2013, and there is an increasing clarity regarding the business case for supplying FTTC-based VUA. The demand data provided by Eircom as part of ComReg's cost modelling exercise to determine the charges for FTTC services indicates that, [§< [REDACTED]
[REDACTED]
[REDACTED]]. Therefore, a significant part of Eircom's FTTC investment had already taken place by the end of 2017.

¹⁴⁸⁵ See Section 6 of the 2017 Pricing Consultation for further details on the modelling approach for FTTC-based services.

- 7.1324 Eircom also claimed at paragraph 7.1264 that the cost range for FTTC published by ComReg in the 2016 Pricing Information Notice ignores key additional sources of uncertainty including the likely loss of lines to rival networks. ComReg has continued to develop its price modelling since the publication of the 2016 Pricing Information Notice,¹⁴⁸⁶ and this has already addressed many of Eircom's issues, and issues raised by other respondents. Modelling development includes the further consideration of the impact of competition from rival platforms. This falls to be assessed in greater detail in the 2018 Pricing Decision.
- 7.1325 In relation to Eircom's point at paragraph 7.1265 regarding consistency of demand between the draft cost models, this was addressed by ComReg through its further work on cost modelling in the NGA Cost Model¹⁴⁸⁷ and in the NGN Core Model.¹⁴⁸⁸ ComReg notes that Eircom's points regarding the cost modelling are to do with the specifics of the modelling exercise, which by definition considers parameters and scenarios,¹⁴⁸⁹ and not to do with the principles of price controls.

Impact on Investment

- 7.1326 ComReg does not agree with Eircom's point as summarised at paragraph 7.1266 that the economics of Eircom's FTTC investment is heavily dependent on continued migration of customers to FTTC, and this would be unachievable were FTTC prices raised, given that this would halt migration to FTTC. Firstly, the majority of Eircom's investment in FTTC infrastructure such as cabinets, DSLAMs and E-Side¹⁴⁹⁰ fibre, has already taken place and a significant uptake of these services has already been achieved. Secondly, this point would appear to contradict price increases by Eircom itself, where it increased the price for standalone FTTC-based VUA services from €17.50 to €19.50 in July 2015 and subsequently from €19.50 to €23 in September 2016, with migration to NGA continuing to rise after these increases.¹⁴⁹¹

¹⁴⁸⁶ ComReg Document 16/106, 2016: "Information Notice - Derogation to Eircom on advance notification and publication of SLAs for LLU and SB-WLR". Available online at https://www.comreg.ie/media/dlm_uploads/2016/11/ComReg-16106.pdf

¹⁴⁸⁷ The **NGA Cost Model** is used to determine the appropriate BU-LRAIC costs for the provision of FTTC-based VUA and FTTC-based Bitstream services. See Section 6 of the 2017 Pricing Consultation.

¹⁴⁸⁸ The **NGN Core Model** is used to determine the BU-LRAIC costs for the provision of core network services. See Section 8 of the 2017 Pricing Consultation.

¹⁴⁸⁹ For further detail on cost modelling, see Sections 6 and 8 of the 2017 Pricing Consultation and Sections 6 and 8 of the 2018 Pricing Decision.

¹⁴⁹⁰ Exchange side – access network within an exchange.

¹⁴⁹¹ Note that the impact on retail demand will depend on the extent and timing of pass through of wholesale price increases to retail price.

- 7.1327 Further to the views of Eircom set out at paragraph 7.1266 and 7.1267 that cost orientation would undermine investment in NGA networks, ComReg does not agree. Eircom's FTTC deployment is almost complete and new deployments are focussed on FTTH, where no cost orientation obligation has been imposed. As a consequence, ComReg considers that the risk of deterring investment in FTTC and further investment in FTTH is likely to be low. In ComReg's view, the cost orientation price control on FTTC-based VUA, combined with continuing flexibility for FTTH-based VUA services, will not negatively affect fibre network investment over the lifetime of the review period, and is likely to encourage investment in FTTH-based services.
- 7.1328 ComReg does not agree with Eircom's point at paragraph 7.1266 that cost orientation undermines certainty for the SMP operator by making its pricing subject to the regulator's view of costs and the SMP operator is now constrained from being able to adjust prices in response to cost changes. Setting a cost oriented price for FTTC-based VUA upfront provides certainty to the SMP operator as to what it has to do in order to ensure compliance with its obligations. In addition, there is greater certainty for the SPs that use the regulated products as to the price they will be charged for the service they are buying.
- 7.1329 Furthermore, in Section 12 of the 2017 Pricing Consultation and Section 12 of the 2018 Pricing Decision ComReg specifies that, on an annual basis, Eircom should review the inputs, costs and assumptions of the NGN Core Model and the NGA Cost Model. The annual review is an opportunity to ensure that any exceptional changes in the model(s) are considered. If, as a result of this review, it is clear that there are material differences between actual and forecasted costs, then Eircom should bring this to the attention of ComReg. ComReg will then assess these material differences and consider how any issues arising might be addressed going forward. Therefore, there is an opportunity for Eircom to review the underlying data and inputs in the models and to bring any material changes to ComReg's attention for further consideration.
- 7.1330 ComReg does not accept Eircom's assertion, as summarised at paragraph 7.1266 and 7.1267 that cost-based regulation of FTTC would undermine the migration path from current generation services to FTTC services. Copper access products such as LLU and SLU are already cost oriented and provide an input to the FTTC cost stack, and therefore to FTTC-based VUA prices. As a consequence, cost orientation for FTTC brings the price controls more in line with copper-based products. Since products offered over NGA networks are in competition with products over copper networks, the consistency of pricing approaches between wholesale products using different technologies helps operators to make an efficient choice of the most optimal wholesale product.

- 7.1331 ComReg notes Virgin Media's views as summarised at paragraph 7.1268 that cost oriented obligations imposed on wholesale access to FTTC-based VUA and dark fibre have the potential to undermine investment in competing broadband infrastructure and could directly influence a decision on whether to build new network, potentially leading to reduced commercial investment in NGA infrastructure by Eircom, Virgin Media, and other operators. ComReg does not agree. ComReg has decided upon BU-LRAIC+ as the appropriate costing methodology to be used to determine the cost oriented price for FTTC-based VUA. The BU-LRAIC+ methodology is based on current costs which values the operator's assets at the current market value and allows for changes in asset prices. By linking the value of the assets to newly deployed network it promotes efficient investment incentives and ensures that Eircom recovers its future costs, thereby encouraging investment by Eircom.
- 7.1332 ComReg notes that one of the objectives of cost orientation is to ensure that access prices are not so high that service-based competition cannot develop, while at the same time ensuring that they are not so low that it will discourage investment in infrastructure, both by Eircom and by other operators. ComReg recognises that if an alternative operator plans to build its own NG access network, the regulated access price can act as a price constraint, and affect the return on investment. A similar effect could be considered with regard to Eircom's investment¹⁴⁹², where Eircom could reasonably expect a 'fair bet'¹⁴⁹³ in terms of its decision to invest. ComReg recognised the uncertainty around potential demand for FTTC-based services when it previously forbore from imposing cost orientation. Eircom has not been subject to a cost orientation obligation on FTTC-based services since it began its rollout in 2013, and its decision to invest would obviously have been made prior to this. Investment in FTTC is now by and large complete. ComReg notes also that the 2010 NGA Recommendation stated that the investment risk for FTTC is significantly lower than that for FTTH.¹⁴⁹⁴ However, in now deciding that cost orientation is required for FTTC-based services, ComReg notes that the regulated access price includes a reasonable rate of return (WACC) that takes into account the risk of investing in these kind of assets. As a consequence, efficient infrastructure deployment can be profitable (from the SMP operator's or from alternative players' perspective) in the presence of this price constraint. Therefore, ComReg does not consider that cost orientation will undermine investment in NGA networks.

¹⁴⁹² This point was raised by Eircom and by its advisers in response to the 2017 Pricing Consultation.

¹⁴⁹³ An investment is considered to be a 'fair bet' when expected return is equal to the cost of capital, at the time of investment. This allows the investor to benefit from the risk of demand being higher than expected balanced against the risk of returns below the cost of capital if demand is low.

¹⁴⁹⁴ See discussion of risk premium in the TERA Report, dated 7 April 2017, which accompanied the 2017 Pricing Consultation.

7.1333 If alternative operators plan to rely on access to the SMP operator's wholesale inputs, cost orientation ensures greater predictability of access prices, and reduces the risk of Eircom increasing both retail and wholesale prices (which may be possible if Eircom was subject only to a margin squeeze obligation) if competition is not sufficiently effective. With respect to Eircom, cost orientation provides a stable view on revenues which might be used in making future investment decisions and a level of certainty regarding what is required of it in terms of complying with regulatory pricing obligations. Therefore, ComReg does not consider that cost orientation will undermine investment in NGA networks, whether by Eircom or by alternative operators.

Obligation not to cause a margin squeeze

- 7.1334 ComReg notes Sky's comments as summarised at 7.1269 regarding the appropriateness of the current structure of the margin squeeze tests and notes that Sky signalled its intention to provide a more detailed response as part of the 2017 Bundles Consultation rather than as part of its response to the Consultation.
- 7.1335 With regard to Vodafone's views summarised at paragraph 7.1270 in relation to the competition problems that each of the different margin squeeze tests is aiming to address, and the reasons as to why the relevant cost orientation obligations would fail to provide adequate protection for the concerns identified, ComReg refers to the discussion of competition problems and the impact on the WLA market set out in the Consultation and Decision.¹⁴⁹⁵ The assessment of competition problems is summarised in the 2017 Pricing Consultation¹⁴⁹⁶ and in the 2017 Bundles Consultation,¹⁴⁹⁷ and in the 2018 Pricing Decision, and the 2018 Bundles Decision.
- 7.1336 ComReg considers that, in the absence of an appropriate price control on Eircom obliging it to maintain an economic space between its wholesale products, and between retail and wholesale products, by virtue of its control of the underlying access infrastructure and its presence at both wholesale and retail levels, Eircom would have the ability and incentive to price its wholesale access inputs and/or retail prices in such a way that it would not allow an SP to cover the cost of provision in downstream retail markets, after acquiring the wholesale inputs from Eircom. If SPs cannot profitably replicate Eircom's retail offers, they may exit the wholesale or retail markets, and/or market entry may be deterred. This would be to the detriment of End Users because it would restrict choice and could eventually lead to higher prices. Therefore, ComReg's position is that Eircom should be subject to margin squeeze obligations which ensure that it does not cause a margin squeeze between WLA services in the WLA Market, and wholesale services in downstream markets, and does not cause a margin squeeze between WLA services and retail services.

¹⁴⁹⁵ See Section 7 of the Consultation and Section 6 of the Decision.

¹⁴⁹⁶ See Sections 10 and 11 of the 2017 Pricing Consultation.

¹⁴⁹⁷ See the 2017 Bundles Consultation, and summarised at Section 3 of the 2018 Bundles Decision.

- 7.1337 ComReg notes Eircom's point summarised at paragraph 7.1271 where it considered that ComReg had not examined whether there would be a justification for retaining the current margin squeeze rules in circumstances where the FTTC-based access services are subject to cost orientation obligations. In addition, Eircom considered that for it to engage in a margin squeeze, it would require Eircom to set retail prices below cost and that such loss-making pricing activity would only be rational if Eircom would have a reasonable expectation of being able to set retail prices at excessive levels in the future for a sufficient period to recover the losses.
- 7.1338 In the Consultation,¹⁴⁹⁸ ComReg proposed that Eircom should be obliged not to cause a margin squeeze between its wholesale services in the WLA Market, and other downstream wholesale services. In particular, Eircom should not cause a margin squeeze between FTTH-based VUA in the WLA Market and FTTH-based Bitstream in the WCA Markets. For the reasons summarised above, ComReg maintains that there continues to be a requirement for these obligations. As discussed earlier, ComReg has decided to impose a cost orientation obligation on FTTC-based VUA in the WLA Market, and therefore a specific additional obligation addressing margin squeeze between FTTC-based VUA and FTTC-based Bitstream in the WCA Markets is not required.

¹⁴⁹⁸ See paragraphs 8.646 to 8.661 of the Consultation.

7.1339 ComReg also maintains that for the reasons summarised above, Eircom should be subject to an obligation not to cause a margin squeeze between its WLA services and downstream retail services. ComReg notes that there are substantive differences between conduct in the form of a margin squeeze and the predatory pricing scenario described by Eircom in its response. A margin squeeze refers to the difference between the wholesale and retail price, without any necessity for the wholesale price to be excessive, or the retail price to be predatory. FTTC-based services are cost oriented, so the wholesale price is not excessive. However, absent an obligation not to cause a margin squeeze between FTTC-based services and retail services, even in the presence of a cost orientation obligation on the wholesale FTTC-based service, Eircom could price its retail services at a level that would not allow an SP to cover the cost of provision in downstream retail markets, though not necessarily at a predatory level, after acquiring the wholesale inputs from Eircom. As a vertically-integrated operator with SMP in the WLA Market, given the notional nature of its wholesale input costs, Eircom would be able to sustain a reduction in retail revenue for longer than many of its competitors having regard to the more immediate cash flow impact of these wholesale input costs¹⁴⁹⁹ on its competitors (relative to the impact on Eircom). While Eircom suggests that it would be prevented from engaging in 'predatory'¹⁵⁰⁰ pricing, as it could not eventually increase retail prices to recover losses because of competitive pressures from Virgin Media and SIRO (who do not depend on wholesale inputs from Eircom), and LLU operators, ComReg notes that such constraint is geographically limited.

¹⁴⁹⁹ ComReg considers that Eircom has a degree of operational latitude available to it, for example decisions it may make regarding its investments in assets, such that the cost it incurs in the short run in practice may be lower than the cost oriented price charged to its wholesale competitors. ComReg considers that Eircom could use such savings to fund a retail margin squeeze in the short run, prior to the cost oriented price being adjusted for SPs.

¹⁵⁰⁰ ComReg noted that in an *ex ante* context, one of its objectives is to promote the development of effective competition which is achieved, *inter alia*, by promoting entry and expansion. In this context an *ex ante* margin squeeze test does not necessarily operate under the same parameters as an *ex post* margin squeeze abuse assessment. For example, an *ex ante* margin squeeze test can take account of circumstances where the Access Seeker may have differing cost structures relative to Eircom having regard to potential lower economies of scale/scope.

- 7.1340 Having regard to the SMP assessment in Section 5, ComReg has set out its position that the WLA Market is not likely to be effectively competitive, including in circumstances where Virgin Media's self-supply was hypothetically included with the WLA Market. As set out in Section 6 regarding competition problems and in this Section 7 ComReg considers that in the absence of a margin squeeze obligation¹⁵⁰¹ (save for the scenarios set out further below), ultimately, retail competition would not likely be effective given the potential risk of Access Seekers being excluded from downstream markets. In this respect, ComReg considers that by virtue of its SMP position (derived from the lack of effective existing and potential competition) Eircom has the ability, through its control of its retail pricing, to cause a margin squeeze (for example, by lowering its retail pricing or bundling retail broadband with unregulated retail services¹⁵⁰²) such that an Access Seeker cannot on the basis of its use of the WLA inputs, offer a similar retail bundle or a retail broadband service at a price that allows it to earn a sufficient margin and recover its efficiently incurred costs. This could lead to a lack of effective competition in downstream markets,¹⁵⁰³ including risks of foreclosure and deterring any new entry or expansion. Such a softening of competition could ultimately eliminate Access Seeker competitors from the market (or large parts of it) with potential consequences for competition in vertically related markets. This would not be in the interests of consumers in the long term as lower competition could translate into higher prices and less innovation.
- 7.1341 ComReg has considered whether an obligation not to cause a margin squeeze between WLA services and downstream retail services should be further specified for all services, or only for Next Generation services. Given the ongoing decline in the use of CG WLA services, and ComReg's view of the sufficiency of other measures (including obligations of access and transparency, as well as cost orientation) applied to CG services, ComReg has decided that a specific obligation not to cause a margin squeeze between CG WLA services and CG retail services is not warranted. This obligation will therefore apply in particular to Next Generation wholesale and retail services, where the retail services are delivered by Next Generation services.
- 7.1342 All retail FTTC services (whether sold singly or as part of a bundle) will be included in the assessments further detailed in the 2018 Bundles Decision. In ComReg's view, this addresses the incentive and potential for Eircom to engage in anti-competitive conduct (e.g. undermining replicability) when selling products containing FTTC inputs at a retail level on a bundled or standalone basis.
- 7.1343 ComReg notes that given the sufficiency of other measures (including obligations of access and transparency, as well as cost orientation) there will be no separate standalone margin squeeze test between FTTC-based services and retail services delivered by FTTC-based services sold singly.

¹⁵⁰¹ This can, depending on the circumstances, include instances where a cost orientation obligation is present.

¹⁵⁰² ComReg notes that Eircom currently offers double, triple and quad-play bundles by virtue of its position as a Mobile Network Operator and its ownership of EirVision and EirSport.

¹⁵⁰³ Including the WCA Markets, where Access Seekers competing in such markets do so on the basis of WLA inputs).

- 7.1344 In the Consultation, ComReg indicated that it would be necessary to consider a particular obligation that Eircom should not cause a margin squeeze between FTTH-based VUA services and FTTH-based retail services within the footprint of the Urban WCA Market, should the Urban WCA Market be deregulated. This is because the withdrawal of SMP regulation from the Urban WCA Market would mean that Eircom could foreclose other operators using WLA inputs to offer retail services within the footprint of the Urban WCA Market. Indeed, the withdrawal of SMP regulation from the Urban WCA Market is predicated on fully effective regulation in the upstream WLA Market. As this Decision has found the Urban WCA Market to be competitive, ComReg maintains that Eircom should be subject to an obligation not to cause a margin squeeze between FTTH-based VUA services and FTTH-based retail services sold singly within the footprint of the Urban WCA Market.
- 7.1345 ComReg notes that its conclusions on the obligation not to cause a margin squeeze represent a streamlining and simplification of the preliminary position adopted in the Consultation, and that this introduces changes to the Consultation position. A specific obligation not to cause a margin squeeze will be applied only between NG WLA services and retail services delivered by NG WLA services, and will not apply between CG WLA services and CG retail services delivered by CG WLA services. All FTTC services will be included in the overall retail margin squeeze tests, which fall to be further specified in the 2018 Bundles Decision. There will be no specific margin squeeze obligation between FTTC-based Bitstream and retail services sold singly delivered by FTTC-based Bitstream.

Cost Accounting

- 7.1346 As summarised at paragraph 7.1272 Vodafone expressed a view that:

“Eircom should continue to be subject to a cost accounting obligation on the basis that ComReg can only effectively monitor Eircom’s compliance with its cost orientation and margin squeeze obligations, if it can assess in detail Eircom’s costs associated with the provision of its regulated WLA services.”

- 7.1347 ComReg considers that the current annual review process (between Eircom and ComReg) pursuant to the 2010 Accounting Separation Decision¹⁵⁰⁴ should be sufficient to address any issues regarding the specific provision of information as part of the Eircom separated accounts.
- 7.1348 In relation to Eircom’s point summarised at paragraph 7.1273 that ComReg should review the current cost accounting obligations, including the format of accounting information, ComReg notes Eircom’s concerns and concludes that this can be considered annually when determining the format of the various market statements.

¹⁵⁰⁴ ComReg Document No 10/67, Decision D08/10 ‘Response to Consultation Document and Final Direction and Decision, Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited’, 31 August 2010 (‘2010 Accounting Separation Decision’).

Rate of Return

7.1349 ComReg has considered Eircom's point at paragraph 7.1274 that ComReg may fail to take into account the additional asymmetric risks associated with the investments.¹⁵⁰⁵ In the context of Eircom's FTTC (or EVDSL) deployment, ComReg considers that there is no need to apply a risk premium. As stated in Section 6 of the EC's 2010 NGA Recommendation:

"Investment into FTTN, on the other hand, which is a partial upgrade of an existing access network (such as for example VDSL), normally has a significantly lower risk profile than investment into FTTH, at least in densely populated areas. In particular, there is less uncertainty involved about the demand for bandwidth to be delivered via FTTN/VDSL, and overall capital requirements are lower. Therefore, while regulated prices for WBA based on FTTN/VDSL should take account of any investment risk involved, such risk should not be presumed to be of a similar magnitude as the risk attaching to FTTH based wholesale access products. When setting risk premia for WBA based on FTTN/VDSL, NRAs should give due consideration to these factors..."

7.1350 ComReg has also taken into account the criteria set out in Annex I, point 6 of the 2010 NGA Recommendation which states that:

"NRAs should estimate investment risk, inter alia, by taking into account the following factors of uncertainty:

- i. Uncertainty relating to wholesale and retail demand;*
- ii. Uncertainty relating to the costs of deployment, civil engineering works and managerial execution;*
- iii. Uncertainty relating to technological progress;*
- iv. Uncertainty relating to market dynamics and the evolving competitive situation, such as the degree of infrastructure-based and/or cable competition; and*
- v. Macroeconomic uncertainty."*

7.1351 Annex I, point 6 of the 2010 NGA Recommendation also recognises that the above factors may change over time, in particular due to the progressive increase in retail and wholesale demand met and that NRAs should review the situation at regular intervals. In this respect, Annex I, point 6 recognises that:

"Criteria such as the existence of economies of scale (especially if the investment is undertaken in urban areas only), high retail market shares, control of essential infrastructures, OPEX savings, proceeds from the sale of real estate as well as privileged access to equity and debt markets are likely to mitigate the risk of NGA investment for the SMP operator..."

¹⁵⁰⁵ This is addressed further in Section 6 of the 2017 Pricing Consultation, as well as Section 6, and Annex 12, paragraph A12.88 of the 2018 Pricing Decision.

- 7.1352 Therefore, in ComReg's view it is recognised that there is a reduced investment risk for FTTC deployment. FTTC services can reutilise the D-Side¹⁵⁰⁶ copper network and the deployment of Eircom's FTTC network has been underway since 2013. As mentioned at paragraph 7.1326 above, at this stage the majority of the associated investment in FTTC infrastructure such as cabinets, DSLAMs and E-Side¹⁵⁰⁷ fibre, has taken place and a significant uptake of these services has already been achieved. Similarly, EVDSL reutilises the copper loop thereby limiting the level of new investment required. As pricing and quality of service is similar to FTTC it is easier to make predictions on EVDSL penetration rates, while the use and cost of copper lines can be estimated with a reasonable level of certainty. Therefore, ComReg considers that there is no need to apply a risk premium for FTTC or EVDSL deployment.
- 7.1353 While Eircom did not claim that there was any failure to take account of risks associated with FTTH investment, for completeness ComReg further considers that inclusion of a risk premium is not necessary for FTTH. As ComReg is imposing a margin squeeze obligation (rather than cost orientation) for FTTH there is no need to estimate costs of the associated access network. At the same time, the assets relevant for the FTTH margin squeeze obligation are not a part of the access network but rather part of the core network. These assets are not therefore subject to a risk premium.
- 7.1354 In relation to BT's views at paragraph 7.1275 that Eircom is "*currently making a WACC of 14%*", ComReg notes that Eircom's separated accounts reported a 13% return on mean capital employed for the Wholesale Access Market for the financial years ended 30 June 2016 and 30 June 2017. These covered periods when some of the more significant revenues recognised in the Wholesale Access Market Group¹⁵⁰⁸ related to services which were not subject to a cost orientation obligation (but rather to a retail minus or margin squeeze obligation). Since then, the price control for SB-WLR has been amended to a cost oriented price (from a previous retail minus price control) which has resulted in revenue reduction of circa €38m year on year from 2016 to 2017. In addition, ComReg is now specifying that a cost orientation obligation should also apply to FTTC-based VUA services in the WLA Market. Therefore, ComReg expects the rate of return reported in the accounts for the Wholesale Access Market Group will reduce towards the regulated rate of return used to set cost oriented prices.
- 7.1355 Nonetheless, there is always likely to be some variance between the return reported in the separated accounts and the regulated rate of return of 8.18% as set out in the **2014 WACC Decision**. This variance can arise as regulated prices are generally not set with reference to historical costs (but based on a BU-LRAIC+ basis) and other issues, such as the frequency and severity of storms or the level of recorded investment relative to realised demand, can also affect the rate of return reported in any particular year.

¹⁵⁰⁶ Distribution side – access network from the exchange to the customer premises.

¹⁵⁰⁷ Exchange side – access network within an exchange.

¹⁵⁰⁸ The Eircom separated accounts provides aggregated data for the Wholesale Access Market Group, which includes *inter alia* the wholesale broadband access market and wholesale fixed narrowband and unbundled access.

7.1356 ComReg notes Virgin Media's views summarised at paragraph 7.1276 above that the introduction of a cost oriented price cap for wholesale access to Eircom's FTTC-based VUA and dark fibre will effectively cap the prevailing market price of NGA, and therefore limit the Return on Equity ('ROE') associated with investment in NGA. ComReg would point out that the prices set for dark fibre as per the 2016 Access Pricing Decision include the regulated rate of return of 8.18%. The proposed prices for FTTC-based VUA as per the 2017 Pricing Consultation, as well as the final prices now set out in the 2018 Pricing Decision, include the regulated rate of return of 8.18%. Therefore, the cost orientation obligation should allow Eircom to recover its efficient costs plus a reasonable rate of return. To the extent that this constitutes a price cap, ComReg notes that it reflects the ability of an efficient operator to invest in NGA and make a reasonable return on its investment.

Cost orientation for Ancillary Services

7.1357 Both Respondents that commented on ancillary services agreed with ComReg's proposal that the current cost orientation obligations should continue to apply to CG and NG ancillary services. ComReg agrees with Vodafone's point that these are important components in the WLA Market, and, if not subject to a price control obligation, would be at risk of Eircom pricing excessively. ComReg also notes Sky's points on the processes involved in providing ancillary services.

7.1358 It is important to clarify that all CG and NG ancillary charges in the existing WPNIA market and WBA markets have been subject to cost orientation based on the 2010 WPNIA Decision and the 2011 WBA Decision for CG services and in the 2013 NGA Decision for NG services. The cost orientation obligation for ancillary services was subsequently further specified in the 2016 Access Pricing Decision such that Eircom can recover no more than its actual incurred cost (adjusted for efficiencies), plus a reasonable rate of return associated with these services. In the Consultation, ComReg proposed to continue this obligation of cost orientation for ancillary services in the WLA Market. In the 2017 Pricing Consultation, ComReg consulted on how the connection costs associated with both CG and NG services in the WLA and WCA Markets should be recovered going forward.¹⁵⁰⁹ In the 2018 Pricing Decision, ComReg examines whether the connection costs for FTTH services in the Relevant WLA Market and Relevant WCA Market should be recovered through a combination of an upfront connection charge / migration charge and a monthly rental charge.

¹⁵⁰⁹ See Section 13 of the 2017 Pricing Consultation.

Other points raised

- 7.1359 With regard to Vodafone's point summarised at paragraph 7.1281 above on the issue of soft migrations, ComReg is of the view that no further action is required at present. Migration costs are currently subject to a cost orientation obligation pursuant to the 2016 Access Pricing Decision, and this obligation is re-imposed at a high level in this Decision and considered in more detail in the 2018 Pricing Decision. ComReg is of the view that these ancillary charges should continue to be based on no more than the actual costs incurred, adjusted for efficiency plus a reasonable rate of return. In line with its pricing obligations Eircom is expected to keep these ancillary charges under review. For FTTH connection / migration charges, please see Section 13 of the 2018 Pricing Decision.
- 7.1360 ComReg notes Vodafone's point summarised at paragraph 7.1282 that the regulatory framework imposed by ComReg should not be overly complicated. The measures set out by ComReg in this Decision streamline and simplify current obligations.
- 7.1361 At paragraph 7.1283, Sky noted that ComReg should set out a clear contingency plan (that does not require waiting until the next market review) in the event that evidence of exploitative pricing practices begins to surface with regard to FTTH. In addition, Vodafone considered that close monitoring of the market was appropriate during the lifetime of this review and ComReg should reconsider the need for a cost orientation obligation should the demand for FTTH-based Bitstream services become more predictable. As noted in Section 8¹⁵¹⁰ of the Consultation, ComReg acknowledged it has residual concerns that Eircom may have the ability and incentive to price excessively in relation to FTTH services even in the presence of a margin squeeze price control. ComReg notes that in the areas where FTTH is currently planned to be rolled out there is little or no competing infrastructure through which a sufficiently meaningful competitive constraint could be exercised on Eircom's pricing over the period of the current market review. ComReg will keep this matter under review during the price control period and consider whether more stringent price control obligations are required in future (including when considered alongside other factors). ComReg will continue to monitor the relevant price trends in this regard.
- 7.1362 ComReg notes Eircom's point at paragraph 7.1284 where it considers that there is no sound basis for finding that Eircom has "*SMP in relation to either VUA or WCA*" in areas where it faces competition from Virgin Media, given the latter's network has potentially twice as many customers. In Sections 6 and 11 of this Decision, ComReg has set out the reasons supporting its designation of Eircom as having SMP in the WLA Market and Regional WCA Market respectively.
- 7.1363 ComReg does not agree with Eircom's point summarised at paragraph 7.1284 that ComReg has failed to consider whether any regulation should be imposed on Virgin Media and that this will distort and undermine competition, including by providing more favourable investment conditions for Virgin Media despite its already very high share of the urban retail market. ComReg notes that, as discussed in Sections 6 and 11 of the Consultation and the Decision, it did not find Virgin Media to have SMP in any market, and therefore the question of remedies does not arise.

¹⁵¹⁰ See paragraph 8.650 of the Consultation.

- 7.1364 In response to Eircom's point summarised at paragraph 7.1285 that the least onerous obligation(s) should be imposed, ComReg believes that this is what is being done in order to address the competition problems identified. Throughout the Consultation and this Decision ComReg has fully justified the reasons why obligations are necessary and has taken account of proportionality considerations, having regard to the need to address identified competition problems. The RIA at Section 14 also assesses the impact of regulation on the various stakeholders and on competition generally. In addition, ComReg considers that the reasons for imposing the obligation of cost orientation for FTTC-based services were sufficiently justified in Section 8 of the Consultation.¹⁵¹¹
- 7.1365 As noted at paragraph 7.1286, Eircom considered that substitution between copper-based broadband and FTTC-based broadband is likely, on the whole, to be one-way (or asymmetric) due to the higher download/upload speeds available on broadband products offered over FTTC networks, and Eircom claimed that the Consultation is wrong to assume customers will not switch from FTTC to copper. As noted in the Consultation and this Decision,¹⁵¹² ComReg considers that, at the retail level, copper-based and fibre based broadband fall within the same retail product market, and ComReg maintains the view that substitution between these retail products is likely to be largely asymmetric or one-way. While ComReg acknowledges that some End Users may substitute back from fibre based services to copper-based services (perhaps in circumstances where the download speed increases or the stability of the service quality on the FTTC services are not as anticipated), it is considered unlikely that such a scenario would be sufficiently widespread. To support this view, ComReg notes that pricing of retail copper-based services is similar to that of retail FTTx-based services, so there would be no price-based reason for a consumer to switch from FTTx back to copper. Further, the discussion of the retail broadband market in the Consultation and the Decision¹⁵¹³ shows a continuing decline in the number of subscribers to retail copper-based services at the same time as a continuing increase in the number of subscribers to retail FTTx services.
- 7.1366 Eircom claimed, as summarised at paragraph 7.1287, that there is a possible pricing issue in terms of what it refers to as "*reverse migrations*", being migrations by customers from NGA to CGA services. Eircom is of the view that such migrations should be penalised. ComReg does not agree. Migration costs are cost oriented so on the basis that Eircom can recover the costs reasonably incurred for these migrations, ComReg does not believe that further action is necessary.

¹⁵¹¹ See paragraphs 8.607 to 8.628 of the Consultation.

¹⁵¹² See Section 5 of the Consultation and Decision.

¹⁵¹³ See Section 3 of the Consultation and Decision.

Comments by the European Commission

7.1367 In the EC Response, the EC commented on ComReg's Notified Draft Measures, in particular, on the need for an appropriate and consistent price control of wholesale products and the need for updated current generation access prices (see EC Response in Appendix: 2). In Appendix: 3, ComReg has taken utmost account of these comments and confirmed that it will review the Revised CAM and the associated prices set in the 2016 Access Pricing Decision as quickly as possible, and will inform the EC in due course of the outcome of any changes to the prices as a result of that review process.

ComReg's Position

- 7.1368 Having considered the views of respondents referred to in paragraphs 7.1250 to 7.1287, ComReg is of the view that it is both proportionate and justified to impose price control and cost accounting obligations on Eircom in the WLA Market.
- 7.1369 In general, ComReg considers that, absent regulation, Eircom has the ability and incentive to leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or wholesale markets. Eircom, as a vertically-integrated SP being designated with SMP, has the incentive to use its market power in the WLA Market to affect the competitive conditions in downstream wholesale and/or retail markets, in particular, through its ability to control the key inputs used by wholesale customers which compete against Eircom in such markets. This could result in a distortion of or restriction in competition in these downstream markets, ultimately resulting in harm to End Users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced End User choice. Therefore, ComReg considers that price control obligations are justified and proportionate in the WLA Market. The detail and implementation of these price controls falls to be further specified in the 2018 Pricing Decision and the 2018 Bundles Decision.
- 7.1370 ComReg has decided that a cost orientation price control is appropriate for a number of services in the WLA Market. A cost orientation obligation will apply to services including, but not limited to, ULMP, SLU, Line Share, CEI, dark fibre, FTTC-based VUA, Exchange launched VUA and other ancillary services in the WLA Market. Where applicable, the cost orientation obligation as set out in the 2016 Access Pricing Decision shall be re-imposed in this Decision, and shall continue to apply.
- 7.1371 ComReg notes that the price control obligation in the WLA Decision Instrument set out at Appendix: 20 of this Decision contains the two alterations set out below, compared to the version of the WLA Decision Instrument that was contained in ComReg's Notified Draft Measures in June 2018.

- 7.1372 The first alteration arises due to a drafting error. Section 12.2 of the WLA Decision Instrument indicated that Eircom's cost orientation obligations applied only to "*products, services or facilities referred to in Section 7.2*" of the Decision Instrument. This reference was incorrect and did not accurately reflect the analysis set out at paragraphs 7.1228 to 7.1232 above, and in this sub-section. Accordingly, the text at Section 12.2 of the WLA Decision Instrument set out at Appendix: 20 of this Decision has been amended to read "*products, services or facilities referred to in Section 7*" in order to correctly mirror the analysis set out herein.
- 7.1373 The second alteration to WLA Decision Instrument relates to the cost orientation obligations and makes clear that, in keeping with the analysis set out at paragraphs 7.1374 to 7.1381 below, the specific obligations are not limited to monthly rental charges alone, but, rather, extend to rental charges of any frequency. ComReg has accordingly adjusted the language in Section 12 of the WLA Decision Instrument to refer to rental charges in general, rather than specifically to monthly rental charges.
- 7.1374 FTTC-based VUA¹⁵¹⁴ was not previously subject to a cost orientation obligation. However, as set out in the Consultation¹⁵¹⁵ and discussed further above, ComReg considers that a margin squeeze test alone has not been sufficient to address competition problems in the provision of FTTC-based VUA. ComReg has discussed above the lack of a demonstrable retail price constraint, either from alternative operators or from Eircom's own copper network, and economic replicability has been shown not to be sufficient to constrain Eircom's pricing. ComReg notes that Eircom's FTTC network rollout is almost complete and so costs and volumes can now be more reliably forecast than was the case when the previous price control was imposed. The implementation of a cost orientation obligation is now more feasible, and is consistent with ComReg's approach to CG WLA services. Finally, it is ComReg's view that Eircom has not in the intervening period implemented sufficiently effective controls to ensure non-discrimination in its supply of FTTC-based VUA. For all of these reasons, ComReg has decided that a cost orientation obligation on FTTC-based VUA is appropriate and justified in the WLA Market.
- 7.1375 In considering Eircom's ability and incentive to use its power in the WLA Market to affect the competitive conditions in the downstream WCA Markets, ComReg has decided that remedies should be imposed that will address Eircom's pricing of WLA services relative to other wholesale services, and that Eircom shall be subject to an obligation not to cause a margin squeeze between WLA services and downstream wholesale services. In particular, Eircom shall be obliged not to cause a margin squeeze between FTTH-based VUA and FTTH-based Bitstream.

¹⁵¹⁴ Reference to FTTC-based VUA includes Exchange launched VUA.

¹⁵¹⁵ See paragraphs 8.625 to 8.627 of the Consultation.

- 7.1376 In the Consultation, ComReg consulted on whether to maintain a margin squeeze obligation which refers in particular to the test set out in ComReg Decision D04/13¹⁵¹⁶ where the price at which Eircom sells or offers a regulated downstream wholesale service¹⁵¹⁷ must be greater than the sum of (i) ULMP costs and (ii) the unavoidable costs of a Reasonably Efficient Operator that must be incurred in order to provide a service equivalent to the relevant downstream wholesale service. ComReg considers that Eircom should continue to be obliged not to cause a margin squeeze between its pricing of WLA services and its pricing of downstream wholesale services, in order to ensure that operators using CG WLA inputs cannot be foreclosed.
- 7.1377 In considering Eircom's ability and incentive to use its power in the WLA Market to affect the competitive conditions in the retail broadband market and other retail markets addressed by WLA services, ComReg has decided that remedies are required which will address Eircom's pricing of WLA services relative to retail prices. ComReg is imposing margin squeeze obligations to ensure that there is sufficient margin between the relevant WLA inputs and prices for Eircom's standalone and bundled retail broadband products.
- 7.1378 ComReg has considered whether a specific margin squeeze obligation should apply to both CG and NG WLA services. Due to declining demand for CG services, and to the sufficiency of other measures including cost orientation imposed on CG services, ComReg has decided that the obligation not to cause a margin squeeze between WLA services and downstream retail services will apply only to NG wholesale and NG retail services.
- 7.1379 In particular, within the footprint of the Urban WCA Market, Eircom will be required to ensure that it does not cause a margin squeeze between FTTH-based VUA and FTTH-based retail broadband sold singly. This measure is designed to ensure that other operators using WLA inputs to offer retail services in the footprint of the Urban WCA Market are protected, given the withdrawal of SMP regulation from that Market. ComReg notes also that, in the case of FTTH-based VUA services, the margin squeeze test is the main control against excessive pricing because there is no cost orientation obligation on FTTH-based VUA.
- 7.1380 ComReg considers that Eircom should continue to be subject to a cost accounting obligation.
- 7.1381 In summary, ComReg has decided that:
- (a) Eircom should be subject to a cost accounting obligation in the WLA Market;
 - (b) Eircom shall be subject to an obligation of cost orientation in the WLA Market including but not limited to prices for ULMP, SLU, Line Share, CEI, dark fibre, FTTC-based VUA, Exchange launched VUA and other ancillary services in the WLA Market;

¹⁵¹⁶ ComReg Document No 13/14, Decision D04/13 'Price Regulation of Bundled offers: further specification of certain price control obligations in Market 1 and Market 4' dated 8 February 2013.

¹⁵¹⁷ Downstream Wholesale Service means a wholesale service which is on offer or on sale by Eircom to Access Seekers downstream from the WLA Market and contains a full unbundling component. Examples of such services include SB-WLR and naked DSL (standalone broadband).

- (c) For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation for ancillary services, Eircom shall ensure that the price offered or charged by Eircom to any other Undertaking in relation to fault repair charges associated with Current Generation WLA products, services and facilities and Next Generation WLA products, services or facilities shall be in line with the prices set out in the Decision Instrument;
- (d) FTTH-based VUA shall not be subject to a cost orientation obligation;
- (e) For ULMP, SLU, Line Share, CEI, dark fibre and ancillary services in the WLA Market, the cost orientation obligation as further specified in the 2016 Access Pricing Decision shall be re-imposed in this Decision;
- (f) Eircom shall have an obligation not to cause a margin squeeze between WLA products, services and facilities in the WLA Market and products, services and facilities in downstream wholesale markets;
- (g) Eircom shall have an obligation not to cause a margin squeeze between WLA products, services and facilities and retail products, services and facilities in retail markets downstream from the WLA Market;
- (h) Eircom shall ensure that that the price at which it sells or offers a Downstream Wholesale Service must be greater than the sum of: (i) the ULMP Cost Stack and (ii) the unavoidable costs of a Reasonably Efficient Operator that must be incurred in order to provide a service equivalent to the relevant Downstream Wholesale Service;
- (i) For FTTH-based VUA, Eircom shall not cause a margin squeeze between FTTH-based VUA in the WLA Market and FTTH-based NGA Bitstream in the WCA Markets.
- (j) Eircom shall have an obligation not to cause a margin squeeze between NG WLA services and retail services sold singly or as part of a bundle and delivered by NG WLA services;
- (k) In the WLA Market in areas corresponding to the Urban WCA Market Eircom shall not cause a margin squeeze between FTTH-based VUA and FTTH-based retail broadband services delivered by FTTH-based VUA services and sold singly; and
- (l) Where more than one retail product is provided on the basis of a single Eircom product, the retail price shall be the weighted average of the individual retail prices.

7.1382 The obligations are set out in Section 12 of the Decision Instrument attached at Appendix: 20 of this Decision. Further specification of price control obligations falls to be set out in the 2018 Bundles Decision and in the 2018 Pricing Decision.

Accounting separation remedies in the WLA Market

Position set out in the Consultation

7.1383 Having regard to (i) Eircom's integrated position across several upstream and downstream markets (in particular noting its SMP designations in a number of these markets), (ii) the scope for Eircom to leverage its market power and (iii) the associated need to ensure sufficient visibility of how costs are allocated across WLA products, services and facilities and other horizontally and vertically-related input services, ComReg proposed in Section 8 of the Consultation that the obligation of accounting separation was justified in the WLA Market. In this regard ComReg proposed to maintain the obligations set out under the 2010 Accounting Separation Decision.¹⁵¹⁸

Respondents' Views

- 7.1384 ComReg notes that Respondents were asked in the Consultation whether they agreed with ComReg's proposed remedies in the WLA Market. Responses on accounting separation obligations are summarised in paragraphs 7.1385 to 7.1388 below.
- 7.1385 Vodafone agreed with ComReg's proposal that Eircom should be subject to accounting separation obligations as it will ensure that ComReg is able to monitor whether Eircom has allocated costs correctly to the relevant WLA services and products.
- 7.1386 Eircom claimed that ComReg had failed to consider the implications of its proposal to maintain Accounting Separation and Cost Accounting obligations in the WLA Market and that a review of the 2010 Accounting Separation Decision is long overdue particularly as it pre-dates all of the NGA technology and market developments that are being contemplated in this review. Furthermore, Eircom asserted that ComReg proposed to impose these obligations without outlining, even at a summary level, how Eircom is to fulfil these obligations and, at a minimum, it would expect that ComReg would outline where in the regulatory accounts it expects this data to be provided. Furthermore, Eircom noted that the costs to administer the level of detail demanded by ComReg are substantial and unreasonable as ComReg has not made any attempt to quantify whether such granular accounts generate any meaningful regulatory or societal benefit.
- 7.1387 Eircom also claimed that the regulated accounting obligations are out of date and ComReg must commence a comprehensive review with the objective of streamlining the obligations and requirements to be consistent with increasingly competitive markets. Eircom noted that the level of regulatory intervention should decrease as competition increases.

¹⁵¹⁸ See paragraphs 8.681 to 8.685 of the Consultation.

7.1388 Eircom stated that it understood from the Consultation that the following products will be included in the WLA accounts: Local Loop Unbundling; Line Share; Co-Location services; Pole and Duct Access; Dark Fibre; Virtual Unbundled Access (VUA) either FTTC or FTTH. It considered that materiality is a very important consideration in many of these cases. Given the practical issues that the low level of revenues, costs, return and Mean Capital Employed cause for auditors when employing a 'fairly presents' audit standard, Eircom suggested that ComReg needs to consider how these obligations are to be applied.

ComReg's Assessment of Respondents' Views

7.1389 ComReg notes Eircom's points summarised at paragraphs 7.1386 to 7.1388 where it argued that ComReg had failed to consider the implications of its proposal to maintain Accounting Separation and Cost Accounting obligations in the WLA Market and that a review of the 2010 Accounting Separation Decision is long overdue. Furthermore, Eircom considers that the costs to administer the level of detail demanded by ComReg pursuant to this obligation are substantial and unreasonable and that the regulated accounting obligations are out of date and ComReg must commence a comprehensive review. ComReg does not agree.

7.1390 Firstly, it is clear the adoption of the 2010 Accounting Separation Decision predates the deployment of NGA technologies in Ireland. However, since the 2010 Accounting Separation Decision, ComReg has, together with Eircom and its auditors, undertaken annual reviews of the format and detailed implementation of Eircom's accounting separation and cost accounting obligations and a number of amendments to the implementation of reporting obligations have been introduced consequent to these reviews. These amendments have included the identification of NGA related network elements within the Statement of Costs¹⁵¹⁹ and changes to the format of information provided within the various market statements. ComReg expects that this review process will continue in the future to ensure that the information provided by Eircom as part of its accounting separation and cost accounting obligations remains relevant to prevailing network and market conditions.

7.1391 Secondly, ComReg is of the view that the details of how the accounting separation and cost accounting obligations in the WLA Market can be accommodated within Eircom's existing separated accounts is best dealt with as part of the review process that is undertaken by ComReg and Eircom each year. ComReg notes that the accounts can be used by Eircom as a means of ensuring and demonstrating compliance with its regulatory obligations and the detailed cost accounting information is often used in the cost models that inform Eircom's regulated wholesale prices.

ComReg's Position

7.1392 Having considered the views of respondents referred to in paragraphs 7.1385 to 7.1388, ComReg is of the view that it is both proportionate and justified to impose accounting separation obligations on Eircom in the WLA Market.

¹⁵¹⁹ NGA elements can be identified within a Statement of Costs provided by Eircom as part of its submission of regulatory accounts.

- 7.1393 ComReg has noted that, absent regulation, Eircom has the ability and incentive to leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or wholesale markets. Accounting separation obligations are required to make transparent Eircom's wholesale prices and its internal transfer prices in order to ensure compliance with its regulatory obligations. Therefore, ComReg considers that accounting separation obligations are justified and proportionate in the WLA Market.
- 7.1394 Eircom shall be subject to an accounting separation obligation in the WLA market consistent with the requirements set out in the 2010 Accounting Separation Decision.
- 7.1395 The above obligation is set out in Section 11 of the Decision Instrument attached at Appendix: 20 of this Decision.

Statement of Compliance ('SoC') Remedy

Position set out in the Consultation

- 7.1396 In paragraphs 8.686 to 8.725 of the Consultation, ComReg set out and justified proposals with respect to obligations to be imposed upon Eircom governing requirements on it to submit a Statement of Compliance ('SoC') to ComReg. The proposed obligation was as follows:
- 7.1397 ComReg proposed to require that Eircom submit to ComReg a written SoC adequately demonstrating its compliance with its regulatory obligations in the WLA Market, to include the following:
- (a) A full and true written statement, signed by a person of appropriate expertise and authority within Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations and confirming to the best of its knowledge that Eircom is in compliance with its regulatory obligations.
 - (b) The information relied upon, and the process followed, by the signatory in order to be satisfied that to the best of its knowledge that Eircom is in compliance with its regulatory obligations.
 - (c) A description and explanation of the governance measures implemented by Eircom in order to ensure that it is and remains in compliance with its regulatory obligations, in particular:
 - (i) A description and explanation of the relevant reporting structures and reporting processes implemented by Eircom.
- The information relied upon and the process followed by Eircom managers to assess the operation and effectiveness of the processes used to identify and mitigate risks of non-compliance in their areas of responsibility.
- (d) A description of the risks identified and the controls developed to mitigate potential risks of non-compliance with Eircom's regulatory obligations, as they relate to the categories of activities in (e) below and including the following in particular:

- (i) A description of the purpose of each process which was analysed for risks of non-compliance.

A detailed description of the risk analysis process, to include the following:

1. A description of the expertise employed by Eircom.
2. A list of all material including all relevant documentation.
3. A description of how the material and expertise was used.

- (ii) A detailed description of the control development process to include the following:

1. A description of the expertise employed by Eircom.
2. A list of all material including all relevant documentation used.
3. A description of how the material and expertise was used.
4. A description of the process used to assess the effectiveness of the controls.

- (e) The obligations set out in (a) to (d) above apply, but for the avoidance of doubt, are not limited to the following categories of activities:

- (i) Pre-provisioning, Provisioning and Service Assurance for WLA products, services and facilities.
- (ii) Product development including product enhancements, and pre product development screening of Access requests.
- (iii) Product prioritisation and investment decisions.
- (iv) Access to shared resources including IT and Product Development resources.
- (v) The management of information, both structured and unstructured¹⁵²⁰ in conformance with regulatory requirements.
- (vi) Other categories as reasonably required by ComReg.

¹⁵²⁰ As described in the Consultation, '**Structured Information**' is information which is documented and managed through an established business process in a formal manner and includes Memos, Email messages, Letters, Order forms, Invoices, Agendas and Reports etc. '**Unstructured Information**' is managed in a less formal manner and includes information which is passed between individuals or business units through informal communications.

- 7.1398 The documentation referred to in the SoC obligations was also to be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the SoC for completeness and accuracy. Such documentation and information will enable ComReg, or a third party as determined by ComReg, to assess whether Eircom has taken all reasonable steps to ensure that the risk assessment and control and governance measures provide reasonable assurance to ComReg that Eircom is compliant with its regulatory obligations.
- 7.1399 ComReg proposed to require Eircom to clearly identify, explain, document and demonstrate the following in particular:
- (a) In respect of the standard of EoI, any and all differences as between systems and processes used to supply Access Seekers and Eircom's downstream arm setting out why it believes that any such differences are very minor and insignificant and can be objectively justified; and
 - (b) In respect of the standard of EoO, any and all differences as between systems and processes used to supply Access Seekers and Eircom's downstream arm. The explanation shall include a description as to how and what controls are in place to ensure an EoO standard notwithstanding the differences in systems and processes used.
- 7.1400 Statements of Compliance were to be kept updated by Eircom as required to reflect material changes to the documentation and information. These updates will be provided to ComReg within one month of the update being required.
- 7.1401 Updates or changes to any SoC provided to ComReg were required to be presented such that the changes are highlighted and the SoC documents include a Version Control¹⁵²¹ and Revision History.¹⁵²²
- 7.1402 Eircom was also to be required to publish the SoC, and updates to the SoC, on its publicly available website within one month of providing it to ComReg, unless otherwise agreed with ComReg.
- 7.1403 Eircom was to be required to provide a SoC, as referred to in paragraphs 8.689 to 8.691 of the Consultation, to ComReg within 6 months of the effective date of the final Decision or:
- (a) in the case of any offer of a new WLA product, service or facility, seven (7) months in advance of its being made available;
 - (b) in the case of any change to an existing WLA product, service or facility, three (3) months in advance of it being made available;
 - (c) as otherwise may be required by ComReg.

¹⁵²¹ Version Control in this context refers to a standardised regime for the management of changes to documents. Versions should be identified by a number or letter code, associated with a date and timestamp and include the identity and role of the person making the change. Revision History is included as part of the Version control regime.

¹⁵²² Revision History is a documented list of changes from the previous draft which is maintained and printed in a dedicated and indexed section of each Statement of Compliance. The list will be cumulative and identify the changes from the preceding versions of the SoC.

Respondents' Views

- 7.1404 Four of the eight Respondents expressed views on the proposed SoC obligations, namely ALTO, BT, Eircom and Vodafone.
- 7.1405 ComReg has grouped and considered Respondents' submissions and related issues using the following themes:
- (a) Transparency – Publication of the SoC (see paragraphs 7.1406 to 7.1407);
 - (b) Potential impact of the SoC on Product Development (see paragraph 7.1408);
 - (c) Scope of the SoC (see paragraphs 7.1409 to 7.1411);
 - (d) SoC Signatory (see paragraph 7.1412);
 - (e) Publication of confidential information (see paragraph 7.1413); and
 - (f) Other issues raised by Respondents (see paragraphs 7.1414 to 7.1418).

Transparency – Publication of the SoC

- 7.1406 BT requested that the SoC obligations be maintained and that the SoC be made available to industry.¹⁵²³
- 7.1407 In Eircom's view, absent a proper ComReg approval process, the publication of the SoC will lead to Eircom being open to '*trial by industry*'¹⁵²⁴ and this is not appropriate or fair. Eircom stated that SoC are prepared for the purpose of demonstrating to ComReg, as the national regulatory authority, that Eircom has complied with its obligations. Given this, there is no objective basis for their publication.

Potential impact of the SoC on Product Development.

- 7.1408 Eircom stated that the SoC process is front loaded, with all the work being required to be done in advance of notification to ComReg, which in conjunction with the transparency obligation to publish the SoC, will increase the workload required of Eircom prior to notification.¹⁵²⁵ Eircom further stated that this huge draw on resources in the product development cycle will greatly impede product developments and stifle innovation.

¹⁵²³ BT Submission, page 7.

¹⁵²⁴ Eircom Submission, footnote 1, Page 63.

¹⁵²⁵ Eircom Submission, page 63.

Scope of the SoC

- 7.1409 Eircom's view was that the SoC proposal, aside from the obligations relating to the inclusion of all of Eircom's regulatory obligations in the SoC, is an unreasonable burden because of the high administrative burden that this proposal will impose on Eircom.¹⁵²⁶ Eircom considered that the proposed SoC obligations would be highly resource intensive due to the need to demonstrate compliance with all regulatory obligations, as well as defining all the additional controls that ensure such compliance by Eircom. Eircom claimed that it would have to employ additional resources to complete the additional auditing and publication obligations.¹⁵²⁷
- 7.1410 Eircom considered that the details required to be contained in the SoC are extensive and have been left open-ended, in that they apply not only to the specific categories identified by ComReg (e.g. pre-provisioning, provisioning, service assurance etc., which are the basis of the existing controls), but also to "*Other categories as reasonably identified by ComReg*".¹⁵²⁸ It is unreasonable, in Eircom's view, for ComReg to have such open-ended proposals.
- 7.1411 Eircom stated that its Regulatory Governance Model ('**RGM**')¹⁵²⁹ is currently being reviewed by ComReg and its consultants. The proposed increased obligations in relation to SoC would, in its view, appear to prejudge the conclusion of that review.¹⁵³⁰

SoC Signatory

- 7.1412 Vodafone was concerned that the self-certification process¹⁵³¹ would be insufficient and that the SoC should be signed off by the Eircom Chief Executive Officer and its Board.¹⁵³²

¹⁵²⁶ Eircom Submission, Page 62.

¹⁵²⁷ Eircom Submission, Page 62.

¹⁵²⁸ Eircom Submission, page 62 and 63.

¹⁵²⁹ Since December 2010 Eircom has planned and implemented a RGM for the governance and oversight of its compliance with its regulatory obligations. ComReg undertook a review to determine the effectiveness of Eircom's RGM. Please refer to [ComReg Information Notices, 26 May 2016, "Review of Eir's Regulatory Governance Model" ComReg document 16/42.](#)

¹⁵³⁰ Eircom Submission, page 63.

¹⁵³¹ Vodafone Submission, page 33.

¹⁵³² Vodafone Submission, page 33.

Publication of Confidential information.

7.1413 Eircom considered that the expansion of the SoC to include prioritisation and investment should not be published, as this is confidential internal Eircom data that should not appear on a public website. Eircom stated that the application of rules by ComReg with respect to the publication of confidential information could make public a wealth of information on Eircom's operations, thereby exposing Eircom to malicious attack and security breaches on its network and information systems, as well as losing any competitive intellectual property advantage.¹⁵³³

Other issues raised by Respondents

7.1414 Vodafone supported the proposed obligation requiring Eircom to produce a SoC. Vodafone stated that a SoC provides an additional level of assurance in respect of Eircom's compliance with its regulatory obligations. However, Vodafone considered that the production of a SoC, in itself, does not incentivise compliance but can assist in an *ex post* identification of compliance issues.¹⁵³⁴

7.1415 However, Vodafone considered that there is a limitation to the SoC obligation, in that Eircom would be conflicted in the production of the SoC given the difficulties that may arise where there is a possibility of self-incrimination.¹⁵³⁵

7.1416 ALTO welcomed ComReg's proposed changes to the SoC remedy.¹⁵³⁶

7.1417 Eircom suggested a change to the definition of 'Structured Information', by deleting the references to email messages. Eircom stated that it was unclear from this definition what is intended to be included in the definition of 'Unstructured Information' and ComReg should make this clear.¹⁵³⁷

7.1418 Eircom stated, with reference to Section 13.3¹⁵³⁸ of the Draft WLA Decision instrument, it is for ComReg to decide if Eircom has complied with its regulatory obligations. Eircom stated that ComReg can be advised by a third party but cannot rely on a third party to fulfil its statutory obligations.

ComReg's Assessment of Respondents' Views

7.1419 ComReg has grouped and considered Respondents' submissions and related issues using the following themes:

(g) Transparency – Publication of the SoC (see paragraphs 7.1420 to 7.1429);

¹⁵³³ Eircom Submission, page 63.

¹⁵³⁴ Vodafone Submission, page 33.

¹⁵³⁵ Vodafone Submission, page 34.

¹⁵³⁶ ALTO Submission, page 8.

¹⁵³⁷ Eircom Submission, page 75.

¹⁵³⁸ Section 13.3 of the Draft WLA Decision Instrument states: *The documentation referred to in this Section 13 shall be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the Statement of Compliance for completeness and accuracy. Such documentation and information shall also enable ComReg, or a third party as determined by ComReg, to assess whether Eircom has taken all reasonable steps to ensure that the risk assessment and control and governance measures referred to in this Section 13 provide reasonable assurance to ComReg that Eircom is compliant with the obligations set out in this Decision Instrument.*

- (a) Potential impact of the SoC on Product Development (see paragraphs 7.1430 to 7.1434);
- (b) Scope of the SoC (see paragraphs 7.1435 to 7.1436);
- (c) SoC Signatory (see paragraphs 7.1437 to 7.1448);
- (d) Confirmation regarding effectiveness of Eircom's Regulatory Governance arrangements (see paragraphs 7.1449 to 7.1467);
- (e) Management of Regulatory Governance data (see paragraphs 7.1468 to 7.1472);
- (f) Publication of confidential information (see paragraphs 7.1473 to 7.1482); and
- (g) Other issues raised by Respondents (see paragraphs 7.1483 to 7.1486).

Transparency – Publication of the SoC

- 7.1420 ComReg does not accept Eircom's claim that in the absence of a ComReg approval process the publication of the SoC will lead to Eircom being open to "*trial by industry*". ComReg also does not accept Eircom's claim that approval of the SoC by ComReg is either necessary or appropriate as the obligation requires Eircom to demonstrate how it remains in compliance with its regulatory obligations. The regulatory governance processes by which Eircom maintains compliance are a matter for Eircom. In this Consultation process ComReg has not required Eircom to implement a specific form of regulatory governance hence the need for ComReg's approval does not arise.
- 7.1421 ComReg does not agree with Eircom that there is no objective justification for the publication of Statements of Compliance. Access Seekers have raised concerns regarding Eircom's compliance with its regulatory obligations. Concerns raised include delays associated with the development of regulated WLA products,¹⁵³⁹ the development of the associated SLAs¹⁵⁴⁰ and the quality of Eircom's operational processes¹⁵⁴¹ underpinning the supply and in-life management of WLA products, services and facilities.
- 7.1422 ComReg understands that the effect of such concerns is to erode Access Seekers' confidence in the provision of WLA services and their consequential ability to compete in downstream markets, particularly having regard to Eircom's compliance with its SMP obligations.

¹⁵³⁹ Examples include Vodafone Submission, paragraph 13 to 151 and BT response page 3.

¹⁵⁴⁰ Examples include Vodafone Submission page 20, paragraph 130, BT submission page 10, and Sky Submission page 1.

¹⁵⁴¹ Examples include BT Submission page 9 and Sky Submission page 7.

- 7.1423 Such concerns can limit competition. Access Seekers' uptake of WLA products or services may be negatively impacted if they consider that WLA products or services are not fit-for-purpose. For example, Access Seekers may delay the uptake of WLA services while they seek improvements to a SLA which they consider will not allow them to compete effectively in downstream markets. These effects, in turn, can have a negative impact on the quality and diversity of products and services to the ultimate detriment of End Users.
- 7.1424 ComReg's position is that appropriate transparency relating to the management of product development and the prioritisation of the development of products, in particular, is necessary in order to ensure that Access Seekers can plan to operate commercially with confidence. It is particularly important that there is equivalence in the allocation of time, support and development resources when making new or amended products and services available to all Access Seekers.
- 7.1425 ComReg's position is that confirmation via the SoC that the development of regulated products takes place in a non-discriminatory and transparent way supports innovation and fosters competition. It is important, therefore, that it is clear to Access Seekers that Eircom is appropriately managing regulatory risk with respect to, *inter alia*, the development of regulated products. The publication of the SoC can demonstrate to Access Seekers that Eircom is not negatively impacted by poor regulatory governance which would be to the detriment of competition and End Users.
- 7.1426 It is ComReg's position that the publication of a SoC helps to remove uncertainty and potentially alleviate Access Seekers' concerns regarding Eircom's compliance with its regulatory obligations by allowing Access Seekers to observe how Eircom maintains compliance with its regulatory obligations. Therefore, the submission and publication of the SoC is expected to benefit competition and ultimately End Users.
- 7.1427 ComReg also notes that Eircom stated in its "*Update to Industry on Eircom's RGM*" ("**Eircom RGM Update**")¹⁵⁴² that transparency with respect to Eircom's compliance with its regulatory obligations provides assurances to Access Seekers:

"The purpose of this report is to provide Industry with the key outputs of the RGM (Access/Non-discrimination obligations)¹⁵⁴³ that directly impact them in a transparent manner and to give assurance of the BWRC¹⁵⁴⁴ oversight".

- 7.1428 Furthermore, Eircom stated in the Eircom RGM Update that the objectives of the Wholesale Reform Programme is to deliver the following:

"Stronger working relationship with ComReg and Industry by ensuring that our processes are non-discriminatory with the intention of reducing Wholesale Customer complaints.

¹⁵⁴² Industry Update on Eircom's Regulatory Governance Model (RGM), dated May 2016.

¹⁵⁴³ ComReg notes that Eircom is also subject to obligations other than access and non-discrimination and ComReg expects that appropriate governance is in place within Eircom in order to ensure its compliance with these other obligations also.

¹⁵⁴⁴ (Eircom) Board Wholesale Reforms Committee as referenced in Industry Update on Eircom's Regulatory Governance Model (RGM), dated May 2016.

Behavioural change in order to position Eircom Wholesale as a trusted and proactive supplier of Wholesale Services.”

7.1429 ComReg notes that its proposal regarding the publication of the SoC largely aligns with the objectives of both Eircom’s Wholesale Reform Programme and the intent of the Eircom RGM Update.

Potential impact of the SoC on Product Development

- 7.1430 ComReg does not agree that the work required to be carried out by Eircom in order for the SoC to be provided to ComReg prior to notification of a new, or amended, product or service to ComReg will greatly impede product development and stifle innovation. ComReg considers that it is necessary that during the product development process that Eircom considers potential risks of non-compliance which may arise after a product is developed and launched.
- 7.1431 Therefore at the appropriate point during the development of the product Eircom should carry out a risk analysis of, *inter alia*, the product processes and systems in order to determine where risks of non-compliance may arise and consider the controls that could be put in place post launch in order to mitigate the risks identified.
- 7.1432 ComReg’s position is that it is essential that new or amended regulated wholesale products are fully compliant with Eircom’s regulatory obligations. It is reasonable, therefore, that WLA products and services would be developed by Eircom in a manner that is compliant with its regulatory obligations.
- 7.1433 ComReg’s position is that a risk analysis, and the associated development of controls, would need to be conducted by Eircom during the product development process in order to ensure Eircom remains in compliance with its regulatory obligations when new or amended regulated wholesale products are launched and thereafter. Therefore, the additional step of preparing a SoC during the product development process is reasonable and not over burdensome.
- 7.1434 ComReg expects that Eircom would be able to ensure compliance with its regulatory obligations as they pertain to a particular WLA product or service at the point that the product is made available to Access Seekers. Therefore, ComReg considers that it is not unreasonable for Eircom to be able to demonstrate to ComReg how it will remain compliant with its regulatory obligations post the launch of a new or amended WLA product or service when it provides notification to ComReg.

Scope of the SoC

- 7.1435 ComReg has considered Eircom's statement that aspects of the proposed SoC obligations are "*open ended*" in that they apply not only to the specific categories identified by ComReg but also to "*Other categories as reasonably identified by ComReg*."¹⁵⁴⁵ ComReg notes that the "*other categories*" are in addition to the required categories of activities detailed in the obligation. For the avoidance of doubt ComReg notes that the categories detailed in the obligation are not the only categories of activities where Eircom's regulatory obligations apply. Therefore, other categories would include areas of Eircom's business activities and processes, in addition to the categories listed, where Eircom's regulatory obligations also apply.
- 7.1436 ComReg has considered Eircom's concern regarding the inclusion of the requirement to provide a SoC which includes "*other*" categories as reasonably required by ComReg. ComReg has decided to remove this requirement in order to ensure certainty regarding the scope of the SoC obligation. However ComReg would expect that in order to ensure compliance with its regulatory obligations Eircom's regulatory governance would extend to all relevant areas of business activity.

SoC Signatory

- 7.1437 ComReg notes Vodafone's concerns regarding self-certification by Eircom of its compliance with its regulatory obligations. ComReg has reconsidered the requirement set out in the Consultation for a signatory of appropriate authority and expertise within Eircom to confirm that Eircom is in compliance with its regulatory obligations.
- 7.1438 As a preliminary point, with respect to Eircom's comments noted in paragraph 7.1411 above, in the initial Consultation ComReg was not prejudging the review of Eircom's RGM. The SoC obligation is independent of the review of Eircom's RGM. Nevertheless, ComReg has considered the findings and observations of both KPMG and Cartesian with respect to regulatory governance as set out in the Reports¹⁵⁴⁶ which are now available to ComReg. ComReg now considers that the signatory needs to be a person within Eircom who is sufficiently independent from day to day operational activity and decision making in relation to the development and supply of wholesale regulated products and services, in order to be able to objectively assess Eircom's compliance with its regulatory obligations.
- 7.1439 ComReg also considers that the signatory should hold a position of appropriate authority and responsibility within Eircom, such that Eircom can provide assurances to ComReg that regulatory governance and, in particular, the SoC obligations, is afforded the necessary oversight and attention by Eircom. ComReg also considers that a SoC signatory of appropriate authority will improve the credibility of the SoC when published and made available to Access Seekers.

¹⁵⁴⁵ Eircom Submission, page 62 and 63.

¹⁵⁴⁶ KPMG report: Review of eir's Regulatory Governance Model, dated 6 April 2017. Cartesian Report: Operational Assessment of eir's Regulatory Governance Model, Dated 7 July 2017.

- 7.1440 ComReg considers that assurances regarding the processes Eircom has in place to ensure compliance with its regulatory obligations are beneficial to competition as Access Seekers are likely to have greater confidence that they can compete with Eircom without the potential competitive disadvantages that arise from Eircom's non-compliance. ComReg notes that Vodafone in its Submission proposed that the SoC should be signed off by the Eircom Chief Executive Officer and its Board.¹⁵⁴⁷
- 7.1441 ComReg has considered the recommendations of its advisors, KPMG, who, along with Cartesian, reviewed Eircom's Regulatory Governance Model (RGM). In its report on its review of Eircom's RGM, KPMG observation G1 states:¹⁵⁴⁸
- “Create an Independent Oversight Body (‘IOB’), as a sub-committee of the Board, with responsibility for the robust oversight of the full RGM. The majority membership of the IOB should consist of independent members who are not Eir Group Directors or employees. Eir should liaise with ComReg regarding the process for appointing, remunerating and retiring the members of the IOB;”*
- 7.1442 In Eircom's Industry Update on Eir's Regulatory Governance Model, dated June 2017, Eircom stated:
- “One of the three strands of Eircom's Regulatory Governance Model is the preparation of Independent Regulatory Compliance & Audit Reports, prepared by the Head of Compliance and Equivalence (C&E) and the Head of Internal Audit (IA), based on their internal reviews to the Board Regulatory Committee (RegCo) on an approximately six monthly basis. The purpose of these Reports is to provide an update to Industry based on the third strand of the RGM and to give assurance of board and RegCo oversight.”*
- 7.1443 ComReg notes therefore that Eircom considers that it is appropriate that members of the Eircom Board should have oversight of the operation and effectiveness of Eircom's regulatory governance processes and that Eircom has implemented reporting requirements from Eircom's Audit and Assurance functions to the Board Regulatory Committee (‘**RegCo**’). ComReg notes that the RegCo structure, implemented by Eircom, could potentially be used by Eircom to fulfil the requirements of the SoC obligation without additional administrative steps or increased burden.¹⁵⁴⁹
- 7.1444 ComReg also notes that under the Companies Act 2014 Company Directors have specific obligations with which they must comply relating to securing compliance with relevant obligations, defined in the Companies Act 2014, as follows:¹⁵⁵⁰

¹⁵⁴⁷ Vodafone Submission, page 33.

¹⁵⁴⁸ KPMG report: Review of Eir's Regulatory Governance Model, dated 6 April 2017, Section 1.4.1: Key observations and actions for (Eircom) Management consideration (page 17).

¹⁵⁴⁹ ComReg notes however that any position taken by ComReg in this Decision is without prejudice to any consideration ComReg may give to additional regulatory measures which may be appropriate in light of the issues raised following the review by ComReg's advisors of Eircom's RGM. Please see Information Notice Reference: ComReg 17/64 Version: Final Date: 13/07/20, Review of Eir's Regulatory Governance Model Publication of Reports and Call for Input.

¹⁵⁵⁰ Companies Act 2014, Chapter 9, section 325: Obligation to prepare directors report for every financial year.

“(2) The directors of a company to which this section applies shall also include in their report under section 325 a statement—

(a) acknowledging that they are responsible for securing the company's compliance with its relevant obligations; and

(b) with respect to each of the things specified in subsection (3), confirming that the thing has been done or, if it has not been done, specifying the reasons why it has not been done.

(3) The things mentioned in subsection (2)(b) are—

(a) the drawing up of a statement (to be known, and in this Act referred to as, a “compliance policy statement”) setting out the company's policies (that, in the directors' opinion, are appropriate to the company) respecting compliance by the company with its relevant obligations;

(b) the putting in place of appropriate arrangements or structures that are, in the directors' opinion, designed to secure material compliance with the company's relevant obligations; and

(c) the conducting of a review, during the financial year to which the report referred to in subsection (2) relates, of any arrangements or structures referred to in paragraph (b) that have been put in place”

7.1445 While the obligations referred to in the Companies Act 2014 do not include regulatory obligations, ComReg considers that it is relevant and instructive that the Companies Act 2014 requires Directors to prepare a compliance statement. This compliance statement confirms, *inter alia*, that, in the Directors' opinion, arrangements are designed and put in place that secure material compliance with the company's relevant obligations.

7.1446 In the Consultation, ComReg proposed that the Statement of Compliance include the following:¹⁵⁵¹

“A full and true written statement, signed by a person of appropriate expertise and authority within Eircom acknowledging that Eircom is responsible for securing compliance with its obligations and confirming to the best of its knowledge that Eircom is in compliance with its regulatory obligations”

7.1447 After considering, *inter alia*, Vodafone's Submission and the arrangements put in place by Eircom as detailed in its Update to Industry on RGM,¹⁵⁵² ComReg now considers that, in order to ensure that the signatory has the required independence and authority, the signatory should be a member or members of the Board of Directors¹⁵⁵³ of Eircom.

¹⁵⁵¹ Paragraph 13.1 (i) of the Draft Decision of the Consultation.

¹⁵⁵² Eircom's Industry Update on eir's Regulatory Governance Model (RGM), dated June 2017.

¹⁵⁵³ As defined in the Companies Act 2014. The Board of Directors of Eircom is referred to as “the Directors” in this section.

7.1448 ComReg also notes that the proposed change also removes any uncertainty regarding the choice of the signatory deemed by Eircom to have “*appropriate expertise and authority*”¹⁵⁵⁴ and whether such a signatory would be acceptable to ComReg. The proposed change now requires the signatory to be a member or members of the Board of Directors which provides Eircom with greater regulatory certainty.

Confirmation of the effectiveness of Eircom’s Regulatory Governance arrangements.

7.1449 ComReg considers that Eircom’s compliance with its regulatory obligations is dependent on appropriate regulatory governance and this can only be achieved and maintained with effective assurance and oversight of the regulatory governance processes within Eircom. ComReg also considers that a periodic review process is required in order to ensure the ongoing effectiveness of the regulatory governance arrangements and structures and controls in place.

7.1450 ComReg notes Eircom’s statement that the inclusion of all of Eircom’s regulatory obligations in a SoC will place an unreasonable burden on Eircom. ComReg’s position is that it is reasonable to expect that Eircom has put in place appropriate governance processes in order to ensure it is in compliance with all of its regulatory obligations. ComReg understands that there is an administrative burden associated with such governance; however, as Eircom is required to remain in compliance with its regulatory obligations, this administrative burden is not unexpected.

7.1451 ComReg proposed that the SoC include all of Eircom’s regulatory obligations and would apply to, but not be limited to, a number of different categories.¹⁵⁵⁵ ComReg has reconsidered this obligation taking into account its decision to amend the SoC obligation to require confirmation to be provided by the Directors and also considering the effort required by Eircom to confirm its compliance with all of its regulatory obligations every time it submits a SoC.

7.1452 ComReg now considers that the Directors should provide confirmation that the regulatory governance arrangements in place provide reasonable assurance that Eircom is compliant with its regulatory obligations and not confirmation that Eircom is in compliance with its regulatory obligations.¹⁵⁵⁶ ComReg notes that this approach is similar to the obligations placed on Company Directors under the Companies Act 2014 as already detailed above.

7.1453 ComReg therefore amends paragraph 13.1(i) of the SoC obligation¹⁵⁵⁷ such that the SoC will now include:

¹⁵⁵⁴ Paragraph 13.1(i) of the SoC obligation as set out in the Draft Decision of the Consultation.

¹⁵⁵⁵ As set out in paragraph 13.2 of the Statement of Compliance obligation in the Consultation and paragraph 7.1397(e) in this Decision.

¹⁵⁵⁶ ComReg notes that this is similar to the requirements of the Companies Act which requires the putting in place of appropriate arrangements or structures that are, in the directors' opinion, designed to secure material compliance with the company's relevant obligations.

¹⁵⁵⁷ As set out at paragraph 7.1397(a) in this section.

A full and true written statement, signed by a Director or Directors (the Directors) of Eircom acknowledging that Eircom is responsible for securing compliance with its obligations.

The following text will also be added to the SoC obligation:

Confirmation that, in the opinion of the Directors, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its regulatory obligations.

- 7.1454 ComReg considers that the Directors should not be required to provide the information relied upon or the details of the process followed but they should provide a description of the process followed and a description of the information relied upon in order to be satisfied that to the best of their knowledge that Eircom is in compliance with its regulatory obligations.
- 7.1455 Therefore, ComReg also amends paragraph 13.1(i) of the SoC obligation as set out in paragraph 7.1397(b) in this section as follows:
- ..a description of the information relied upon, and the process followed, by the Directors of Eircom in order to be satisfied that to the best of their knowledge the arrangements, structures and internal controls in place provide reasonable assurance that Eircom is in compliance with the obligations set out in this Decision Instrument.*
- 7.1456 ComReg considers that the obligation proposed in the Consultation whereby the signatory is required to confirm Eircom's compliance with its regulatory obligations provides confirmation of Eircom's compliance up to, and at, a particular point in time. Requiring the signatory to confirm, to the best of their knowledge, that Eircom has an appropriate regulatory governance framework in place and operates it correctly provides greater assurance to ComReg that Eircom will remain compliant beyond the date of the SoC.
- 7.1457 Therefore ComReg has amended the SoC obligation in consideration of Eircom's Submission and ComReg's decision to amend the obligation such that a Director, or Directors, is required to provide the required confirmation and after taking into account that the SoC obligation applies to all of Eircom's regulatory obligations in the WLA Market. It is ComReg's position that these amendments are considerably less burdensome and are proportionate and reasonable.
- 7.1458 It might be considered that the proposed amendment has the appearance of weakening the proposed obligation in that Eircom is not now required to confirm compliance with all of its regulatory obligations. However, Eircom is required to provide an explanation of the regulatory governance arrangements in place and confirmation that these arrangements, structures and internal controls provide reasonable assurance that Eircom is compliant with its regulatory obligations.
- 7.1459 ComReg is of the view that this is a more effective and reasonable regulatory measure than requiring Eircom to confirm compliance with all of its regulatory obligations each time it submits a Statement of Compliance to ComReg.
- 7.1460 ComReg is amending the obligation by removing the requirement for the signatory to confirm to the best of their knowledge that Eircom is in compliance with its regulatory obligations. ComReg now require the Directors to confirm that the internal governance arrangements, structures and controls provide reasonable assurance that Eircom is compliant with its regulatory obligations.

- 7.1461 ComReg also require the Directors to provide a description of the processes followed and a description of the information relied upon in order to provide reasonable assurance that Eircom is compliant with its regulatory obligations.
- 7.1462 The purpose of the SoC is to document the regulatory governance processes implemented by Eircom. Furthermore, in order for Eircom's regulatory governance processes to be effective, Eircom would have had to have documented them regardless of the imposition of the SoC obligation. Therefore, preparing and submitting this information to ComReg should not impose a significant additional burden on Eircom.
- 7.1463 For example, Eircom, in order to ensure compliance, must be in a position to evaluate the management of, *inter alia*, its decision making, business and operational processes in order to determine the presence of regulatory risk and manage that risk appropriately.
- 7.1464 Therefore, ComReg notes that the requirement to provide information relating to systems and processes in order to demonstrate how Eircom has assessed the risk of non-compliance, is information Eircom should readily have access to as a result of its analysis of regulatory risk. ComReg has considered this as part of its proportionality assessment.
- 7.1465 Similarly, ComReg considers that, given that some form of risk and control framework is necessary in order to ensure regulatory compliance, providing information about any such framework in place in Eircom should not be unduly burdensome for Eircom.
- 7.1466 The proposed SoC obligation requires Eircom to demonstrate how it is remaining compliant with its regulatory obligations, and it is not prescriptive as to the processes or structures that Eircom puts in place in order to achieve this, this being a matter for Eircom.
- 7.1467 ComReg considers that the submission by Eircom of a SoC to ComReg enhances ComReg's capacity to monitor Eircom's compliance with its regulatory obligations by explaining and demonstrating the structures and processes implemented by Eircom in order to remain compliant.

Management of Regulatory Governance Data

- 7.1468 ComReg has also reconsidered the degree of oversight to be applied to the management of the controls put in place by Eircom to mitigate the risk of non-compliance with regulatory obligations. It is ComReg's position that the data produced when controls are operated¹⁵⁵⁸ must be recorded and stored in a systematic and structured manner to ensure that this data can be retrieved to allow it to be reviewed and audited as part of Eircom's regulatory assurance processes or by a third party as appropriate.

¹⁵⁵⁸ Controls can result in reports/ data being generated in order to monitor whether a risk has materialised, e.g. time to repair faults for Access Seekers versus time to repair faults for Eircom's downstream arms.

- 7.1469 It is ComReg's position that the effectiveness of the operation of regulatory governance and, in particular, the effectiveness of the regulatory governance assurance processes in place within Eircom, depend on the analysis of the data produced when controls are operated. The ongoing generation and analysis of this control data is a fundamental component of risk mitigation.
- 7.1470 Confirmation by Eircom that this data generation and analysis process, followed by appropriate action by Eircom if the data analysis identifies regulatory risk, underpins the assurances provided to ComReg that Eircom is taking appropriate steps to ensure its ongoing compliance with its regulatory obligations.
- 7.1471 Furthermore, it is ComReg's position that the control data must be stored in an organised and robust fashion in order for both Eircom's internal assurance function and, separately, third party auditors potentially appointed, as appropriate, by ComReg, to be able to retrieve the data and thereby assess this component of Eircom's Regulatory governance function.
- 7.1472 Therefore, ComReg considers that the SoC should also include the requirement for Eircom to provide a description of the method it uses to record and store control data including the identification of the repository where this data is recorded and stored. In addition the Directors must confirm that adequate documentation is in place that would be sufficient to provide evidence as to the correct operation of the regulatory governance processes.

Publication of confidential information

- 7.1473 As noted above ComReg has decided to amend the SoC obligation such that ComReg considers that the Directors should not be required to provide the information relied upon or the details of the process followed. The Directors should now provide a description of the process followed and a description of the information relied upon in order to be satisfied that to the best of their knowledge that Eircom is in compliance with its regulatory obligations.
- 7.1474 Therefore Eircom's concerns regarding the publication of information regarding investment decisions does not arise. ComReg considers that in order to compete, Access Seekers rely on fit-for-purpose regulated access products and services. Access Seekers also rely on Eircom's obligation to meet reasonable access requests for new and amended regulated access products and services.
- 7.1475 In order to develop and evolve regulated access products and services, Eircom needs to ensure that it will invest in staff with the required skillsets and appropriate levels of expertise and that the systems and technology which support regulated access products and services are maintained and/or upgraded as required.
- 7.1476 Therefore, ComReg considers that Eircom needs on-going investment in, *inter alia*, systems and expertise, to ensure the delivery of fit-for-purpose regulated access products and services. It is essential that such products and services are provided by Eircom to a standard that allows Access Seekers to compete effectively in downstream markets.

- 7.1477 ComReg considers that the processes employed and the information relied upon by Eircom, including information regarding the status of systems and the skillsets and levels of expertise, in order to make RAP related investment decisions, should be subject to a risk analysis in the context of Eircom's compliance with its regulatory obligations in the WLA Market.
- 7.1478 For example, Eircom has an obligation not to discriminate. Risks of non-compliance with this obligation, and Eircom's other obligations, should be considered when Eircom prepares investment plans such as upgrades to systems or plans for additional development resources for general product development, including the development of RAP and non-RAP services.
- 7.1479 ComReg's position is that transparency for Access Seekers on the process by which Eircom governs the management of risks of non-compliance with its regulatory obligations arising from investment decisions is necessary. ComReg's position is that such transparency will increase certainty for Access Seekers regarding the delivery and performance of products and services. In particular, further transparency will help create confidence, thereby encouraging competition and investment by Access Seekers.
- 7.1480 For the avoidance of doubt the amendment to the SoC obligation requires the inclusion of a description of the information relied upon and not the information itself. Furthermore, ComReg notes that should Eircom have concerns that the publication of particular material in a SoC then Eircom can assert the confidentiality of such material providing reasons. All such assertions will be considered by ComReg. ComReg notes that the publication of any material should include a review as to its confidentiality. ComReg's approach to the treatment of confidential information is set out in its published Confidentiality Guidelines.¹⁵⁵⁹
- 7.1481 Similarly, with respect to Eircom's concern regarding the loss of competitive intellectual property advantage, if Eircom considers that publication of a SoC would reveal information which would result in it losing competitive advantage in an unregulated market then this would be considered under ComReg's Confidentiality Guidelines.
- 7.1482 ComReg notes, however, that only information relevant to Eircom's compliance with its regulatory obligations is required to be included in the SoC, such as information relating to the development and implementation of regulated services. Therefore, ComReg does not consider that the publication of a SoC will pose a risk to Eircom's networks or information systems or is likely to raise any intellectual property related issues.

Other issues raised by Respondents

- 7.1483 ComReg does not agree with Vodafone that the production of the SoC does not incentivise compliance. ComReg notes that the production of a SoC, underpinned by an appropriate risk management and control environment, should incentivise compliance by Eircom with its SMP obligations.

¹⁵⁵⁹ Guidelines on the Treatment of Confidential Information, Response to Consultation, ComReg Document 05/24, March 2005 ('**Confidentiality Guidelines**').

- 7.1484 Furthermore, ComReg's position is that the requirement for a SoC encourages Eircom to maintain a structured and consistent approach to achieving and maintaining regulatory compliance.
- 7.1485 ComReg does not agree with Eircom's suggestion to delete the references to e-mail messages from the definition of 'Structured Information' as e-mail is a fundamental business tool. ComReg considers that the definition of 'Unstructured Information' within the Consultation paper is clear and has expanded the definition within the DI to reflect that definition.
- 7.1486 Making a determination regarding Eircom's compliance with its regulatory obligations is a matter for ComReg alone. However in order to arrive at a conclusion regarding Eircom's compliance with its regulatory obligations ComReg will from time-to-time seek advice and input from third parties with relevant expertise, as appropriate. For the avoidance of doubt ComReg has amended the text relating to the Statement of Compliance obligation¹⁵⁶⁰ in Section 13.3 of the Draft WLA Decision Instrument to the following:

"The documentation referred to in the SoC obligations was also to be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the SoC for completeness and accuracy. Such documentation and information will enable ComReg, or a third party as determined by ComReg, to assess Eircom's risk assessment and control and governance measures in order to allow ComReg to determine whether Eircom has provided reasonable assurance to ComReg that Eircom is compliant with its regulatory obligations."

ComReg's Position

- 7.1487 Having considered Respondents' views as summarised and assessed in paragraphs 7.1406 to 7.1486 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on SoC, as set out in the Consultation,¹⁵⁶¹ with the exception of the amendments specified in paragraphs 7.1488 to 7.1490.
- 7.1488 ComReg amends Section 13.1 of the proposed SoC obligation in the Draft Decision Instrument,¹⁵⁶² as follows (amended text is shown in italics):
- Pursuant to Regulations 9, 10, 11, 12 and 13 of the Access Regulations Eircom shall submit to ComReg a written Statement of Compliance that adequately demonstrates its compliance with its regulatory obligations in the WLA Market, to include the following:
- (a) *A full and true written statement, signed by one or more Directors of Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations, in which:*

¹⁵⁶⁰ Note that the corresponding text has also been changed in the WCA Decision instrument.

¹⁵⁶¹ Paragraphs 8.686 to 8.725 of the Consultation.

¹⁵⁶² As published in the Consultation.

- (i) *The Directors confirm that, in their opinion, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its regulatory obligations.*
- (ii) *The Directors explain the basis upon which the confirmation in (a) above is made including a description of the information relied upon, and the process followed, by the Directors of Eircom in order to be satisfied that to the best of their knowledge the arrangements, structures and internal controls in place provide reasonable assurance that Eircom is in compliance with the obligations set out in this Decision Instrument.*

7.1489 ComReg amends the obligations as set out in Section 13, in particular as set out in section 13.2 of the Draft Decision Instrument, by removing 13.2 (vi) which required Eircom to provide a SoC for other categories as reasonably required by ComReg.

7.1490 Section 13.1(iv) of the Draft Decision Instrument shall be amended as follows to include items (d) and (e), shown in italics below:

- (d) *a description of the operation of controls including the method employed by Eircom to record and store the data produced when controls are operated.*
- (e) *a description of and the identification of the repository in which the data from the operation of each control is recorded and stored.*

The obligations with respect to SoC being imposed upon Eircom are more particularly set out at Section 13 in the Decision Instrument in Appendix: 20 of this Decision.

Decision Instrument for WLA Market

7.1491 ComReg has made some amendments to the language contained in a number of Sections of the WLA Decision Instrument (Appendix: 20) for the purpose of clarifying the nature of certain obligations contained therein. However, these changes do not impact the substance of the overall obligation and the outcomes remain effectively the same. Any substantive changes to obligations contained in the final WLA Decision Instrument are described in the relevant Sections throughout the Decision.

8 Assessment of the Retail Broadband Market in the presence of WLA Regulation

Position set out in the Consultation

- 8.1 Having established the preliminary view in Section 6 of the Consultation that Eircom should be designated as having SMP in the WLA Market, in Section 9 of the Consultation ComReg examined the retail broadband market in the presence of regulation on the WLA Market. This was referred to as the Modified Retail Market ('**Modified Retail Market**'). In the presence of WLA regulation,¹⁵⁶³ Eircom's supply of WLA inputs allows SPs such as Sky (via BT), Vodafone and other smaller SPs to directly or indirectly provide retail broadband services.

Product Market Definition

- 8.2 ComReg defined the Product Market component of the Modified Retail Market in Section 4 of the Consultation, with this summarised as follows:¹⁵⁶⁴
- (a) All broadband products provided over copper, FTTC, FTTH and CATV networks have sufficiently similar product characteristics, pricing and intended use. The analysis of product speeds and other characteristics outlined in Section 4 of the Consultation suggests that these products are positioned as alternative methods of accessing similar retail services.
 - (b) There is likely to be a chain of substitution between broadband products provided over copper, FTTC, FTTH and CATV networks. However, the restricted availability of FTTC, FTTH and CATV broadband products may limit the ability of customers to switch between platforms in response to a hypothetical price increase of broadband products provided over copper networks.
 - (c) Retail broadband products provided over 3G/4G mobile networks, satellite, and FWA networks, and via Leased Lines are not considered to be effective substitutes for retail broadband access provided over copper, FTTC, FTTH and CATV networks. As set out in Section 4 of the Consultation,¹⁵⁶⁵ this is primarily due to functional differences, customer usage and differences in pricing, as well as the likely lack of effective substitution to such platforms.

Geographic Market Definition

- 8.3 In assessing the geographic scope of the Modified Retail Market in the presence of upstream WLA regulation, ComReg considered the following issues:¹⁵⁶⁶

¹⁵⁶³ Assuming the existence of the remedies that ComReg proposed to impose in the WLA Markets, as set out in Section 8 of the Consultation.

¹⁵⁶⁴ See paragraphs 9.4 and 9.5 of the Consultation.

¹⁵⁶⁵ See paragraphs 4.12 to 4.273 of the Consultation. See also paragraph 8.2(c) above.

¹⁵⁶⁶ See paragraphs 9.6 to 9.9 of the Consultation.

- (a) geographic variation in entry conditions;¹⁵⁶⁷
 - (b) the evolution of SP market shares;¹⁵⁶⁸ and
 - (c) geographic variation in products and pricing.¹⁵⁶⁹
- 8.4 ComReg's preliminary view was that some factors are suggestive of separate Modified Retail Markets from a geographic perspective (such as differences between geographic areas in the number of competing SPs and market share differences). However, other evidence, such as uniformity of retail pricing and product functionalities¹⁵⁷⁰ is not suggestive of sub-geographic markets. Overall, ComReg's preliminary view was that there may be separate geographic markets. However, ComReg made no firm conclusions in this regard and left this question open, with the issue of sub-geographic markets being considered in further detail in the assessment of the WCA Market(s) in Section 10 of the Consultation.

Respondents' Views

- 8.5 Seven of the eight Respondents to the Consultation expressed views on the assessment of the Modified Retail Market. ALTO, BT, enet, Sky and Vodafone broadly agreed with ComReg's assessment.
- 8.6 Virgin Media considered that ComReg's approach to defining the Modified Retail Market appears to be inconsistent with its approach to defining the retail market. In this respect, Virgin Media noted that, in Section 4 of the Consultation, a national market was defined, whereas the geographic market definition for the Modified Retail Market was left open.
- 8.7 Eircom did not agree with ComReg's preliminary conclusions on the assessment of the Modified Retail Market and was of the view that the same purported errors identified by Eircom in its Submission concerning the definition of the relevant retail market (absent WLA regulation) in Section 4 also prevail with respect to the Modified Retail Market, namely that the Product Market should include Mobile Broadband and broadband services provided over FWA and satellite networks.
- 8.8 Colt did not provide any views on ComReg's assessment of the Modified Retail Market.
- 8.9 ComReg has summarised the Respondents' main views on the Modified Retail Market below, grouping the key issues raised into the following two themes:
- (a) Comments on the Product Market Definition (see paragraphs 8.10 to 8.15 below); and
 - (b) Comments on the Geographic Market Definition (see paragraphs 8.17 to 8.25 below).

¹⁵⁶⁷ See paragraphs 9.10 to 9.21 of the Consultation.

¹⁵⁶⁸ See paragraphs 9.22 to 9.24 of the Consultation.

¹⁵⁶⁹ See paragraphs 9.25 to 9.27 of the Consultation.

¹⁵⁷⁰ ComReg noted that there were differences in network types (cable, fibre and copper) across geographic areas, giving rise to differences in the availability of broadband products.

Comments on the Product Market Definition

- 8.10 As noted in paragraph 8.5 above, ALTO, BT, enet, Sky and Vodafone broadly agreed with ComReg's assessment of the Modified Retail Market.
- 8.11 enet noted that it shared ComReg's view that the Modified Retail Market is likely to comprise retail broadband services offered over copper, FTTC, FTTH and CATV networks.
- 8.12 Sky indicated that it broadly agrees with the analysis carried out by ComReg and that, in any event, ComReg is not required to conclude on the precise scope of the retail market as part of its analysis.
- 8.13 Vodafone agreed that, from a product perspective, the Modified Retail Market was the same as the retail market set out in Section 4 of the Consultation, and agreed in particular that it includes all fixed point retail broadband products of any speed, whether provided over copper, FTTC, FTTH and CATV networks. Vodafone expressed the view that these products have sufficiently similar characteristics for the purpose of market definition, and agreed that there is likely to be a chain of substitution between them. Vodafone also agreed that retail broadband products provided over 3G and 4G mobile networks, satellite networks, FWA networks and leased lines are not effective substitutes and, therefore, do not form part of the Modified Retail Market.
- 8.14 Eircom disagreed with ComReg's preliminary conclusions on the assessment of the Modified Retail Market, with its comments summarised at paragraph 8.7 above.
- 8.15 ALTO, BT and Virgin Media did not comment specifically on the definition of the Modified Retail Market from a Product Market perspective.
- 8.16 The EC Response queried ComReg's decision to exclude alternative FTTH from the market; however, while the EC did not specify whether it was referring to retail or wholesale markets, ComReg's has assumed it relates to wholesale markets. ComReg has accordingly addressed this concern in the context of wholesale markets at Appendix: 3 and as highlighted elsewhere in this Decision.

Comments on the Geographic Market Definition

- 8.17 ALTO and BT agreed with ComReg's analysis, which acknowledged that both product speeds and choice of supplier differs depending on geographic location, and expressed the view that this should have been highlighted more strongly in ComReg's overall preliminary conclusion at paragraph 9.31 of the Consultation, in particular the statement regarding the possibility of sub-geographic markets existing, which ComReg left open.¹⁵⁷¹ Both ALTO and BT agreed with ComReg's approach, whereby ComReg acknowledged that sub-geographic markets may exist but left this question open.

¹⁵⁷¹ See paragraph 9.31(b) of the Consultation, which states that "ComReg recognises the possibility of sub-geographic markets existing; however, we leave this question open."

- 8.18 Eircom expressed the view that there are multiple sub-national geographic markets, rather than a single national retail broadband market, especially in the presence of a competitive urban WCA market. Eircom stated that ComReg has not concluded on the geographic scope of the Modified Retail Market, rather it has simply recognised the ‘possibility’ that sub-geographic markets may exist. Eircom also noted that it is unlikely that the presence of regulation in the WLA Market alone would create this ‘possibility’ of separate geographic retail markets; rather, it considered that the existence of sub-national retail broadband markets holds in the absence of regulation in either the WLA or WCA markets.
- 8.19 enet suggested that it is possible that sub-geographic markets exist for the provision of such services, depending how many competing network infrastructures have been deployed.
- 8.20 As noted in paragraph 8.6 above, Virgin Media stated that ComReg’s approach to defining the Modified Retail Market appears to be inconsistent with its approach to defining the retail market in Section 4. Virgin Media noted that in Section 4 ComReg defined a national market for retail broadband, whereas in Section 9 it left the question of geographic market definition open, despite noting in paragraph 9.25 that:
- “Despite some geographic variation in network coverage, ComReg has not observed differing competitive conditions in retail broadband pricing.”¹⁵⁷²*
- 8.21 Virgin Media argued that, while ComReg notes that the functionality of services varies by location, ComReg does not make the case that this is caused specifically by variation in local competitive conditions. In Virgin Media’s view, this variation in broadband functionality may be attributable to other factors including variation in population density, disposable income and age of the population, terrain, existing civil engineering that can support network deployment, the number of lines covered by a Main Distribution Frame (**‘MDF’**) in case of copper unbundling, and so on, but these factors do not - in themselves - support the definition of sub-national markets.
- 8.22 Virgin Media considered that other indicators such as homogeneity in pricing on a national basis, and the cost of advertising (the main media channels are national in scope), support a national geographic market definition.
- 8.23 Vodafone stated that it recognises the potential for geographic differences in competitive intensity. Vodafone considered that products derived from wholesale broadband networks (including voice, broadband and TV) are marketed and sold at a national level and that national challengers to Eircom’s potential dominance for these products rely on being able to offer services throughout Ireland, typically at a price that can vary by product, but otherwise pricing does not vary by geography.

¹⁵⁷² See page 408 of the Consultation.

- 8.24 Vodafone expressed the view that, if regulation delivers a wholesale product set that varies geographically, in a way that means major SPs have gaps in their ability to replicate (technically and/or economically) Eircom's product offers within some geographic locales, this could seriously undermine competition in the retail market and the investment and innovation that flow from it. Vodafone further argued that consideration of geographic variations in market definition, SMP designation, or the imposition of remedies to be implemented in the WCA market must take account of the need to ensure that nationally focused competitors can, in principle, maintain a national footprint.
- 8.25 Sky did not comment specifically on the definition of the Modified Retail Market from a geographic market perspective.

ComReg's Assessment of Respondents' Views

- 8.26 In this section, ComReg assesses Respondents' views under the themes identified in paragraph 6.7 above, as follows:
- (a) Assessment of comments on the Product Market Definition (see paragraphs 8.49 to 8.52 below); and
 - (b) Assessment of comments on the Geographic Market Definition (see paragraphs 8.53 to 8.62 below).
- 8.27 Before doing so, in paragraphs 8.28 to 8.48 below ComReg updates the key changes to trends on geographic aspects of the analysis, as they are germane to the assessment of Respondents' views.¹⁵⁷³

Updated Geographic Trends

- 8.28 Below, ComReg updates its assessment of the geographic aspect of the Modified Retail Market, in particular, relating to:
- (a) geographic variation in entry conditions;
 - (b) the evolution of SP market shares; and
 - (c) geographic variances in products and pricing.

Geographic Variation in Entry Conditions

- 8.29 In paragraphs 9.10 to 9.21 of the Consultation, ComReg examined geographic variation in entry conditions by Exchange Area.
- 8.30 ComReg observed differences in the availability and coverage of broadband products provided over copper, FTTC, FTTH and CATV networks. ComReg's preliminary view was that geography and building density play a role in the availability of broadband access via different platforms. In general, the availability of alternative platforms is correlated with the population density of a given area (i.e. customers in urban areas are more likely to have access to alternative networks than customers in rural areas).
- 8.31 ComReg presented an overview of network coverage in the Consultation, which has been updated below to reflect the latest market dynamics.

¹⁵⁷³ See paragraphs 9.6 to 9.27 of the Consultation.

- 8.32 Eircom's copper network is near ubiquitous, and as noted in the Consultation, CG ADSL and ADSL2+ broadband services are available from approximately 80% - or 940¹⁵⁷⁴ - of Exchange Areas.¹⁵⁷⁵ Since the Consultation, this figure has remained broadly static. Based on wholesale supply of CG WLA-based LLU products, BT Ireland can also supply broadband services over Eircom's copper network in areas where it has made investments in unbundling local exchanges. At the time of the Consultation, it was noted that BT Ireland had unbundled [REDACTED] exchanges, which covered [REDACTED] premises; since the Consultation, this figure has remained largely static, with BT having now unbundled [REDACTED] exchanges and which covers [REDACTED] premises.¹⁵⁷⁶
- 8.33 It should, however, be noted that in the Consultation, ComReg used an estimate of total premises in each Exchange Area provided by Eircom, the basis of which has, in the intervening period, been clarified by Eircom.¹⁵⁷⁷ Eircom's estimate related to the total number of working and pending lines across the Eircom network, including Eircom retail and wholesale customers, essentially providing a figure for the total number of premises connected to Eircom's PSTN network.
- 8.34 This implies that SP coverage (in terms of premises) in this Decision is not directly comparable with coverage figures presented in the Consultation, as ComReg is now using more accurate data on premises as taken from Eircode.
- 8.35 BT Ireland supplies broadband services via its network to its own retail customers (predominantly large business customers), and also provides WCA-based services to Sky Ireland and Vodafone. At the time of the Consultation, BT Ireland served [REDACTED] customers (retail and wholesale) using LLU inputs purchased from Eircom in the upstream WLA Market. BT serves [REDACTED] customers using these inputs as of Q4 2017, a [REDACTED].¹⁵⁷⁸
- 8.36 As set out below, Table 23 presents figures for the number of exchanges unbundled by each of the above SPs and the number of retail subscribers served as at Q1 2016 and Q4 2017.¹⁵⁷⁹
- 8.37 A number of other SPs have also unbundled some Eircom exchanges, enabling them to provide CG retail services to their own broadband subscribers.

Table 23: Number of Exchanges Unbundled by Service Providers and Retail Subscribers Served [REDACTED]¹⁵⁸⁰

Service Provider	Number of Exchanges Unbundled Q1 2016	Exchanges Unbundled Q4 2017	Retail Subscribers Q1 2016	Retail Subscribers Q4 2017
BT	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Magnet	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Digiweb	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3Play Plus	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colt Telecom	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
TOTAL	N/A	N/A	63,413 ¹⁵⁸¹	45,228 ¹⁵⁸²

- 8.38 Eircom also operates a FTTC and FTTH network, with broadband services available at [§< ██████████] exchanges as at Q1 2016. As of Q4 2017, Eircom's FTTC and FTTH network passes 1.8m premises, with FTTC broadband services available at 860 exchanges¹⁵⁸³, including 170,000 FTTH premises passed at [§< ██████████] exchanges.¹⁵⁸⁴ Eircom has indicated publicly that it plans to extend its coverage to 1.9 million premises by December 2018, including the rollout of FTTH to approximately 300,000 rural premises. As at Q4 2017, Eircom is providing services to [§< ██████████] retail broadband customers via its FTTC and FTTH networks.
- 8.39 By virtue of its purchase of Eircom's VUA products in the WLA Market, BT Ireland provides WLA-based WCA services over its FTTC and FTTH network. BT Ireland can only avail of Eircom's VUA products in areas where it has made investments in local handover (backhaul and associated facilities, such as WEILs), and where Eircom has rolled out its FTTC or FTTH networks. BT Ireland supplies Sky with WLA-based WCA services using Eircom's VUA-based WLA inputs, which Sky Ireland in turn uses to supply retail broadband (and other) services. As at Q4 2017, BT Ireland can avail of Eircom's VUA products in [§< ██████████] Eircom exchanges¹⁵⁸⁵ (up significantly from [§< ██████████] in Q1 2016) and as at Q4 2017 serves [§< ██████████] retail and wholesale customers via its VUA inputs, having increased from [§< ██████████] in Q1 2016.

1574

https://www.eir.ie/opencms/export/.content/pdf/IR/reports/2016_2017/quarter4/eir_4th_quarter_and_full_year_results_to_30_June_2017_annual_bond_document_1.pdf.

1575 This covered 96% of the premises (both residential and business premises) in Ireland. The figure as of Q4 2017 is approximately [§< ██████████] premises.

1576 ComReg uses Eircode data to estimate the total number of premises by Exchange Area, based on 'postal addresses' as defined by Eircode. See Eircode Address Database Product Guide, Edition 2, Version 7: <https://www.eircode.ie/business/products-and-services>. This issue is discussed further in Appendix: 10 below.

1577 Email correspondence between ComReg and Eircom in January 2017.

1578 Greater than 20%.

1579 See Table 16 on page 404 of the Consultation.

1580 These SPs use these inputs to serve their own retail and wholesale customers. For example, BT Ireland may use its LLU services to provide downstream wholesale services to Sky and/or Vodafone.

1581 See ComReg's QKDR Q1 2016, Section 3.

1582 See ComReg's QKDR Q4 2017, Section 3.

1583

https://www.eir.ie/opencms/export/.content/pdf/IR/reports/2016_2017/quarter4/eir_4th_quarter_and_full_year_results_to_30_June_2017_annual_bond_document_1.pdf.

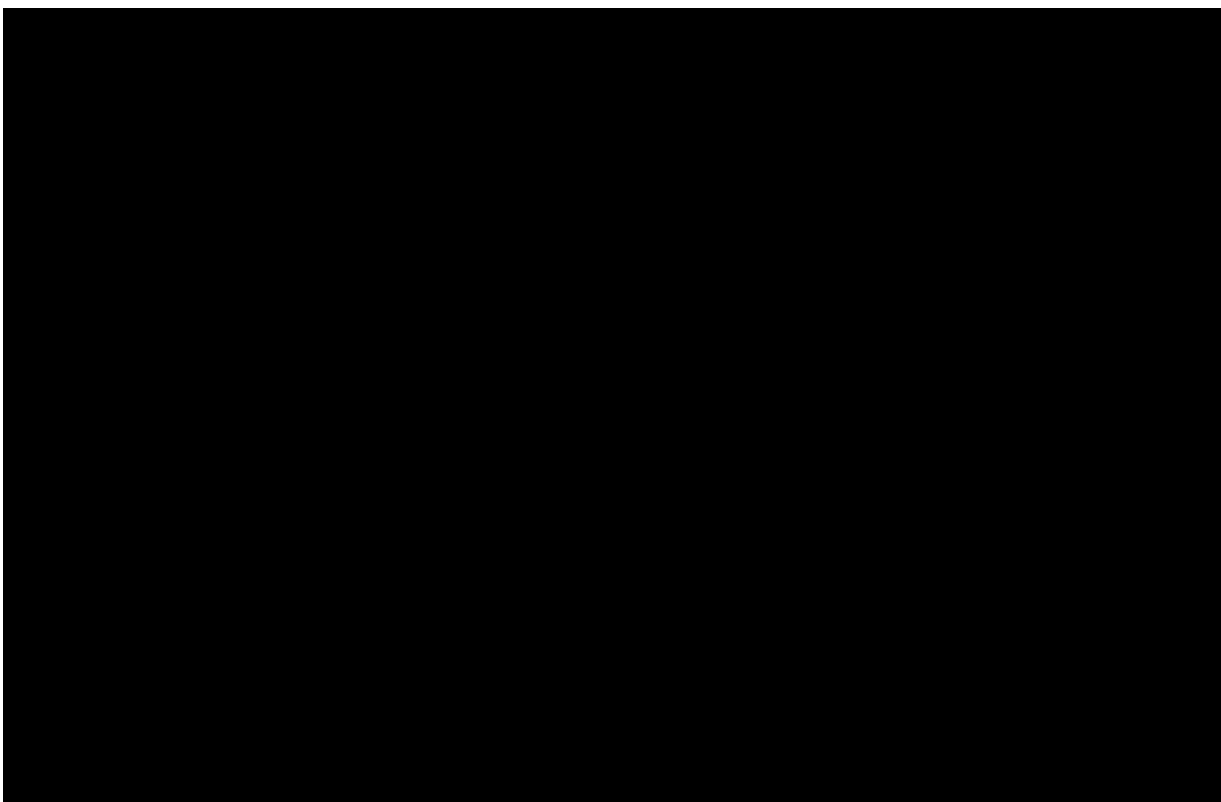
1584 Eircom's [full year financial results ending Q4 2017](#).

1585 These exchanges cover [§< ██████████] premises, although FTTC/FTTH-based services may not be available in all of the premises in each Exchange Area.

Evolution of Service Provider Market Shares

8.44 ComReg considered that there is likely to be a degree of variation in SP market shares in different geographic areas, driven by the availability of platforms in such areas in the Consultation.¹⁵⁹⁴ ComReg presented a breakdown of the number of Exchange Areas by the number of SPs capable of providing services within each Exchange Area, absent regulation in the WCA Market, but in the presence of WLA regulation.¹⁵⁹⁵ This is compared with the figures as at Q4 2017 below in Figure 21.¹⁵⁹⁶ ComReg's view was that this information indicated that there are a number of exchanges where Eircom faces a greater degree of competition in the provision of retail (and, in some cases, wholesale) broadband services (and related services), relative to other geographic areas.

Figure 21: SPs capable of providing broadband services using own network inputs and/or WLA inputs [REDACTED]¹⁵⁹⁷



¹⁵⁹⁴ See paragraphs 9.22 to 9.23 above.

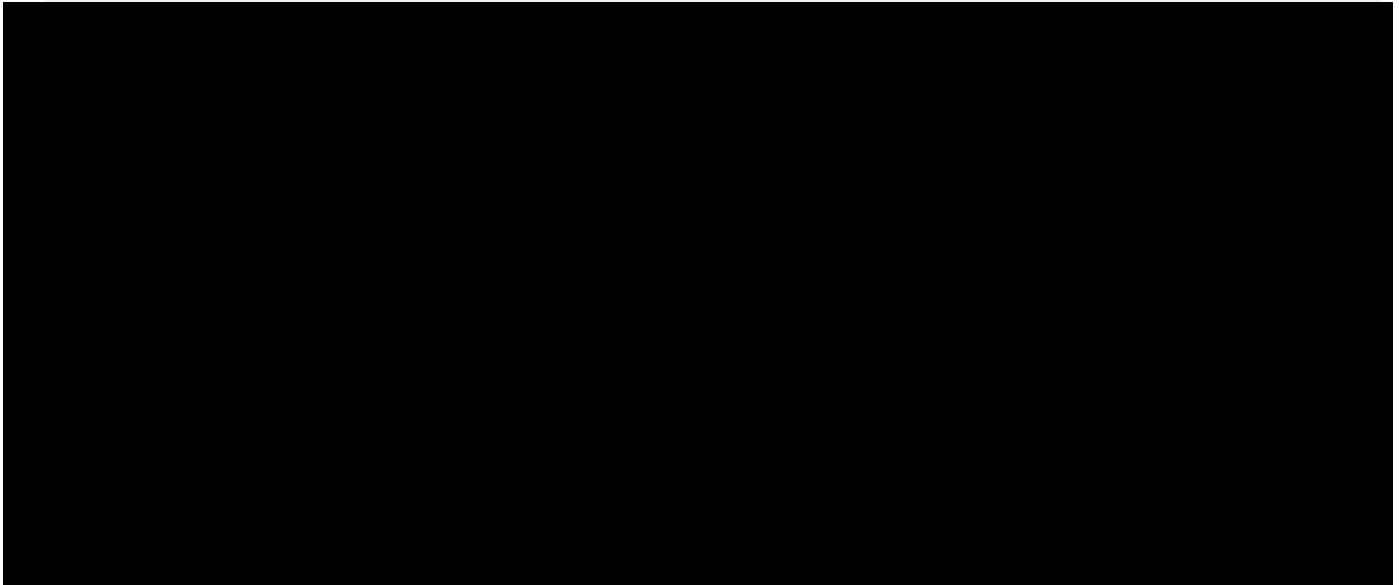
¹⁵⁹⁵ See Table 17 on page 407 of the Consultation.

¹⁵⁹⁶ Data collected through November 2017 SIR.

¹⁵⁹⁷ Data relate to Q1 2016 and Q4 2017 respectively. Note that differences in SP coverage (in terms of premises) in this Decision are not directly comparable with coverage figures presented in the Consultation, as ComReg is now using more accurate data on premises from Eircode. This suggests that some of the changes in premises covered between Q1 2016 and Q4 2017 are not solely related to changes in SP rollout. Eircom's market share includes its self-supply of retail broadband services and its supply of wholesale Bitstream services to SPs who do not have own-network or WLA inputs available in the Exchange Area.

8.45 Figure 22 below plots the number of SPs (including Eircom) capable of providing broadband services and associated market shares for Q1 2016 (data presented in the Consultation) and now as at Q4 2017. In general, as the number of Service Providers present at an Exchange Area increases, Eircom's market share declines. In the figure below, where only two SPs are present, Eircom's overall (i.e. across all Exchange Areas where only two SPs are present) market share as at Q1 2016 was 86% and the data as at Q4 2017 suggests that Eircom's overall market share has dropped to 75%.¹⁵⁹⁸

Figure 22: Number of SPs (including Eircom) capable of providing broadband services using own network inputs and/or WLA inputs by SP Market Share [REDACTED]¹⁵⁹⁹



Geographic variances in products and pricing

8.46 ComReg noted that it had not observed differing competitive conditions in retail broadband pricing, and that, in response to a SIR,¹⁶⁰⁰ all SPs indicated in their responses that they did not differentiate the prices of their retail broadband services on a geographic basis, despite some SPs using multiple platforms in offering such services.¹⁶⁰¹

8.47 In addition, ComReg noted that, with regard to product functionality, no SPs had indicated in their responses to ComReg's non-statutory information requests that they offer retail products with different functionalities or types of products in different geographic areas.¹⁶⁰²

¹⁵⁹⁸ Note that these figures are totals across all exchanges; for example, where two SPs are present (e.g. Eircom and Virgin Media), ComReg presents the sum of each SP's market share across all those exchanges.

¹⁵⁹⁹ Data relate to Q1 2016 and Q4 2017.

¹⁶⁰⁰ The February 2015 SIR sought information from SPs on issues relating to geographically-differentiated pricing.

¹⁶⁰¹ See paragraph 9.25 of the Consultation.

¹⁶⁰² See paragraph 9.27 of the Consultation.

- 8.48 In paragraphs 9.28 to 9.30 of the Consultation, ComReg outlined its preliminary view that there may be separate Modified Retail Broadband Product Markets from a geographic perspective, but drew no firm conclusions in this regard, and left this question open. Such areas may be differentiated as follows:
- (a) Areas where there may be a significant presence of competing SPs, including those using WLA inputs and independent network SPs, with further evidence of competitive conditions potentially differing, having regard to factors such as market share variations between geographic areas; and
 - (b) Areas where there may be little or no presence by alternative networks, such that consumer choice is limited to very few SPs. This area includes parts of the country where it is not yet commercially viable to invest in retail broadband services.

Assessment of Comments on the Product Market Definition

- 8.49 As outlined in paragraphs 8.11 to 8.13 above, enet, Sky and Vodafone broadly agreed with ComReg's definition of the Modified Retail Market from a product perspective, while in paragraph 8.15 it was noted that ALTO, BT and Virgin Media did not comment specifically on the Product Market definition of same.
- 8.50 ComReg notes Eircom's views summarised in paragraph 8.14 above, suggesting that the Product Market definition is incorrect, and that Mobile Broadband and broadband services provided over FWA and satellite networks should be included.
- 8.51 ComReg has previously responded to points raised by Eircom in relation to the product definition of the retail broadband market (absent WLA and WCA regulation) in Section 3 and disagrees with Eircom's view.¹⁶⁰³ In particular, ComReg outlined its justification for excluding Mobile Broadband, FWA and satellite-based broadband products from the retail broadband market based on an assessment of a variety of characteristics and market evidence including (but not limited to) usage and End Users' views ascertained via the 2017 WLA/WCA Market Research.¹⁶⁰⁴
- 8.52 Based on the analysis presented in the Consultation and in Section 3 of this Decision,¹⁶⁰⁵ ComReg does not agree with Eircom's view that Mobile Broadband, FWA and satellite-based broadband are likely to pose a sufficiently effective competitive constraint on copper, FTTx and CATV-based broadband products, such that they warrant inclusion in the same Product Market.

¹⁶⁰³ See paragraphs 3.79 to 3.96 above.

¹⁶⁰⁴ See paragraphs 3.80 to 3.90 for Mobile Broadband; paragraphs 3.94 to 3.99 for FWA; and paragraph 3.93 for satellite.

¹⁶⁰⁵ Referred to in footnote 1604 above.

Assessment of Comments on Geographic Market Definition

- 8.53 With regard to the geographic definition of the Modified Retail Market, ALTO, BT, enet and Vodafone broadly agreed with ComReg's geographic assessment,¹⁶⁰⁶ while as noted in paragraph 8.25, Sky did not comment specifically on this aspect of ComReg's analysis.
- 8.54 ComReg notes Eircom's view in paragraph 8.18 above that there are numerous sub-national geographic markets, rather than a single retail broadband market that is national in scope, especially in the presence of a competitive urban WCA market. With respect to Eircom's comment that ComReg has not concluded on the geographic scope of the Modified Retail Broadband market, as noted in paragraph 9.2 of the Consultation, ComReg is not required to do so. Rather, the purpose of the assessment of the Modified Retail Market is to inform ComReg's subsequent assessment of the definition of, and competition assessment for, the Relevant WCA Markets (as defined in Section 10 of the Consultation and Section 9 of this Decision), including with respect to the strength of any indirect constraints from related markets. Given that the wholesale demand for WCA is largely driven by retail demand for broadband (and other) services, it is necessary to consider the dynamics of the Modified Retail Market and whether these dynamics materially impact at a wholesale level. Throughout the analysis in the Consultation and this Decision, ComReg has taken due account of such considerations.
- 8.55 Eircom also noted that it is unlikely that the presence of regulation in the WLA Market alone would create this 'possibility' of separate retail broadband markets; rather, the existence of sub-national retail broadband markets holds in the absence of regulation in either the WLA or WCA markets.
- 8.56 ComReg does not agree with Eircom that sub-national retail markets exist absent regulation in either the WLA or WCA markets. This would suggest that sub-national markets exist based solely on the presence of independent alternative networks such as Virgin Media or SIRO. ComReg gave consideration to the definition of the retail market, absent WLA regulation, in Section 4 of the Consultation and Section 3 of this Decision and, for the reasons set out therein, has concluded that the retail market would likely be national under this scenario.
- 8.57 ComReg assessed the Modified Retail Market in Section 9 of the Consultation and in that section, having regard to the presence, not only of independent alternative networks, but also SPs operating using upstream WLA inputs. ComReg's overall conclusion, as set out below, is that it recognises the possibility of sub-geographic markets existing; however, it leaves this question open for the time being. While certain factors point towards separate Modified Retail Broadband Markets from a geographic perspective, such as the number of competing SPs and market share differences between different geographic areas (being suggestive of differing intensities of competition), other factors such as uniformity of retail pricing and product functionalities are not suggestive of sub-geographic markets.

¹⁶⁰⁶ See paragraphs 8.17, 8.19 and 8.23 to 8.24 above.

- 8.58 ComReg notes Virgin Media's views as summarised in paragraphs 8.20 to 8.22 above, which suggest that variations in broadband functionality, rather than being definitive indicators of sub-geographic markets, may be more attributable to factors impacting network rollout. Such factors might include population density, disposable income and age of the population, terrain, existing civil engineering that can support network deployment, and the number of lines covered by a MDF in the case of copper unbundling.
- 8.59 In paragraph 9.12 of the Consultation, ComReg noted differences in the *coverage* of different platforms/networks and the availability of services over them.¹⁶⁰⁷ ComReg's preliminary view was that geography plays a role in the availability of broadband access via different platforms and that, in general, the business case for investing in networks and network upgrades (and thus availability and functionality of services, and the number of competing SPs) is likely to be impacted by the factors identified by Virgin Media. This has been reflected in the increased presence of SPs operating in more urbanised areas relative to rural areas. For example, Figure 21 shows that the number of SPs present in an Exchange Area increases with the number of premises and subscribers in that Exchange Area. In ComReg's view, such presence, having regard to the intensity of competition, is also likely to drive investment in network upgrades and rollout. As is evident from the analysis in the Consultation and this Decision, ComReg has taken due account of SP presence and product functionality in its assessment of the product and geographic scope of the Modified Retail Market (and the definition of the Relevant Markets).
- 8.60 With respect to Virgin Media's comments that other indicators such as national pricing and the cost of advertising (the main media channels being national in scope) support a national geographic market definition, ComReg does not agree that these factors are necessarily determinative in and of themselves, particularly when considered alongside other factors such as geographic variations in entry conditions and the evolution of SPs' market shares. ComReg notes that most SPs, while engaging in national advertising, make clear that services offered are subject to coverage availability, or allow for service availability to be checked online¹⁶⁰⁸. For example, Vodafone states on its website that "*Service is subject to device capabilities and network availability.*"¹⁶⁰⁹ It is also the case that television advertising slots do not tend to allow advertising to be broken out at a local level. Given this, the national advertising approach taken by SPs is not necessarily suggestive of a national market. Rather, it is a function of the manner in which such advertising slots are sold.

¹⁶⁰⁷ This analysis has been updated in paragraphs 8.29 to 8.43 above. For example, as noted in paragraph 8.38, Eircom has passed 170,000 FTTH premises as at Q4 2017 ([full year financial results ending Q4 2017](#)), which impacts the availability of FTTH services.

¹⁶⁰⁸ For example, at <https://www.virginmedia.ie/broadband/buy-a-broadband-package/>.

¹⁶⁰⁹ See <https://n.vodafone.ie/network/coverage.html>.

- 8.61 As noted in paragraph 8.24, Vodafone expressed the view that, if regulation delivers a wholesale product set that is varied geographically, in a way that means major national SPs have gaps in their ability to replicate (technically and/or economically) Eircom's product offers within some geographies, this could seriously undermine competition in the retail market and the investment and innovation that flow from it.
- 8.62 ComReg notes Vodafone's views. ComReg considers that any variation in Eircom's wholesale product offering by geography tends to be related to network coverage and technology. For example, availability of VUA products will depend on whether an NGA network has been deployed in certain geographies. In the context of the MDF and the market definition and subsequent competition assessment, ComReg has taken due account of wholesale product availability.

ComReg's Position

- 8.63 Having regard to the analysis in Section 9 of the Consultation and the consideration of Respondents' views in paragraphs 8.5 to 8.62 above, ComReg's position is that the Modified Retail Market (i.e. the product and geographic market in the presence of WLA regulation) is defined as follows:
- (a) Retail broadband products of any speed provided over copper, FTTC, FTTH and CATV networks, including broadband products provided using upstream WLA inputs (the '**Modified Retail Broadband Product Market**'); and
 - (b) ComReg recognises the possibility of sub-geographic markets existing; however, ComReg leaves this question open, as certain factors pointed towards separate Modified Retail Broadband Markets from a geographic perspective, such as the number of competing SPs, and market share differences between different geographic areas. Contrary to this, however, uniformity of retail pricing and product functionalities were not suggestive of sub-geographic markets.

9 Assessment of the Relevant WCA Market

Position set out in the Consultation

- 9.1 Taking on board the analysis in Section 5,¹⁶¹⁰ which defines the Relevant WLA Market, ComReg has applied the same framework for defining the Relevant WCA Market(s). The objective of doing so is to examine if there are any wholesale products or services that an Access Seeker would consider to be an effective substitute to the WCA focal product (CG Bitstream), taking account of demand-side and supply-side factors.
- 9.2 As noted in paragraph 10.6 of the Consultation, the Relevant WCA Market(s) sit between the (upstream) Relevant WLA Market and the (downstream) retail broadband market (and related markets). When purchasing WCA, Access Seekers are likely to have less control over the product and related parameters relative to their purchases of WLA. This is because less backhaul and other investment is required of Access Seekers in obtaining WCA connectivity, having regard to the nature of the service offered.
- 9.3 As ComReg noted in paragraph 10.7 of the Consultation, regulation of the Relevant WLA Market can potentially influence competition in the downstream Relevant WCA Market(s) and retail markets, given that WCA can be offered using inputs purchased in the upstream Relevant WLA Market. For example, an Access Seeker's purchase of VULA (whether from Eircom or SIRO) in the Relevant WLA Market can be used to provide a variety of downstream wholesale and retail services, including the provision of Bitstream-type services in the Relevant WCA Market(s).

WCA Product Market Definition

- 9.4 ComReg set out its preliminary view in Section 9 of the Consultation that broadband products of all speeds delivered over copper, FTTC, FTTH and CATV networks are included in the Modified Retail Broadband Market, in line with the chain of substitution analysis at the retail level (as discussed in Section 8 of this Decision and Appendix: 8).
- 9.5 ComReg considered that Eircom's copper network-based Current Generation ('CG') WCA product, referred to as CG Bitstream, was a suitable starting point, or 'focal product', for the Product Market definition exercise in the Consultation, as despite a decline in retail subscribers (and, consequently, in volumes of the underlying CG Bitstream product),¹⁶¹¹ it was the then-most widely used and most widely available WCA product at the time of the Consultation publication.

¹⁶¹⁰ See paragraphs 5.2 to 5.9 above.

¹⁶¹¹ CG Bitstream subscribers declined from 472,787 subscribers in Q3 2015 to 315,211 subscribers in Q4 2017, a decline of 33%.

- 9.6 ComReg postulated that any WCA products hypothetically offered by SIRO would be similar to those offered by Eircom and BT Ireland from a functional and technical perspective. However, ComReg was of the preliminary view that, were SIRO to offer a WCA product (currently, it does not), it may not impose a sufficiently immediate and effective constraint on existing participants (arising from demand-side substitutability) in the Relevant WCA Market over the short to medium term, given SIRO's current and expected geographic coverage.¹⁶¹² However, despite these concerns, ComReg identified that, from a supply-side substitute perspective, SIRO could hypothetically supply a WCA product.
- 9.7 ComReg recognised that retail CATV services (provided by Virgin Media) are likely to place a degree of indirect constraint on a HM supplier of WCA services in areas where the CATV network has been rolled out. It assessed its impact on the Product Market definition in paragraphs 10.100 to 10.108 of the Consultation, as set out in paragraph 9.10(d) below. Similarly, ComReg assessed its impact on the geographic scope of the Relevant WCA Market in paragraphs 10.166 to 10.167 of the Consultation and this is also detailed below in this Decision.¹⁶¹³
- 9.8 ComReg did not consider indirect constraints arising from FWA, mobile and satellite networks to be effective in the Relevant WCA Market, given its preliminary conclusion in Section 9 of the Consultation that these products were not likely to fall within the Modified Retail Broadband Market.
- 9.9 ComReg then considered the potential for WCA demand-side substitution by purchasers of WCA and supply-side substitution by SPs (including their self-supply, where relevant). ComReg's preliminary conclusion in the Consultation was that the WCA Product Market included copper network-based WCA Bitstream (the focal product) and FTTx-based WCA Bitstream. ComReg was also of the preliminary view that this Product Market did not include retail broadband services provided over the following networks:
- (a) Retail Broadband provided over FWA networks (see paragraphs 10.50 to 10.52 of the Consultation);
- ComReg considered that FWA networks were unlikely to be an effective substitute for WCA, due to uncertainty surrounding technical feasibility and potential issues with quality of service. ComReg was also aware of declining demand for the provision of retail services by means of FWA.
- (b) Retail Broadband provided over Alternative FTTH networks (see paragraphs 10.53 to 10.59 of the Consultation);

¹⁶¹² See paragraph 10.39 of the Consultation.

¹⁶¹³ See paragraphs 9.231 to 9.325 above.

ComReg considered that, because the scope for supply-side substitution into the Relevant WCA Market via localised alternative FTTH networks was currently limited, it was therefore unlikely that localised alternative FTTH networks would satisfactorily meet the requirements of Access Seekers.¹⁶¹⁴ ComReg nonetheless recognises that, as set out at paragraphs 4.9 to 4.11 above, from a functional perspective, the technical capabilities of retail services offered on localised alternative FTTH networks are likely to be similar to those offered over other FTTH networks that have broader coverage.

- (c) Retail Broadband provided over 3G/4G Mobile networks (see paragraphs 10.60 to 10.63 of the Consultation);

As with its WLA analysis, ComReg preliminarily concluded that retail broadband services provided over 3G/4G networks did not represent an effective supply-side substitute for WCA.

- (d) Retail Broadband provided using upstream inputs acquired in the Relevant WLA Market (paragraphs 10.64 to 10.70 of the Consultation);

ComReg recognised that Eircom likely faces constraints in the Relevant WCA Market and downstream markets from vertically integrated SPs such as Vodafone who compete at the retail level on the basis of their purchase and use of upstream WLA inputs. However, ComReg proposed to exclude supply-side substitution into the Relevant WCA Market by WLA purchasers that are not active in the Relevant WCA Market.

- (e) Retail Broadband provided over Leased Lines (paragraph 10.71 of the Consultation).

ComReg also set out its preliminary view that leased lines are unlikely to be an effective substitute in the Relevant WCA Market due to their much higher cost and differing functionality.

9.10 The EC Response also commented on ComReg's Notified Draft Measures, noting ComReg's proposal to exclude services provided over alternative FTTH networks from the market definition (see EC Response in Appendix: 2). ComReg has addressed this issue in Appendix: 3 , and also at paragraphs 3.44 to 3.46, and paragraph 4.11.

9.11 In summary, in the Consultation, ComReg defined the WCA Product Market as:

- (a) Wholesale Bitstream WCA-based products provided over copper and FTTx networks, including Bitstream provided using upstream WLA inputs;¹⁶¹⁵

¹⁶¹⁴ As at Q4 2017 [§< [REDACTED]] subscribers were on localised alternative FTTH networks (enet and Magnet).

¹⁶¹⁵ 'Upstream WLA inputs' are construed to include purchases of WLA by BT from Eircom for the purpose of the provision of downstream WCA services.

- (b) Self-supply of WCA-based Bitstream by Eircom and BT Ireland, both of whom are active in the supply of WCA services;
 - (c) WCA-based Bitstream products that may hypothetically be offered by SIRO;
 - (d) Self-supply of CATV retail broadband products offered by Virgin Media in areas where its network is present; and
 - (e) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).
- 9.12 Bitstream-based WCA products hypothetically provided over localised alternative FTTH networks were excluded from the WCA Product Market as no WCA products currently being supplied over these networks could likely serve as an effective substitute to the WCA offering of a HM supplier (or act as an effective indirect constraint). It was also considered unlikely that an equivalent product could be developed and offered by such localised FTTH networks within a relatively short period (e.g. twelve (12) months), at negligible cost and risk.

WCA Geographic Market Definition

- 9.13 ComReg then assessed the geographic scope of the Relevant WCA Market according to the following criteria:¹⁶¹⁶
- (a) Geographic differences in entry conditions over time;
 - (b) Variation in the number and size of potential competitors;
 - (c) Distribution of market shares;
 - (d) Evidence of differentiated pricing strategies or marketing; and
 - (e) Geographical differences in demand characteristics.
- 9.14 For the purpose of the geographic market analysis, ComReg considered the following SPs to constitute Primary Operators:¹⁶¹⁷
- (a) Eircom;
 - (b) BT Ireland;
 - (c) SIRO;
 - (d) Vodafone; and
 - (e) Virgin Media.

¹⁶¹⁶ See paragraphs 10.137 to 10.174 and Appendix 5 of the Consultation.

¹⁶¹⁷ See paragraphs 10.154 and 10.155 of the Consultation; a Primary Operator is an SP that can operate in the Relevant WCA Market and/or the retail market (directly or indirectly), absent regulation in the Relevant WCA Market, in addition to having a sizable national (or regional) presence. ComReg was of the view that only Primary Operators are capable of exerting an effective competitive constraint on other competitors and thereby potentially contributing to differing competitive conditions.

9.15 In paragraph 10.157, and also at Appendix 5 of the Consultation ComReg identified and justified the cumulative criteria which it proposed to use (collectively the 'Criteria') in determining whether there were likely to be differences in competitive conditions between geographic areas, and, therefore, how the relevant geographic market(s) should be defined. The criteria were:

- (a) **Criterion 1:** An Exchange Area¹⁶¹⁸ in which at least three Primary Operators would be capable, within a sufficiently short period of time, of providing either broadband services at the retail level to End Users, WCA or WLA in the Exchange Area, absent regulation in the Relevant WCA Market; and
- (b) **Criterion 2:** An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users,¹⁶¹⁹ absent regulation in the Relevant WCA Market; and
- (c) **Criterion 3:** An Exchange Area in which one or all of the Primary Operators providing retail broadband services to End Users using inputs from the Relevant WLA Market provide service to at least 10% of End Users, absent regulation in the Relevant WCA Market; and
- (d) **Criterion 4A:** An Exchange Area in which each Alternative Network Operator¹⁶²⁰ has the network coverage to, within a sufficiently short period, provide retail broadband services to End Users accounting for at least 30% of premises (or currently provides at least 30% of End Users with retail broadband services), absent regulation in the Relevant WCA Market; and
- (e) **Criterion 4B:** An Exchange Area in which each Alternative Network Operator providing retail telecommunication services to End Users provides services to at least 10% of End Users, absent regulation in the Relevant WCA Market; and
- (f) **Criterion 5:** Exceptionally, on a case-by-case basis, where an Exchange Area:

¹⁶¹⁸ An 'Exchange Area' is the geographic area served by a particular Eircom exchange. Each location in the State falls within one Exchange Area only. The Eircom network consists of 1,203 exchanges located nationwide. It should be noted that the initial Number of Exchange Areas identified in the Consultation (1,217) has fallen to 1,203, a decline of 14 Exchange Areas. This is because these 14 Exchange Areas have been identified as not being relevant for the assessment of the Relevant Markets, given they do not relate to the provision of WLA and/or WCA services. For example, they relate to test exchanges or data centre nodes. ComReg set out its reasoning for using the Exchange Area as the appropriate unit of geographical classification at paragraphs 10.150 to 10.152, and at Appendix 5, of the Consultation.

¹⁶¹⁹ In accordance with the Modified Greenfield Approach, absent regulation in the Relevant WCA Market, it was assumed that customers served by an Access Seeker using WCA inputs would revert back to Eircom (which, absent regulation, would not be required to provide WCA products).

¹⁶²⁰ The Consultation defined Virgin Media and SIRO as the only two Alternative Network Operators, being those SPs that have a network that exists independent of WLA and WCA regulation.

An Alternative Network Operator, or ANO, is a PO that has a network that exists independently of WLA and WCA regulation. Virgin Media and SIRO are, accordingly, the only ANOs currently present on the Relevant WCA Market.

- (i) fails no more than one of Criteria (2) to (4B) above, and fails the criterion by a small margin (i.e. less than 10% percent of the percentage specified);¹⁶²¹

OR

- (ii) fails no more than one of Criteria (2) to (4B) above, and where an Alternative Network Operator provides telecommunication services, either at the wholesale level or at the retail level, which equates to at least 60% of End Users,

that Exchange Area will be deemed to have satisfied the relevant criterion.

9.16 Having considered the analysis presented above (and having regard to Appendix 5 of the Consultation) ComReg set out its preliminary view in the Consultation that there are two separate, distinct Relevant Geographic WCA Markets:

- (a) The 'Urban WCA Market', being those 88 Exchange Areas¹⁶²² in which all the relevant criteria above were met on a cumulative basis; and
- (b) The 'Regional WCA Market', being those 1,129 Exchange Areas where the relevant criteria were not cumulatively met.

9.17 Accordingly, ComReg proposed to define two separate Relevant WCA Markets (together referred to as the '**Relevant WCA Markets**'), as follows:

- (a) The **Urban WCA Market** was then identified as comprising the following products offered in the then identified 88 Exchange Areas¹⁶²³ where all relevant Criteria are deemed to have been met:
 - (i) WCA-based Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs;
 - (ii) Self-supply of WCA-based Bitstream by Eircom and BT Ireland;
 - (iii) WCA-based Bitstream products that may hypothetically be offered by SIRO;
 - (iv) Self-supply of CATV retail broadband products offered by Virgin Media; and

¹⁶²¹ For example, the requirement for Eircom's market share to be less than 50% (Criterion 2) could be amended to 55% under Criterion 5 (i.e. 110% of the requirement set out in Criterion 2).

¹⁶²² ComReg notes that, in the Consultation, 88 Exchange Areas were deemed as falling into the Urban WCA Market and 1,129 Exchange Areas falling into the Regional WCA Market. A small change was made to this assessment in light of data clarifications from Eircom and a small number of calculation errors identified by ComReg in applying the five criteria.

¹⁶²³ See footnote 1622 above.

- (v) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).¹⁶²⁴
- (b) The **Regional WCA Market** was then identified as comprising the following products offered in the then identified 1,129 Exchange Areas where all relevant Criteria were considered not to have been met:¹⁶²⁵
 - (i) WCA-based Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs;
 - (ii) Self-supply of WCA-based Bitstream by Eircom and BT Ireland;
 - (iii) WCA-based Bitstream products that may hypothetically be offered by SIRO; and
 - (iv) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

Respondents' Views

WCA Product Market Definition

- 9.18 Seven of the eight Respondents to the Consultation expressed views on the WCA Product Market definition.
- 9.19 ALTO, BT, enet, and Sky broadly agreed with ComReg's assessment.
- 9.20 Eircom disagreed with ComReg's WCA Product Market definition, re-stating many of the views it expressed in its response to ComReg's WLA Product Market definition.
- 9.21 Virgin Media stated that it agrees "*for the most part*"¹⁶²⁶ with ComReg's preliminary views on the WCA Product Market definition, but that it disagreed with the proposal to include self-supply of CATV-based retail broadband products offered by Virgin Media in the Urban WCA Market.

¹⁶²⁴ ComReg referred to the requirement to have widespread coverage, as some SPs use WLA inputs to self-supply retail services within very small coverage areas. It was ComReg's preliminary view that such products would not impose a sufficiently effective indirect constraint upon a HM supplier of WCA services to warrant inclusion in the market.

¹⁶²⁵ ComReg was of the view that any indirect constraint from Virgin Media's CATV network was limited to urban areas, covered within the Urban WCA Market. ComReg therefore proposed to exclude the indirect constraint from CATV networks in the definition of the Regional WCA Market. Nevertheless, ComReg considers the extent of any indirect constraint from Virgin Media in the Assessment of SMP in the Relevant WCA Markets in Section 11 below.

¹⁶²⁶ As set out at page 6 of Virgin Media's submission response to ComReg's Consultation Question 9.

- 9.22 Vodafone disagreed with ComReg's preliminary conclusions on the Product Market definition and expressed concern that, in its view, the evidence did not support the finding that SIRO, Virgin Media and Vodafone provide effective competitive constraints in the Relevant WCA Markets. Vodafone's Submission was accompanied by a report which it commissioned from Compass Lexecon (the '**Compass Lexecon Report**').¹⁶²⁷
- 9.23 Colt did not provide any views on ComReg's assessment of the WCA Product Market.
- 9.24 ComReg has summarised the Respondents' main views on the WCA Product Market below, grouping the key issues raised into the following themes:
- (a) Comments on WCA Product Market Definition and ComReg's methodology (see paragraphs 9.25 to 9.60 below);
 - (b) Inclusion of CATV self-supply in the Urban WCA Market (see paragraphs 9.61 to 9.64 below); and
 - (c) Other issues raised in relation to the WCA Product Market definition (see paragraphs 9.65 to 9.67 below).

Comments on WCA Product Market Definition

Delineation of WCA Product Markets by technology

- 9.25 Eircom disagreed with ComReg's preliminary conclusions on the WCA Product Market assessment. Eircom noted that, as in the case of its views with respect to the Relevant WLA Market, given the decline in current generation¹⁶²⁸ ('**CG**') Bitstream products, it may be more appropriate to delineate the Relevant WCA Market on the basis of CG and next generation¹⁶²⁹ ('**NG**') technologies.¹⁶³⁰ ComReg interprets this to mean that, in Eircom's view, separate CG and NG WCA Product Markets should be defined. Eircom argued that the demand for CG products is likely to decline further over the lifetime of this market review as retail (and consequently) wholesale demand ultimately migrates to NG access.
- 9.26 Eircom noted that CG copper-based broadband technologies are in decline, citing ComReg's Q3 2016 QKDR:

*"In Q3 2016, 43.1% of all DSL lines were provided by OAOs using wholesale Bitstream. In absolute terms there were 198,540 wholesale Bitstream lines in Q3 2016, a decrease of 8.5% since Q3 2015. In contrast 25.3% of all VDSL lines in the same quarter were provided by OAOs using wholesale Bitstream. In absolute terms there were 116,831 wholesale VDSL Bitstream lines in Q3 2016, an increase of 6.1% since Q3 2015."*¹⁶³¹

¹⁶²⁷ ComReg treats the Compass Lexecon Report as part of the Vodafone Submission and, therefore, representative of Vodafone's views.

¹⁶²⁸ By 'CG', ComReg means services provided over copper access networks.

¹⁶²⁹ By 'NG', ComReg means services provided over FTTx access networks.

¹⁶³⁰ See Eircom submission, p.68.

¹⁶³¹ See Eircom's Submission, page 64.

Constraint arising from Virgin Media on business market

9.27 Eircom also made reference to paragraph 10.106 of the Consultation, in which ComReg stated that:

“Virgin Media’s network coverage is primarily targeted towards households, with minimal provision of retail services to businesses. This suggests that business customers affected by a SSNIP in WCA prices may not be able to switch to Virgin Media for retail broadband services.”

9.28 In Eircom’s view, the assertion that Virgin Media does not concentrate on the business market is not necessarily true. It noted that Virgin Media appeared to be keen to expand in the business market – particularly in the SME segment. Eircom considered that Virgin Media competes vigorously in this market and, in addition, Virgin Media’s planned network rollout would allow it to serve additional business, as well as residential, customers, thus enabling additional business users to switch in the event of a price increase.

Robustness of ComReg estimates

9.29 Eircom noted that the issues it raised in relation to the assessment of indirect constraints in the definition of the Relevant WLA Market also applied to the Relevant WCA Markets. Eircom considered that the manner in which ComReg conducted the Critical Loss Test (‘CLT’) was not robust in terms of both estimates of marginal costs and subsequent critical loss values. Eircom also considered that the estimates of customers’ behavioural responses against which to compare these critical loss values were not robust in the context of determining the extent to which various retail services may provide indirect constraints at the wholesale level.

9.30 Eircom therefore concluded that, on the basis of the purported weaknesses in ComReg’s analysis of indirect constraints, ComReg had failed to correctly identify the extent to which Virgin Media, FWA, mobile broadband and satellite broadband would act as effective constraints in the Relevant WCA Market.

Pricing of FTTC Bitstream products

9.31 Sky broadly agreed with ComReg's preliminary conclusions on the product and geographic assessments. Sky noted that ComReg, in its analysis, did not refer to the pricing of the key FTTC Bitstream product purchased by Access Seekers on Eircom's network i.e. POTS-based¹⁶³² FTTC. Sky noted that port charges¹⁶³³ for this POTS-based service were €8.09, having increased from €5.98 in September 2016, with Sky considering that, had ComReg taken these port charge price increases into account in its analysis, it would have substantially reinforced ComReg's preliminary conclusions that Eircom holds SMP on the Relevant WLA Market and Relevant WCA Markets.¹⁶³⁴

Compass Lexecon Report – Critique of substitutability and constraint assessment

9.32 Vodafone disagreed with ComReg's preliminary conclusions on the WCA Product Market assessment, deferring instead to the conclusions in the Compass Lexecon ('CL') Report which it had commissioned. In particular, Vodafone agreed with CL's conclusions in respect of how competitive constraints should be assessed as part of the Product Market definition process.¹⁶³⁵

9.33 Vodafone expressed concern that evidence cited by ComReg did not support the preliminary finding that SIRO, Virgin Media and Vodafone provided effective (direct and indirect, as appropriate) competitive constraints in the Relevant WCA Markets. To this end, Vodafone called on ComReg to give much less weight to SIRO (as a potential direct competitor) and Virgin Media and Vodafone (as indirect competitors) in its assessment of competitive constraints.¹⁶³⁶

¹⁶³² "Plain Old Telephony Service".

¹⁶³³ The specific charge Sky alludes to is the monthly rental charge for POTS-based NGA Bitstream Plus (and also VUA). Port charges are the additional cost of obtaining a POTS-based FTTC service. For example, Standalone POTS-based FTTC VUA is currently priced at €23.00 plus an €8.09 port charge, for a total of €31.09. See Eircom WBARO: http://www.openeir.ie/Reference_Offers/. According to Eircom's *NGA Bitstream Plus Products Product Description* (available online at <http://www.openeir.ie/WorkArea/DownloadAsset.aspx?id=4636>), "All Bitstream Plus products provide generic Ethernet access between an end-customer's premises and an Operator's own network and are intended to support a mix of time sensitive and high-volume applications. These include voice, general entertainment (including Broadcast TV), and high speed Internet" (p.7). POTS-based Bitstream Plus FTTC supports a PSTN voice telephony service, as well as all the features of standalone FTTC Bitstream Plus (high-speed broadband using VDSL2 technologies from a kerbside cabinet), on a single copper pair.

¹⁶³⁴ As set out in Sky's Submission at paragraphs 14, 21 (in respect of WLA) and 62 (in respect of WCA).

¹⁶³⁵ See Compass Lexecon Report accompanying Vodafone's Submission, pages 5 to 20.

¹⁶³⁶ ComReg notes for the avoidance of doubt that the assessment of competitive constraints over a longer time horizon occurs as part of the SMP assessment, and not at the market definition stage. Market definition considers short-term competitive constraints through the lenses of substitution to alternative products in response to small but significant non-transitory increases in prices.

9.34 As noted above, CL prepared a report on behalf of Vodafone “...to assess the merits of ComReg’s finding that there is a competitive Urban WCA Market in Ireland.”¹⁶³⁷

9.35 In considering whether a given product acts as a constraint within that product’s geographic footprint,¹⁶³⁸ CL agreed that ComReg’s approach may be appropriate, as it includes products which may exercise a competitive constraint regionally, even if these products are not offered across a sufficient geographic footprint to constrain prices nationally. In CL’s view, this allows for the possibility that retail broadband suppliers take a regional approach to acquiring WCA. However, CL noted that ComReg, in the context of WLA, considered that the use of multiple suppliers to achieve the necessary coverage as being “...unlikely to be a realistic or suitable option due to the transaction costs”.¹⁶³⁹

Demand-side Substitution

9.36 CL agreed with ComReg’s approach in taking copper-based Bitstream as the focal product in the Relevant WCA Market.¹⁶⁴⁰ CL also agreed that it is appropriate to include FTTx Bitstream in the Product Market. CL considered it “uncontroversial” to include Eircom and BT Ireland’s self-supply and external wholesale supply in WCA market shares on the basis of demand substitution.

Supply-side Substitution

9.37 CL noted that ComReg proposed to include FTTx-based WCA products hypothetically offered by SIRO in the Relevant WCA Market.¹⁶⁴¹ CL argued that ComReg’s concerns in relation to SIRO’s footprint and certain switching costs in the context of WLA are also applicable to WCA, and moreover, that SIRO is only a potential supplier of WCA, whereas it is an actual supplier of WLA. Compass Lexecon suggests that ComReg does not explain why the reasoning for finding that SIRO is an insufficient constraint in the context of WLA therefore does not also apply to WCA. Rather, in CL’s view,

“ComReg argues against including Virgin Media as a supply side constraint in the context of WCA due to Virgin Media’s limited footprint (which far exceeds SIRO’s prospective footprint) and switching costs.”¹⁶⁴²

¹⁶³⁷ Ibid, page 3.

¹⁶³⁸ See paragraph 10.54 of the Consultation.

¹⁶³⁹ As set out by ComReg at paragraph 6.99 of the Consultation.

¹⁶⁴⁰ ComReg’s WCA Product Market definition is outlined in paragraph 10.133 of the Consultation.

¹⁶⁴¹ See paragraph 10.73 of the Consultation. ComReg’s reasoning for including SIRO is outlined in paragraphs 10.39 and 10.54, as well as 5.52 and 5.54 of the Consultation.

¹⁶⁴² See Compass Lexecon Report accompanying Vodafone’s Submission, at paragraph 2.14.

9.38 In relation to ComReg’s point that the analysis is undertaken on a forward-looking basis,¹⁶⁴³ CL noted that it is not clear how ComReg has done this in practice, and what weight ComReg places on existing versus potential network footprint, or on network expansions anticipated for immediate versus medium term delivery. CL stated that

*“...it is therefore not clear to what extent ComReg relies on SIRO network expansions that may only occur towards the end of the review period and therefore may not provide any clear immediate constraints”.*¹⁶⁴⁴

9.39 CL contrasts ComReg’s approaches to assessing the presence of SIRO on the WLA Market and the WCA Market. CL states that ComReg first de-emphasises concerns relating to the impact of a limited network footprint¹⁶⁴⁵ and potentially significant switching costs in order to include SIRO in the Relevant WLA Market, despite finding that SIRO *“is unlikely to impose an effective constraint on Eircom”*.¹⁶⁴⁶ CL then pointed out that ComReg emphasises the technical feasibility of a SIRO WCA offering based on this WLA presence, in order to include SIRO in the Relevant WCA Market, despite finding that:

*“Even if SIRO were [sic] to offer a WCA market product, ComReg is of the preliminary view that SIRO may not impose a sufficiently effective constraint on Eircom in the WCA market over the medium term”.*¹⁶⁴⁷

9.40 CL therefore considered that the proposal by ComReg to include SIRO in the market *“likely overestimates the competitive pressure potentially attributable to SIRO”*. CL further noted that ComReg explains that SIRO’s planned rollout *“...is predominantly located within the Urban WCA Market”*.¹⁶⁴⁸

Indirect Competition

9.41 CL stated that Virgin Media and Vodafone are included in the WCA Market exclusively on the basis that they can be considered internal users of WCA; that is, as self-supplying WCA.

9.42 CL noted that, whereas Virgin Media’s network has lower coverage than that of Eircom, ComReg concludes that:

¹⁶⁴³ See paragraph 10.153 of the Consultation.

¹⁶⁴⁴ See Compass Lexecon Report accompanying Vodafone’s Submission, paragraph 2.15.

¹⁶⁴⁵ See paragraph 2.16 of the Compass Lexecon Report. CL extrapolates this conclusion from paragraph 10.48 of the Consultation, in which ComReg indicates that Virgin Media *“may not provide the level of coverage demanded by Access Seekers, who require a national presence to serve their retail customers”*.

¹⁶⁴⁶ See paragraph 5.52 of the Consultation.

¹⁶⁴⁷ See paragraph 10.39 of the Compass Lexecon Report.

¹⁶⁴⁸ See paragraph 2.16 of the Compass Lexecon Report.

*“....the indirect constraints from Virgin Media’s retail CATV network in urban areas (based on its retail self-supply) are sufficiently strong, in the areas where the Virgin Media network is present, to warrant inclusion in the WCA Market”.*¹⁶⁴⁹

- 9.43 CL noted that ComReg relies on the European Commission’s Explanatory Note to the 2014 Recommendation for the inclusion of alternative platforms in the Relevant WCA Market if there is competitive pressure stemming from those platforms at the retail level, but considered that ComReg does not perform a complete quantitative analysis across these points. CL therefore concludes that ComReg’s application of the indirect constraints condition overestimates the strength of competition.
- 9.44 CL agreed that the three conditions set out in the Explanatory Note to the 2014 Recommendation¹⁶⁵⁰ are relevant to the assessment of indirect constraints¹⁶⁵¹ and noted at paragraph 10.76 of the Consultation (and throughout) are relevant, but did not consider that ComReg has demonstrated that the conditions are satisfied, as outlined below.

Condition 1: Whether WCA price increases would be passed through to retail prices

- 9.45 CL considered that ComReg assumes, rather than establishes, that WCA price increases would be passed through into retail prices, acknowledging it *“may not be the case”* that SPs would pass through wholesale price increases in full.¹⁶⁵² When making a similar assumption for WLA, ComReg describes this as a *“prudent approach”*.¹⁶⁵³
- 9.46 CL stated that, while ComReg’s approach avoids underestimating the indirect competitive impact, there is a risk that it overestimates the impact. CL considered the full pass-through assumption likely to be inappropriate for a number of reasons:

¹⁶⁴⁹ See paragraph 10.127 of the Consultation.

¹⁶⁵⁰ See pages 46 and 47 of the Explanatory Note to the 2014 Recommendation.

¹⁶⁵¹ See Compass Lexecon Report accompanying Vodafone’s Submission, paragraph 2.22.

¹⁶⁵² See paragraph 10.96 of the Consultation.

¹⁶⁵³ See paragraph 5.134 of the Consultation.

- (a) ComReg assumes that all other elements of the downstream retail service are provided at the competitive price level, such that an increase in the price of WLA may translate into a retail price increase;¹⁶⁵⁴ CL noted that this does not take into account that entrants may use WCA to compete with existing SPs that use WLA or proprietary infrastructure until they gain sufficient scale to unbundle with WLA or build their own networks (i.e. climb the ladder of investment). CL suggested that a specific user cohort can therefore be supplied based on different technologies with different associated costs. CL argued that it is therefore not clear that competition will drive down prices to a uniform level, or that SPs failing to pass through wholesale cost increases for one of several upstream products would become loss-making.
- (b) CL noted that SPs do not set localised prices depending on whether an Exchange Area is served based on WLA or WCA. CL argued that, under national pricing, an increase in WCA prices should, at most, be passed onto retail prices in proportion to the share of the SP's user base served using WCA, but that the incentive for an SP to do so will depend on any impact this will have on its competitiveness across its entire retail offering. CL noted that ComReg does not assess this, and pointed out that ComReg recognises that *"any wholesale price increase will nonetheless be diluted once it is translated into a retail price increase. This is because the wholesale service costs are just one input to the overall retail price"*.¹⁶⁵⁵ In CL's view, the smaller an SP's reliance on WCA, the greater this dilution should be.
- (c) CL highlighted that ComReg finds that bundles are increasingly prevalent and that, in the context of WLA, *"it is not possible to be definitive about the retail price associated with the WLA-related element of the bundle"*.¹⁶⁵⁶ However, CL pointed out that ComReg assumes *"no cross-subsidisation from other services sold within bundles"*.¹⁶⁵⁷ In CL's view, this is a questionable assumption in light of ComReg's conclusion that *"a sufficient number of customers could (and would) unpick a bundle containing broadband and TV services if there were to be a hypothetical price increase in the cost of the bundle"*.¹⁶⁵⁸ CL considered that an SP would, hence, only pass on a WCA price increase into the bundle if the associated price increase more than compensated for the loss of income across all services in the bundle, and that ComReg does not assess this.

¹⁶⁵⁴ Paragraph 5.108 of the Consultation states: *"Assuming that all other elements of the downstream retail service were provided at a competitive price level, an increase in the price of WLA may translate into a retail price increase given that the SP would otherwise be operating its service at a loss over the long-term"*.

¹⁶⁵⁵ See paragraph 10.79 of the Consultation.

¹⁶⁵⁶ See paragraph 5.113 of the Consultation.

¹⁶⁵⁷ See footnote 410 of the Consultation.

¹⁶⁵⁸ See paragraph 4.271 of the Consultation.

- (d) CL made the case that broadband retailers incur up-front costs of customer acquisition and that these costs are then typically recovered over the duration of the customer relationship. CL argued that, for existing users, these costs are sunk, and it may therefore remain economically rational to keep supplying existing users at an Exchange Area, even if WCA prices increase to a level that makes it unprofitable to acquire new users. CL considered that this may allow a WCA supplier to extract profit from the existing customer base whilst only losing incremental margins from foreclosed new users, and that ComReg does not assess this.
- (e) CL noted that, in proposing stricter, cost orientation-based, regulation for Regional WCA, ComReg relies on past national wholesale price increases as evidence that Eircom does not consider its wholesale prices to be constrained by indirect competition. ComReg also considers these price increases as *“evidence that Eircom’s prices are not currently sufficiently constrained at a retail or wholesale level, in the presence of regulation”*.¹⁶⁵⁹ CL pointed out that, in the context of WLA, ComReg concludes that there is *“no firm behavioural evidence to suggest that Eircom is facing effective pricing constraints in the provision of WLA”*,¹⁶⁶⁰ and that *“Eircom likely has incentives to exploit its WLA customers in this manner as it competes with these SPs in downstream retail and/or wholesale markets”*.¹⁶⁶¹ CL argued that ComReg does not explain why these concerns do not apply equally to the proposed Urban WCA Market.

9.47 In summary, CL took the view that ComReg’s assumption that WCA price increases would be passed on in full into retail prices is unsubstantiated and does not take into account the differentiated cost structure and product offering of Eircom’s retail rivals. CL argued that cross-subsidies to WCA-based broadband users from WLA-based users, from other components of a bundle, or from existing users to new users, may enable and incentivise SPs to absorb WCA price increases. CL noted that ComReg acknowledges in the context of WLA that Eircom could distort competition by *“setting higher prices for WLA products to negate rivals’ competitive advantages”*.¹⁶⁶² CL agreed that this is a risk but considered that ComReg’s conclusion that Eircom is subject to a meaningful indirect constraint is contradicted by ComReg’s assessment of Eircom’s past conduct. CL considered that ComReg has not addressed this risk when assessing indirect WCA constraints, and that assuming full pass-through is not inherently prudent, as it risks failing to identify SMP.

¹⁶⁵⁹ See paragraph 13.306(b) of the Consultation.

¹⁶⁶⁰ See paragraph 6.124 of the Consultation.

¹⁶⁶¹ See paragraph 7.12 of the Consultation.

¹⁶⁶² See paragraph 7.42 (second bullet) of the Consultation.

Condition 2: Whether there is sufficient demand substitution at the retail level

- 9.48 CL argued that, although ComReg does determine the magnitude of a 5-10% SSNIP at WCA level, its analysis addresses whether a retailer could profitably increase retail prices by 5-10%, holding wholesale prices as a given. CL considered that ComReg's analysis does not assess the impact of a 5-10% wholesale price increase and ComReg has therefore not undertaken the test set out in the Explanatory Note to the 2014 Recommendation. As retail prices are higher than the prices for the underlying wholesale products, CL claimed that ComReg's analysis overestimates the magnitude of the relevant price increase that retailers would implement if passing through a 5-10% wholesale SSNIP.
- 9.49 CL referred to ComReg's 2014 WLA/WCA Market Research which suggests that 20% of residential customers buying broadband on a standalone basis would switch to CATV-based broadband (such as that provided by Virgin Media) in response to a €2 price increase,¹⁶⁶³ while for residential buyers of bundles, is the figure falls to 14%.¹⁶⁶⁴ CL stated that, with the exception of a single scenario, the relevant wholesale price increases identified by ComReg are significantly less than €2. CL considered that ComReg's reliance on consumer responsiveness to a retail €2 price increase is therefore likely to exaggerate the indirect competitive constraint at WCA level.
- 9.50 CL also noted that, in relation to WLA-based suppliers (like Vodafone), the factual basis for ComReg's finding that *"it is likely that a number of End Users would switch to its WLA based retail services in response to a SSNIP in WCA prices (as Vodafone's WLA based services would remain unaffected by such a SSNIP on WCA)"*¹⁶⁶⁵ is unclear. CL pointed out that, nonetheless, ComReg proposes to *"include the self-supply of Vodafone's WLA based broadband services within the WCA market"*.¹⁶⁶⁶
- 9.51 CL considered that ComReg would need to assess the implications of a SSNIP at WCA level, not at retail level and that ComReg has therefore not performed the required test.

¹⁶⁶³ See paragraph 10.104 of the Consultation (based on 2014 WLA/WCA Market Research).

¹⁶⁶⁴ *Ibid.*

¹⁶⁶⁵ See paragraph 10.113 of the Consultation.

¹⁶⁶⁶ See paragraph 10.115 of the Consultation.

Condition 3: Whether Eircom would expect to recapture users from foreclosed WCA buyers

9.52 CL highlighted that higher WCA prices may depress WCA volumes and that, if it did so, the associated loss of WCA income would undermine Eircom's incentive to impose such price increases (assuming that Conditions 1 and 2 were met). CL noted, however, that Eircom's retail business may win some of the users switching away from the SPs affected by higher WCA prices, and for retail competition to constrain Eircom's conduct at WCA level, the effect of such incremental retail margins must therefore not be so strong as to more than offset the effect of lower wholesale volumes, as recognised by ComReg. CL noted that ComReg argues

*".....it is likely that a HM vertically-integrated supplier would hold its retail prices constant in the face of a SSNIP of WCA, so as to attract [as] many retail customers as possible away from other SPs that purchase WCA inputs"*¹⁶⁶⁷

and concludes that

*"....retail customers affected by the pass-through of a SSNIP in WCA (i.e. retail customers of Access Seekers who purchase WCA from the vertically-integrated supplier) are also likely to switch to retail products offered by Eircom's retail arm."*¹⁶⁶⁸

- 9.53 CL considered that this suggests that the requirement that *"the customers of the access seekers would not switch to a significant extent to the retail arm of the integrated hypothetical monopolist"* may not be met.¹⁶⁶⁹
- 9.54 CL noted how ComReg considers that *"Virgin Media does not likely face an incentive to [supply wholesale], given that it would lead to increased competition in areas where it provides retail services"*.¹⁶⁷⁰ In CL's view, it is exactly in these geographic areas that ComReg suggests deregulating WCA.¹⁶⁷¹
- 9.55 However, *"ComReg does not explain why Eircom would not have a similar incentive to withhold WCA supply when targeting the same users."*¹⁶⁷² CL suggested that it may be the case that Virgin Media's and Eircom's incentives differ due to differences in retail market shares and, thereby, their expected ability to recapture downstream users following foreclosure of WCA buyers, but ComReg does not appear to have assessed this.

¹⁶⁶⁷ See paragraph 10.121 of the Consultation.

¹⁶⁶⁸ See paragraph 10.124 of the Consultation.

¹⁶⁶⁹ See Explanatory Note to the 2014 Recommendation, pages 46 and 47.

¹⁶⁷⁰ See paragraph 5.65 of the Consultation.

¹⁶⁷¹ As set out at paragraph 2.22 of the Consultation, in carrying out its assessment, ComReg, per the Modified Greenfield Approach, assumes that SMP regulation is absent in the WLA Market and, accordingly, in any downstream markets (including the WCA Market).

¹⁶⁷² See paragraph 2.33 of the Compass Lexecon Report. ComReg notes that discussion of Eircom incentives to supply WCA in the merchant market is also appropriate to assessment of SMP.

- 9.56 From CL's point of view, ComReg does not assess whether customers would *"switch to a significant extent to the retail arm of the integrated hypothetical monopolist"*, such that it may become profitable for Eircom to impose higher WCA prices in the absence of regulation,¹⁶⁷³ and has therefore not assessed whether the third of the requirements set out in the Explanatory Note to the 2014 Recommendation is met.
- 9.57 In summary, CL considered that ComReg has not undertaken the appropriate analysis in relation to the three conditions set out in the Explanatory Note to the 2014 Recommendation to determine whether a HM supplier of WCA has an incentive to foreclose at wholesale level.¹⁶⁷⁴
- 9.58 CL provided various reasons why the conditions set out in the Explanatory Note to the 2014 Recommendation may not be satisfied. In its view this is corroborated by ComReg's findings that Eircom could distort competition by *"Setting higher prices for WLA products to negate rivals' competitive advantages"*,¹⁶⁷⁵ and that past price increases are *"evidence that Eircom's prices are not currently sufficiently constrained at a retail or wholesale level, in the presence of regulation"*.¹⁶⁷⁶
- 9.59 CL considered that ComReg did not discuss the sensitivity of its finding of a competitive Urban WCA Market to its proposed inclusion of Virgin Media's and Vodafone's retail broadband products in the WCA Market in view of the strength of indirect constraints. However, CL noted that Virgin Media appears *"to represent the difference"* between the proposed Regional WCA Market and Urban WCA Market,¹⁶⁷⁷ which suggests that ComReg's proposal to include indirect constraints from Virgin Media may significantly impact ComReg's preliminary findings.

¹⁶⁷³ See Explanatory Note to the 2014 Recommendation, pages 47.

¹⁶⁷⁴ As noted at pp. 19-20 of the Compass Lexecon Report, this involves considering the extent to which:

- (a) a WCA price increase would be passed on into retail prices;
- (b) such a retail price increase would induce users to switch to another platform (and thereby reduce WCA volumes); and
- (c) whether Eircom's expected recapture of any of these users at retail level would result in margins that more than compensate for the wholesale margins lost from the lower wholesale volumes.

¹⁶⁷⁵ See paragraph 7.42 (second bullet) of the Consultation.

¹⁶⁷⁶ See paragraph 13.306(b) of the Consultation; see also paragraph 5.169.

¹⁶⁷⁷ In so doing, CL alluded to paragraph 10.177 of the Consultation, which sets out the definitions of the Urban WCA Market and the Regional WCA Market.

9.60 CL considered ComReg’s proposed inclusion of SIRO in the WCA Product Market, based on supply-side substitution considerations, and the inclusion of Virgin Media’s and Vodafone’s retail self-supply, based on indirect constraints as being unsupported by the necessary analyses and contradicted by facts and conclusions otherwise relied upon by ComReg. CL therefore considered that ComReg had overestimated the associated competitive constraints from SIRO,¹⁶⁷⁸ Virgin Media and Vodafone, and the products offered by these suppliers should not, therefore, be included in the Relevant WCA Market.¹⁶⁷⁹

Inclusion of CATV-based Broadband Self-Supply in the Urban WCA Market

9.61 Virgin Media agreed, for the most part, with ComReg’s preliminary WCA Product Market definition. Virgin Media agreed that there is no *direct* constraint arising from CATV networks that would warrant including the self-supply of CATV broadband in the Relevant WCA Market. However, Virgin Media disagreed with the proposal to include self-supply of CATV-based retail broadband products offered by it in the Urban WCA Market. Virgin Media did so on the grounds, that, firstly, there is no direct constraint arising from CATV that would warrant including the self-supply of CATV broadband in the WCA Market. Secondly, Virgin Media added that the cost of developing a WCA product would be prohibitive in light of the lack of prospects for cost recovery, given: (i) the limited addressable market based on Virgin Media’s CATV footprint (which is located in areas where there are strong competitors); and (ii) a lack of evidence of such access being sought.

9.62 Virgin Media argued that, under some circumstances, the SMP framework applied by ComReg in its market analysis allows for the inclusion of CATV-based retail broadband in the Relevant WCA Market, even when no WCA product is made available over a CATV network. Virgin Media considered these circumstances to apply – in the context of supply-side substitution - when:

- (a) a WCA product would likely be made available on a CATV network within a short timeframe in response to a SSNIP of WCA; *and*
- (b) there is demand for a CATV-based WCA product from access seekers; *or*
- (c) there is evidence of an indirect constraint on the Relevant WCA Market posed by CATV-based retail broadband products.

9.63 Virgin Media noted that ComReg considered each of these questions and summarised its understanding of the observations made by ComReg at paragraphs 10.44 to 10.49 of the Consultation in relation to “*Virgin Media’s potential to influence the Relevant WCA Market*”.¹⁶⁸⁰

“1. Virgin Media has not expressed any interest in providing wholesale products (WLA or WCA).”

¹⁶⁷⁸ Once a market has been defined, the assessment of competitive pressures on the candidate HM supplier attributable to competitors is carried out at the SMP analysis stage of a market review.

¹⁶⁷⁹ *Ibid*, page 3.

¹⁶⁸⁰ See Virgin Media’s Submission, pages 6 and 7.

2. *Virgin Media has no incentive to offer such a product over its network given a significant portion of their network capacity is already consumed by their retail customers.*

3. *Wholesale products are unlikely to be offered over a CATV network within a sufficiently short timeframe, such that they could constrain the pricing behaviour of a HM supplier of WCA over a copper and FTTx network.*

4. *An insufficient number of retail broadband customers would be attracted to a WCA offer provided on Virgin Media's CATV network."*

9.64 In respect of Virgin Media's point 4, it is worth noting at this stage the Consultation did not, in fact, make this point. Rather, the Consultation noted at paragraph 10.46 that significant costs are likely to discourage Access Seekers from switching in sufficient numbers to any WCA-based CATV Bitstream service provided over a CATV network. In any event, the point is likely moot, given points 1 to 3 above.

Other issues raised in relation to the WCA Product Market Definition

9.65 ALTO agreed with ComReg's preliminary conclusions on the assessment of the WCA Product Market. ALTO noted, however, that it is concerned with ComReg's assessment of FTTx. ALTO did not explicitly articulate these concerns, but considered that Eircom is a difficult and reluctant wholesale provider, as demonstrated by the compliance issues highlighted in the Eircom RGM Reports and the - at least - 12 non-compliance notices that ComReg had issued against Eircom over the previous two years (with ALTO noting that none of these have been resolved). ALTO accordingly asserted that:

"ComReg makes its economic assessment assuming regulation is working – ALTO submits that this is clearly incorrect and ComReg should make its assessment on the basis of ineffective enforcement – i.e., that current regulation is not working."

9.66 ALTO agreed that the alternative supply of WCA¹⁶⁸¹ is wholly dependent on a properly functioning Relevant WLA Market.

9.67 BT noted similar concerns to ALTO in relation to FTTx. Similarly to ALTO, BT considered Eircom a difficult and reluctant wholesaler. BT set out its belief that the incentive for Eircom to invest in competitive¹⁶⁸² WCA products is soft, and that by virtue of ComReg's proposals to de-regulate the Urban WCA Market and the proposed leased lines de-regulation (with which BT also disagreed) the incentive will soften further in the Relevant WCA Markets.

WCA Geographic Market Definition

9.68 Seven of the eight Respondents to the Consultation expressed views on ComReg's WCA Geographic Market assessment.

¹⁶⁸¹ ALTO does not define the term 'alternative supply'. However, the implication from the context in which it is used by ALTO is that it refers to the supply of WCA using upstream WLA inputs.

¹⁶⁸² BT does not define the parameters of what it deems to be competitive WCA products.

- 9.69 ALTO, BT, enet, and Sky broadly agreed with ComReg's assessment, while Eircom, Virgin Media and Vodafone disagreed. Colt did not provide any views.
- 9.70 ComReg has summarised the Respondents' main views on the WCA Geographic Market below, grouping the key issues raised into the following themes:
- (a) Comments on Criteria for the WCA Geographic Market Assessment (see paragraphs 9.71 to 9.91 below); and
 - (b) Disagreement with Proposal for Sub-National Relevant WCA Markets (see paragraphs 9.92 to 9.128 below).

Comments on Criteria for the WCA Geographic Market Assessment

- 9.71 enet considered that ComReg had put forward a persuasive argument as to why the geographic market should be split between an Urban WCA Market and a Regional WCA Market.
- 9.72 ALTO agreed with ComReg's assessment of the WCA Geographic Market, noting that there is a geographic distinction to the markets as correctly highlighted in the Consultation, and that the rollout of WCA is linked to population density and commercial viability.
- 9.73 ALTO also noted that ComReg suggested that it should monitor developments in the Regional WCA Market, given the uncertainty of when the NBP will be awarded. ALTO highlighted paragraph 10.145 of the Consultation, which indicated that Eircom has commenced the rollout of FTTx services in the same areas that SIRO is rolling out its own fibre network. ALTO expected that, in this context, Eircom will cherry pick the most viable locations, thereby limiting the return of any new entrant.
- 9.74 BT also agreed with ComReg's assessment, noting that the Urban WCA Market has different characteristics to sub-urban and more rural areas, and further noting that a small number of entrants have invested in urban infrastructure to compete with Eircom. However, BT considered that the commercial drivers of infrastructure deployment do not appear to align with the Urban WCA Market as defined by ComReg, and that it was not clear to BT why such a difference exists. BT also considered that ComReg needed to provide more justification and further transparency as to the selection of each of the Exchange Areas falling within the Urban WCA Market.
- 9.75 Eircom disagreed with ComReg's preliminary conclusions on the WCA Geographic Market assessment on the basis that the criteria for determining whether an Exchange Area should be included in the Urban WCA Market were too restrictive and not reflective of the differing competitive conditions that serve to differentiate urban and rural areas.
- 9.76 Eircom referred to paragraph 10.157 of the Consultation which stated that:
- “.....the analysis of these conditions leads to a set of cumulative criteria that an Exchange Area must meet for consideration as to whether or not there are differences in competitive conditions compared to other geographic areas.”*

9.77 Eircom was of the view that, in terms of assessing the levels of competition within a given area, these cumulative criteria are overly complex and restrictive, and therefore fail to identify those Exchange Areas where the competitive conditions are sufficiently differentiated. Eircom's views in this regard are outlined below.

9.78 Furthermore, in its February 2018 letter to ComReg, Eircom indicated that ComReg market reviews should be *“sufficiently forward looking and create the correct balance between dynamic and static efficiency thereby encouraging the levels of investment required to deliver ubiquitous very high capacity networks (VHCNs).”*¹⁶⁸³

Criterion 1: An Exchange Area in which at least three Primary Operators would be capable, within a sufficiently short period, of providing either broadband services at the retail level to End Users, WCA or WLA in the Exchange Area, absent regulation in the WCA Market

9.79 Eircom was of the view that there is a distinction to be made in terms of SP presence in a given Exchange Area, namely with regard to the level(s) of the supply chain where such SPs are present. Eircom considered that an Exchange Area should be deemed sufficiently competitive where, for example, there are a minimum of two network providers, whether this is Eircom and an Alternative Network Provider or two Alternative Network Providers.¹⁶⁸⁴

Criterion 2: An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users within that particular Exchange Area, absent regulation in the WCA Market

9.80 Eircom was of the view that, in the presence of infrastructure competition, this criterion is unnecessary, as competition at the network level allows for effective competition in the retail broadband market. Eircom noted, however, that, should ComReg wish to impose conditions on competition in the retail market for the purposes of geographic delineation, broadband services at the retail level should include mobile broadband as well as broadband provided over FWA and satellite networks.

Criterion 3: An Exchange Area where one or all of the Primary Operators providing retail broadband services to End Users using inputs from the WLA Market provide a total greater than 10% of End Users within that particular Exchange Area, absent regulation in the WCA Market

9.81 Eircom argued that this condition is not necessary as

“...competition at the retail level will differ across urban areas, as the presence of a specified number of Primary Operators is sufficient to determine that there is effective competition at the retail level.”

Eircom therefore considered that, given its view above that a minimum of two SPs is sufficient for competition, then further criteria are unnecessary.

¹⁶⁸³ As set out at p.2 of Eircom letter to ComReg dated 15 February 2018.

¹⁶⁸⁴ Eircom does not define the term 'Alternative Network Provider'.

Criterion 4A: An Exchange Area in which each Alternative Network Operator has the network coverage to, within a sufficiently short period, provide retail broadband services to End Users to more than 30% of the premises in that particular Exchange Area (or currently provides greater than 30% of End Users with retail broadband services), absent regulation in the WCA Market

9.82 When considering Criterion 4A in conjunction with Criterion 4B, Eircom considered that it should only be necessary for one Alternative Network Operator (i.e. either SIRO or Virgin Media) to have passed 30% of the premises in a particular Exchange Area. Eircom further noted that this is on the basis that an Exchange Area can, as a whole, be considered to have economies of density. In Eircom's view, it would make commercial sense over time (but not initially) to further rollout network, so as to pass the majority of premises in a particular Exchange Area, where that Exchange Area is deemed to be 'urban' or 'semi-urban'.

Criterion 4B: An Exchange Area in which each Alternative Network Operator providing retail telecommunication services to End Users provides greater than 10% of End Users within that particular Exchange Area, absent regulation in the WCA Market

9.83 Eircom considered that Criterion 4B is unnecessary, as the very presence of an Alternative Network Operator will allow Access Seekers to either resell a wholesale product or provide services at the retail level, so that the Alternative Network Operator does not also need a defined share of the retail market in that particular Exchange Area.

Criterion 5: Exceptionally, on a case-by-case basis, where an Exchange Area:

(i) fails no more than one of the criteria set out from (2) to (4) above and fails the criterion by a small margin (i.e. less than 10% percent of the percentage specified); OR

(ii) fails no more than one of the criteria set out from (2) to (4) above and where an Alternative Network Operator provides telecommunication services either at the wholesale level or at the retail level which equates to more than 60% of End Users within that particular Exchange Area; that Exchange Area will be deemed to have satisfied the relevant criterion.

- 9.84 Eircom noted that, on the basis of these criteria (discussed above), of the 1,217 Exchange Areas examined, 88 met the relevant criteria and therefore are deemed to have competitive conditions, which are different from the remaining 1,129 Exchange Areas.¹⁶⁸⁵ Eircom considered that this is not reflective of the number of Exchange Areas where competition is sufficiently differentiated and that the criteria are overly complex and prescriptive in determining which Exchange Areas should be included in the Urban WCA Market.
- 9.85 Eircom considered that an example of how restrictive these criteria are can be seen in the inclusion of Exchange Areas where SIRO had already rolled out its network in the Regional WCA Market. Looking at the nine towns where SIRO has rolled out its network (Carrigaline, Cavan, Drogheda, Letterkenny, Sligo, Skibbereen, Tralee and Wexford) only the Carrigaline Exchange Area is considered to meet criteria 1-5, even though the number of addresses passed by SIRO's network in five of these towns (Dundalk, Carrigaline, Letterkenny, Cavan and Tralee) is over 80%.
- 9.86 Eircom referenced the statement in the Consultation that "... boundaries of any geographic unit should also be relatively stable and easily understood by SPs"¹⁶⁸⁶ and considered that criteria based simply on the number of network operators (Eircom, SIRO and Virgin Media) or the number of Primary Operators in an Exchange Area would be more appropriate in this regard and would allow for ease of analysis of competitive conditions within an Exchange Area and thereby increased ease of implementation.

¹⁶⁸⁵ ComReg notes that, in the Consultation, 88 Exchange Areas were deemed as falling into the Urban WCA Market and 1,129 Exchange Areas falling into the Regional WCA Market. A small change was made to this assessment in light of data clarifications from Eircom and a small number of calculation errors identified by ComReg in applying the five criteria. It should also be noted that the initial Number of Exchange Areas identified in the Consultation (1,217) has fallen to 1,203, a decline of 14 Exchange Areas. This is because these 14 Exchange Areas have been identified as not being relevant for the assessment of the Relevant Markets, given they do not relate to the provision of WLA and/or WCA services. For example, they relate to test exchanges or data centre nodes.

¹⁶⁸⁶ At paragraph A.5.38 of the Consultation.

- 9.87 Eircom pointed to the manner in which the UK NRA, Ofcom,¹⁶⁸⁷ has identified distinct WBA geographic markets to reflect differences in competitive conditions. Eircom considers that the following criteria may be more appropriate and representative of the true levels of competition within an Exchange Area:
- (a) Criterion 1: Exchange Areas where two or more network operators are present or forecast to be present; OR
 - (b) Criterion 2: Exchange Areas where three or more Primary Operators are present or forecast to be present.
- 9.88 In addition, Eircom expressed its view that there should be a periodic review of the competitive Exchange Areas, noting its concern that, absent such a review, Exchange Areas that become competitive over time, with further network rollout envisaged over the market review period, will continue to be subject to regulation, thus distorting the market.
- 9.89 Sky agreed broadly with ComReg's preliminary conclusions on the geographic assessment, and stated that it does not object to the criteria proposed by ComReg. However, as with Eircom, Sky considered that it is imperative that ComReg keep the issue of qualifying criteria for Exchange Areas falling in or out of the Urban WCA Market under review.
- 9.90 Sky noted that ComReg had outlined a set of criteria for the same purpose in the 2013 NGA Decision¹⁶⁸⁸ that, on the face of it, seemed reasonable. However, Sky suggested that the criteria quickly emerged to be wholly inappropriate, insofar as they assumed that any Exchange Area where NGA was available fell into the LEA category. Many of these Exchange Areas faced no platform competition from other SPs and had not been unbundled, and so faced no competition in terms of port charges or backhaul. As a consequence, Sky considered that Eircom faced a prolonged period of lighter touch regulation in these areas, notwithstanding that LEAs were supposed to mark out territories only where greater competition was in evidence.
- 9.91 Sky further outlined its view that the proliferation of exchanges inappropriately-classified as falling within the LEA and the prolonged period of time for which they have been misclassified is likely to have contributed to Eircom's enhanced market power. Sky then reiterated its view that it is therefore vital that ComReg clearly states that it will examine the criteria outlined on an ongoing basis and that it reserves the right to make interim amendments to that list of criteria before the next market review.

¹⁶⁸⁷ https://www.ofcom.org.uk/data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf. The Eircom and Ofcom criteria differ. Eircom's Criterion 1 (two or more SPs are present, or forecast to be present) differs from Ofcom's Market A criterion that no more than two SPs are present. Eircom's Criterion 2 and Ofcom's Market B are the same. Ofcom designated BT with SMP on Market A, and found no SMP on Market B.

¹⁶⁸⁸ As set out in ComReg Decision D03/13, dated 31/01/2013, 'Next Generation Access ('NGA'): Remedies for Next Generation Access Markets' (the '**2013 NGA Decision**').

Disagreement with Proposal for Sub-National Relevant WCA Markets

- 9.92 Virgin Media expressed disagreement with ComReg's proposal for the definition of sub-national Relevant WCA Markets. Virgin Media noted that this proposal represented a departure from ComReg's previous review of this market, in which it defined a national Relevant WCA Market (then classified as the Wholesale Broadband Access market).
- 9.93 Virgin Media outlined its view that the proposal appeared to be based on the following factors:
- (a) Evidence of geographic differences in entry conditions;
 - (b) Evidence of variation in the number and size of potential competitors between urban and regional areas; and
 - (c) Evidence of variation in the distribution of market shares between urban and regional areas.
- 9.94 Virgin Media noted ComReg's point that neither Eircom nor BT Ireland vary their prices for WCA services geographically. Virgin Media considered that ComReg's proposal to identify sub-national Relevant WCA Markets appears to be inconsistent with its proposal to define a national retail broadband market. Virgin Media pointed out that ComReg has observed national pricing strategies in both the retail broadband market¹⁶⁸⁹ and in the Relevant WCA Market, yet ComReg has arrived at different preliminary views regarding the geographic boundaries of these markets.
- 9.95 To define a separate Urban WCA Market and Regional WCA Market, Virgin Media considered that ComReg must satisfy itself that conditions of competition are sufficiently different between these areas such that separate geographic markets can be distinguished. In Virgin Media's view, the most compelling evidence of different competitive conditions is variation in the price or quality of the services between geographic areas that can be attributed to competitive pressure, for example, where there is evidence that lower WCA prices are available within particular Exchange Areas due to competition from WLA SPs.
- 9.96 Virgin Media considered that, while ComReg has pointed to variation in the quality of broadband products between regional and urban areas as being a feature of the market, no attempt has been made to control for other factors that could explain this variation - for example, quality variation is likely to be largely determined by population density. Virgin Media argued that, without controlling for a variety of factors, including variation in population density, disposable income and age of the population, terrain, existing civil engineering that can support network deployment, the number of lines covered by a Main Distribution Frame in case of copper unbundling, it is unclear to what extent competition is driving differences in the quality (or the effective price) of broadband.
- 9.97 Vodafone disagreed with ComReg's preliminary conclusion that there were separate Urban WCA and Regional WCA Markets. Vodafone instead

¹⁶⁸⁹ ComReg notes that, in the Consultation, it examined the retail broadband market absent regulation in the WLA Market and WCA Markets and again in the context of the proposed regulation of the WLA Market, but absent regulation of the WCA Markets.

“...agrees with Compass Lexecon’s conclusions on ComReg’s competitive assessment in the context of the geographic market definition.”¹⁶⁹⁰

- 9.98 Vodafone noted its concern that ComReg undertook its analysis by assuming that the Relevant WCA Market is *“local in scope”*, that is, that there are two geographic WCA markets, and then proved this by applying its proposed criteria in a mechanistic way. In Vodafone’s view, ComReg has not undertaken the requisite analysis to show that there are two distinct geographic WCA markets.
- 9.99 Based on its own experience, Vodafone considered the Relevant WCA Market to be national. Vodafone noted that, firstly, Eircom follows a national pricing approach; and secondly, Vodafone faces considerable practical challenges in identifying an alternative supplier of WCA products which would allow it to compete with Eircom’s retail offers on a national basis. Vodafone derived support for its views from the Compass Lexecon Report.

Compass Lexecon Report – Conclusions on ComReg’s WCA Geographic Market Assessment

- 9.100 Overall, CL considered that, for a number of reasons, ComReg’s proposed five criteria test is likely to overestimate the degree of competition in the Exchange Areas identified as falling within the Urban WCA Market such that, even if all criteria are satisfied, this may not be sufficient to imply a competitive market.¹⁶⁹¹ CL agreed, as a matter of principle, with ComReg’s approach to testing whether there are sub-national markets for WCA.
- 9.101 In the following paragraphs, ComReg outlines CL’s interpretation of each of ComReg’s five criteria¹⁶⁹² for assessing the WCA Geographic Market, in addition to CL’s views on the criteria.

CL’s Assessment of ComReg’s Criterion 1

- 9.102 CL understood Criterion 1 to mean that any combination of *“at least three Primary Operators”* may satisfy this requirement and that the reference to *“would be capable, within a sufficiently short period”* suggests that the requirement includes a degree of forward-looking assessment.
- 9.103 CL considered that ComReg’s first proposed criterion does not distinguish between Primary Operators that:

- “a. represent demand substitution, supply substitution, or an indirect constraint;*
- b. would be present for one or both of CGA and NGA; and*
- c. are mutually independent or have shared ownership.”¹⁶⁹³*

¹⁶⁹⁰ See Vodafone submission, at paragraph 264.

¹⁶⁹¹ ComReg considers that the assessment of whether a market is competitive or not is separate to, and follows, the definition of the relevant Product Market and the relevant geographic market.

¹⁶⁹² See paragraph A5.85 of the Consultation.

¹⁶⁹³ See paragraph 3.11 of the Compass Lexecon Report.

ComReg’s proposal to treat all Primary Operators as equivalent

9.104 CL considered that ComReg has not adequately justified its proposal to treat Primary Operators which represent demand substitution, supply substitution, or an indirect constraint¹⁶⁹⁴ as equivalent. CL noted that it is clear from European Commission guidance that existing, potential, and indirect competitors cannot a priori be considered equivalent¹⁶⁹⁵ and this is also reflected in ComReg’s own assessment that

*“SIRO may not impose a sufficiently effective constraint on Eircom in the WCA market over the medium term”*¹⁶⁹⁶

and that

“it is finely balanced as to whether retail services provided over a CATV network could exert a sufficiently immediate and effective indirect constraint in the WCA market such that they warrant inclusion in the WCA market”.¹⁶⁹⁷

9.105 CL also noted that it is not clear that the criteria for including Virgin Media and Vodafone in the market by virtue of indirect competition have been met. On this basis, CL considered that ComReg’s application of this criterion likely overestimates the strength of competition.

ComReg’s proposal equates unbundling of NGA OR CGA to unbundling of NGA AND CGA

9.106 CL noted that, on a given Exchange Area, SPs may supply retail NGA based on WLA, but CGA based on WCA and understood that this is the case for Vodafone. CL considered that ComReg’s first criterion only appears to assess whether unbundling has taken place for *either* CGA *or* NGA rather than for *both*.

9.107 CL argued that ComReg’s approach hence appears to assume that the presence of, for example, Vodafone as an unbundler of NGA on an Exchange Area will act as a constraint on Eircom in its supply of CGA-based WCA to Vodafone on the same Exchange Area. CL noted that ComReg’s analysis seems to rely on a chain of reasoning whereby:¹⁶⁹⁸

- (a) NGA retail prices constrain CGA retail prices through chain substitution; and
- (b) CGA retail prices constrain CGA-based WCA prices through indirect competition.

¹⁶⁹⁴ While CL alludes to the discussion of indirect constraints in the Explanatory Note to the 2014 Recommendation, this discussion concerns the relevant Product Market, and not the relevant geographic market.

¹⁶⁹⁵ See European Commission Notice on the definition of relevant market for the purposes of Community competition law, (97/C 372/03), paragraphs 13, 14, 20, and Commission Explanatory Note to the 2014 Recommendation (SWD(2014) 298), page 47.

¹⁶⁹⁶ See paragraph 10.39 of the Consultation.

¹⁶⁹⁷ See paragraph 10.107 of the Consultation.

¹⁶⁹⁸ CL noted that ComReg does not discuss this so it is not clear whether this is, in fact, ComReg’s reasoning.

9.108 CL noted that ComReg assesses whether NGA retail prices constrain CGA retail prices through chain substitution, and that ComReg's assessment was based on the likely degree of substitution between CGA and NGA in response to a price increase by a CGA retail HM. However, CL noted that, as recognised by ComReg,¹⁶⁹⁹ Eircom may not increase its own CGA retail prices in response to higher WCA prices once these are unconstrained by regulation. In addition, CL noted that, as also recognised by ComReg,¹⁷⁰⁰ there is no reason to believe that WLA or CATV-based CGA retailers would increase their prices. CL asserted that a price increase by a hypothetical WCA monopolist at wholesale level is therefore not equivalent to a price increase by a hypothetical CGA monopolist at retail level.¹⁷⁰¹

9.109 CL thus argued that a finding of chain substitution between retail CGA and retail NGA does not therefore imply that a CGA-based WCA monopolist would not be able to profitably increase its prices, and as ComReg does not address this, CL considered that ComReg's application of this criterion likely overestimates the strength of competition.

Ownership of Primary Operators

9.110 CL highlighted that ComReg identifies both Vodafone and SIRO as Primary Operators and that Vodafone owns 50% of SIRO. CL thus argued that two of the three required Primary Operators needed to find a competitive market could therefore be related and that ComReg does not consider what, if any, effect this may have. CL's view was that ComReg's application of this criterion may therefore overestimate the strength of competition.

CL's Assessment of ComReg's Criterion 2

9.111 CL noted that, as part of Criterion 2, ComReg explains that market shares are calculated assuming that "*subscribers of Eircom's wholesale purchasers revert to being Eircom customers, absent regulation in the WCA Market. This assumes Eircom will withdraw its wholesale supply of WCA*".¹⁷⁰² CL understood this to imply that third party retail volumes based on Eircom's WCA product are added to Eircom's retail volumes for the purpose of calculating market shares. CL argued that this may overstate Eircom's market share under the assumed withdrawal of WCA supply, as other SPs unaffected by this withdrawal also may win a share of the affected users.

9.112 CL also considered that the basis for ComReg's requirement that Eircom's market share be less than 50% is not clear. In particular, CL considered that ComReg has not undertaken a full analysis of the market share split needed to imply sufficient indirect competition, and that it is therefore not clear whether the market share threshold proposed by ComReg is appropriate.

¹⁶⁹⁹ See paragraph 10.121 of the Consultation.

¹⁷⁰⁰ See paragraph 10.123 of the Consultation.

¹⁷⁰¹ For the sake of clarity, it should be noted that the concept of a hypothetical CG monopolist at retail level is CL's, and does not appear in the Consultation.

¹⁷⁰² Note under Table 23 of the Consultation.

CL's Assessment of ComReg's Criterion 3

9.113 CL understood Criterion 3 to mean that the individual market shares amongst WLA-based SPs do not matter as long as their total is at least 10%, and commented that the reference to “one” in “one or all” seems redundant as the criterion will always be satisfied for all if it is satisfied for one SP.

9.114 CL noted that ComReg argues that

*“.....for a Primary Operator to act as an effective constraint on another operator (and contribute to differing competitive conditions) it must have a minimum presence in an area, such that potential subscribers view it as a sufficiently viable alternative supplier in any switching decision”.*¹⁷⁰³

9.115 However, CL argued, Criterion 3 seems to suggest that one WLA-based Primary Operator could have a very low market share as long as another WLA-based Primary Operator has a sufficiently high market share and ComReg's reasoning for Criterion 3 is therefore not clear.

9.116 CL also considered that ComReg has not undertaken a full analysis of the market share split needed to imply sufficient indirect competition and it is therefore not clear whether the market share threshold proposed by ComReg is appropriate.

CL's Assessment of ComReg's Criterion 4A

9.117 CL understood Criterion 4A to apply to “each” Alternative Network Operator present in a given Exchange Area. Counterintuitively, CL stated that this suggests that an Exchange Area found to be sufficiently competitive to be included in the proposed Urban WCA Market when one Alternative Network Operator is present, in theory, may not be considered sufficiently competitive if an additional Alternative Network Operator were to enter. CL considered that an increase in already adequate competition would hence result in failure to meet this criterion. CL argued that the rationale for applying the market share threshold to “each” SP is not clear.

9.118 CL noted that the criterion requires that Alternative Network Operators have network coverage of at least 30% of premises in a particular Exchange Area or supply at least 30% of users based on a combination of own and other infrastructure. CL noted that ComReg explains in the Consultation that the optionality in the mix between own and other infrastructure “.....is to allow for the scenario where a network operator has a lower network coverage, but a high share of the total market within the Exchange Area”.¹⁷⁰⁴ CL considered that an Alternative Network Operator may therefore meet this criterion even if its network coverage is very low, as long as the SP has a sufficiently high retail market share based on some other type of access (potentially supplied by Eircom), or *vice versa*. CL noted that this requirement thereby equates (potentially unused) own network coverage to a market share based on third party access through another SP's network, the rationale for which is not clear.

¹⁷⁰³ See paragraph A5.71 of the Consultation.

¹⁷⁰⁴ See footnote 1222 of the Consultation.

9.119 CL considered that ComReg does not explain the basis for this 30% threshold, or whether two Alternative Network Operators would be allowed to have overlapping networks. CL agreed that less than full network coverage may be enough for an Alternative Network Operator to be competitive in an Exchange Area. However, CL argued that it is not clear why ComReg suggests that as little as 30% may be sufficient in the case of WCA, while in the case of WLA, it considers that Virgin Media's coverage of 45% of households and 38% of premises would be insufficient. CL pointed out that, in a similar analysis in the UK in 2014, Ofcom applied a 65% network overlap requirement in its assessment of when to deem Virgin Media to be present in an Exchange Area.¹⁷⁰⁵ CL considered that this suggests that ComReg's proposed 30% threshold is low and therefore likely overestimates the degree of competition in the Urban WCA Market.

9.120 CL concluded that the basis for the market share threshold in the proposed Criterion 4A is therefore not clear and ComReg has not undertaken a full analysis of the market share split needed to imply sufficient indirect competition. CL therefore considered that it is not clear whether the network coverage/market share threshold proposed by ComReg is appropriate.

CL's Assessment of ComReg's Criterion 4B

9.121 CL interpreted Criterion 4B to mean that each and every Alternative Network Operator present in an Exchange Area must have a market share of at least 10%. CL contended that the rationale for so doing is not clear, particularly given that WLA-based SPs are only required to have a 10% market share in aggregate under Criterion 3.

9.122 CL similarly considered that the basis for the market share threshold in the proposed Criterion 4B is not clear and that ComReg has not undertaken the full analysis of the market share split needed to imply sufficient indirect competition. CL stated that it is therefore not clear whether the market share threshold proposed by ComReg is appropriate.

CL's Assessment of ComReg's Criterion 5

9.123 In relation to the first proposed exception, CL noted that ComReg explains that

“For example, the requirement for Eircom's market share to be less than 50% (Criterion 2) could be altered to 55% under Criterion 5 (i.e. 110% of the requirement set out in Criterion 2)”.¹⁷⁰⁶

9.124 Allowing such a margin of flexibility, CL argued, seems consistent with ComReg's intended stability of market boundaries. ComReg does not discuss the extent to which this exception to Criteria 2 to 4 impacts its findings. Together with the abovementioned ambiguity associated with Criteria 2 to 4, CL stated that it cannot assess whether this part of ComReg's Criterion 5 is appropriate.

¹⁷⁰⁵ Ofcom, *Review of the wholesale broadband access markets*, 26 June 2014, paragraph 4.73. For the sake of comparison, according to ComReg and Ofcom data, the average exchange serves 1,600 premises, and the average Aggregation Node serves 7,000 premises in Ireland, while the average exchange serves 7,000 premises in the UK.

¹⁷⁰⁶ See footnote 832 of the Consultation.

- 9.125 CL noted that the second of ComReg's proposed exceptions allows one of Criteria 2 to 4 to be failed as long as an Alternative Network Operator has a market share of at least 60% in a given Exchange Area. In CL's view, the link to ComReg's intended stability of market boundaries is not clear. CL noted that the only Alternative Network Operators that ComReg proposes to include in its analysis are Virgin Media and SIRO, and of these, the proposed exception appears most relevant to Virgin Media, given SIRO's modest current user volumes.¹⁷⁰⁷
- 9.126 This exception, CL considered, therefore assumes that the relative strength of Virgin Media can compensate for the weakness of other SPs. CL considered that the rationale for this is not clear, as for example, it may be exactly when Virgin Media has a strong presence that other SPs may find it least attractive to unbundle and therefore depend most directly on WCA.
- 9.127 CL suggested that the second exception proposed in ComReg's Criterion 5 may therefore be problematic as it may facilitate removing regulation exactly when it may be needed, and that this may again overestimate the degree of competition in the Urban WCA Exchange Areas.
- 9.128 Overall, CL reported that that it considered that these criteria are, for a number of reasons, likely to overestimate the degree of competition in the Urban WCA Exchange Areas.

ComReg's Assessment of Respondents' Views

WCA Product Market Definition

- 9.129 In this section, ComReg assesses Respondents' views in relation to the WCA Product Market definition under each of the key themes identified in paragraph 9.24 above, as follows:
- (a) Comments on WCA Product Market Definition (see paragraphs 9.130 to 9.220 below);
 - (b) Inclusion of CATV-based Broadband Self-Supply in the Urban WCA Market (see paragraphs 9.221 to 9.224 below); and
 - (c) Other issues raised in relation to the WCA Product Market (see paragraphs 9.225 to 9.230 below).

¹⁷⁰⁷ SIRO's rollout has, however, increased to over 120,000 premises at the end of 2017 - <https://siro.ie/huawei-trial/>, with [redacted] active subscribers.

Comments on WCA Product Market Definition

Delineation of WCA Product Markets by technology

- 9.130 In response to Eircom's contention set out in paragraphs 9.25 and 9.26 above that the WCA Product Market should be delineated into CG and NG technologies (i.e. separate markets), ComReg has responded to similar points raised by Eircom in relation to the definition of the WLA Market in Section 4.¹⁷⁰⁸ ComReg considers that, while CG products have declined in recent quarters, they continue to account for a sizeable proportion (25.6%) of total fixed retail broadband subscriptions, alongside NG subscriptions (41%) and CATV subscriptions (27%), as illustrated below in Figure 23.¹⁷⁰⁹ To exclude subscriptions to CG products from the WCA Product Market definition and nonetheless include self-supply of CATV subscriptions¹⁷¹⁰ (which constitute a lower proportion of total fixed retail broadband subscriptions), as Eircom suggests, would appear inconsistent with market functioning.
- 9.131 As set out in the WLA analysis in Section 4 above, ComReg is of the view that a chain of substitution exists in respect of the provision of broadband products provided over CG, NG and CATV networks at the retail level.¹⁷¹¹ ComReg's analysis indicates that, if the price of a broadband product offered at one speed was to increase by a small but significant amount, customers would be able to switch to an alternative product at the relatively lower original price, or switch to an alternative product to receive a higher broadband speed at the new relatively higher price.
- 9.132 ComReg further notes that, as set out in the Consultation:
- “Given that the wholesale demand for WCA is largely driven by retail demand for broadband (and other) services, it is necessary to consider the dynamics of the Modified Retail Market and whether these dynamics materially impact at a wholesale level”¹⁷¹²*
- 9.133 Accordingly, ComReg is of the view that demand for wholesale services such as WCA is a derived demand arising from End User demand for the provision of broadband services at the retail level. This End User demand is characterised by a chain of substitution between different technologies, including CG, NG and CATV based broadband (and related services), as set out in the Consultation, and at Section 4 and Appendix: 8 of this Decision. For these reasons, ComReg remains of the view that it is not justified to delineate separate Product Markets for CG and NG WCA networks.

¹⁷⁰⁸ See paragraphs 4.92 to 4.102 above.

¹⁷⁰⁹ ComReg QKDR Q4 2017.

¹⁷¹⁰ ComReg's WCA Product Market definition is given in paragraph 9.10 above.

¹⁷¹¹ See paragraphs 3.141 and 4.91 above and Appendix: 8.

¹⁷¹² See paragraph 9.2 of the Consultation.

9.134 ComReg furthermore notes that Service Providers compete in the retail market on the basis of their ability to provide both CG and NG broadband to subscribers, based on subscriber demand preferences, although ComReg recognises that it is technically open for a Service Provider to provide CG product characteristics (such as speed, download allowances etc.) over a NG network, although this may involve switching costs (such as new equipment etc.).¹⁷¹³

9.135 Finally, ComReg notes that, as set out in the Consultation,

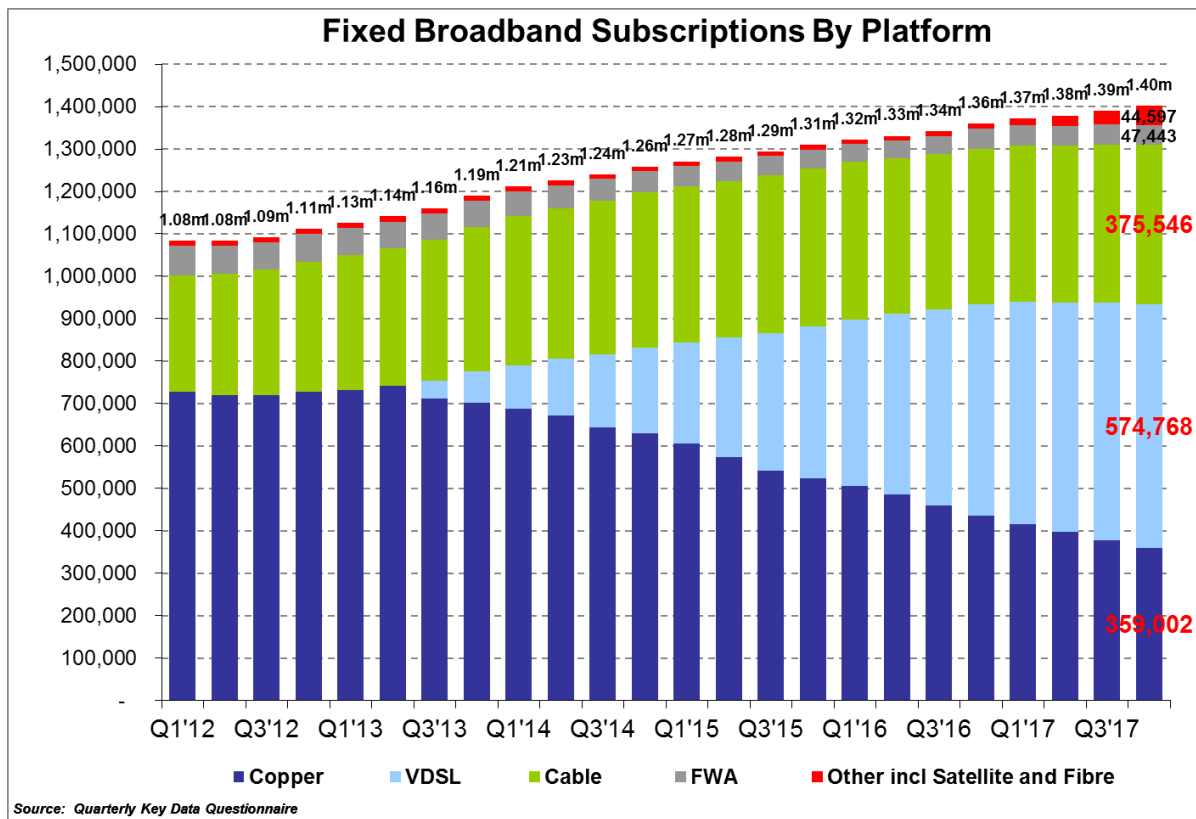
*“ComReg considers that substitution between copper network and FTTx based Bitstream is likely to be one-way due to the higher download speeds available from NGA networks. As a consequence, an Access Seeker using an FTTx based Bitstream service may not find a lower download/upload speed offered by a copper network based Bitstream service to be a good substitute (given the derived retail demand-side considerations), but a wholesale Access Seeker of the copper network based Bitstream service is likely to find a FTTx based Bitstream service to be an effective substitute.”*¹⁷¹⁴

9.136 While ComReg is of the view that a chain of substitution exists between CG and NG products and, on a forward-looking basis, will continue to exist over the duration of this market review period, ComReg recognises that, should CG cease to be considered an effective substitute for NG, it may be appropriate in future market reviews to reconsider whether WCA provided by means of CG and by means of NG networks may fall into separate markets.

¹⁷¹³ Appendix: 7 below outlines the typical retail broadband packages offered by SPs. The evidence suggests that most SPs offer both CG and NG packages, with the exception of Virgin Media.

¹⁷¹⁴ See paragraph 10.37 of the Consultation.

Figure 23: Fixed Broadband Subscriptions by Platform – Q4 2017



9.137 ComReg also notes that its proposal to include CG products in the WCA Product Market is consistent with the European Commission’s assessment that:

“.....it is expected that copper-based technologies will continue to play an important role in providing access to high-speed broadband services thereby extending the lifetime of copper access networks.”¹⁷¹⁵

9.138 The European Commission also noted that:

“.....it remains likely that there is a chain of substitution between copper DSL-based Bitstream services and fibre-based Bitstream services provided over FTTH and FTTC/VDSL networks in the near-to medium-term future.”¹⁷¹⁶

9.139 Eircom referenced ComReg’s QKDR for Q3 2016, in particular noting that:

“In Q3 2016, 43.1% of all DSL lines were provided by OAOs using wholesale Bitstream. In absolute terms there were 198,540 wholesale Bitstream lines in Q3 2016, a decrease of 8.5% since Q3 2015. In contrast 25.3% of all VDSL lines in the same quarter were provided by OAOs using wholesale Bitstream. In absolute terms there were 116,831 wholesale VDSL Bitstream lines in Q3 2016, an increase of 6.1% since Q3 2015.”¹⁷¹⁷

¹⁷¹⁵ See Explanatory Note to the 2014 Recommendation, page 41.

¹⁷¹⁶ See Explanatory Note to the 2014 Recommendation, page 46.

¹⁷¹⁷ See Eircom Submission, page 64.

9.140 The following table sets out changes in the period Q2 2016 to Q4 2017 with respect to the provision of CG and NG lines for the provision of WLA and WCA services by Eircom and other SPs.

Table 24: Retail, LLU, VULA and Bitstream lines,¹⁷¹⁸ Q2 2016 – Q4 2017¹⁷¹⁹

Service Type	Q2 2016		Q4 2017		change in %	change in n
	%	n	%	n		
Current Generation						
Eircom CG Retail	45.40%	220,175	43.73%	156,965	-29%	-63,210
Access Seeker CG Bitstream	42.40%	205,583	44.07%	158,213	-23%	-47,370
CG LLU	12.20%	59,209	12.20%	43,791	-26%	-15,418
Total	100%	484,967	100%	358,969	-26%	-125,998
Next Generation						
Eircom NG Retail	53.20%	227,505	45.67%	262,520	15%	35,015
Access Seeker NG Bitstream	37.80%	161,725	21.11%	121,312	-25%	-40,413
NG VULA	9.00%	38,316	33.22%	190,936	398%	152,620
Total	100%	427,546	100%	574,768	34%	147,222

9.141 Thus, ComReg observes that demand for CG WCA DSL and VDSL provided by means of both CG Bitstream and NG Bitstream has declined, with the decline in demand for CG Bitstream being more pronounced. At the same time, there has been a very substantial increase in the provision of VDSL access by means of (WLA-based) VULA, with the Q4 2017 QKDR recording an increase of 398% since Q2 2016 (with this likely explaining some of the decline in CG and NG Bitstream as SPs move to WLA based VULA products).

9.142 ComReg also notes that there appears to be an inconsistency in Eircom's view on delineating CG WCA and NG WCA as falling within separate markets. In this respect, Eircom's Submission¹⁷²⁰ on ComReg's proposed price control obligations on the Regional WCA Market states that one key constraint on prices for FTTC-based access is the high take-up of copper-based services in these areas. This suggests that Eircom considers CG WCA and NG WCA fall within the same market, due to the existence of pricing constraints.

Constraint arising from Virgin Media on business market

9.143 As outlined in paragraphs 9.27 and 9.28, Eircom set out its view that Virgin Media appears to compete more vigorously in the business broadband market than ComReg stated in paragraph 10.106 of the Consultation. In the Consultation, ComReg noted that Virgin Media's network coverage is primarily targeted towards households, with minimal provision of retail services to businesses, which comprise just 2.4% of its total subscriber base.

¹⁷¹⁸ n=number of lines.

¹⁷¹⁹ Data based on information supplied by SPs for ComReg's Q2 2016 and Q4 2017 QKDRs.

¹⁷²⁰ See Eircom Submission, pages 54 to 64.

9.144 ComReg notes that, in the retail broadband market portrayed in the QKDR,¹⁷²¹ non-residential subscriptions comprise just 3.4% of CATV subscriptions. This suggests that business broadband subscriptions comprise a low proportion of Virgin Media's (and other CATV broadband providers') total subscriptions. In contrast, as of Q4 2017, business broadband subscriptions comprised [3%] of Eircom retail's total broadband subscriber base. Similarly, business broadband products generate just [3%] of Virgin Media's retail broadband revenue. These figures suggest that Virgin Media is unlikely to act as a strong direct competitive constraint on Eircom and other broadband providers with respect to business customers.

9.145 Based on the low proportion of Virgin Media subscriber and revenue figures accounted for by business customers, and the persistence of these low figures over time, ComReg rejects Eircom's contention that Virgin Media competes 'vigorously' on the retail business broadband market.

Robustness of ComReg estimates

9.146 ComReg considers that demand for larger-scale business broadband is likely confined to the WHQA (leased line) market, the components of which are not considered substitutes to retail broadband.

9.147 As noted in paragraphs 9.29 and 9.30 above, Eircom also commented on ComReg's assessment of indirect constraints in the WCA Market. As Eircom noted, many of the same issues it has raised in its response on the assessment of indirect constraints in the WLA Market apply in the context of the WCA Market, including criticisms of the CLT. In this respect, ComReg has responded to these points in paragraphs 4.113 to 4.153 in Section 4 and, for the reasons set out therein, ComReg does not agree with Eircom's view.

Pricing of FTTC Bitstream products

9.148 In paragraph 9.31, ComReg summarised Sky's views on the WCA Product Market definition. While Sky broadly agreed with ComReg's proposed market definition, it noted that ComReg had not taken account of Eircom increasing its pricing of POTS-based FTTC. Had it done so, this would have bolstered ComReg's SMP findings regarding Eircom. In September 2016, Eircom increased the price of its monthly rental charge for POTS-based NGA Bitstream Plus WCA product from €5.98 to €8.09, an increase of €2.11, or 35%.

9.149 ComReg presented an analysis of Eircom's WCA pricing behaviour in paragraphs 11.36 to 11.40 in the Consultation. On that basis, ComReg presented its preliminary conclusion that Eircom's pricing behaviour was indicative of a lack of effective constraint in the Regional WCA Market, and was also suggestive that Eircom has both the ability and incentive to increase prices above the competitive level for WCA services.

¹⁷²¹ See ComReg QKDR Q4 2017, page 33. Given the inclusion of FWA, satellite and mobile broadband in the QKDR assessment of the retail broadband market, this definition of the retail broadband market is broader than that of the 'Modified Retail Broadband Market' detailed at paragraph 9.31 of the Consultation.

- 9.150 ComReg notes Sky's reference to Eircom's introduction of price increases in FTTC-based services in July 2015 and September 2016. In Sky's view, the latter change was announced in tandem with ComReg's 2015 FACO Decision to introduce a cost orientation obligation in the FACO market on SB-WLR, and the move was demonstrative of Eircom's ability to exercise its SMP. Given that Eircom's monthly rental charges for both FTTC POTS-based NG VUA and FTTC POTS-based NG Bitstream are identical (at €8.09),¹⁷²² ComReg considers that its analysis set out at paragraphs 4.161 to 4.166 of Section 4 in respect of WLA applies similarly in respect of WCA.
- 9.151 Eircom is subject to a margin squeeze test in its pricing of WCA FTTC services, and so is entitled, within the scope of existing price controls, to increase the prices of these services. The 2017 Pricing Consultation outlined a proposed move to a cost oriented price control framework which results in cost-based prices for FTTC Bitstream based WCA services (SA and POTS-based) that are lower than the prices currently offered by Eircom in its WBARO (with such prices based on a margin squeeze test).¹⁷²³ This approach is confirmed in the 2018 Pricing Decision.
- 9.152 Sky has contended that, once ComReg introduced a cost orientation obligation on SB-WLR in the FACO market in 2015, a corresponding reduction appeared to have been off-set by Eircom through a near-parallel increase in its POTS-based NGA Bitstream Plus prices, thus suggestive of the lack of an effective constraint. The following table sets out the respective pricing changes for Eircom's NGA Bitstream Plus WCA product and SB-WLR products, following Eircom's increases in its standalone FTTC in July 2015, and POTS-based FTTC in September 2016:

¹⁷²² As set out at sections 4.1.2 and 4.2.1 of the January 2018 version of the openeir Bitstream Service Price List (available online at <http://www.openeir.ie/WorkArea/DownloadAsset.aspx?id=5117>).

¹⁷²³ See pp. 243 to 246 and Figures 36 to 38 of the 2017 Pricing Consultation and Section 14, Figure 15 of the 2018 Pricing Decision.

Table 25: Eircom Wholesale price changes¹⁷²⁴

Wholesale Product	Price		
	Q2 2015	Q2 2016	Q1 2018
Standalone NGA Bitstream Plus	€17.50	€19.50	€23.00
POTS-based NGA Bitstream Plus	€5.98	€5.98	€8.09
FACO: Single Line			
Sign-up, Order Acceptance, Validation and Notification	€2.75		
Cease Orders	€1.57		
Customer Reverts to CPS	€3.36		
FACO: Multiple Lines			
Sign-up, Order Acceptance, Validation and Notification	€4.71		
Cease Orders	€2.35		
Customer Reverts to CPS	€4.53		
Sign-up Orders Failing Validation	€0.45		

Table 26: Changes in Eircom NGA Bitstream Plus prices over time

Wholesale Product	2015-2016		2016-2018		2015-2018	
	€	%	€	%	€	%
Standalone NGA Bitstream Plus	€2	11%	€3.50	18%	€5.50	31%
POTS-based NGA Bitstream Plus	€0	0%	€2.11	35%	€2.11	35%

9.153 ComReg observes from the data set out above that the prices of various components of its NGA Bitstream Plus product increased, even in the presence of retail minus price control. This suggests to ComReg that Eircom retained the capacity to price independently of effective competitive constraints.

Compass Lexecon Report – Critique of substitutability and constraint assessment

9.154 In paragraphs 9.32 to 9.35, ComReg noted Vodafone’s disagreement with ComReg’s preliminary conclusions on the WCA Product Market assessment and its concern that the evidence does not support the designation of SIRO, Virgin Media and Vodafone as imposing effective competitive constraints on the Relevant WCA Markets. In this regard, ComReg responds below to the points raised by Compass Lexecon on Vodafone’s behalf.

¹⁷²⁴ Pricing data are taken from Eircom’s 2018 *Bitstream Service Price List* (v.11), and 2018 RIO (v.5).

- 9.155 In paragraph 2.2 of its Report, CL noted that, in the context of WLA, ComReg indicated in the Consultation that the use of multiple suppliers to achieve the necessary coverage was “...*unlikely to be a realistic or suitable option due to the transaction costs*”.¹⁷²⁵ CL asserted that this must be taken into account in the WCA Geographic Market assessment when examining whether products with a limited geographic footprint can be expected to result in competitive conditions that are “*appreciably different*” to what is observed outside of their footprint.¹⁷²⁶
- 9.156 ComReg considers that the transaction costs involved in using multiple WCA suppliers to achieve sufficient geographic coverage could be prohibitive, as multiple interconnection costs may be involved. For example, if an Access Seeker purchases WCA from multiple suppliers (e.g. Eircom and BT), varying costs would be involved in interconnecting with each of these suppliers (although these costs would likely be less than for multiple WLA suppliers, as WCA services allow hand-off at a higher point in the network thereby lowering interconnection costs), in addition to the potential costs of sourcing differing customer premises equipment (**CPE**) which may be specific to each WCA supplier. The addressable market could be also narrowed in circumstances where WCA suppliers provide overlapping network coverage.
- 9.157 ComReg has taken into account whether products with a limited geographic footprint can be expected to result in competitive conditions that are “*appreciably different*” to what is observed outside of their footprint. Moreover, ComReg notes that Product Market and geographic market assessments should not be interpreted separately or mechanistically. Rather, ComReg considers the product and geographic assessment together in order to arrive at a holistic view of the parameters of a given market.
- 9.158 It is axiomatic that a product must be available in an area for customers to be able to switch to it. ComReg assesses product availability, including the availability of products that have limited or regional geographic coverage only, (and, therefore, substitution possibilities) in the context of its geographic market assessment, and the five criteria used to determine whether Exchange Areas fall into the Urban WCA Market or the Regional WCA Market explicitly account for this. ComReg then goes on to assess the impact of the geographic market definition when determining whether any SP has SMP on the duly-defined relevant market. ComReg’s geographic assessment is, accordingly, designed to be sufficiently granular to take account of competitive effects at both national and sub-national level.

¹⁷²⁵ See paragraph 6.99 of the Consultation.

¹⁷²⁶ As defined at paragraph 8 of the Notice on Market Definition. See paragraphs 10.54, 10.113 and 11.54 of the Consultation.

9.159 CL also queries¹⁷²⁷ whether a WLA product which has a limited footprint could lead to competitive conditions in that product's geographic footprint which are sufficiently different to conditions of competition outside that footprint. ComReg notes that this is accounted for, in that SIRO's presence for the provision of wholesale services (currently WLA services) will contribute to the competitive dynamic in the area in which these WLA services are provided. Outside of SIRO's footprint, competitive conditions may be different as SIRO is not present in these areas.

Demand-side Substitution

9.160 As outlined in paragraph 9.36, CL generally agreed with ComReg's approach to the assessment of demand substitution in the WCA Market.

Supply-side Substitution

9.161 As noted in paragraph 9.37, CL raised issues concerning ComReg's proposed inclusion of the hypothetical provision by SIRO of FTTx-based WCA products in the WCA Market. CL suggested that ComReg has not explained why it concludes that SIRO is an insufficient constraint in the context of the WLA Market, but does not set out why this does not also apply in the context of the WCA Market.

9.162 In the Consultation, ComReg formed the preliminary view that, on the basis of direct constraints, the WCA Product Market included WCA-based Bitstream products provided over an FTTx network, including hypothetical products offered by SIRO (on the basis of supply-side substitution). While recognising that SIRO did not offer a WCA product, ComReg formed the view that SIRO could offer supply-side substitution possibilities as, in response to a SSNIP by a HM supplier of copper and FTTx-based WCA products, SIRO could commence the supply of WCA services within a relatively short timeframe. As of December 2017, SIRO has rolled out its network to more than 120,000 premises.¹⁷²⁸

9.163 ComReg further notes that, in the context of WLA, SIRO has entered into commercial arrangements with a number of partners, some of whom purchase WLA for resale at a very local access level.¹⁷²⁹ In contrast, Access Seekers purchasing WCA do so higher up in the network, allowing for broader coverage, with less interconnection (and other) investment, relative to WLA, which requires deeper interconnection infrastructure, potentially requiring multiple points of interconnection and, therefore, different interconnection costs in the context of WLA relative to WCA.

¹⁷²⁷ At paragraph 2.2 of the Compass Lexecon Report.

¹⁷²⁸ <https://siro.ie/huawei-trial/>.

¹⁷²⁹ As set out at <https://siro.ie/siro-broadband-partners/>.

9.164 ComReg has identified that SIRO is currently active in the provision of WLA within its (limited but growing) network footprint, and therefore includes the provision by SIRO of WLA in the WLA Product Market on the grounds that, on a forward-looking basis, it is a likely demand-side substitute for the identified focal product (CG LLU provided by Eircom). In contrast, ComReg includes the hypothetical provision by SIRO of WCA in the WCA Product Market on the grounds of supply-side substitutability as, in response to a SSNIP by a HM supplier of WCA products, ComReg considers that SIRO could commence the supply of WCA products (NGA FTTx Bitstream) within a relatively short timeframe.

9.165 In this respect, ComReg noted in the Consultation that, from a demand-side perspective, SIRO's network footprint was limited:

“Even if SIRO were to offer a WCA market product, ComReg is of the preliminary view that SIRO may not impose a sufficiently effective constraint on Eircom in the WCA market over the medium term given SIRO's current and expected geographic availability..... In this respect, Access Seekers currently purchasing Bitstream services from Eircom or BT Ireland would not be in a position to readily switch all their services to an alternative WCA product provided over the SIRO network or to cease their purchase of WCA from Eircom or BT Ireland.”¹⁷³⁰

9.166 ComReg notes SIRO's rollout to date has been slower than anticipated (see Figure 12 in Section 5). As of Q1 2018, SIRO's network passes more than [§< [REDACTED]] premises (having grown from 36,500 in November 2016),¹⁷³¹ and its projection for 2018 is to pass [§< [REDACTED]] premises.¹⁷³² ComReg notes that SIRO's website sets out its intention to pass 500,000 premises by the end of 2018 and that [§< [REDACTED]].¹⁷³³ On the basis of delayed rollout to date, ComReg is not convinced that there would be sufficient substitution to SIRO's hypothetical WCA-based products on a nationwide basis. Such substitution would only likely be more feasible within the overlapping coverage areas of SIRO and a HM supplier of WCA (allowing for switching and other transaction costs).

¹⁷³⁰ See paragraph 10.39 of the Consultation.

¹⁷³¹ <https://siro.ie/siro-joins-ftth-council/>.

¹⁷³² Information obtained from a SIR issued to SIRO in November 2017.

¹⁷³³ <https://siro.ie/more-about-siro/>.

- 9.167 In relation to CL's point that ComReg argues against including Virgin Media as a supply-side constraint despite its greater footprint, ComReg's rationale for excluding Virgin Media as a direct constraint (based on supply side substitution) is outlined in paragraphs 10.43 to 10.49 of the Consultation. ComReg notes that its rationale for including hypothetical WCA supply by SIRO in the relevant market arose from factors including that it acts as a wholesale only SP, its capacity to introduce points of interconnect at an aggregation point higher in its network, and the fact that SIRO already has the necessary wholesale billing and order management systems in place for its WLA services which could be leveraged into WCA service provision. In contrast, ComReg considered that Virgin Media would have less of an incentive to offer WCA, as a large part of its network capacity is already consumed by its retail business, it would likely incur higher set-up costs, and Access Seekers would likely incur higher switching costs, given differences in CPE for copper/FTTx, and CATV networks. Moreover, Virgin Media has stated to ComReg that it does not intend to offer WCA or WLA products in the near future.¹⁷³⁴
- 9.168 In paragraph 2.15 of its Submission, CL noted that it is unclear how ComReg has, in practice, undertaken the analysis on a forward-looking basis, and what weight ComReg places on existing versus potential network footprint, or on network expansions anticipated for immediate versus medium term delivery. CL therefore queries the transparency and methodology of ComReg's forward-looking approach to supply-side substitution, and the relative weight ComReg attaches to current or expected future rollout.
- 9.169 ComReg's approach to ensuring that the analysis encompasses a forward-looking element involves liaising with SPs regarding future rollout plans, as well as obtaining detailed rollout plans and projections through SIRs, where they exist. In assessing supply-side substitutability, ComReg predominantly relies on current rollout as the most accurate indicator of substitution possibilities. However, where ComReg has been provided with specific information on intended network rollout to precise locations within defined timeframes, it takes account of this additional information in its analysis. In doing so, ComReg considers, *inter alia*, the ease or difficulty of providing new supply-side substitutability based on technical feasibility, timeliness of service provision, presence of existing ancillary facilities (e.g. billing and order management systems) and ease of switching.¹⁷³⁵ ComReg also takes account of the reliability of network rollout projections, based on experience to date of network rollout occurring at a faster or slower rate than forecast. Taken together, any rollout plans furnished to it by each SP enable ComReg to account for competitive dynamics such as coverage and the availability of substitutes, in defining the market on a forward-looking basis over the period of the market review.

¹⁷³⁴ As set out at p.607 of Virgin Media's response to the Consultation.

¹⁷³⁵ See paragraph 10.54 of the Consultation.

- 9.170 In taking a forward-looking view of the WCA Product Market, ComReg considers, on an SP-by-SP basis, whether future network rollout likely offers demand-side or supply-side substitution possibilities which would warrant the extension of the market definition beyond the focal product, as set out in paragraph 9.5 above, bearing in mind the difference between each SP's current network, and its network extension proposals. In the case of Vodafone, for example, ComReg considered whether, in light of its announced plans to use Eircom's VUA product at a large number of Exchange Areas to self-supply retail broadband services, this would lead to the inclusion of a Vodafone Bitstream-based FTTx product in the WCA Product Market by means of demand-side or supply-side substitution,¹⁷³⁶ or, alternatively, by means of imposing an indirect constraint on the focal product.¹⁷³⁷
- 9.171 In paragraph 9.40, ComReg set out CL's view that the proposal to include SIRO in the market likely overestimates the competitive pressure potentially attributable to SIRO. CL noted, however, that, given SIRO's then very limited network footprint and market share, it was not clear whether this would have any meaningful impact on ComReg's subsequent assessment of competition in the WCA Market.
- 9.172 ComReg does not agree that its analysis is likely to overstate the competitive pressure potentially attributable to SIRO. ComReg notes that, on the one hand, CL suggested that "*ComReg does not explain why the reasoning for finding that SIRO is an insufficient constraint in the context of WLA therefore does not also apply to WCA.*"¹⁷³⁸ ComReg notes that, in the Consultation, it found that, on balance, SIRO was likely to act as a demand-side substitute on the WLA Product Market,¹⁷³⁹ and as a supply-side substitute on the WCA Product Market. Accordingly, it is not the case, as suggested by CL, that ComReg found SIRO to be an insufficient constraint on the WLA Market.
- 9.173 CL also indicated that "*It is therefore not clear to what extent ComReg relies on SIRO network expansions that may only occur towards the end of the review period and therefore may not provide any clear immediate constraints.*"¹⁷⁴⁰ From a Product Market definition perspective, ComReg has noted in the Consultation that the supply-side constraint posed by SIRO is likely only to be effective in the case of areas of overlapping coverage. The extent of this constraint, as measured by SIRO network expansion, is more appropriately addressed as part of geographic market definition exercise and, in particular, the five criterion test used to distinguish whether Exchange Areas are more likely to fall within the Urban WCA Market or the Regional WCA Market.
- 9.174 ComReg's approach to SIRO has been clearly justified across both the Relevant WLA Market and the Relevant WCA Markets.

¹⁷³⁶ See paragraph 10.24 of the Consultation.

¹⁷³⁷ See paragraphs 10.113 to 10.115 of the Consultation.

¹⁷³⁸ See paragraph 2.14 of the CL Report.

¹⁷³⁹ See paragraph 5.54 of the Consultation.

¹⁷⁴⁰ See paragraph 2.15 of the CL Report.

Indirect Competition

9.175 In respect of indirect constraints, CL agreed that the assessment conditions identified by ComReg were relevant, but concluded that ComReg had failed to demonstrate that each of the conditions had been satisfied. CL held that:

- (a) Condition 1: the assumption that WCA price increases would be passed on in full into retail prices is unsubstantiated and does not take into account the differentiated cost structures and product offerings of Eircom's retail rivals
- (b) Condition 2: the required test was not performed, as ComReg would need to assess the implications of a SSNIP at wholesale level, not at retail level
- (c) Condition 3: ComReg did not assess whether customers would "*switch to a significant extent to the retail arm of the integrated hypothetical monopolist*", such that it may become profitable for Eircom to impose higher WCA prices in the absence of regulation

9.176 CL further noted that ComReg relies on the Explanatory Note to the 2014 Recommendation for the inclusion of alternative platforms in the WCA Market if there is competitive pressure stemming from alternative platforms at the retail level,¹⁷⁴¹ but considered that ComReg does not perform a complete quantitative analysis across these points.

9.177 ComReg does not agree with CL's views in respect of the analysis of the inclusion of alternative platforms in the WCA Market. ComReg below first reiterates the conditions set out in the Explanatory Note to the 2014 Recommendation:¹⁷⁴²

- (a) Whether, and to what extent, Access Seekers would be forced to pass a hypothetical wholesale price increase onto their customers at the retail level based on the wholesale/retail price ratio (**'Condition 1'**);
- (b) Whether there would be sufficient demand substitution at the retail level in response to the pass-through of the SSNIP in WCA into retail prices such as to render the wholesale price increase unprofitable (**'Condition 2'**); and
- (c) Whether the retail customers of the Access Seekers purchasing the WCA products would switch to a significant extent to the retail arm of the integrated HM, in particular if the HM does not raise its own retail prices when it raises its wholesale prices (**'Condition 3'**).

¹⁷⁴¹ See Explanatory Note to the 2014 Recommendation, pages 46 and 47.

¹⁷⁴² See Explanatory Note to the 2014 Recommendation, Section 4.2.2.

Condition 1: Whether WCA price increases would be passed through to retail prices

9.178 In paragraphs 9.45 to 9.47, ComReg summarised CL's view that ComReg's assumption in the Consultation that WCA (and WLA) price increases would be fully passed through to retail prices in full may overestimate the indirect competitive impact.¹⁷⁴³ ComReg maintains its view that this is a reasonable approach in the context of the assumption that the SSNIP assumes that markets are competitive. ComReg also notes that, since the Consultation, Ofcom has, in March 2018, published its WLA Market Review Statement, which proposes, similarly to ComReg that:

*"For the purposes of defining the WLA Market, we consider that an assumption of approximately full pass-through is reasonable on the assumption that retail markets are effectively competitive."*¹⁷⁴⁴

9.179 ComReg does not therefore agree that its assumption of full pass-through is inappropriate and below responds to each of the points raised by CL in this regard. ComReg also notes that Vodafone's Submission made no objections to ComReg making the same pass-through assumption on the WLA Market,¹⁷⁴⁵ which may suggest a possible inconsistency in Vodafone's approach (although this may be somewhat explained in the WCA analysis, having regard to the presence of upstream WLA regulation, whereas the WLA analysis assumes no regulation in either the WLA or WCA markets).

9.180 ComReg agrees with CL that entrants may use WCA to compete head-to-head with existing SPs providing retail services using WLA or their own infrastructure, until these entrants gain sufficient scale and scope economies to justify the business case for the use of WLA products or, indeed, build/expand their own networks (i.e. climb the ladder of investment). It is not the case, however, that the retail costs of broadband (**'retail costs'**)¹⁷⁴⁶ are entirely symmetric for WCA Access Seekers and WLA Access Seekers.

¹⁷⁴³ Considered by ComReg to be a "prudent approach" (paragraph 5.134 of the Consultation).

¹⁷⁴⁴ See Ofcom, 2018, 'Wholesale Local Access Market Review: Statement – Volume 1 Markets, market power determinations and remedies' at paragraph 3.66. Available online at https://www.ofcom.org.uk/data/assets/pdf_file/0020/112475/wla-statement-vol-1.pdf.

¹⁷⁴⁵ As set out at paragraphs 21c and 28 of Vodafone's Submission.

¹⁷⁴⁶ Defined at paragraph A7.11 of the Consultation as "the costs of servicing a residential customer per month including the WLA and WCA prices, customer services costs, billing, equipment, and connection costs."

- 9.181 In paragraph A7.11 and Table 89 of the Consultation, ComReg outlined the monthly cost of servicing a residential customer, which includes prices based on the use of WLA and WCA-based services (defined to include a rental and a usage component), and retail costs (defined to include customer service, billing, equipment, and connection costs). Some elements of retail costs will have similar components. ComReg agrees that, overall, retail prices may be different for WLA Access Seekers and WCA Access Seekers, given the level of investment the former undertakes. For the avoidance of doubt, however, ComReg reiterates that it is unaware of a material number of Service Providers pricing their retail offerings based on whether they use WCA or WLA inputs.¹⁷⁴⁷
- 9.182 CL queries ComReg's presumption that WCA price pass-through would occur (Condition 1). It suggests, instead, that SPs may use multiple wholesale services, including WCA to compete at the retail level. Accordingly, the fact that the price of one wholesale input increases does not necessarily mean that this will be fully passed through to the retail level, given the mix of wholesale services used. ComReg notes that this scenario is, in principle, possible. However, the evidence at ComReg's disposal suggests that SPs (such as Vodafone) do not differentiate their retail broadband prices based on the underlying technology used. Moreover, when conducting its SSNIP analysis as part of the retail market definition exercise at Section 4 of the Consultation, ComReg assumed that the market on which the SSNIP occurs is competitive. Under this assumption, any SP which failed to pass-through wholesale price increases to the retail level risks incurring unsustainable losses in the long term, as it is constrained to earn normal profits only, for any level of input costs. To this end, ComReg notes Vodafone's comment that:

*“More importantly, ComReg’s own analysis shows that, based on recent price changes, Eircom’s wholesale and retail prices are not effectively constrained in this market. Eircom has increased its NGA wholesale prices twice since the launch of NGA services in 2013. In July 2015 Eircom increased the VUA monthly price by €2. Furthermore, from 1 September 2016 Eircom increased the rental price of for FTTC based VUA by €3.50 and the monthly rental price for FTTH based VUA by around €3.00. Similarly, Eircom also increased its retail broadband prices for NGA. **The wholesale price increases have had the effect of significantly increasing our cost of delivering voice and broadband services to our customers** – however, given ComReg’s decision to reduce the pricing of WLR products, Eircom’s cost base for serving the same retail customers has not been affected.” [EMPHASIS ADDED]¹⁷⁴⁸*

¹⁷⁴⁷ See Appendix: 7 for further details.

¹⁷⁴⁸ Vodafone submission, at paragraph 227.

- 9.183 Additionally, in December 2017 Vodafone itself increased its broadband prices with the notification to retail customers stating that this was due to “*increased operational costs*”.¹⁷⁴⁹ This suggests that Vodafone’s ability to not pass through wholesale or other costs increases is limited. Indeed, ComReg notes that the price increases applied by Vodafone across a range of CG and NG retail broadband packages (including bundles), with the typical increase for a residential and business package being €5,¹⁷⁵⁰ with such retail services based on a range of CG and NG technologies.
- 9.184 CL, as summarised in paragraph 1.46 above, argued that, under national pricing, an increase in WCA prices should, at most, be passed onto retail prices in proportion to the share of the SP’s user base served using WCA, but that the incentive for an SP to do so will depend on any impact this will have on its competitiveness across its entire retail offering. Noting that it assumes a competitive market scenario when carrying out its SSNIP analysis, ComReg agrees with CL that, **under national pricing**,¹⁷⁵¹ the lower the proportion of an SP’s reliance on WCA for its provision of retail services (relative to its use of WLA and own network inputs), the lower the potential impact may be in terms of the pass-through to retail prices.
- 9.185 Vodafone does not appear to distinguish its broadband pricing based on the use of WLA or WCA inputs. Vodafone’s residential standalone broadband products are divided into ‘Gigabit’ FTTH (provided by SIRO), which is priced according to Mbps,¹⁷⁵² and fibre broadband, which is offered at a single price point.¹⁷⁵³ Accordingly, Vodafone retail broadband pricing appears to distinguish between FTTH WLA provided by SIRO, and wholesale products which it purchases from other SPs (WLA provided by Eircom and WCA provided by BT), rather than between WCA and WLA.

¹⁷⁴⁹ Vodafone Home contract change notification – December 2017, <https://n.vodafone.ie/aboutus/customer-notifications.html>.

¹⁷⁵⁰ Of the 7 residential packages affected, 5 packages each increased by €5, with the two remaining packages increasing by €10 and €7 respectively. Of the 10 business packages affected, 8 packages each increased by €5, with the two remaining packages increasing by €2 each.

¹⁷⁵¹ Including in circumstances where an SP does not distinguish its retail prices based on the use of WLA or WCA inputs.

¹⁷⁵² As described at <https://n.vodafone.ie/shop/broadband/gigabit-broadband.html>.

¹⁷⁵³ Vodafone’s ‘Simply Broadband’ product, per <https://n.vodafone.ie/shop/broadband.html>.

9.186 In ComReg’s view, if a SP decides to pass on an increase in wholesale input costs (e.g. a SSNIP in WLA or WCA)¹⁷⁵⁴ to the final retail price (which ComReg assumes it will, under a competitive market assumption), it will more likely implement the cost pass-through relatively uniformly across the range of associated retail offerings as opposed to only those offerings based on WCA. For example, if the cost (due to a SSNIP of WCA) of a SP’s WCA-based FTTC package increases, should the SP decide to pass on the price increase, it would likely do so across all FTTC packages, not just those dependent on WCA inputs. ComReg bases this assumption on Vodafone’s recent pricing behaviour; in particular, the fact that Vodafone announced price increases in respect of its home broadband products in July 2014, April 2015, August and November 2016 and December 2017¹⁷⁵⁵ without apparent distinction between the underlying product technologies employed. In the context of national pricing, it does not seem plausible that an SP would increase prices only in those areas¹⁷⁵⁶ served by WCA and affected by the SSNIP.

9.187 In this respect, ComReg notes that, for instance, Vodafone distinguishes its retail broadband pricing by underlying FTTC and FTTH platforms, rather than between CG and NG, or WLA and WCA, technologies, as set out in the following table:

Table 27: Vodafone FTTC and FTTH retail pricing (residential offerings)¹⁷⁵⁷

Product	Technology ¹⁷⁵⁸	Wholesale provider	Bundle	Max Mbps	€ per month
Simply Broadband	FTTC	Eircom	No	100	€45
Home Essentials	FTTC	Eircom	Phone	100	€50
Home Unlimited	FTTC	Eircom	Phone	100	€60
Gigabit	FTTH	SIRO	No	150	€55
Gigabit	FTTH	SIRO	No	300	€65
Gigabit	FTTH	SIRO	No	1000	€90

¹⁷⁵⁴ For example, in September 2016, Eircom increased the price of NG FTTC Bitstream (standalone) from €19.50 to €23.00.

¹⁷⁵⁵ As set out in chronological order at <https://n.vodafone.ie/aboutus/customer-notifications.html>.

¹⁷⁵⁶ Noting that these areas are not necessarily geographically contiguous, and that a mixture is likely in any given locale or region.

¹⁷⁵⁷ Pricing data taken from <https://n.vodafone.ie/shop/broadband> on 20 February 2018, and excludes any introductory or promotional prices.

¹⁷⁵⁸ Gigabit broadband is FTTH provided by SIRO: <https://n.vodafone.ie/shop/broadband/gigabit-broadband.html>. ComReg infers that the other products described as ‘fibre’ at <https://n.vodafone.ie/shop/broadband.html> must, by exclusion, be FTTC provided by Eircom.

- 9.188 As summarised in paragraph 9.46(c) above, CL pointed out that ComReg assumes “*no cross-subsidisation from other services sold within bundles.*”¹⁷⁵⁹ In CL’s view, this is a questionable assumption in light of ComReg’s conclusion that “*a sufficient number of customers could (and would) unpick a bundle containing broadband and TV services if there were to be a hypothetical price increase in the cost of the bundle.*”¹⁷⁶⁰ CL therefore notes that ComReg does not assess whether an SP would hence only pass on a WCA price increase into the bundle if the associated price increase would more than compensate for the loss of income across all services in the bundle. In this respect, ComReg has already noted at paragraph 9.183 that, in December 2017, Vodafone increased the overall price of a number of its retail bundle plans due to “*increased operational costs*”.
- 9.189 CL also argued that “*...cross-subsidies to WCA-based broadband users from WLA-based users, from other components of a bundle, or from existing users to new users, may enable and incentivise operators to absorb WCA price increases.*”¹⁷⁶¹ ComReg is unclear how this would work in practice, given that it would only likely be possible where a SP makes use of both WLA and WCA inputs, and those inputs may be used in different geographic areas.
- 9.190 ComReg agrees that some short-term cross subsidisation is possible. However, for market definition purposes, ComReg has assumed that all components of the bundle are priced at the competitive level and that, accordingly, any price increase in any component of the bundle would be above the level which would be expected to obtain in competitive market. Unless the SP cross-subsidised by pricing other components of the bundle below the competitive level (i.e. below cost), an SP would have to pass these costs through to the retail level (as set out in the Vodafone example above). ComReg notes in this context that the Modified Greenfield Approach also assumes that upstream WLA Markets are regulated and that price controls are in effect on that market.
- 9.191 Bundles whose central component consists of broadband include fixed telephony (‘double-play’), fixed telephony and TV services (‘triple-play’)¹⁷⁶² and, less frequently, quad-play (fixed line, TV and mobile phone services).¹⁷⁶³ Such bundles, where offered by Access Seekers are (save for Virgin Media, which has its own network) dependent on a WLA or WCA inputs for their broadband component (absent which other components of the bundle such as telephone, and TV could not be offered). Thus, the effect of a WCA (or WLA) price increase will be passed through to each component of the bundle which relies on WLA or WCA (e.g. retail broadband access, VoIP fixed telephony, and IPTV).

¹⁷⁵⁹ See footnote 410 of the Consultation.

¹⁷⁶⁰ See paragraph 4.271 of the Consultation.

¹⁷⁶¹ See Compass Lexecon Report, at paragraph 2.25.

¹⁷⁶² ComReg outlines currently available broadband packages by Service Provider in Appendix: 7 below.

¹⁷⁶³ ComReg’s QKDR for Q4 2017 showed that 28.5% of subscriptions were double play and 21.5% of subscriptions were triple and quad play.

- 9.192 However, from the End User perspective, the price increase would likely be passed through into the overall cost of the bundle, regardless of its individual components, as detailed at footnote 1750 above. ComReg considers that End Users may unpick a bundle if there is a significant price increase for the bundle as a whole, as evidenced by the 2014 WLA/WCA Market Research.¹⁷⁶⁴
- 9.193 CL considered that an SP would only pass on a WCA price increase into the bundle if the price increase would “*more than compensate for the loss of income across all services in the bundle*”,¹⁷⁶⁵ and that ComReg had failed to assess this possibility. ComReg agrees that it may be the case that the WCA price increase may only be passed on to the retail price of the bundle if the price increase would cover the loss of profitability arising from customers switching to other providers. However, the extent of the pass-through of wholesale price increases and its impact on an SP’s profitability, will likely also involve an assessment of the impact on profitability having regard to extra profitability from those customers who do not switch (and pay the price increase) and the loss of profitability from those customers who do switch. As noted earlier, Vodafone recently increased its prices for a range of retail services that include a broadband component and this does not, based on data available via ComReg’s QKDR, appear to have had a material impact on its subscriber base, such that it may be suggestive of a significant negative effect on profitability. As discussed previously, ComReg made the prudent assumption of full pass-through of price increases imposed at a wholesale level. While ComReg allows for the limited possibility of full pass-through not occurring, any SP which failed to pass through wholesale price increases to the retail level would risk incurring unsustainable losses in the long term, as it is constrained to earn normal profits only, for any level of input costs.
- 9.194 ComReg agrees with CL¹⁷⁶⁶ that, given costs of customer acquisition, it may, depending on circumstances, be economically rational in the short term¹⁷⁶⁷ to keep supplying existing users at an Exchange Area, even if WCA prices increase to a level that makes it unprofitable to acquire new users, in order to recoup these costs.¹⁷⁶⁸ ComReg does not agree that it is absolutely necessary to assess upfront customer acquisition costs as part of Condition 1. The example given by CL is simply one specific instance of Access Seekers being forced to pass a wholesale SSNIP onto their consumers. However, the reason for cost pass-through in this instance is due, not completely to retail broadband competition, but rather to the need for the retailer to seek to recover its customer acquisition costs. Accordingly, this instance is not of general application to all of a retailer’s customers, but only those who have been recently acquired and whose acquisition costs have not, therefore, yet been fully recovered.

¹⁷⁶⁴ As set out at paragraph 4.268 of the Consultation.

¹⁷⁶⁵ Set out at paragraph 2.24(c) of the Compass Lexecon Report.

¹⁷⁶⁶ Set out at paragraph 2.24(d) of the Compass Lexecon Report.

¹⁷⁶⁷ In the medium to long-term, under the assumption of a competitive market scenario, the Service Provider would incur losses that would likely make the provision of the service unprofitable.

¹⁷⁶⁸ It may be rational to do so, even where the Access Seeker makes a loss on service provision, so long as the loss associated with continuing to supply (and therefore continuing to recoup a proportion of customer acquisition costs) is less than the loss associated with ceasing to service the customer (and therefore failing to further recoup customer acquisition costs).

- 9.195 In summary, ComReg generally disagrees with the views expressed by CL. While, in the Consultation, ComReg assumed 100% pass-through of WCA price increases, ComReg does allow for the possibility that SPs could, in the short to medium term, decide not to fully pass through WCA price increases. However, ComReg considers that such a strategy could be unsustainable in the long term in the presence of an assumption of competitive retail markets. ComReg agrees with CL that cross-subsidies may, in the short term, be a viable means of absorbing the WCA price increase for an SP that relies on WLA and WCA to serve its customers, but that this approach is unsustainable in the long term, assuming that the bundle components are priced at the competitive level. CL also considered that ComReg's conclusion that Eircom is subject to a meaningful indirect constraint is contradicted by ComReg's proposed assessment of Eircom's past conduct, insofar as ComReg "*relies on past national wholesale price increases as evidence that Eircom does not consider its wholesale prices constrained by indirect competition to propose stricter, cost orientation-based, regulation for Regional WCA*".¹⁷⁶⁹
- 9.196 ComReg disagrees with CL in this regard. CL alludes to the proposed imposition of remedies in the Regional WCA Market arising from the lack of sufficient indirect constraints and queries why the same concerns do not apply to the Urban WCA Market. ComReg considers that these same concerns do not apply on the Urban WCA Market because conditions of competition on this market are deemed sufficiently different from those on the Regional WCA Market, as concluded by ComReg in applying Criteria 1 to 5 on an objective basis. It follows that where conditions of competition are sufficiently different from one geographic market to another, different approaches should be taken to the imposition of remedies in these markets.

Condition 2: Whether there is sufficient demand substitution at the retail level

- 9.197 In paragraphs 9.48 to 9.51 above, ComReg noted CL's points regarding demand-side substitution at the retail level. CL considered that ComReg's analysis does not assess the impact of a 5-10% wholesale price increase and ComReg has therefore not undertaken the test required by the European Commission, because it assessed retail, rather than wholesale, price increases.¹⁷⁷⁰ As retail prices are higher than the prices for the underlying wholesale products, CL claimed ComReg's analysis overestimates the magnitude of the relevant price increase that retailers would implement if passing through a 5-10% wholesale SSNIP.
- 9.198 ComReg does not agree. The calculation of a 5-10% increase in the price of WCA services and its pass-through into retail prices was discussed and explained in the Consultation.¹⁷⁷¹

¹⁷⁶⁹ See paragraph 2.24 of the Compass Lexecon Report.

¹⁷⁷⁰ As set out at paragraph 2.27 of the Compass Lexecon Report.

¹⁷⁷¹ At paragraphs 4.7, 4.14 and 5.128 to 5.143.

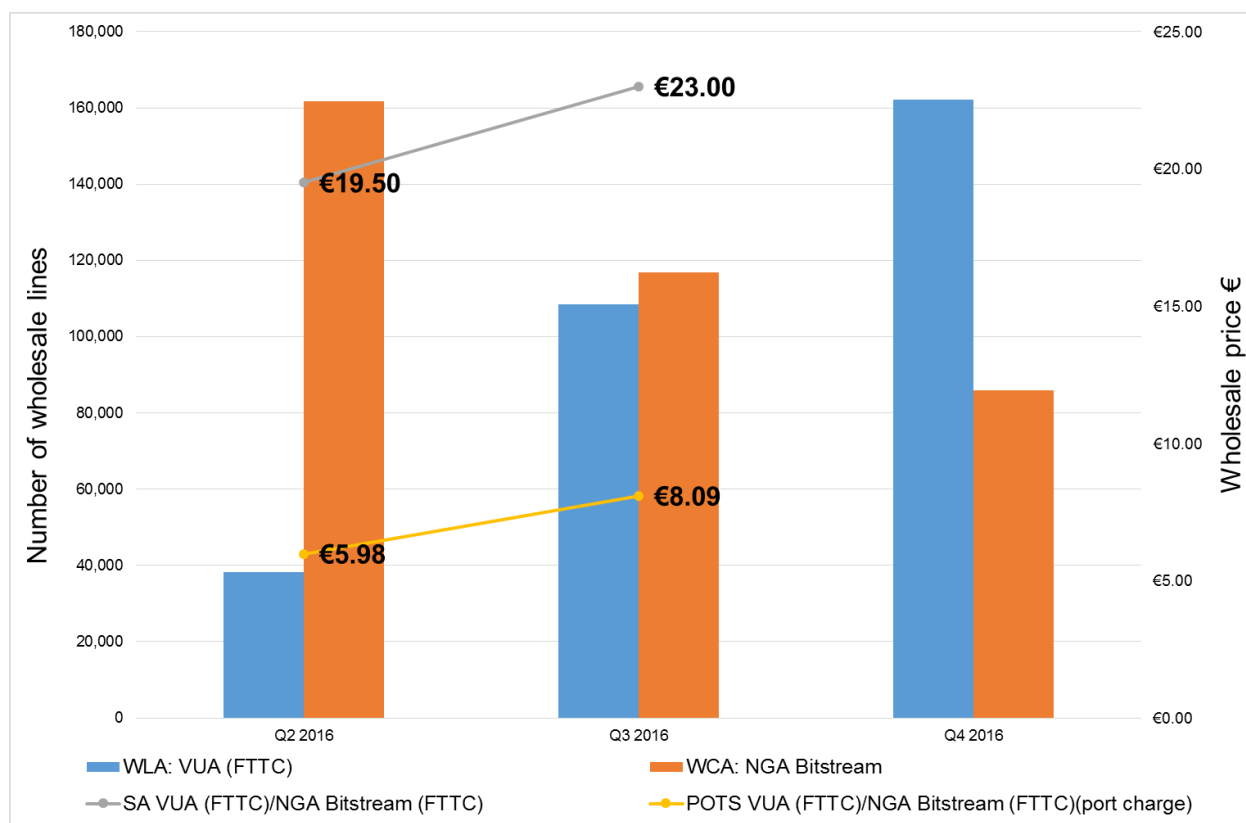
- 9.199 Furthermore, the approach ComReg has taken has been to examine how a 5-10% SSNIP in WCA products would impact the downstream retail market, given that demand for WCA is a derived demand arising initially at the retail level. As set out at paragraphs 10.92 to 10.98 of the Consultation, ComReg examined a SSNIP of WCA products. Given that demand for WCA is derived from demand for retail broadband, ComReg then assessed (by means of a CLT) how much retail demand would need to be diverted in response to a pass-through of a wholesale SSNIP to the retail level, to make that SSNIP unprofitable. ComReg accordingly rejects as incorrect CL's contention that ComReg (incorrectly) carried out a SSNIP test at the retail level. Rather, ComReg (correctly) carried out a SSNIP test at the wholesale level, and then assessed likely impacts on profitability by carrying out CLTs at the retail level, in view of the derived demand characteristics of WCA.
- 9.200 CL has suggested that the retail price increase set out in the market research commissioned by ComReg overestimates the magnitude of the impact on retail prices of a 10% SSNIP of WCA.¹⁷⁷² In the Consultation, ComReg noted that *"an increase of 10% in the price of WCA would not likely directly translate into an equivalent increase at the retail level."*¹⁷⁷³ ComReg applied 5% and 10% SSNIPs to prevailing WCA prices, which led to retail price increases of between 0.36% and 4.5%, depending on the exact WCA product purchased.¹⁷⁷⁴
- 9.201 Figure 24 below shows an analysis of data on Eircom's wholesale subscribers captured at the same date that NGA WCA Bitstream Plus price increases were imposed in September 2016. It suggests that the subscriber base has already been in decline prior to monthly rental charge increases of between 8% and 35%, depending on the precise product in question. The rate of decline did not appear to steepen in the quarter immediately following the price increases. ComReg also notes that there has been a general shift away from WCA Bitstream towards VULA products.¹⁷⁷⁵

¹⁷⁷² See Compass Lexecon Report at paragraph 2.27.

¹⁷⁷³ See Consultation at paragraph 10.79.

¹⁷⁷⁴ As set out in Tables 19 and 21 contained in section 10 of the Consultation.

¹⁷⁷⁵ Vodafone increased [redacted]
[redacted]

Figure 24: Eircom Wholesale price increases and subscriber base impacts¹⁷⁷⁶

9.202 Eircom's wholesale prices for CGA and NGA Bitstream are regulated by ComReg under the 2011 WBA Decision and the 2013 NGA Decision. In line with the 2013 NGA Decision, Eircom is subject to a price control obligation based on a number of margin squeeze tests. Eircom can make price changes to standalone NG Bitstream services so long as they comply with the regulatory obligations set out in the 2013 NGA Decision, including the specified margin squeeze tests. Separately, where NGA services are sold with retail line rental (or PSTN voice), Eircom is obliged to comply with the net revenue test ('NRT') set out in the 2013 Bundles Decision. ComReg notes that Eircom's pricing obligations may not be a good proxy for prices that would occur in a competitive market outcome as they are not necessarily reflective of cost-based pricing.

9.203 CL also queried ComReg's rationale for the choice of a SSNIP amount of €2, noting that, in most scenarios, a wholesale SSNIP would be much smaller than €2,¹⁷⁷⁷ thus leading ComReg to exaggerate the indirect competitive constraint. ComReg's rationale for the choice of a SSNIP amount of €2 in respect of WLA is outlined in paragraphs 4.140 to 4.147 above, and the underlying principle similarly applies to WCA, as summarised in the following paragraph.

¹⁷⁷⁶ Pricing data taken from the openeir RO and Bitstream Price List.

¹⁷⁷⁷ As set out in Tables 9, 11, 19 and 21 of the Consultation.

- 9.204 ComReg selected the nominal SSNIP amount of €2 as it is considered to be reasonable practice in survey design to use the actual absolute change in the price level rather than the percentage change. This is because consumers are more likely to make informed choices about potential switching behaviour based on nominal price increases, rather than percentage changes in price.
- 9.205 With respect to consumers who receive broadband as part of a bundle, ComReg is interested in respondents' behaviour following an increase in the broadband element of the bundle only. A hypothetical percentage increase of 5-10% might be interpreted by respondents purchasing a bundle as an increase in the cost of the overall bundle. ComReg, therefore, favoured an absolute monetary increase in the broadband element of the monthly bundle alone to overcome potential confusion.
- 9.206 ComReg considers that it can be reasonably assumed that a SSNIP of less than €2 would likely lead to more diminished behavioural responses, relative to those responses at the €2 level, and potentially to lower levels of substitution across platforms (particularly for price sensitive customers). ComReg is of the view that €2 is a reasonable threshold from which to implement the SSNIP, and that adopting a lower rate is not likely to materially alter ComReg's findings.
- 9.207 ComReg also notes that, in the 2017 Pricing Consultation, the proposed monthly per port cost oriented prices of €18.99 for certain NG products (namely FTTC-based Bitstream) in the Regional WCA Market, are significantly lower than current FTTC-based Bitstream price levels of €23 (noting that such WCA products are currently subject to a margin squeeze obligation and are set by reference to Eircom's retail prices with appropriate adjustments). In the current circumstances, ComReg considers that a cost-based wholesale price is more likely to be a better proxy for a competitive market outcome price (relative to a margin squeeze-based price). Taking a margin squeeze price as a proxy for a competitive price may not be appropriate, given that they are derived from retail prices and retail market conditions themselves, and may not therefore be competitive. In this context, a 5% and 10% SSNIP applied to the proposed cost oriented FTTC Bitstream-based price would amount to increases of €0.95 and €1.90 respectively. Even allowing for potential movements in the proposed cost oriented prices, such SSNIP amounts nonetheless remain lower than the €2 amount employed by ComReg in the Consultation (and in the 2014 and 2017 WLA/WCA Market Research). ComReg therefore remains of the view that a €2 SSNIP is appropriate for the assessment of indirect constraints in the WCA Market.

Condition 3: Whether Eircom would expect to recapture users from foreclosed WCA buyers

- 9.208 In paragraphs 9.52 to 9.60 above, ComReg noted CL's points on its assessment of whether Eircom would expect to recapture users from foreclosed WCA buyers. CL considered that ComReg's view that retail customers of WCA Access Seekers affected by the pass-through of a SSNIP of WCA may switch to Eircom's retail arm¹⁷⁷⁸ suggests that the requirement in the Explanatory Note to the 2014 Recommendation that "*the customers of the access seekers would not switch to a significant extent to the retail arm of the integrated hypothetical monopolist*" may not be met.¹⁷⁷⁹
- 9.209 ComReg indicated the likelihood that a proportion of retail customers who are subject to a SSNIP would likely switch to Eircom's retail arm, but did not strictly quantify the extent of such hypothetical switching. In considering all three Conditions, ComReg took the view that, in the presence of switching possibilities (including CATV, and use of upstream WLA inputs), indirect constraints would likely be, on a forward-looking basis, sufficiently strong to warrant inclusion in the relevant WCA Product Market.
- 9.210 Furthermore, ComReg considers that it is not strictly possible to determine definitively whether:
- (a) WCA Access Seekers would pass on the SSNIP,¹⁷⁸⁰ or
 - (b) If the SSNIP were, in fact, fully passed on, whether the retail customers of the Access Seeker would switch to Eircom or any other network.
- 9.211 Moreover, unlike WLA, there are many more outside options for retail subscribers when WLA regulation is in place, if a SSNIP of WCA occurred. It therefore follows that, due to more outside options, Eircom is likely to recapture proportionally fewer customers. Eircom retail customer figures have remained reasonably constant in recent years, while at the same time its wholesale customers have been increasing their own market shares. Taken together with ComReg's geographic market analysis, this is indicative that, in certain Exchange Areas, Eircom is losing market share to competing platforms (which includes WLA and CATV-based competitors).¹⁷⁸¹

¹⁷⁷⁸ See paragraph 10.124 of the Consultation.

¹⁷⁷⁹ See Explanatory Note to the 2014 Recommendation (SWD(2014) 298), pages 46 and 47.

¹⁷⁸⁰ As set out at paragraph 10.89 of the Consultation, when assessing Condition 1.

¹⁷⁸¹ Between Q4 2016 and Q4 2017, Eircom's retail market share declined from 32.6% to 31.4%. Vodafone's retail market share of fixed broadband over the same period remained steady at 19%, of which the proportion of its market share arising from WLA purchases [redacted].

- 9.212 In the Consultation, ComReg recognised that some Access Seekers' customers who were served by WCA would likely switch to Eircom in response to a SSNIP, but did not specify the quantum of this likely switching. ComReg also recognised that some of these customers would likely switch to WLA-based or CATV-based retail providers, thus recognising that, in all likelihood, not all such WCA-based retail customers would switch back to Eircom. In those Exchange Areas characterised by more competitors (absent WCA regulation), Eircom's market shares are lower.
- 9.213 Therefore, while unable to quantify precisely the amount of switching that would take place, ComReg considers it reasonable to operate on the basis that subscribers could – and would - switch to other platforms (with this also borne out by current platform market shares). Such switching to Eircom is somewhat less likely in the Urban WCA Market, as described in detail below.
- 9.214 In response to CL's points noted in paragraph 9.54, CL queries ComReg's failure to discuss whether Eircom would have similar incentives to Virgin Media to withhold WCA supply. ComReg notes that this is not the test Condition 3 considers. Condition 3 requires ComReg to consider whether Access Seeker customers would be recaptured by Eircom. According, while not entirely relevant for an indirect constraints assessment for market definition purposes, ComReg nevertheless considers CL's point for completeness.
- 9.215 Eircom may, in certain circumstances, have a lower incentive to withhold WCA services. ComReg notes that this conclusion is conditional on whether Eircom would suffer a loss of income on the provision of WCA, and whether Eircom could recoup any such losses because its WCA customers switch to its WLA or retail products. For example, ComReg considers that Eircom faces a stronger incentive to deny access to WCA services where it faces lower competitive constraints from independent competitors (those existing absent WCA regulation using WLA inputs), and can appropriate greater profitability through its retail arm. However, these incentives can become diluted where, rather than its retail arm gaining the customer, the risks and likelihood of those retail subscribers switching to alternative SPs increase. Where a subscriber switches to a SP using Eircom's WLA service (assuming the existence of upstream regulation and where the WLA service is available), Eircom will continue to receive wholesale revenue, although the profitability of this scenario relative to the scenario where its own retail arm gains the customer may be lower (in particular, where the denial of access to its WCA services removes WCA based competitors from the retail market, the intensity of competition is reduced).

- 9.216 This latter scenario, relative to one where the retail subscriber is not 'hosted' off the Eircom network at all (either via its WLA service or by its downstream retail arm), may also be less desirable for Eircom.¹⁷⁸² This illustrates that Eircom's incentives can differ having regard to the number of competitors it faces and having regard to the nature of the competitive constraints it may impose. ComReg, therefore disagrees with CL that there is any material inconsistency in its view set out in the Consultation with respect to the respective incentives of Virgin Media and Eircom to supply WCA services and any impact in the assessment of indirect constraints.
- 9.217 ComReg again notes that the number of affected End Users in the Urban WCA Market that are served using Eircom WCA¹⁷⁸³ is approximately [3< [REDACTED]]. In the context of the possibility of Eircom's retail arm recapturing these customers in response to a SSNIP of WCA, ComReg notes that Eircom is likely to be less successful in recapturing these customers in the Regional WCA market, given the fewer number and variety of outside switching possibilities, compared to the Urban WCA Market. ComReg also notes that Eircom WCA based customers account for just 2.4% of customers in the Urban WCA market.
- 9.218 ComReg considers that the third condition set out in the Explanatory Note to the 2014 Recommendation has been appropriately assessed in light of available data, and accordingly rejects CL's contention to the contrary, which appears to be based on the fact that ComReg did not carry out a comparative analysis between SP incentives. In the Urban WCA Market, ComReg remains of the view that Eircom faces constraints in imposing WCA price increases and, if it did so, it is not the case that Eircom could seamlessly capture the affected downstream retail customers, as a number of alternatives including BT (alternative WCA supply for the Access Seeker), Vodafone and Virgin Media exist.
- 9.219 In response to CL's point in paragraph 9.59, ComReg agrees that the Urban WCA Market is impacted by the presence of Virgin Media at each of the associated Exchange Areas, and notes that Virgin Media's (and retail based WLA SPs') presence is captured under the consideration of indirect constraints on the relevant Product Market and also – at a more detailed level – in the assessment of the WCA Geographic Market (see paragraphs 9.238 to 9.325 below). In this respect the WCA Geographic Market assessment takes account, at a granular level, of the network coverage and competitive dynamics arising from competing SPs.
- 9.220 Overall, ComReg remains of the view that the inclusion of SIRO's hypothetical WCA products, as well as the inclusion, based on the indirect constraints from Vodafone's WLA-based retail services and Virgin Media's retail services, remains appropriate in the WCA Product Market.

¹⁷⁸² However, absent WLA regulation ComReg considers that Eircom has the ability and incentive to foreclose WLA access, having regard to the assessment of the effectiveness of constraints from Virgin Media and SIRO.

¹⁷⁸³ This number does not include End Users in the Urban WCA Market that are served using BT WCA delivered using Eircom VUA.

Inclusion of CATV self-supply in the Urban WCA Market

- 9.221 In paragraphs 9.61 to 9.64, ComReg noted Virgin Media's disagreement with the inclusion of self-supply of CATV retail broadband products offered by Virgin Media in the Urban WCA Market. Virgin Media agreed that, as set out by ComReg, there is no direct constraint arising from CATV networks that would warrant the inclusion of self-supply of CATV broadband in the Relevant WCA Market (for example, due to Virgin Media's lack of interest in providing WCA and lack of incentive to do so, given that a significant portion of its network capacity is already consumed by its retail customers).¹⁷⁸⁴ It follows that Virgin Media disagrees with ComReg's inclusion of CATV retail broadband products as an indirect constraint.
- 9.222 Virgin Media's response notes that it does not intend to, nor has it an incentive to, offer a WCA product, and that it would be prohibitively expensive to do so. However, the supply of a product which directly competes with a focal product (in this case, WCA) does not, by definition, constitute an indirect constraint. In ComReg's view, Virgin Media has not challenged ComReg's preliminary finding that self-supply of CATV retail broadband amounted to an effective indirect constraint on a HM's imposition of a SSNIP of WCA (although it has enumerated various factors which suggest that Virgin Media should not be characterised as a direct constraint). ComReg considers that it appropriately justified the inclusion of Virgin Media's self-supply in the WCA Product Market definition in paragraphs 10.100 to 10.108 of the Consultation, and more specifically in the Urban WCA Market (paragraphs 10.175 and 10.177(a)). ComReg considers that, as Virgin Media's footprint is concentrated in urban areas, it is in these areas where it is likely to pose the strongest indirect competitive constraint.
- 9.223 ComReg also notes the Explanatory Note to the 2014 Recommendation, which states that:¹⁷⁸⁵
- “Experience under the Article 7 process has shown that in a growing number of Member States direct or indirect constraints stemming from CATV-based WCA offers do exist, though occurring generally at a sub-national level (given the lack of ubiquity of the CATV networks). Given the upgrade of CATV to DOCSIS 3 which is expected to continue, it may become increasingly appropriate to include CATV bitstream in the relevant Product Market, especially when sub-national geographic markets have been defined.”*
- 9.224 ComReg notes that the Consultation paragraphs alluded to by Virgin Media refer to the potential for supply-side substitution by a vertically integrated CATV network provider, and not to whether CATV-based products act as sufficiently effective indirect constraints on the Relevant WCA Market, as set out by Virgin Media at part (c) of its Submission when responding to Question 9.

¹⁷⁸⁴ See paragraphs 10.44 to 10.49 of the Consultation.

¹⁷⁸⁵ See page 47 of the Explanatory Note to the 2014 Recommendation.

Other issues raised in relation to the WCA Product Market Definition

- 9.225 In paragraphs 9.65 to 9.66, ComReg noted overlapping points raised by ALTO and BT. ALTO and BT highlighted concerns with ComReg's assessment in relation to FTTx (FTTC and FTTH), but offered no detail as to their respective concerns. For this reason, ComReg cannot provide a response to these unsupported concerns.
- 9.226 ComReg agrees that the supply of WCA services by an alternative SP (such as BT) is predicated on upstream WLA regulation. ComReg has noted several compliance cases involving Eircom and has responded to similar points raised in this regard by ALTO and BT in Section 6, at paragraphs 6.42 to 6.63.
- 9.227 ALTO argued that ComReg should make its economic assessment on the basis of ineffective enforcement (i.e. that current regulation is not working). ComReg disagrees and it is appropriate to make its assessment, not only based on the existence of upstream WLA regulation, but also having regard to an assessment of dynamics in the market. ComReg also notes ALTO's agreement with ComReg's "*preliminary economic theoretical conclusions on the product assessment for the WCA Markets*".¹⁷⁸⁶
- 9.228 BT stated that Eircom's "*incentive to invest in competitive WCA products is soft and will soften further in the Urban WCA Market and Regional WCA Market with ComReg's proposals to de-regulate the Urban WCA Market and the proposed leased lines de-regulation*".¹⁷⁸⁷ (with which BT also disagreed).
- 9.229 Eircom has largely rolled out its FTTC services and continues to do so with respect to its FTTH services (the latter to be completed by the end of 2018), which must be offered to Access Seekers in accordance with Eircom's regulatory obligations, as appropriate. ComReg notes that, in recent quarters, there has been an increasing shift in Access Seekers' purchases from WCA-based Bitstream to the WLA-based VUA. For example, in Q4 2017 there were 121,312 WCA based VDSL Bitstream lines, a decrease of 25% since Q2 2016.¹⁷⁸⁸ In comparison, there were 190,936 VULA (NG WLA) lines in Q4 2017, up from 38,316 in Q2 2016 (+398%) and up from 187,355 in Q3 2017 (+2%).
- 9.230 To the extent that Eircom is required to provide WCA products, services and facilities pursuant to this Decision, ComReg will continue to monitor its compliance with its regulatory obligations¹⁷⁸⁹ and take action as appropriate.

WCA Geographic Market Definition

- 9.231 In this section, ComReg assesses Respondents' views under each of the key themes identified in paragraph 9.70 above, as follows:
- (a) Comments on Criteria for the WCA Geographic Market Assessment (see paragraphs 9.233 to 9.266 below); and

¹⁷⁸⁶ See ALTO Submission response to Q.9, at p.9.

¹⁷⁸⁷ See BT Submission response to Q.9, at p.12.

¹⁷⁸⁸ See ComReg QKDR Q4 2017 and Q2 2016, pages 38 respectively.

¹⁷⁸⁹ ComReg notes that it has enhanced a number of regulatory obligations relative to those required under the 2011 WBA Decision (and related Decisions), with these set out in Section 12, at paragraphs 12.15 to 12.27.

- (b) Disagreement with Proposal for Sub-National Relevant WCA Markets (see paragraphs 9.267 to 9.325 below).

9.232 Having regard to Respondents' views, ComReg has also clarified its geographic criteria, and the application thereof, at paragraphs 9.326 to 0 below.

Comments on Criteria for the WCA Geographic Market Assessment

9.233 In paragraphs 9.71 to 9.74 above, ComReg noted a number of points from ALTO and BT. In general, ALTO and BT were in agreement with ComReg's assessment of the WCA Geographic Market. ALTO suggested that Eircom would cherry pick the most viable locations in rolling out FTTx services, limiting the return of any new entrant. ComReg considers that, in deploying its FTTx network, Eircom will rollout to those locations which are commercially viable, and that this will open up opportunities for Access Seekers that wish to purchase wholesale services from Eircom in these areas.

9.234 As noted in paragraph 9.74, BT considered that the commercial deployment drivers of some entrants do not appear to align with the Urban WCA Market defined by ComReg and that it was not clear to BT why such a difference exists. BT did not provide any further information to substantiate its views, and ComReg is, accordingly, unable to respond to this point. Moreover, the rationale and evidence to support the delineation of an Urban WCA Market was set out in the Consultation¹⁷⁹⁰ and have been further explained in this Section 9.

9.235 BT also considered that ComReg needs to provide more justification and further transparency as to the selection of each of the Exchange Areas falling within the Urban WCA Markets. ComReg's justification for the selection of each of the urban Exchange Areas centres on the assessment of the cumulative criteria outlined and discussed in the Consultation.¹⁷⁹¹ As noted therein, the key considerations include:

- (a) Geographic differences in entry conditions over time;
- (b) Variation in the number and size of potential competitors;
- (c) Distribution of market shares;
- (d) Evidence of differentiated pricing strategies or marketing; and
- (e) Geographical differences in demand characteristics.

9.236 ComReg's geographic analysis is described and updated below at paragraphs 9.238 to 9.325. ComReg has identified each criterion by reference to the description of the relevant geographic market in the Notice on Market Definition:

¹⁷⁹⁰ See paragraphs 10.156 and 10.157, and Appendix 5, of the Consultation.

¹⁷⁹¹ See paragraphs 10.137 to 10.174 of the Consultation.

“... an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different.”¹⁷⁹²

9.237 Eircom made a number of comments on ComReg’s WCA geographic market assessment, summarised in paragraphs 9.75 to 9.88 above. The thrust of Eircom’s argument was that the criteria for determining whether an Exchange Area should be included in the Urban WCA Market are too restrictive, and are not reflective of the differing competitive conditions that serve to differentiate urban and rural areas, as set out below on a criterion-by-criterion basis:

Criterion 1: An Exchange Area in which at least three Primary Operators would be capable, within a sufficiently short period, of providing either broadband services at the retail level to End Users, WCA or WLA in the Exchange Area, absent regulation in the WCA Market

9.238 ComReg does not agree with Eircom that an Exchange Area should be deemed sufficiently competitive solely on the basis of the presence of a minimum of two network providers, either Eircom and another provider, or two providers other than Eircom. Firstly, the presence of Primary Operators is just one factor considered when assessing the competitiveness of an Exchange Area, alongside other criteria such as distribution of market shares and network coverage. Secondly, ComReg notes the Explanatory Note to the 2014 Recommendation, which states:¹⁷⁹³

“.....starting from the competitive constraints on the retail level, NRAs should look at a minimum at supply-side and demand-side substitution, including the number and size of alternative operators offering related retail services in a particular geographic area, the local / regional development of retail market shares and any pricing and price differences across geographies.”

9.239 Applying Eircom’s views, when assessing competitive conditions, an Exchange Area in which two SPs each had a 50% market share, and an Exchange Area in which one SP had a 99% market share and one SP had a 1% market share, would both be deemed “sufficiently competitive” in Eircom’s estimation. ComReg’s position, as set out at paragraphs 11.1 to 11.4 of the Consultation, is that it is prudent to assess competitiveness on the basis of multiple indicators, and not just market share, which may fail to accurately capture whether sufficient differences in competitive conditions exist between different geographic areas.

¹⁷⁹² European Commission Notice on Market Definition, paragraph 8.

¹⁷⁹³ See page 48 of the Explanatory Note to the 2014 Recommendation.

Criterion 2: An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users within that particular Exchange Area, absent regulation in the WCA Market

9.240 ComReg does not agree that this criterion is unnecessary, even in the presence of infrastructure competition. In assessing Eircom's market share by Exchange Area, ComReg considers both Eircom's retail market share (reflecting its self-supply of WCA) and the number of WCA-based Bitstream lines provided by Eircom to the merchant market at Exchange Areas where other SPs have not invested in backhaul. This implies that Criterion 2 is fulfilled where Eircom has a total market share (incorporating Eircom's self-supply to its retail arm and those merchant market WCA lines that could not be served by BT or Vodafone in the absence of regulation) of less than 50%. ComReg's rationale in choosing a 50% market share threshold is rooted in competition law precedent, as set out in detail at paragraph 9.303 below, and also at paragraph 11.3 of the Consultation.

9.241 Furthermore, ComReg disagrees that retail broadband services provided by means of mobile, satellite or FWA should be included in its analysis, for the reasons set out at paragraphs 9.8 and 9.9 above.

Criterion 3: An Exchange Area where one or all of the Primary Operators providing retail broadband services to End Users using inputs from the WLA Market provide a total greater than 10% of End Users within that particular Exchange Area, absent regulation in the WCA Market

9.242 Eircom was of the view that this condition is not necessary, on the basis that the presence of a specified number of Primary Operators is sufficient to determine that there is effective competition at the retail level (i.e. that Criterion 1 suffices on its own). ComReg does not agree. As set out above, ComReg considers that Criterion 1 is, on its own, insufficient to allow for a determination on whether an Exchange Area is competitive. Criterion 3 is aimed at ensuring that, in the absence of regulation in the Relevant WCA Markets, a PO utilising upstream WLA inputs has a sufficient presence, measured in terms of a minimal market share of 10%, such that each Primary Operator is likely to constitute a minimum effective competitive constraint on the market conduct of the others, in the context of it being suggestive of differing competitive conditions.

9.243 ComReg has, nevertheless, partially reworded Criterion 3 to provide further clarity in respect of its application and intent, as described in greater detail at paragraphs 9.304 to 9.308 below.

Criterion 4A: An Exchange Area in which each Alternative Network Operator has the network coverage to, within a sufficiently short period, provide retail broadband services to End Users to more than 30% of the premises in that particular Exchange Area (or currently provides greater than 30% of End Users with retail broadband services), absent regulation in the WCA Market

- 9.244 As summarised above in paragraph 9.83, Eircom considered that, ultimately, only Criterion 4A was relevant and that it should only be necessary for one of the Alternative Network Operators (i.e. either SIRO or Virgin Media, but not both) to have passed 30% of the premises in a particular Exchange Area.
- 9.245 ComReg notes that, in assessing whether an Exchange Area meets Criterion 4A, the wording of Criterion 4A set out in the Consultation suggested that each Alternative Network Operator present at the Exchange Area must, separately, exceed the 30% coverage threshold.
- 9.246 ComReg's reasoning was that an Alternative Network Operator could best act as an effective competitive constraint (and thus be suggestive of differing competitive conditions) in an Exchange Area if it had sufficient network coverage to be attractive to an SP wishing to provide WCA or to provide retail services in an Exchange Area. Accordingly, if no Alternative Network Operator has network coverage of at least 30%, it is less likely that another Access Seeker will enter that Exchange Area by accessing the Alternative Network Operator's network and purchasing WCA services. An Alternative Network Operator must have sufficient coverage at an Exchange Area to be capable of exerting an effective constraint that may, when considered alongside other factors, be suggestive of differences in competitive conditions.
- 9.247 For that reason, ComReg concludes that two Alternative Network Operators having combined network coverage of at least 30% at an Exchange Area will, in certain circumstances,¹⁷⁹⁴ be likely to be a less effective demand/supply-side substitute, or provide less effective indirect competitive constraints, than a single Alternative Network Operator having coverage of at least 30%.
- 9.248 ComReg agrees that, in view of the effectiveness of constraints arising from a single Alternative Network Operator's coverage, where two Alternative Network Operators are present at an Exchange Area, Criterion 4A will be passed if just one of those Alternative Network Operators has coverage of at least 30%, (i.e. either SIRO or Virgin Media, but not necessarily both) and therefore proposes to reword Criterion 4A accordingly.
- 9.249 ComReg has further reworded Criterion 4A to provide additional clarity in respect of its application and intent, as described in greater detail at paragraphs 9.310 and 9.319 below.

¹⁷⁹⁴ For example, consider two Alternative Network Operators each having 15% coverage in the same Exchange Area. Their combined coverage is 30%. These ANOs would be less effective than a single ANO having 30% coverage. ComReg also notes that Access Seekers having to purchase from multiple suppliers of WCA services face higher transaction and other costs (systems integration, etc.), and this may not be justified where the WCA suppliers' coverage is not significant enough.

Criterion 4B: An Exchange Area in which each Alternative Network Operator providing retail telecommunication services to End Users provides greater than 10% of End Users within that particular Exchange Area, absent regulation in the WCA Market

- 9.250 Eircom considered Criterion 4B unnecessary, as the very presence of an Alternative Network Operator will, in its view, allow Access Seekers to either resell a wholesale product or provide services at the retail level, so that the Alternative Network Operator does not also need a defined share of the retail market in that particular Exchange Area.
- 9.251 ComReg disagrees with Eircom's reasoning here, which suggests that no market share threshold is required to determine that a particular Exchange Area is competitive, so long as an Alternative Network Operator with any market share is present and supplying End Users, either directly or indirectly. As set out in the Consultation,¹⁷⁹⁵ ComReg is of the view that, for an Exchange Area to be deemed sufficiently competitive, no single firm should have a market share that would give it the ability and incentive to act independently of rival SPs. Thus, low market shares can be a good proxy for more competitive Exchange Areas.
- 9.252 For a Primary Operator to act as an effective constraint on another SP and, thus, be suggestive of differing competitive conditions, it must have a minimum impact in an area (defined in the first instance by market share), such that it is evident that actual and potential subscribers view it as a sufficiently viable alternative supplier in any switching decision.
- 9.253 ComReg has, nevertheless, partially reworded Criterion 4B to provide further clarity in respect of its application and intent, as described in greater detail at paragraphs 9.314 to 9.318 below.
- 9.254 Eircom did not comment specifically on proposed Criterion 5, which deals with exceptional cases. Eircom did, however, make a number of additional general points on the overall criteria, as outlined in paragraphs 9.84 to 9.88 above. Eircom considered that the difference in the number of Exchange Areas falling within the Urban WCA Market and Regional WCA Market is not reflective of the number of Exchange Areas where competition is sufficiently differentiated, and that the criteria are overly complex and prescriptive in determining which Exchange Areas should be included in the Urban WCA Market.
- 9.255 ComReg considers that the choice and application of the criteria are reasonable and are designed to ensure that any differences between conditions of competition (arising from demand or supply-side substitution, or indirect constraints) across Exchange Areas can be appropriately determined and included in the Urban WCA Market or Regional WCA Market as appropriate. In this way, the criteria are designed to be sufficiently stringent to ensure the appropriate delineation, particularly given the consequences of removing regulation on the overall market.

¹⁷⁹⁵ At paragraphs A5.70 to A5.73 of the Consultation.

- 9.256 Eircom commented on SIRO's rollout to date, noting that SIRO has already rolled out to some Exchange Areas falling within the Regional WCA Market. ComReg notes that SIRO's rollout is considered in both the product and geographic assessment and ComReg has obtained actual and future rollout plans from SIRO (to the extent that they exist). In respect of the specific example given by Eircom and described at paragraph 9.85 above, ComReg notes it applies the geographic criteria in an objective fashion, and notes coverage is just one of the criteria used to identify the conditions of competition obtaining in any Exchange Area. ComReg further notes that, according to its calculations, SIRO network coverage in Carrigaline (corresponding to the Carrigaline Exchange Area) did not exceed 80%, as suggested by Eircom. As the assessment is intended to be forward-looking, ComReg takes account of the future expansion plans (if any) of SPs in its assessment.
- 9.257 Given the need for market reviews to be forward-looking (where possible), and the potential dynamic nature of the Regional WCA Market, given the ongoing rollout of the SIRO and Virgin Media networks and the potential for Access Seekers to increase their WLA based footprints, ComReg intends to reapply Criteria 1 to 5 (noting that, in this Decision, ComReg has clarified and/or reworded some of the Criteria in response to comments made by a number of respondents in their Submissions to the Consultation) during the lifetime of the market review in order to examine the appropriateness of the continued imposition of regulatory obligations (hereafter, the **'Mid-term Assessment'**). This could lead to, for example, the maintenance of existing regulation or its lessening or removal, as appropriate, in those Exchange Areas falling within the Regional WCA Markets. Where regulation is to be lessened or removed, the sunset period discussed in Section 13 of this Decision would be applied.
- 9.258 Accordingly, ComReg intends to collect relevant data over the course of 2018 and 2019 from POs, and issue a Consultation (Mid-term Assessment) within 2 years of the effective date of this Decision, with a view to updating and making a Decision within six months of the Consultation (Mid-term Assessment). ComReg, mindful of its statutory obligations, intends to consult on the changes it proposes to make following the Mid-term Assessment in terms of any Exchange Areas in the Regional WCA Market from which it proposes to remove some or all regulatory obligations.
- 9.259 On a forward-looking basis, and in view of the potential dynamic nature of the geographic aspects of the Relevant WCA Markets, in intending to conduct the Mid-term Assessment, ComReg reserves the right to designate further SPs as Primary Operators, in addition to the five Primary Operators identified in this Decision, should ComReg form the view that any SP meets the conditions for designation as a Primary Operator set out at paragraphs 10.154 and 10.155 of the Consultation, and at footnote 1617 above. The Mid-term Assessment would, in the context of the WCA Product Market definition set out in this Decision, apply each of the criteria set out in this Decision, and consider whether or not conditions of competition in each Exchange Area falling within the Regional WCA Market have materially changed. If so, ComReg will consider whether or not the continuing imposition of regulatory obligations in such areas remains appropriate, as set out in the discussion of remedies at paragraphs 12.6 to 12.12 below.

- 9.260 Eircom referenced ComReg's statement in the Consultation that "*The boundaries of any geographic unit should also be relatively stable and easily understood by SPs*"¹⁷⁹⁶ and considered that criteria based simply on the number of network operators (explained by Eircom as referring to Eircom, SIRO and Virgin Media) or Primary Operators in an Exchange Area would be more appropriate and would allow for ease of analysis and implementation. ComReg notes in this respect that the geographic unit ComReg assesses is the Exchange Area, which is stable; rather, the competitive dynamics within an Exchange Area may change over time, which is a separate issue.
- 9.261 Eircom also pointed to Ofcom's 2014 criteria for identifying distinct WBA geographic markets,¹⁷⁹⁷ in which Ofcom noted that it considered several factors in assessing competitive conditions in each Exchange Area:
- (a) the number of SPs present at the Exchange Area that exert a material competitive constraint (these are referred to as POs);
 - (b) BT's service share in Exchange Areas, measured over time; and
 - (c) the likelihood of further LLU entry in the Exchange Area over and above Communications Providers' ('CPs') committed plans to enter.
- 9.262 As noted in the Consultation and above, ComReg does not consider that SP presence alone is a sufficient criteria for assessing whether conditions of competition between Exchange Areas differ appreciably. ComReg has set out in the preceding paragraphs the reasons why it considers criteria based on the number of market participants alone to be insufficient in determining whether an Exchange Area is competitive or not, noting in particular that this provides insufficient insight into the level of any differences in competitive conditions across Exchange Areas.
- 9.263 In response to Eircom's view (summarised in paragraph 9.88) that there should be a periodic review of the competitive Exchange Areas, ComReg agrees, and it is ComReg's intention to undertake a Mid-term Assessment, using updated data from Primary Operators, as described at paragraph 9.257 above.
- 9.264 In paragraphs 9.89 to 9.91 above, ComReg noted a number of points from Sky in relation to the WCA Geographic Market assessment. ComReg notes Sky's comments and agrees that it will be important to keep the issue of qualifying criteria for Exchange Areas falling in or out of the Urban WCA Market under review. This must, however, also have regard to the need to provide stability and regulatory certainty to all SPs. ComReg considers that the Mid-term Assessment would allow for the dynamic appraisal of any material differences in competitive conditions at Exchange Areas falling within the Regional WCA Market, while continuing to provide stability and regulatory certainty.

¹⁷⁹⁶ See paragraph A5.38.

¹⁷⁹⁷ Ofcom, 2014. *Review of the wholesale broadband access markets*. Available online at https://www.ofcom.org.uk/data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf, page 94. Ofcom has recently consulted on the WBA market in Q2 2017. Available online at https://www.ofcom.org.uk/data/assets/pdf_file/0013/103180/wba-consultation.pdf.

- 9.265 In respect of Sky's contention, set out at paragraph 9.90 above, that the 2013 NGA Decision criteria were inappropriate, ComReg set out criteria to allocate exchange areas to a relevant market in its Decision D04/13,¹⁷⁹⁸ and the rationale was explained further in the 2017 Bundles Consultation. The purpose of the LEA criteria was to provide pricing flexibility in relation to Eircom's retail bundles and retail standalone broadband where justified, based on the status of competition as assessed against the LEA criteria.
- 9.266 ComReg has taken experience of implementing previous price controls into account when considering appropriate measures to address competition problems in the retail and wholesale broadband markets, and considers that the implementation of remedies imposed at a high level in this Decision, and which fall to be further specified in the 2018 Bundles Decision, will ensure that the level of regulation is appropriate.

Disagreement with Proposal for Sub-National Relevant WCA Markets

- 9.267 In paragraphs 9.92 to 9.96, ComReg noted Virgin Media's view that the proposal to define separate Relevant WCA Markets represents a departure from ComReg's previous review of this market.
- 9.268 In Virgin Media's view,¹⁷⁹⁹ the notion of sub-national Relevant WCA Markets is inconsistent with ComReg's proposal to define a national retail broadband market. ComReg notes that it is not required to conclude on the precise scope of the retail market, but carried out this analysis in order to inform its analysis of the WCA markets. In the Consultation, ComReg defined the scope of the Modified Retail Broadband Product Market, but left the question of the possibility of sub-geographic markets open.¹⁸⁰⁰
- 9.269 While ComReg agrees that [§< ██████████] do not appear to vary their wholesale prices for WCA geographically, ComReg does not consider national pricing in and of itself to be the key distinguishing feature as to the geographic scope of market. As outlined in the Consultation¹⁸⁰¹ and, furthermore, as detailed in the Explanatory Note to the 2014 Consultation, assessing the conditions of competition on factors in addition to pricing (for example, the presence or absence of competing infrastructure, or the take-up of wholesale access products in the upstream WLA Market) is also appropriate and, having considered these collectively, it is open to an NRA to justify the definition of sub-national Relevant WCA Markets. ComReg must, therefore, assess factors other than pricing, when determining the extent of relevant geographic markets, with it having carried out such an assessment.
- 9.270 Virgin Media argued that, without controlling for other factors (for example, quality variation is likely to be largely determined by population density), the extent to which competition is driving differences in the quality (or the effective price) of broadband is unclear.

¹⁷⁹⁸ ComReg Decision D04/13, 'Price Regulation of Bundled Offers: Further specification of certain price control obligations in Market 1 and Market 4' dated 8 February 2013

¹⁷⁹⁹ As set out at paragraphs 9.92 to 9.96 above.

¹⁸⁰⁰ See Consultation at paragraph 9.31.

¹⁸⁰¹ See paragraphs A5.5 and A5.6 of the Consultation.

- 9.271 ComReg notes that quality can vary from customer to customer for reasons other than population density, for example, the stability and nature of the underlying infrastructure. For example, two customers with FTTC may, given their respective copper loop distances from the cabinet, and copper quality, experience different levels of service quality in terms of broadband speeds experienced. ComReg also notes that the partition of the Relevant WCA Market into urban and regional areas is implicitly determined by factors such as population or premises density. All other factors being equal, economies of density will incentivise SPs to focus on the delivery of services to more densely-populated areas (measured by population or premises), such that unit costs will likely fall with spatial proximity. Such areas are therefore likely to be more attractive to SPs, with sparsely-populated areas being less attractive.
- 9.272 Given the greater commercial viability of serving densely-populated areas, there is, *a priori*, a greater likelihood of competitive intensity in these areas up to a notional saturation point beyond which the likelihood of market entry by a competing network declines, given incumbency of competing SPs, and finite demand, based on number of premises/customers available. ComReg seeks to model intensity based on objective, transparent and non-discriminatory criteria.
- 9.273 Applying the cumulative criteria, which specify the required number of SPs to be present, distribution of market shares, and so on, reveals a number of Exchange Areas in which competition conditions are likely to be appreciably different compared with other Exchange Areas.
- 9.274 In paragraphs 9.97 to 9.128, ComReg summarised a number of points from Vodafone, incorporating the views of CL. Vodafone disagreed with ComReg's preliminary conclusion that there are two distinct Urban and Regional Relevant WCA Markets, and instead agreed with Compass Lexecon's conclusions on ComReg's geographic market definition.
- 9.275 Vodafone considered, based on its own experience, the Relevant WCA Market to be national in its geographic scope. Vodafone noted that, firstly, Eircom follows a national wholesale pricing approach,¹⁸⁰² and secondly, Vodafone argued that it faces considerable practical challenges in identifying an alternative supplier of WCA products which would allow it to compete with Eircom's retail offers on a national basis.
- 9.276 ComReg's view, having assessed competition at each of the Exchange Areas, is that competitive conditions are appreciably different between certain Exchange Areas, ultimately leading to the definition of two separate WCA Geographic Markets. ComReg notes that Eircom follows a national pricing approach in respect of WCA. However, in the event of Eircom increasing WCA prices (nationally), it is ComReg's view that this would likely lead to differences in competitive outcomes across certain Exchange Areas, as Access Seekers and/or End Users can switch to alternative SPs in certain Exchange Areas identified as falling within the Urban WCA Market. ComReg also notes that Eircom prices its WCA products at a national level in the presence of, and following obligations arising from, regulation. Accordingly, Eircom's national pricing practices in respect of WCA may reflect its response to its regulatory obligations, rather than reflecting geographic competitive conditions.

¹⁸⁰² ComReg notes that this is in the presence of regulation.

- 9.277 In response to Vodafone's point that it faces considerable practical challenges in identifying an alternative supplier of WCA products, ComReg considers that Vodafone appears to have sufficient capacity to find an alternative supplier of WCA from either BT or using its own WLA inputs, noting that it purchases WLA inputs from SIRO and Eircom.
- 9.278 ComReg responds below to the points raised by CL in relation to the WCA Geographic Market assessment.

Response to Compass Lexecon Report – Conclusions on ComReg's WCA Geographic Market

- 9.279 As noted in paragraph 9.100 above, CL considered that ComReg's proposed five criteria are likely to overestimate, for a number of reasons, the degree of competition in the Urban WCA Exchange Areas. ComReg considers CL's assessment of each criterion in turn below.

CL's Assessment of ComReg's Criterion 1

ComReg's proposal to treat all Primary Operators as equivalent

- 9.280 CL refers to the EC's Notice on Market Definition noting that, in its view, existing, potential and indirect competitors cannot *a priori* be considered equivalent – a position which it considers is reflected in ComReg's analysis of SIRO, which, in its view, does not impose a sufficiently effective constraint on Eircom in the Relevant WCA Market over the medium term. CL therefore considers that ComReg's application of the geographic criteria overestimates the strength of competition proposed by ComReg in the Consultation. CL also suggests that there is a lack of clarity surrounding the criteria for including Virgin Media and Vodafone in the market by virtue of indirect competition.
- 9.281 In response to CL's consideration that ComReg has not adequately justified its proposal to treat Primary Operators as equivalent, it is not the case that ComReg considers all Primary Operators to be equivalent, nor did ComReg make any such explicit proposal in the Consultation. This is CL's own interpretation, as set out at paragraph 3.11 of the Compass Lexecon Report, which does not reference any statement in this regard in the Consultation. ComReg's inclusion of the respective Primary Operators has regard to the analysis conducted in Section 10 and Appendix 5 of the Consultation,¹⁸⁰³ in which ComReg set out its preliminary conclusions on the WCA Product and Geographic Market definitions.
- 9.282 ComReg's assessment of Primary Operators included an analysis of the continuum of competitive constraints provided by demand-side substitution, supply-side substitution, and indirect constraints, having regard to current and planned network rollout of SPs and the geographic coverage of their networks, absent regulation in the Relevant WCA Market (i.e. the Modified Greenfield Approach). This assessment recognises that some SPs can offer retail and/or WCA services (directly or indirectly) in certain geographic areas only in the absence of regulation in the Relevant WCA Market. Indeed, this is reflected in the granular approach that ComReg has taken in assessing the scope of the Relevant WCA Markets, with coverage explicitly considered in this regard.

¹⁸⁰³ See paragraphs 10.10 to 10.178 and A5.55 to A5.80 of the Consultation.

9.283 In respect of SIRO, ComReg noted that it may not act as a sufficiently effective substitution possibility in the medium term, but that, on a forward-looking basis, and in the light of its network rollout plans, the hypothetical provision by SIRO of WCA products would be likely to offer an effective supply-side substitution option in those areas where it has a network presence.¹⁸⁰⁴ SIRO is currently present at [REDACTED]¹⁸⁰⁵ Exchange Areas, approximately [REDACTED]¹⁸⁰⁶ of the total number of Exchange Areas. The following table sets out the number of Exchange Areas where SIRO is present, and passes the Criterion 4A coverage threshold.

Table 28: SIRO presence and coverage at Exchange Areas [REDACTED]

9.284 ComReg considers that, from a supply-side substitution perspective, SIRO could enter the WCA market within a reasonable time period without incurring undue costs. Noting that WCA can be more readily taken up by SPs relative to WLA, given that fewer interconnect points are required, ComReg further considers that, over the short to medium term, hypothetical SIRO WCA products should be included in the Relevant WCA Market. The impact of SIRO on competition is then accounted for in the SMP assessment in Section 10.

9.285 ComReg's geographic assessment of the Relevant WCA Markets recognises that the constraint presented by SIRO is likely to be geographically limited to those Exchange Areas where its network is present or is likely to be present within the short to medium term. SIRO is included as a Primary Operator, given its capacity to act as a supply-side substitute on a forward-looking basis, based on its current and planned network rollout¹⁸⁰⁷ and potential to offer WCA services over the lifetime of the market review.

¹⁸⁰⁴ See paragraphs 10.54 and 10.74 of the Consultation.

¹⁸⁰⁵ Less than 60.

¹⁸⁰⁶ Less than 40%.

¹⁸⁰⁷ As set out in network rollout plans provided by SIRO to ComReg which specify rollout projections, by both date and location.

9.286 With regard to the inclusion of Virgin Media as a Primary Operator, ComReg noted¹⁸⁰⁸ in the Consultation that it is ‘*finely balanced*’ whether retail services provided over a CATV network can exert a sufficiently immediate and effective indirect constraint to warrant inclusion in the WCA Product Market. However, ComReg also acknowledged that Virgin Media has a significant regional presence and sizable retail market share in certain urban areas¹⁸⁰⁹ and therefore likely imposes an indirect constraint on the Relevant WCA Market in those areas. The self-supply of CATV-based retail broadband products is accordingly included in the WCA Product Market definition only in areas where Virgin Media’s CATV network is present, as accounted for in the context of ComReg’s geographic market definition, based on the application of Criteria 1 to 5. ComReg’s geographic assessment (as set out in Appendix 5 of the Consultation) includes Virgin Media as a Primary Operator on the basis of its effect as an indirect constraint in certain geographic areas.

9.287 ComReg has designated Vodafone as a Primary Operator for the reasons set out at Appendix 5 of the Consultation – that it:

“...manages a network which is capable (or which ComReg considers is prospectively capable within a reasonable timeframe and without incurring significant sunk costs) of providing WCA and/or retail broadband services using its own network inputs or inputs procured via the WLA Market”.

9.288 Aside from purchasing WLA services, Vodafone purchases a small and declining volume of CG Bitstream from BT (based on LLU). Vodafone uses these services to self-supply retail broadband products to its residential and business customers and, where Vodafone does not purchase WLA-based services, it uses WCA-based services provided by Eircom and BT, to ensure it has a nationwide retail broadband (and other services) offering.¹⁸¹⁰ ComReg included Vodafone as a Primary Operator, having regard to its significant WLA-based footprint and its ability to offer retail services absent regulation in the Relevant WCA Market to a significant number of consumers.¹⁸¹¹

¹⁸⁰⁸ See paragraph 10.107 of the Consultation.

¹⁸⁰⁹ See paragraph 10.107 of the Consultation in addition to Section 9 and Appendix 5 of the Consultation.

¹⁸¹⁰ ComReg notes that, in the context of the Modified Greenfield Approach, Eircom would likely otherwise be absent from this market.

¹⁸¹¹ Vodafone’s coverage based on its investment in WLA services extends to [redacted] premises.

ComReg's proposal equates unbundling of NGA or CGA to unbundling of NGA and CGA

- 9.289 CL has also expressed concern¹⁸¹² with ComReg's geographic analysis as, in its view, ComReg appears to assess whether unbundling has taken place for either CGA or NGA rather than for both CGA and NGA. In this respect CL refers to Vodafone's case in which it may supply NGA based on WLA, but CGA based on WCA. It notes that ComReg appears to assume that the presence of Vodafone unbundling NGA at an Exchange Area will constrain Eircom in its supply of CGA to Vodafone at the same Exchange Area and further notes that, in its view, this cannot be the case as it would put WLA and WCA in the same market (i.e. if Vodafone were to start self-supplying CGA based on WLA).
- 9.290 CL also stated that a finding of chain substitution between retail CGA and retail NGA does not imply that a CG-based WCA monopolist would not be able to profitably increase its prices. CL considers that this is another reason for ComReg overestimating the strength of competition in the Urban WCA Market.
- 9.291 ComReg reiterates that, based on its analysis, it is of the view that WCA and WLA form separate relevant Product Markets which are characterised, *inter alia*, by differing levels of control and investment required for interconnection on the part of Access Seekers.
- 9.292 For instance, in principle, Vodafone can self-supply WCA based on WLA VUA. It could also, in principle, procure CG WCA from BT. Vodafone can also supply NG retail services based on WLA based VUA supplied by Eircom or SIRO, instead of CG retail based on Bitstream supplied by Eircom or BT (although the latter scenario is only possible where a line is enabled for VUA).
- 9.293 While ComReg's WCA Product Market definition concludes that CG and NG-based WCA services fall within the same market, the WCA Geographic Market assessment acknowledge differences in the investment and network rollout strategies of those SPs who purchase WLA-based services from Eircom (or indeed from BT or self-supplying based on WLA). ComReg's WCA Geographic Market assessment considers network investments required for purchasing CGA and NGA services separately,¹⁸¹³ recognising that the facility to purchase NG-based WLA services does not imply an ability to purchase CG-based WLA services, and vice-versa.

¹⁸¹² As set out at paragraphs 9.106 to 9.109 above.

¹⁸¹³ For example, at Exchange A, Service Provider 1 may supply CGA-based WCA services to existing customers through its upstream investment in LLU (Relevant WLA Market) (or by purchasing LLU-based Bitstream from another SP). Service Provider 1 may use NGA-based Bitstream services (whether self-supplied using WLA, or purchased from another SP such as BT, SIRO etc.) to serve its existing NGA WCA customers (i.e. resale of another Service Provider's WCA services). Absent regulation in the Relevant WCA Markets, Service Provider 1 can continue to provide CGA-based WCA services by virtue of its investments in the Relevant WLA Market, but will not be in a position to rely on a regulated input for its NGA-based services. Service Provider 1 may seek to supply NGA-based WCA services on a commercial basis (i.e. agree commercial terms with the former SMP SP (Eircom in this case)), contract with an alternative supplier for NGA-based services, make investments in NGA-based WLA services (i.e. VUA-based services), or rollout its own NGA-based network. Furthermore, Service Provider 1 can invest in the provision of WCA themselves, or purchase inputs from other SPs who have invested in WLA service provision.

9.294 ComReg assessed indirect constraints in the Relevant WCA Market in paragraphs 10.75 to 10.124 of the Consultation and has responded to points raised by CL above in relation to indirect constraints in paragraphs 9.175 to 9.220.

Ownership of Primary Operators

9.295 The Compass Lexecon Report notes that Vodafone is a partner in the 50:50 SIRO Joint Venture with ESB Networks. ComReg's assessment of SIRO and Vodafone's presence at a particular Exchange Area recognises that Vodafone purchases services from SIRO in the Relevant WLA Market to self-supply retail broadband products. CL queries whether this ownership relationship may lead to the overestimation of the strength of competition.

9.296 For CL's hypothesis to be valid, the competitive constraints imposed by Vodafone and/or SIRO must be less sufficient than a counterfactual in which they have no shared ownership interests. This requires either SIRO or Vodafone (or both) to alter their market behaviour to become less effective constraints (arising from supply-side substitution in the case of SIRO, and indirect constraints in the case of Vodafone) than would otherwise be the case. For instance, having decided to offer WCA, SIRO could refuse to supply WCA to a competitor of Vodafone in a particular Exchange Area.

9.297 ComReg notes that SIRO's network is limited in size at present and its network rollout plan to the end of 2018 includes [redacted] premises. This compares to actual rollout figures as of end 2017 of 120,000 premises. ComReg expects Vodafone to purchase services from SIRO across its network as the rollout advances. SIRO also supplies WLA-based services to a number of SPs, including Digiweb and BT Ireland, on an open, commercial, and non-discriminatory basis.¹⁸¹⁴ As such, SIRO's market activity to date suggests that it operates independently of its two owners in its provision of services to Access Seekers. ComReg also notes that Vodafone currently buys WLA-based services from Eircom and a small and declining volume of CG WCA-based services from BT Ireland (as well as NG/CG WCA from Eircom in the presence of regulation). Given that SIRO is not active on the WCA Market, ComReg can only extrapolate from its behaviour on the WLA Market, where it is active. SIRO's commercial practice to date appears to indicate that it conducts itself independently of Vodafone on the WLA Market. ComReg therefore lacks grounds to conclude that, were SIRO to commence offering services on the WCA Market, its commercial decisions would be influenced by the impacts its market conduct would likely have on Vodafone.

9.298 In the WCA Geographic Market assessment, in a particular Exchange Area, where SIRO supplies WLA-based services to Vodafone, these services can exist absent regulation in the Relevant WCA Markets.

¹⁸¹⁴ As set out at paragraph 11 of the parties' 2014 merger notification to the European Commission, 'Case No COMP/M.7307 - ELECTRICITY SUPPLY BOARD/ VODAFONE IRELAND/ JV. REGULATION (EC) No 139/2004 MERGER PROCEDURE Article 6(1)(b) NON-OPPOSITION.' Available online at http://ec.europa.eu/competition/mergers/cases/decisions/m7307_20141024_20310_4000385_EN.pdf.

9.299 SIRO's network presence in an Exchange Area is recognised in the WCA Geographic Market assessment; however, given that it does not currently supply its own WCA-based Bitstream service or retail broadband service, its inclusion in an Exchange Area (absent any supply to another Service Provider) will not likely, within the short to medium term, materially change the conditions of competition in the Exchange Area (criteria 2 to 5 remain unchanged following the inclusion of SIRO's hypothetical WCA products, unless it commences supplying another Service Provider).

Assessment of ComReg's Criterion 2

- 9.300 CL queries ComReg's assumption that, absent regulation in the WCA Markets, third party retail service provided using Eircom's WCA services would revert exclusively to Eircom. It notes that this may overstate Eircom's market share under the assumed withdrawal of WCA supply, as other Service Providers unaffected by this withdrawal may win a share of the affected users. ComReg's WCA Geographic Market assessment is undertaken absent regulation in the Relevant WCA Market, in accordance with the Modified Greenfield Approach. As part of this assessment, ComReg must assess SP market shares in a hypothetical scenario where Eircom is no longer obliged to supply WCA services to other SPs, but can continue to supply its own downstream retail arm, and must continue to supply upstream WLA inputs to other SPs.
- 9.301 ComReg's assessment must therefore consider how to treat the downstream customers of SPs purchasing WCA in a scenario where Eircom withdraws WCA services within a short period of time following de-regulation. The most immediate guaranteed source of supply for these retail customers is to purchase services directly from Eircom. ComReg also notes that, in reverting to Eircom, such retail customers would also likely face minimal barriers to switching (whether in terms of loss of temporary loss of service, or the need to change modems etc.) as the service would effectively remain on Eircom's network. It is on this basis that, absent regulation, ComReg reverts WCA-based customers to being Eircom customers directly. This approach raises Eircom's market share in the relevant Exchange Area, increasing the likelihood of failing Criterion 2.¹⁸¹⁵
- 9.302 For the avoidance of doubt, ComReg recognises that some retail customers would likely switch to SPs who do not require/use Eircom WCA services. However, ComReg notes that, as set out below, the data suggest that over the period Q4 2016 to Q4 2017, the rate of growth in broadband subscriber numbers on FTTx platforms has tended to outstrip the growth rate on CATV platforms, with FTTx subscriptions growing by 21.3% and CATV subscriptions growing by 2.4%. Moreover, the coverage of CATV and WLA-based platforms tends to predominate in more urban areas, which implies that switching to these platforms is a much greater likelihood in these areas. ComReg notes that, nationally, there were 278,704 wholesale Bitstream (CG and NG) subscribers (as at Q4 2017). [redacted]¹⁸¹⁶ fall into the Urban WCA Market while [redacted]¹⁸¹⁷ fall into the Regional WCA Market.

¹⁸¹⁵ An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users within that particular Exchange Area, absent regulation in the Relevant WCA Market.

¹⁸¹⁶ Less than 80,000.

¹⁸¹⁷ 200,000 to 220,000.

9.303 CL further notes that the basis for ComReg's requirement that Eircom's market share be less than 50% is not clear and has therefore questioned its appropriateness. ComReg's decision to include a 50% market share threshold in Criterion 2 is based on competition law precedent, whereby a firm which has a market share of 50% or more faces a '*rebuttable presumption of dominance*', whereby the SP is presumed to enjoy a position of SMP.¹⁸¹⁸ Market shares do not in themselves conclusively indicate the presence of SMP, but do indicate the level of, and potential differences in, conditions of competition in the Exchange Area. ComReg uses a number of cumulative criteria in its WCA Geographic Market assessment to ensure its assessment takes account of the relativity of Service Provider market shares, the number of network operators and network rollout/coverage, on a forward-looking basis. ComReg does not therefore accept CL's view that its rationale for the choice of this 50% market share criterion is unclear.

Assessment of ComReg's Criterion 3

9.304 As noted in paragraphs 9.113 to 9.116 above, CL questioned the clarity of ComReg's Criterion 3 as, in its view, it seems to suggest that one WLA-based Primary Operator could have a very low market share as long as another WLA-based Primary Operator has a sufficiently high market share. Furthermore, it has questioned the basis for the choice of the 10% market share threshold and sought further clarity.

9.305 Criterion 3 relates to the presence of WLA-based Primary Operators in an Exchange Area in terms of the percentage of End Users they serve, as measured in market shares. It is designed to account for differing competitive conditions between Exchange Areas arising from a WLA-based Primary Operator (or Primary Operators). ComReg considers that the 10% market share requirement, which can be met either by the market share of a single Primary Operator using WLA inputs, or by the sum of the market shares of a number of Primary Operators using WLA inputs, captures the ability of Primary Operators making use of WLA inputs to act as effective demand-side substitutes as an Exchange Area given that, by using WLA inputs, such Primary Operators typically have 100% coverage in the Exchange Area.

9.306 ComReg has stipulated market share criteria for Eircom, other Primary Operators, and (where present) Alternative Network Operators at an Exchange Area. Taken together, these market share criteria are partially indicative (together with the other criteria) of differences in competitive conditions between Exchange Areas. ComReg therefore identified that the 10% market share threshold for Primary Operators using WLA inputs could be reached either singly or collectively, on the grounds that for a Primary Operator to act as an effective constraint on another SP (and contribute to differing competitive conditions) it must have a minimum presence in an area, such that potential subscribers view it as a sufficiently viable alternative supplier in any switching decision.

¹⁸¹⁸ For example, see *Case C-62/86 AKZO Chemie [1991] ECRI-3359*, interpreting *Case 85/76 Hoffmann-La Roche & Co AG v Commission [1979] ECR 461*.

- 9.307 ComReg has taken the opportunity to clarify in the wording of Criterion 3 to note that it refers to the provision of retail broadband services directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. For example, the provision by BT of WCA services is indirect provision which falls within Criterion 3. Otherwise, depending on Exchange Area characteristics, the Criteria could risk failing to account for BT's presence.
- 9.308 ComReg agrees with CL that the reference to "one" in "one or all" is redundant, and therefore replaces it with "any".

Assessment of ComReg's Criteria 4A and 4B

- 9.309 CL has raised concerns that ComReg does not explain the basis for the 30% threshold associated with Criterion 4A and noted that it is not clear why as little as 30% may be sufficient, comparing it to Ofcom's approach in 2014.
- 9.310 CL notes that Criteria 4A and 4B apply to each Alternative Network Operator separately, as each Alternative Network Operator builds its own (FTTx or CATV) network and each therefore may have different network coverage in an Exchange Area. ComReg's rationale for including Criteria 4A and 4B is similar to the rationale adopted for Criterion 3 – each Alternative Network Operator must have a minimum network presence and market share to suggest the presence of differing competitive conditions between Exchange Areas, absent regulation in the Relevant WCA Market.
- 9.311 However, where two Alternative Network Operators are present at an Exchange Area, it will suffice for Criterion 4A to pass if just one has coverage within the Exchange Area of at least 30%.
- 9.312 ComReg's choices of the 10% market share and 30% coverage threshold requirements have regard, respectively, to, firstly, ensuring that a sufficient degree of competition exists within an area to be suggestive of potentially differing competitive conditions, and, secondly, to recognising that, for an Alternative Network Operator to act as an effective competitive constraint in an Exchange Area (in the context of being suggestive of differing competitive conditions), it must have a network that has a minimum coverage within the Exchange Area. ComReg has selected these thresholds bearing in mind factors such as exchange sizes. ComReg does not consider that the 65% network overlap requirement set out by Ofcom for the UK is appropriate to an Irish context, given that the average competitive exchange in the UK serves approximately 7,000 premises,¹⁸¹⁹ compared to a figure of 1,600 premises on average in Ireland.
- 9.313 Virgin Media's network is well established in urban areas and it has an average network coverage of [3< ██████████]¹⁸²⁰ in those Exchange Areas where it operates. Conversely, the SIRO network is in its early stages of rollout and has an average network coverage of [3< ██████████]¹⁸²¹ in those Exchange Areas where it operates.

¹⁸¹⁹ As set out at paragraph 5.21 of Ofcom's 2017 *Wholesale Broadband Access Market Review*, available online at https://www.ofcom.org.uk/data/assets/pdf_file/0013/103180/wba-consultation.pdf.

¹⁸²⁰ Between 60% and 70%.

¹⁸²¹ Less than 50%.

- 9.314 Regarding Criterion 4B, CL noted that the rationale for requiring each and every Alternative Network Operator to have a market share of 10% is not clear, particularly given that WLA-based SPs are only required to have a 10% market share in aggregate under Criterion 3.
- 9.315 It should first be noted that Criterion 4B only applies to ANOs which provide retail broadband services directly to End Users, or indirectly to End Users via a WCA service that is sold to other retail SPs. Virgin Media provides retail broadband to End Users. However, SIRO is active in the provision of WLA, but not WCA. Accordingly, SIRO does not provide retail broadband services indirectly by means of WCA. For these reasons, Criterion 4B currently only applies to Virgin Media. Thus, Criterion 4B can currently only be satisfied where Virgin Media has a retail market share of at least 10%. On a forward-looking basis, Criterion 4B would also apply to SIRO (or any other SP which ComReg designated as an Alternative Network Operator), if such an ANO provided WCA or retail broadband services.
- 9.316 The rationale at Criterion 4B for requiring ANOs to have a 10% market share is that, as set out in Criterion 4A, an ANO may not have ubiquitous coverage in an Exchange Area, and ComReg must therefore assess whether products with a limited geographic footprint can be expected to result in competitive conditions that are “*appreciably different*” to what is observed outside of their footprint, as set out by CL at paragraph 2.2 of its Report. In this respect, ComReg distinguishes its approaches to WCA and WLA on the basis that WLA requires an Access Seeker to invest in interconnection at potentially many more and deeper points of interconnection and that, accordingly, the costs associated with purchasing from multiple suppliers of WLA¹⁸²² are likely to be much higher than purchasing from multiple suppliers of WCA, due to the difference in the number of interconnection points.
- 9.317 On a forward-looking basis, were an additional ANO to commence offering WCA or retail broadband services, ComReg recognises that, where two ANOs are present at an Exchange Area, it may not be appropriate to require each to separately have a market share of at least 10% in order for this criterion to be met. Accordingly, ComReg has reworded Criterion 4B to ensure consistency with Criterion 3, and also take a more forward-looking perspective which accounts for the assignment of market shares in the hypothetical scenario where SIRO were to enter the Relevant WCA Market. ComReg therefore clarifies that, where two Alternative Network Operators are present at an Exchange Area, it will suffice for Criterion 4B to pass if the (direct and indirect, consistent with Criterion 3) retail market shares of the two Alternative Network Operators sum to at least 10% (i.e. Criterion 4B would be met if SIRO, having entered the Relevant WCA Market, had an indirect retail market share of 6% and Virgin Media had a direct retail market share of 5%, or if SIRO had an indirect retail market share of 1% and Virgin Media had a direct retail market share of 11%).

¹⁸²² As described in greater detail at footnote 506 of the Consultation.

- 9.318 In practice, ComReg has identified that 154 Exchange Areas fall within the Urban WCA Market. Both SIRO and Virgin Media are present at 26 of the 154 Exchange Areas. In none of these Exchange Areas is Criterion 4B passed on the basis of SIRO and Virgin Media both having market shares of less than 10%, and therefore failing Criterion 4B on an individual basis, but passing when their market shares are amalgamated, and meet the 10% market share threshold.
- 9.319 CL is mistaken when it suggests that an Alternative Network Operator with a very low network coverage, but higher retail market share (based on the use of another type of access (e.g. from Eircom)) can satisfy Criterion 4A. The assessment of Criterion 4A is undertaken for each Primary Operator, absent regulation in the Relevant WCA Market. Each Alternative Network Operator's (i.e. SIRO and Virgin Media) network coverage share is based on their own network assets, and not any services purchased from another SP. Similarly, each Alternative Network Operator's market share is based on its own network, and not on using the network assets of another SP.

Assessment of ComReg's Criterion 5

- 9.320 Responding to ComReg's Criterion 5, CL expressed concern with allowing for such a margin of flexibility but noted that ComReg's approach seems consistent with its intended stability of market boundaries. It noted that ComReg did not discuss the extent to which the exception under Criterion 5 impacts its findings.
- 9.321 Criterion 5 allows for two exceptional additions, where an Exchange Area fails to meet one of the relevant criteria, but by a small margin. The purpose of this criterion is to allow for small changes in market shares or network coverage that may take place during the lifetime of the market review, and to ensure the boundaries of the Relevant WCA Markets are sufficiently stable during that period, to give certainty to market players.
- 9.322 CL also sought clarity on the exception afforded where an Alternative Network Operator has a market share of at least 60%, noting that this exception seems to assume that the relative strength of Virgin Media can compensate for the weakness of other SPs. A total of [§< ■] Exchange Areas are given this exception, covering [§< ■]¹⁸²³ premises and [§< ■]¹⁸²⁴ WCA subscriptions.
- 9.323 The second part of Criterion 5 allows for any one of Criteria 2 to 4 to be deemed met if the Exchange Area fails on only one of those criteria, and if an Alternative Network Operator provides telecommunications services at the retail or wholesale level to at least 60% of End Users at that Exchange Area. CL notes that, given modest SIRO user volumes, this exception would most likely be applicable to Virgin Media. CL noted its concerns that this exception could facilitate removing regulation where it is needed by assuming that "*the relative strength of Virgin can compensate for the weakness of other operators*", based on the assumption that other criteria not being met is indicative of weak competition in an Exchange Area.

¹⁸²³ Less than 120,000 premises.

¹⁸²⁴ Less than 10,000 WCA subscriptions.

- 9.324 ComReg notes that this criterion applies equally to SIRO and Virgin Media in the areas where they have a network presence, although ComReg notes that its capacity to apply Criterion 5 will likely be linked to the accuracy and reliability of network rollout forecasts provided to it by SPs. On a forward-looking basis, SIRO is likely to increase its network presence in Exchange Areas over the lifetime of this market review. Secondly, ComReg notes the rationale for this criterion. The 60% market share threshold applies at the retail or wholesale level in view of the fact that SIRO is not currently present on either the WCA or the retail market (i.e. it is a WLA-only SP), while Virgin Media does not intend to offer a WCA product to other SPs. Moreover, the criterion only applies exceptionally, and on a case-by-case basis where only one other criterion has been failed, as set out in the detailed geographic analysis at Appendix: 10.
- 9.325 Thus, assume Eircom, Virgin Media and a Primary Operator are present on an Exchange Area with market shares of 35%, 60% and 5% respectively. Criteria 1, 2, 4A and 4B are all met, but Criterion 3 fails. Compared to other Exchange Areas, Eircom's market position in this Exchange Area is likely to give rise to differing competitive conditions compared to other Exchange Areas.

Further clarifications: Geographic criteria

- 9.326 In reviewing Respondents' Submissions, ComReg formed the view that it was possible to provide greater clarity and further simplicity in the application of the geographic criteria, in response to concerns that the criteria risked being overly complex and difficult to apply. Accordingly, ComReg has set out a number of clarifications regarding the application of the criteria, as set out below.

Absence of certain Primary Operators allows criteria to be moot

- 9.327 Criterion 3 only applies to POs which make use of third-party upstream WLA inputs, while Criteria 4A and 4B only apply to Alternative Network Operators. For the avoidance of doubt, where no PO which makes use of third-party upstream WLA inputs (assuming that Eircom is present at all Exchange Areas, and self-supplies WLA) is present at an Exchange Area, Criterion 3 is not assessed, and the Exchange Area will be deemed to have passed if it meets Criteria 1, 2, 4A and 4B, or fails one of Criteria 2, 4A or 4B, but qualifies by virtue of the application of the exemptions set out at Criterion 5(i) or 5(ii).
- 9.328 The same principle applies where no Alternative Network Operator is present at an Exchange Area: Criteria 4A and 4B are not assessed, and the Exchange Area will be deemed to have passed if it meets Criteria 1, 2, and 3, or fails one of Criteria 2 or 3, but qualifies by virtue of the application of the exemption set out at Criterion 5(i) (noting that Criterion 5(ii) only applies to Alternative Network Operators).

Avoidance of double-counting

- 9.329 Care must be taken to ensure that double-counting of measures of potential differing competitive conditions is avoided (for example, where services could be assigned to the WCA SP, or to the retail PO that it sells to). For instance, suppose Vodafone purchases WCA from BT. BT is predominantly active at the WCA level, but satisfies Criterion 3 on the basis of indirect retail supply. Vodafone also satisfies Criterion 3 on the basis of direct retail supply. To avoid double-counting, services are assigned to the PO active at the level of the most immediate constraint, in descending order of wholesale demand-side substitution, hypothetical supply-side substitution,¹⁸²⁵ and indirect constraint.
- 9.330 Thus, in the example above, BT offers a direct demand-side substitute WCA product, while Vodafone provides an indirect constraint from the downstream retail market. BT WCA sales to Vodafone are recorded as BT services, as BT offers the more immediate constraint.
- 9.331 Similarly, Vodafone purchases WLA from SIRO. By definition, SIRO's presence as a supply-side substitute in the Relevant WCA Markets is purely hypothetical, as SIRO is only currently present on the WLA Market. These WLA purchases are, for the purpose of the WCA geographic market assessment, recorded as Vodafone lines, as Vodafone is actively present as an indirect constraint, while SIRO is only hypothetically present as a supply-side substitute.

Ensuring consistent logical application of Criteria

- 9.332 ComReg is aware that, in certain limited circumstances, applying Criteria 3, 4A or 4B could cause an Exchange Area which previously met all relevant criteria, to fail following the entry of an additional PO which fails to meet the necessary market share or coverage thresholds. It is counter-intuitive that an Exchange Area exhibiting sufficient differences in competitive conditions to warrant falling into a separate geographic market, would then be deemed to exhibit insufficient differences, due to the entry of an additional PO.
- 9.333 To remedy this limited possibility of an inconsistency, ComReg allows for Criteria 3, 4A or 4B to be assessed on the basis, not of all POs, but of a subset of $(n-1)$ ¹⁸²⁶ POs present at that Exchange Area, if, and only if, the following cumulative circumstances apply when assessing all POs present:
- (a) At least four POs are present at the Exchange Area; and
 - (b) The Exchange Area fails one of Criteria 3, 4A or 4B; and
 - (c) The Exchange Area does not meet either of the Criterion 5 exemptions.
- 9.334 In such instances, an Exchange Area will be deemed to pass the relevant failing criterion (3, 4A or 4B), assessing a subset of POs present.

¹⁸²⁵ To the extent that supply-side substitution is hypothetical, it is not therefore possible to assign serves to POs designated as supply-side substitutes. While ComReg notes that, based on a forward-looking perspective, SIRO could hypothetically enter the Relevant WCA Market, if it did so, its sales of WCA would fall to be considered in the context of demand-side substitution.

¹⁸²⁶ That is, on the basis of any 3 POs, where 4 POs are present, or on the basis of any 4 POs, where 5 POs are present. It should be noted that, by construction, the assessment of Criteria 3, 4A and 4B on the basis of a subset cannot lead to the relevant Criterion passing, where Eircom is the 'excluded' SP.

Modified and/or clarified geographic criteria

9.335 ComReg accordingly applies the following geographic criteria in determining whether or not there are sufficient differences in competitive conditions between Exchange Areas to warrant the delineation of separate geographic markets. These criteria are applied in Appendix: 10 of this Decision, and the resultant list of Exchange Areas comprising the Urban WCA Market and the Regional WCA Market respectively is set out at Appendix: 11. ComReg's view of the cumulative criteria required for this assessment – in the absence of regulation in the Relevant WCA Market - is as follows:

Table 29: Criteria for Assessing Competitive Conditions in Exchange Areas

Absent regulation in the WCA Market:
Criterion 1: An Exchange Area in which at least three Primary Operators would be capable, within a sufficiently short period, of providing WCA, WLA, or broadband services at the retail level to End Users; AND
Criterion 2: An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users; AND
Criterion 3: An Exchange Area where any Primary Operator(s) using third-party WLA inputs, if present, collectively provide(s) ¹⁸²⁷ retail broadband services to at least 10% of End Users; AND
Criterion 4A: An Exchange Area in which an Alternative Network Operator, if present provides, ¹⁸²⁸ or could provide, within a sufficiently short period, retail broadband services to End Users to at least 30% of the premises in that particular Exchange Area; AND
Criterion 4B: An Exchange Area in which any Alternative Network Operator(s), if present, collectively provide(s) ¹⁸²⁹ retail broadband services to at least 10% of End Users; AND
Criterion 5: Exceptionally, on a case-by-case basis, where an Exchange Area:

¹⁸²⁷ In this instance, 'collectively provides' means the provision of retail broadband services by one or more Primary Operators using WLA inputs, directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. The 10% market share figure is satisfied by a single Primary Operator using WLA inputs, or by the sum of the market shares of all Primary Operators using WLA inputs.

¹⁸²⁸ In this instance, 'provides' means the provision of retail broadband services directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. Thus, the 30% coverage figure is satisfied by a single ANO, even if two ANOs are present, but is not satisfied by the two ANOs having coverage which sums to at least 30%, where each individual ANO's coverage is less than 30%.

¹⁸²⁹ In this instance, 'collectively provides' means the provision of retail broadband services by one or more Alternative Network Operators, directly to End Users and/or indirectly to End Users via WCA service that is sold to other retail SPs. Thus, the 10% market share figure may be satisfied by a single Alternative Network Operator, or by the sum of the market shares of all Alternative Network Operators.

(i) fails no more than one of Criteria (2) to (4B) above, and fails the Criterion by a small margin (i.e. less than 10% of the percentage specified); ¹⁸³⁰ OR
(ii) fails no more than one of Criteria (2) to (4B) above, and where an Alternative Network Operator provides broadband services, either at the wholesale level or at the retail level, which equates to at least 60% of End Users, that Exchange Area will be deemed to have satisfied the relevant Criterion.

9.336 ComReg has updated the assessment of the WCA geographic market, as outlined in Table 30 below. A full outline of the methodology and application of the criteria is presented in Appendix: 10 of this Decision. ComReg has also assessed competitive conditions during the period between that set out in the Consultation in 2016 and the date of this Decision, with this trend outlined in Appendix: 10. The identity of the Exchange Areas falling into the Urban WCA Market and the Regional WA Market are set out at Appendix: 11.¹⁸³¹

Table 30: Application of Criteria for Assessing Competitive Conditions by Geographic Area – Q4 2017

	No. of Exchange Areas	Premises in Exchange Areas	Subscriptions in Exchange Areas
Urban WCA Market	154	1,061,911	809,006
Regional WCA Market	1,049	1,143,977	529,769

ComReg's Position

9.337 ComReg has given careful consideration to the appropriate definition of the Relevant WCA Market(s), in light of the proposals set out in the Consultation, and Respondents' Submissions, which frequently addressed ComReg's proposal in some depth and detail.

9.338 In respect of ComReg's proposals concerning the WCA Product Market definition, Respondents made the following points in their Submissions, which have been addressed in detail above:

- (a) The Product Market should be delineated according to (CG and NG) technology;

¹⁸³⁰ For example, the requirement for Eircom's market share to be less than 50% (Criterion 2) could be amended to 55% under Criterion 5 (i.e. 110% of the requirement set out in Criterion 2).

¹⁸³¹ ComReg notes that, while there are 145 Exchange Areas in the Urban WCA Market, an additional 9 exchanges/nodes are entirely contained within the 145 Exchange Areas, and it is appropriate to indicate that these 9 exchanges/nodes are part of the Urban WCA Market footprint. In some cases these exchanges/nodes do not have any active lines being served. These exchanges/nodes are: KSH, BOM, SBK, KMO, LPT, MNS, CWJ, CWD, MMT. For example, exchange BOM is contained in the AUV Exchange Area. Hence, the total number of Exchange Areas/exchanges in the Urban WCA Market footprint is 154. The status of these exchanges/nodes (plus 10 others that are in the Regional WCA Market) was clarified by email from Eircom on 21 July 2017.

- (b) The Critical Loss Test estimates were not robust;
- (c) The substitutability and constraint assessment was flawed; and
- (d) CATV-based self-supply should not be included in the Urban WCA Market.

9.339 ComReg has carefully considered Respondents' Submissions in these regards, and has addressed each of the comments, together with other comments made in Submissions, at paragraphs 9.130 to 9.230 above. ComReg has generally disagreed with the criticisms set out in respect of its approach to defining the WCA Product Market for the reasons set out above and considers that its analysis is robust in respect of both data and methodology.

9.340 In respect of ComReg's proposals concerning the WCA geographic market definition, Respondents made the following points in their Submissions, which have also been addressed in detail above:

- (a) The Criteria used by ComReg for determining whether Exchange Areas fall into the Regional WCA Market or the Urban WCA Market are flawed; and
- (b) There are insufficient grounds for concluding that sub-national geographic markets exist.

9.341 ComReg has carefully considered Respondents' Submissions in these regards, and has addressed each of the comments, together with other comments made in Submissions, at paragraphs 9.231 to 9.325 above. ComReg has generally disagreed with the criticisms set out in respect of its approach to defining the WCA geographic markets for the reasons set out above and considers that its analysis is robust in respect of both data and methodology. However, ComReg has taken on board Respondents' comments in respect of each of the five geographic criteria, and has added a number of clarifications to the interpretation and the implementation of the Criteria to ensure that they are applied on a logical and consistent basis.

9.342 On a forward-looking basis, ComReg also intends to carry out a Mid-term Assessment, having regard to its objective to carry out market reviews on a forward-looking basis, and to the likely dynamic nature of the Relevant WCA Markets over the lifetime of this Decision.

9.343 Having regard to the analysis in Section 10 of the Consultation and having considered Respondents' views in paragraphs 9.129 to 9.325 above, ComReg has decided to define two separate Relevant WCA Markets.

9.344 ComReg has decided that the WCA Product Market is comprised of:

- (a) WCA-based Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs;
- (b) Self-supply of WCA-based Bitstream by Eircom and BT Ireland¹⁸³²;

¹⁸³² Given that ComReg has defined the Relevant WCA Markets to include self-supply, ComReg has removed explicit references to self-supply within the WCA Decision Instrument (contained at Appendix: 21).

- (c) WCA-based Bitstream products that may hypothetically be offered by SIRO;
- (d) Self-supply of CATV retail broadband products offered by Virgin Media in areas where its network is present; and
- (e) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

9.345 Bitstream-based WCA products hypothetically provided over localised alternative FTTH networks are excluded from the WCA Product Market as there are no WCA products currently being supplied over these networks which could, or could likely, serve as an effective substitute for the WCA offering of a HM supplier.¹⁸³³

9.346 ComReg assessed the WCA Geographic Market according to several criteria, which it considers appropriate for the purposes of assessing any differences in competitive conditions between individual Exchange Areas:¹⁸³⁴

- (a) Geographic differences in entry conditions over time;
- (b) Variation in the number and size of potential competitors;
- (c) Distribution of market shares;
- (d) Evidence of differentiated pricing strategies or marketing; and
- (e) Geographical differences in demand characteristics.

9.347 ComReg defines those SPs that can operate independently of WCA regulation as 'Primary Operators'. Applying these criteria to Exchange Areas, ComReg defines two separate WCA Geographic Markets:

- (a) The 'Urban WCA Market', being those 154 Exchange Areas in which all necessary criteria were met on a cumulative basis. ComReg identified that the following products are available in the Urban WCA Market:
 - (i) WCA-based Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs;
 - (ii) Self-supply of WCA-based Bitstream by Eircom and BT Ireland;
 - (iii) WCA-based Bitstream products that may hypothetically be offered by SIRO;
 - (iv) Self-supply of CATV retail broadband products offered by Virgin Media; and

¹⁸³³ Localised alternative FTTH networks only account for [§< ██████████] FTTH subscriptions as at Q4 2017. Given the small numbers involved, ComReg considers that, even if these networks were included in its analysis, they would not alter ComReg's conclusions in respect of the Relevant WCA Market.

¹⁸³⁴ See paragraphs 10.137 to 10.174 and Appendix 5 of the Consultation.

- (v) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

and

- (b) The 'Regional WCA Market' representing those 1,049 Exchange Areas where the necessary criteria were not cumulatively met. ComReg identified that the following products are available in the Regional WCA Market:
 - (i) WCA-based Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs;
 - (ii) Self-supply of WCA-based Bitstream by Eircom and BT Ireland;
 - (iii) WCA-based Bitstream products that may hypothetically be offered by SIRO; and
 - (iv) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

10 Competition Analysis and Assessment of SMP in the Relevant WCA Markets

Position set out in the Consultation

- 10.1 In Section 5 of this Decision ComReg set out its assessment of competition in the Relevant WLA Market. ComReg now proceeds to analyse the levels of competition in the Relevant WCA Markets, with a view to assessing whether any SP on those markets should be designated with SMP. Before doing so, ComReg briefly summarises the approach it took in the Consultation to assessing competition in the Relevant WCA Markets.¹⁸³⁵
- 10.2 The concept of SMP is defined in the 2018 SMP Guidelines¹⁸³⁶ as a position of economic strength enabling the holder to act, to an appreciable extent, independently of its competitors, customers and consumers. Section 3.1 of the 2018 SMP Guidelines set out a wide range of criteria which may be considered in the context of SMP assessment. As set out in the Consultation¹⁸³⁷ and at paragraph 5.113 above, ComReg took into account only those criteria which it deemed most relevant to the market analysis in question.
- 10.3 Noting a degree of overlap with its analysis of the Relevant WLA Market, the competition assessment in the Consultation examined the following:
- (a) **Existing competition in the Relevant WCA Markets:** including vertical integration, market shares, relative strength of existing competitors, barriers to expansion, economies of scale and scope, indirect constraints, and pricing behaviour;¹⁸³⁸
 - (b) **Potential competition in the Relevant WCA Markets:** including the overall size of the undertaking, an assessment of control of infrastructure not easily duplicated, barriers to entry in the Relevant WCA Markets, as well as the overall strength of potential competitors;¹⁸³⁹ and
 - (c) **Strength of any countervailing buyer power ('CBP'):** the impact of any strong buyers of WCA on the competitive behaviour of WCA providers.¹⁸⁴⁰

¹⁸³⁵ Section 11 of the Consultation.

¹⁸³⁶ See paragraph 52 of the 2018 SMP Guidelines.

¹⁸³⁷ See paragraphs 11.3 and 11.7, and Appendix 11, of the Consultation.

¹⁸³⁸ See paragraphs 11.11 to 11.44 of the Consultation.

¹⁸³⁹ See paragraphs 11.45 to 11.98 of the Consultation.

¹⁸⁴⁰ See paragraphs 11.99 to 11.127 of the Consultation.

Assessment of SMP

Existing Competition in the Relevant WCA Markets

- 10.4 ComReg noted in the Consultation that the “sole merchant market providers”¹⁸⁴¹ in the Relevant WCA Markets were BT Ireland and Eircom. Assuming no regulation in the Relevant WCA Markets (but assuming regulation in the WLA Market), ComReg held the preliminary view that Eircom’s market share in the Regional WCA Market was suggestive (but not determinative) of SMP, but that Eircom likely faced greater constraints in the Urban WCA Market.¹⁸⁴²
- 10.5 ComReg further considered that, absent regulation, the lack of competition in the Regional WCA Market would afford Eircom the ability and incentive to exert its SMP by increasing the prices it charged to Access Seekers for WCA above. Conversely, it was ComReg’s preliminary view that the combination of direct competition (from BT Ireland, and potentially from SIRO) and indirect constraints (from both Virgin Media and Vodafone) faced by Eircom in the Urban WCA Market would likely prevent it from profitably doing so.¹⁸⁴³
- 10.6 ComReg’s analysis suggested that no SP had SMP in the Urban WCA Market. In the Regional WCA Market, Eircom’s persistently high market shares (set out in Table 31 below) and the absence of clear evidence of competition constraining pricing behaviour, suggested that Eircom held SMP.

Table 31: Relevant WCA Market shares, Q1 2016 [REDACTED]

WCA Market	Eircom	Virgin Media	BT Ireland	Vodafone	SIRO
Regional ¹⁸⁴⁴	[REDACTED] ¹⁸⁴⁵	[REDACTED] ¹⁸⁴⁶	[REDACTED] ¹⁸⁴⁷	[REDACTED] ¹⁸⁴⁸	[REDACTED] ¹⁸⁴⁹
Urban WCA	[REDACTED] ¹⁸⁵⁰	[REDACTED] ¹⁸⁵¹	[REDACTED] ¹⁸⁵²	[REDACTED] ¹⁸⁵³	[REDACTED] ¹⁸⁵⁴

¹⁸⁴¹ See paragraph 11.11 of the Consultation.

¹⁸⁴² See paragraphs 11.17 to 11.28 of the Consultation.

¹⁸⁴³ See paragraphs 11.36 to 11.40 of the Consultation.

¹⁸⁴⁴ Market shares hypothetically include Virgin Media’s CATV and SIRO’s FTTH networks.

¹⁸⁴⁵ Eircom’s Market Share was above 80%.

¹⁸⁴⁶ Virgin Media’s Market Share was less than 10%.

¹⁸⁴⁷ BT Ireland’s Market Share was less than 10%.

¹⁸⁴⁸ Vodafone’s Market Share was less than 10%.

¹⁸⁴⁹ SIRO’s Market Share was less than 1%.

¹⁸⁵⁰ Eircom’s Market Share was between 25% and 35%.

¹⁸⁵¹ Virgin Media’s Market Share was between 45% and 55%.

¹⁸⁵² BT Ireland’s Market Share was between 5% and 10%.

¹⁸⁵³ Vodafone’s Market Share was between 5% and 10%.

¹⁸⁵⁴ SIRO’s Market Share was less than 1%.

Potential Competition in the Relevant WCA Markets

- 10.7 In assessing potential competition in the Relevant WCA Markets, ComReg considered barriers to entry and expansion¹⁸⁵⁵ and the likelihood of any potential competition.¹⁸⁵⁶
- 10.8 In the Consultation,¹⁸⁵⁷ ComReg noted that SIRO, while not currently present on the Relevant WCA Markets, likely had the ability to enter and provide WCA services in those geographic areas where it had, or expected to have, a network presence, in circumstances where Eircom were to seek to increase its WCA prices above the competitive level.
- 10.9 SIRO currently provides WLA-based services to Sky, Digiweb and Vodafone, who are present in the downstream retail broadband market.

Barriers to entry and expansion

- 10.10 The factors which ComReg considered under barriers to entry and expansion included the overall size of the undertaking and control of infrastructure that is not easily replicated; sunk costs; economies of scale, scope and density; and vertical integration.

Overall size of the undertaking and control of infrastructure that is not easily replicated

- 10.11 ComReg was of the preliminary view that, in the Regional WCA Market, a new entrant was unlikely to rollout a network across a large geographic area. This was because many Exchange Areas were too remote, or did not serve a sufficiently-sized customer base, to warrant the necessary investments to be made in providing WCA (or retail) services, independently of Eircom, such that it might only be economically feasible for one SP to operate in such areas.¹⁸⁵⁸
- 10.12 ComReg also expressed the view in the Consultation that the timing of the NBP and uncertainty around contract award was unlikely, within the lifetime of this market review, to have a sufficiently material impact on competition within the Regional WCA Market.

Sunk Costs

- 10.13 ComReg's preliminary view was that sunk costs was a relevant factor which would undermine entry and/or expansion in the Regional WCA Market. With respect to the Urban WCA Market, evidence on SPs' own network build, or current and expected use of upstream WLA inputs by SPs (which effectively lowers sunk costs and associated risks) suggested that sunk costs did not seem to be a sufficient factor in undermining entry and/or expansion.

¹⁸⁵⁵ See paragraphs 11.47 to 11.78 of the Consultation.

¹⁸⁵⁶ See paragraphs 11.79 to 11.97 of the Consultation.

¹⁸⁵⁷ See paragraph 11.91 of the Consultation.

¹⁸⁵⁸ See paragraph 11.53 of the Consultation.

Economies of scale, economies of scope and economies of density

10.14 In the Consultation ComReg noted that economies of scale are the cost advantages that firms obtain with increased output, with cost per unit of output decreasing with increasing scale. Economies of scope are factors that make it cheaper to produce a range of products together than to produce each one of them on its own. Economies of density express cost savings resulting from spatial proximity, including population and premises density. ComReg was of the preliminary view in the Consultation¹⁸⁵⁹ that the evidence of differences in economies of scale, scope and density between the Urban WCA Market and Regional WCA Market was indicative of Eircom having SMP in the Regional WCA Market (but not the Urban WCA Market).

Vertical Integration

10.15 ComReg's preliminary view in the Consultation was that Eircom's vertically integrated structure was indicative of a putative SMP position in the Regional WCA Market, as it allowed Eircom to behave, to an appreciable extent, independently of its competitors, customers and consumers.¹⁸⁶⁰

10.16 In contrast, on the Urban WCA Market, ComReg considered that Eircom might, in the presence of WLA regulation and competition from a number of independent networks and SPs using upstream WLA inputs, face lower incentives to behave, to an appreciable extent, independently of its competitors, customers and consumers. Insofar as indirect constraints were concerned, rather than losing one of its own retail customers to another independent network (and the entire loss of profitability from that customer), it might face some incentive to provide wholesale services to SPs (as in this scenario it at least retains profits from wholesale sales).¹⁸⁶¹

Strength of Potential Competitors

10.17 ComReg's preliminary view was that, absent regulation in the Regional WCA Market, it was unlikely that Eircom would be sufficiently constrained by potential competition to prevent it from behaving, to an appreciable extent, independently of competitors, customers and consumers. The options which ComReg considered in assessing the strength of potential entry to the Relevant WCA Markets were building an independent network to offer WCA (including the use of WLA inputs to do so), and adapting an existing network to provide WCA. These were considered as follows.

¹⁸⁵⁹ See paragraphs 11.68 to 11.73 of the Consultation.

¹⁸⁶⁰ See paragraphs 11.75 to 11.76 of the Consultation.

¹⁸⁶¹ See paragraphs 11.77 to 11.78 of the Consultation.

Building an independent network to provide WCA

- 10.18 ComReg noted that some independent network SPs had a presence in the Regional WCA Market. However, their market share and geographic coverage was very limited, and was unlikely to increase significantly over the lifetime of this market review. ComReg's preliminary view was, therefore, that potential competition stemming from entry by means of the construction of an independent network (even in the presence of WLA regulation), including by means of the NBP, was unlikely to occur within the Regional WCA Market over the period of this market review, such that it would act as an effective competitive constraint.¹⁸⁶² As noted in paragraph 10.11, ComReg notes that enet intends offer a wholesale Bitstream service based on aggregating the services of enet, SIRO and Eircom. ComReg does not expect it to impact the competitive dynamics of the Relevant WCA Markets as enet's coverage is limited to a small number of towns (see paragraphs 10.92 and 10.93), making it unlikely to pose a significant competitive constraint on Eircom and BT in the Relevant WCA Market, due to enet's comparatively low coverage levels.
- 10.19 In the Consultation, it was noted that alternative SPs were unlikely to develop extensive network coverage over the period of this market review due to high barriers to entry, such that their presence would constrain the exercise by Eircom of any SMP in the Regional WCA Market.¹⁸⁶³

Adapting an existing network to provide WCA

- 10.20 ComReg was of the preliminary view in the Consultation that, aside from SIRO, it was unlikely that any other SP would adapt an existing network to compete in the Relevant WCA Markets over the time period of the market review, and that this possibility was therefore unlikely to be a factor constraining Eircom's position within the Urban WCA Market.
- 10.21 ComReg considered that, in the Regional WCA Market, there was "*....a limited presence of Alternative Network Operators that are not already providing WCA services.*"¹⁸⁶⁴ Accordingly, ComReg considered that Eircom was unlikely to be constrained by potential competition in the Regional WCA Market.
- 10.22 Overall, ComReg's preliminary view was that, absent regulation in the Regional WCA Market, it was unlikely that Eircom would be sufficiently constrained by potential competition to prevent it from behaving, to an appreciable extent, independently of competitors, customers and consumers.
- 10.23 Regarding the Urban WCA Market, ComReg set out its preliminary view that, in the absence of regulation, potential competition from SIRO would, in combination with existing competition, be likely to constrain Eircom's ability to behave, to an appreciable extent, independently of competitors, customers and consumers.¹⁸⁶⁵

¹⁸⁶² See paragraphs 11.86 and 11.87 of the Consultation.

¹⁸⁶³ See paragraph 11.96 of the Consultation.

¹⁸⁶⁴ See paragraph 11.93 of the Consultation.

¹⁸⁶⁵ See paragraphs 11.47 to 11.97 of the Consultation.

Countervailing Buyer Power

10.24 In assessing evidence of CBP in the Relevant WCA Markets, ComReg considered a number of factors including the size of the buyer and its relative importance to the seller,¹⁸⁶⁶ credible alternative sources of supply,¹⁸⁶⁷ and evidence from SP negotiations of bargaining power.¹⁸⁶⁸

Size of the buyer and its relative importance to the seller

10.25 ComReg's preliminary analysis indicated that, while one Access Seeker accounted for a sizeable proportion of Eircom's WCA sales, the largest purchaser of WCA was Eircom's own retail arm. As with the Relevant WLA Market,¹⁸⁶⁹ Eircom earned most of its WCA revenues from its retail arm. Accordingly, absent regulation, ComReg considered that a "...sizeable portion of retail subscribers of a WCA based Access Seeker would be likely to purchase retail services from Eircom".¹⁸⁷⁰ However, ComReg noted that, in the Urban WCA Market, this scenario was likely to be less pronounced, given the greater availability of retail broadband services from alternative suppliers. This was because, absent regulation, a number of retail subscribers of Access Seekers using WCA inputs (Bitstream) would likely switch to purchasing services directly from Eircom.

10.26 Table 32 below updates Table 28 in the Consultation, and shows the relative size of each SP's purchases of WCA from Eircom (including Eircom's self-supply) within the Urban WCA Market, as of Q4 2017. Eircom's retail business, with a 75% share (of total WCA – Eircom self-supply and wholesale), is, by far, the largest purchaser of WCA from Eircom in the Urban WCA Market. Vodafone, with a [%< ██████████ █████] share of overall WCA purchases ([%< ██████████] of wholesale only WCA), is the largest third-party purchaser from Eircom in the Urban WCA Market.

¹⁸⁶⁶ See paragraphs 11.110 to 11.114 of the Consultation.

¹⁸⁶⁷ See paragraphs 11.115 to 11.118 of the Consultation.

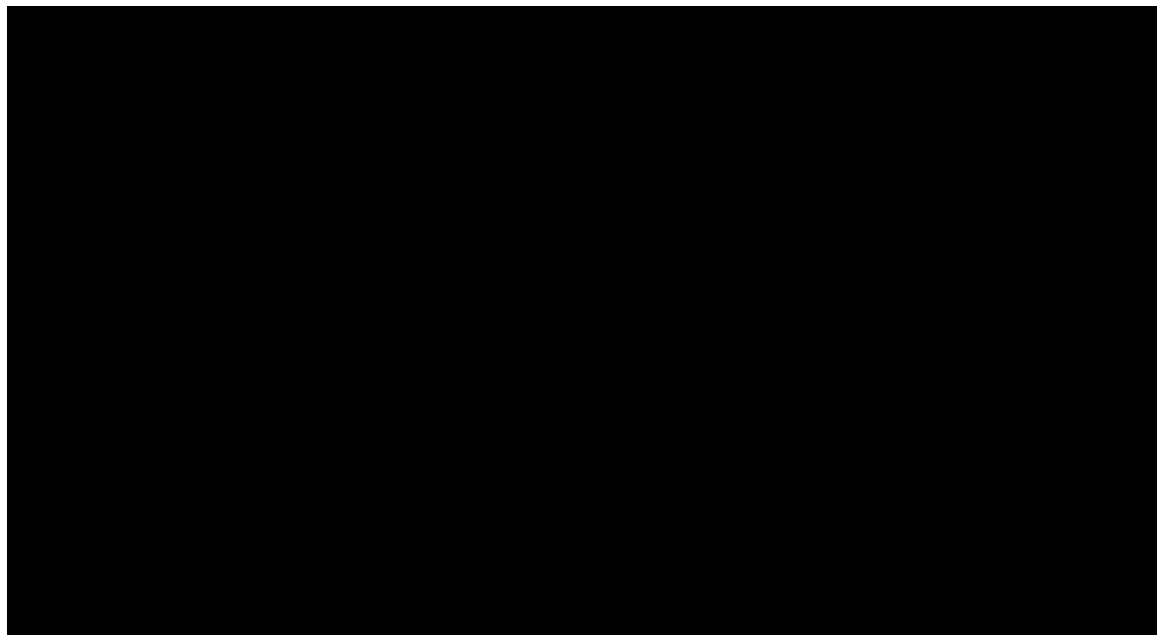
¹⁸⁶⁸ See paragraphs 11.119 to 11.121 of the Consultation.

¹⁸⁶⁹ See paragraph 6.119 of the Consultation.

¹⁸⁷⁰ See paragraph 11.113 of the Consultation.

Table 32: Share of WCA Purchases from Eircom in the Urban WCA Market Q4 2017

[REDACTED]



10.27 Table 33 below gives an idea of the proportion of WCA purchases by a Primary Operator at Exchange Areas in which those Primary Operators also have a VUA presence. For BT, [REDACTED] of Bitstream (CG and NG) purchases are at Exchange Areas at which BT also has a VUA presence (for purchases of VUA from Eircom). For Vodafone, [REDACTED] of Bitstream (CG and NG) purchases are at Exchange Areas at which BT also has a VUA presence (for purchases of VUA from Eircom).

Table 33: Proportion of WCA Purchases where Primary Operator has VUA Presence

[REDACTED]

	Purchases of Bitstream (CG and NG) where WLA (LLU/VUA) presence	Percentage of Total Bitstream (CG and NG) Purchases
BT	[REDACTED]	[REDACTED]
Vodafone	[REDACTED]	[REDACTED]

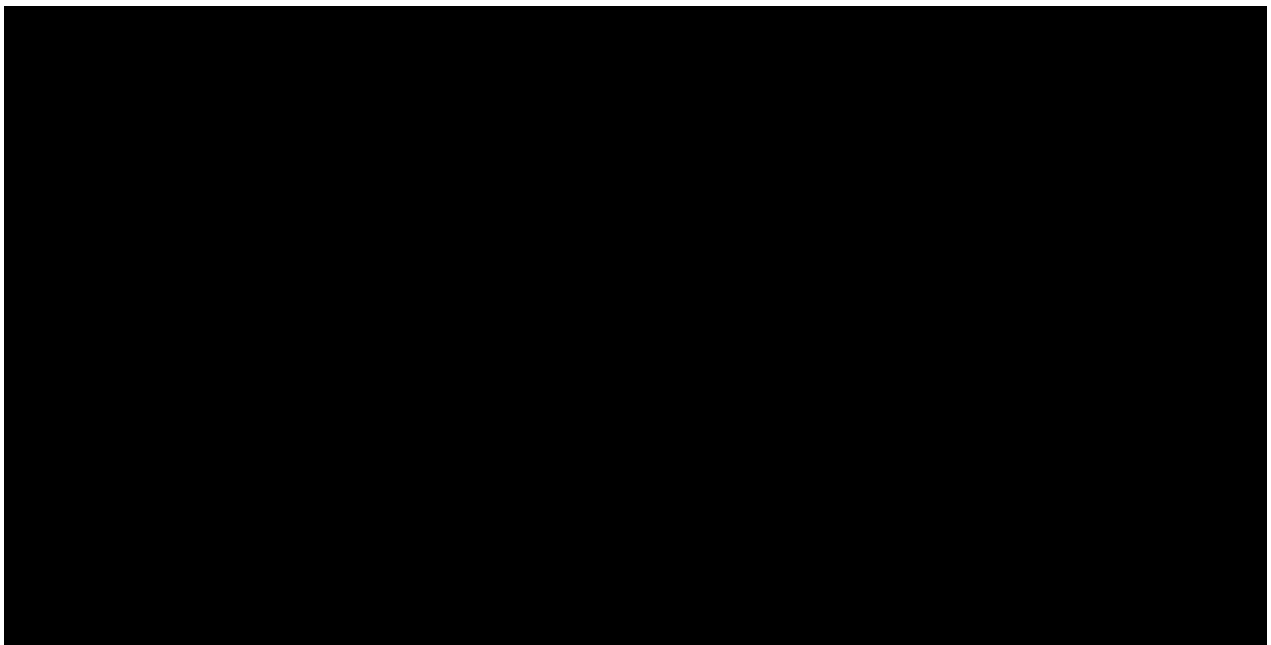
¹⁸⁷¹ Eircom's self-supply of WCA is between 200,000 and 220,000.

¹⁸⁷² Total Wholesale (Merchant Market) Supply is between 65,000 and 75,000.

10.28 Table 34 below, similar to Table 28 in the Consultation, shows the relative size of each SP's purchases of WCA from Eircom (including Eircom's self-supply) in the Regional WCA Market, as of Q4 2017. It illustrates that Eircom's retail business, with a 52% share is, by a significant margin, the largest purchaser in the Regional WCA Market. Vodafone has a [%< ██████████] share of overall WCA purchases ([%< ██████████] of wholesale only WCA) and is the largest third-party purchaser on the Regional WCA Market. BT Ireland is also a significant purchaser of WCA from Eircom in the Regional WCA Market, with a [%< ██████████] share of WCA purchases ([%< ██████████] of wholesale only WCA). Together, Eircom, Vodafone and BT account for [%< ██████] of purchases from Eircom in the Regional WCA Market.

Table 34: Share of WCA Purchases from Eircom in the Regional WCA Market Q4 2017

[%<REDACTED]



10.29 ComReg's preliminary view in the Consultation was that, while Access Seekers were a significant source of revenue for Eircom in the Relevant WCA Markets, their relative size did not suggest that they would have a sufficiently strengthened bargaining position with respect to price or other terms of supply, particularly when compared with Eircom's self-supply of WCA purchases to its own retail arm.

¹⁸⁷³ Eircom's self-supply of WCA is between 200,000 and 250,000.

¹⁸⁷⁴ Total Wholesale (Merchant Market) Supply is between 200,000 and 220,000.

Credible alternative sources of supply

10.30 ComReg's preliminary view was that, compared to the Regional WCA Market, Eircom faced greater competition in the Urban WCA Market from alternative WCA suppliers such as BT Ireland, alternative networks capable of supplying WCA services such as SIRO, and also indirectly from Virgin Media and Vodafone who compete only at the retail level.

10.31 In this regard, ComReg noted that, of the 96 Exchange Areas¹⁸⁷⁵ in the Urban WCA Market, the following SPs were present:

- (a) Eircom - present at [§< ██████████] Exchange Areas;
- (b) BT Ireland - capable of providing copper network-based Bitstream services at [§< ██████████] Exchange Areas and FTTx-based Bitstream services at [§< ██████████] Exchange Areas;
- (c) Virgin Media - capable of providing services at [§< ████████████████████] of the [§< ████████] Exchange Areas;
- (d) Vodafone - capable of providing FTTx-based services at [§< ████████████████████] Exchange Areas when network rollout is complete; and
- (e) SIRO - network rollout underway, but over the lifetime of this review has potential to provide WCA services in certain areas.

10.32 ComReg was of the preliminary view that, over the lifetime of this market review, the barriers to entry in the Regional WCA Market are likely to be sufficient to inhibit the emergence of any widespread commercially-led alternative credible source of supply for Access Seekers, such that it would mitigate the exercise of Eircom's suggestive market power effectively.

Evidence of bargaining power from SP negotiations

10.33 In the Consultation, ComReg considered whether the exercise of effective CBP was evidenced from bargaining in WCA negotiations between Eircom and Access Seekers. ComReg sought evidence of bargaining power and CBP from SPs in the Statutory Information Request ('SIR'). No such evidence was, however, forthcoming.

10.34 ComReg's preliminary view was that it was unlikely that Eircom would be sufficiently constrained in the Regional WCA Market by CBP, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and consumers. While Eircom might face stronger constraints from CBP on the Urban WCA Market, ComReg did not consider that CBP would be sufficient to act as an effective competitive constraint.¹⁸⁷⁶

¹⁸⁷⁵ ComReg notes that, in the Consultation, 88 Exchange Areas were deemed as falling into the Urban WCA Market and 1,129 Exchange Areas falling into the Regional WCA Market. A small change was made to this assessment in light of data clarifications from Eircom and a small number of calculation errors identified by ComReg in applying the five criteria.

¹⁸⁷⁶ See paragraphs 11.98 to 11.123 of the Consultation.

Overall Preliminary conclusions on assessment of SMP

- 10.35 Overall, with regard to the Regional WCA Market, ComReg's preliminary view was that neither existing competition, potential competition nor CBP were likely, within the lifetime of this market review, to prevent Eircom from behaving, to an appreciable extent, independently or competitors, customers and consumers.
- 10.36 ComReg accordingly formed the preliminary view that, in the absence of credible competitive constraints as set out above, prices for products provided by Eircom in the Relevant WCA Markets tended only to have changed in response to the need to comply with existing regulatory obligations.¹⁸⁷⁷
- 10.37 With regard to the Urban WCA Market, ComReg's preliminary view was that existing and potential competition were likely, within the lifetime of this market review, to prevent Eircom from behaving, to an appreciable extent, independently or competitors, customers and consumers. ComReg did not, however, consider that CBP was likely to constrain Eircom's behaviour in the Urban WCA Market. ComReg's preliminary view was therefore that no undertaking was likely to have SMP in the Urban WCA Market. ComReg noted that the assessment was made having regard to the assumption that all of the remedies that ComReg proposed for the WLA Market were in place (in accordance with the Modified Greenfield Approach).
- 10.38 Accordingly, and having regard to the preliminary conclusions set out in the Consultation, ComReg was of the view that Eircom should be designated as having SMP in the Regional WCA Market, and that no SP should be designated as having SMP in the Urban WCA Market. ComReg proposed that a sunset period of six months from the date of this Decision would be put in place to allow the orderly removal of regulation in the Urban WCA Market. During this six (6) month period, access to existing Bitstream services would be maintained at prevailing prices.

Respondents' Views

SMP Assessment Criteria

- 10.39 Six of the eight Respondents to the Consultation expressed views on ComReg's assessment of SMP in the Relevant WCA Markets. enet and Sky broadly agreed with ComReg's assessment, while ALTO, BT, Eircom and Vodafone disagreed. Vodafone's Submission was accompanied by the Compass Lexecon Report.
- 10.40 **enet** considered that ComReg's assessment of SMP in the Relevant WCA Markets followed logically from how it had defined those markets. enet supported ComReg's preliminary conclusions that Eircom be designated with SMP in the Regional WCA Market, and that no SP be designated with SMP in the Urban WCA Market.
- 10.41 **Sky** broadly agreed with ComReg's assessment of SMP in the Relevant WCA Markets, but noted that it would be critical that ComReg act quickly in the event of evidence arising that Eircom's market power on the Urban WCA Market had not been diluted to the extent set out by ComReg in the Consultation.

¹⁸⁷⁷ See paragraph 11.120 of the Consultation.

- 10.42 **ALTO** and **BT** considered that the proposed deregulation of the Urban WCA Market could risk increasing the opportunities for anti-competitive leveraging between markets, and commented on the impact on wholesale competition.
- 10.43 **Eircom** noted its objection to the sunset period proposed by ComReg for the withdrawal of existing regulation in the Urban WCA Market. Eircom also considered that the NBP would be present in the Regional WCA Market and would provide sufficient CBP.
- 10.44 **Vodafone** disagreed with the assessment of SMP in the Urban WCA Market, deferring instead to Compass Lexecon's conclusions on the SMP analysis.¹⁸⁷⁸ As Vodafone disagreed with the definition of the Relevant WCA Markets,¹⁸⁷⁹ it therefore disagreed with ComReg's preliminary finding that Eircom has SMP in the Regional WCA Market only.
- 10.45 Neither **Colt** nor **Virgin Media** provided any explicit views on ComReg's preliminary findings on SMP in the Relevant WCA Markets.
- 10.46 ComReg summarises the Respondents' main views on the assessment of SMP below, grouping the key issues raised into the following themes:
- (a) ComReg's SMP Analysis (see paragraphs 10.47 to 10.61 below);
 - (b) Leveraging between markets and wholesale competition (see paragraphs 10.62 to 10.67 below);
 - (c) Sunset period for the withdrawal of remedies in the Urban WCA Market (see paragraphs 10.68 to 10.70 below); and
 - (d) Impact of NBP in the Regional WCA Market (see paragraph 10.71 below).

ComReg's SMP analysis in the Relevant WCA Markets

- 10.47 Eircom noted that market shares are only one indicator of SMP, and that the presence of economies of scale and scope, as well as easier access to capital markets should also be taken into consideration. Eircom noted, in particular, that competitors such as Liberty Global (Virgin Media), Vodafone and BT operate on a global scale and are extremely well-resourced.
- 10.48 Vodafone – as detailed in the Compass Lexecon (as previously abbreviated, 'CL') Report - disagreed with the delineation between the Urban WCA Market and Regional WCA Market (as set out in footnote 1879), and therefore disagreed with ComReg's preliminary conclusion that Eircom has SMP in the Regional WCA Market only. Vodafone considered that the Relevant WCA Market is national in scope, and that Eircom is not competitively constrained on this national market, due to a lack of viable alternatives. ComReg should therefore designate Eircom with SMP on a national, rather than a regional, market.¹⁸⁸⁰

¹⁸⁷⁸ See Compass Lexecon Report, pages 32 to 36.

¹⁸⁷⁹ As set out at paragraphs 266 and 267 of its Submission, Vodafone considered that ComReg had applied its analysis in a mechanistic fashion which contrasted with Vodafone's experience of the market, which, in its view, suggested the existence of a national market.

¹⁸⁸⁰ See Vodafone Submission at page 38, and the Compass Lexecon Report, pages 32 to 36.

- 10.49 CL considered that ComReg’s finding of a lack of competition in the Regional WCA Market appeared robust. In respect of the Urban WCA Market, CL considered that ComReg’s finding that no SP possesses SMP followed from ComReg’s proposed market definition. This finding is therefore, in CL’s view, vulnerable to the methodological issues raised in the Compass Lexecon Report with respect to the definition of the Relevant WCA Markets.
- 10.50 CL then commented on the three main central components of ComReg’s SMP analysis, namely ComReg’s assessments of existing competition, potential competition, and countervailing buyer power.

Existing Competition

- 10.51 In relation to Eircom’s market share on the Urban WCA Market, CL noted that the market share calculations were predicated on treating supply-side substitution and indirect competition as being equivalent to direct (i.e. demand-side substitution) competition. CL considered that this approach was not justified.
- 10.52 In relation to ComReg’s conclusion that Eircom faced indirect constraints from Vodafone and Virgin Media in the Urban WCA Market, CL considered that ComReg failed to carry out the appropriate tests to assess:
- (a) retailers’ incentives and abilities to pass through WCA price increases,
 - (b) whether, assuming pass-through, retail market competition is sufficient to constrain Eircom’s conduct upstream at the WCA level, or
 - (c) the impact that any recapture by Eircom of users foreclosed through WCA pricing may have had on Eircom’s incentive to foreclose.

CL therefore considered that ComReg had failed to demonstrate the presence of sufficiently effective indirect constraints.¹⁸⁸¹

- 10.53 CL further considered that the analysis of pricing behaviour in Section 11 of the Consultation had not assessed past pricing behaviour. Accordingly, ComReg’s conclusion that Eircom “*would not likely be in a position to profitably raise prices above the competitive level*”¹⁸⁸² had not, in CL’s view, been justified by reference to past pricing behaviour.
- 10.54 CL furthermore commented that, in this context, ComReg’s WLA analysis applied equally to WCA. ComReg had stated in respect of WLA that

*“....the fact that the only circumstances within which LLU prices have dropped has been based on regulatory intervention, may be suggestive of a lack of outside effective competitive constraints on Eircom’s price setting behaviour”.*¹⁸⁸³

¹⁸⁸¹ See paragraph 2.36 of the CL Report.

¹⁸⁸² See paragraph 11.40 of the Consultation.

¹⁸⁸³ See paragraph 6.38 of the Consultation.

10.55 CL considered that the same analysis applies to WCA and that ComReg's assessment of past pricing behaviour in other contexts therefore contradicted its conclusion on pricing behaviour in the proposed Urban WCA Market. CL also highlighted that Virgin Media implemented a number of price increases in 2016, and considered that ComReg did not discuss whether this was consistent with its proposed finding that Virgin Media exerts a meaningful indirect competitive constraint on Eircom's WCA prices.

Potential Competition

10.56 In relation to ComReg's assessment of the impact on SMP of potential competition, CL noted that ComReg concluded that:

*“.....absent regulation in the Urban WCA Market, potential competition from SIRO would, in combination with existing competition, be likely to further constrain Eircom's ability to behave, to an appreciable extent, independently of competitors, customers and consumers”.*¹⁸⁸⁴

10.57 However, CL considered that ComReg's proposal to include SIRO in the Relevant WCA Markets as a hypothetical provider of WCA likely overestimated the competitive pressure potentially attributable to SIRO, for the reasons CL had already set out at paragraph 2.16 of the CL Report in the context of supply-side substitution for the purpose of the Product Market definition exercise.

Countervailing Buyer Power

10.58 Regarding ComReg's assessment of CBP, CL noted ComReg's conclusion that:

*“While Eircom may face stronger constraints from CBP with respect to its supply in the Urban WCA Market, ComReg does not consider that they would be sufficient, in and of themselves, to act as an effective competitive constraint”.*¹⁸⁸⁵

10.59 CL considered that ComReg's analysis overestimated, on a number of occasions, the degree of competition faced by Eircom, which, in its view, corroborated that Eircom is unlikely to face meaningful CBP.

CL's conclusions on ComReg's SMP analysis

10.60 Overall, CL argued that ComReg's SMP analysis likely overestimated the competitive pressure faced by Eircom. CL considered that the assessment of past pricing conduct excluded important evidence that ComReg relied upon in other contexts within the Consultation, which contradicts ComReg's finding of an absence of SMP in the proposed Urban WCA Market. Furthermore, CL considered that CBP was unlikely to act as a meaningful constraint on Eircom.

¹⁸⁸⁴ See paragraph 11.97 of the Consultation.

¹⁸⁸⁵ See paragraph 11.123 of the Consultation.

10.61 Accordingly, CL considered that ComReg's analysis had not demonstrated that the Urban WCA Market was competitive. CL noted that some of the key facts (specifically, past pricing conduct) that ComReg relied upon to find that Eircom had SMP in the proposed Regional WCA Market also applied to the proposed Urban WCA Market, and that this suggested that the proposed Urban WCA Market might not, in fact, be competitive.

Leverage between markets and wholesale competition

10.62 ALTO expressed concern about ComReg's assessment of SMP in the Relevant WCA Markets. It submitted that, if ComReg was going to increase the opportunities for leveraging between markets by means of its proposed de-regulation of the Urban WCA Market, then the market urgently needed to understand how ComReg was going to improve its wholesale enforcement regime which, ALTO claimed, was unfit-for-purpose. ALTO's view was that any material change should be delayed until ComReg had resolved its wholesale compliance and enforcement issues, including the capacity to effectively censure wholesale SPs for breaches of regulation, including the ability to directly levy fines.

10.63 BT disagreed with ComReg's assessment of SMP in the Relevant WCA Markets, stating that the analysis did not appear to be informed by how the market worked in practice. The proposals, in BT's view, opened the potential for Eircom to strengthen its market position, and to control the market (although BT did not stipulate which exact market it was referring to).

10.64 BT stated that [REDACTED]

[REDACTED]

10.65 BT expressed the view that de-regulating the Urban WCA Market would allow Eircom to "*drive backhaul pricing to the floor to force out wholesale competition*".¹⁸⁸⁶ BT indicated that *ex post* enforcement by ComReg of regulation was too slow to address this potential conduct and its potential consequences. BT further held that de-regulation would allow Eircom to decide which SPs it would provide WCA to in the Urban WCA Market, and on what conditions. BT believed such conducts were already occurring.

¹⁸⁸⁶ See BT Submission at p.13 in its response to Q.11.

10.66 BT also noted its belief that [redacted]

[redacted]
 [redacted]
 [redacted]
 [redacted]
 [redacted]
 [redacted]
 [redacted]

10.67 BT hence considered that ComReg's proposals for the de-regulation of the Urban WCA Market would result in "*wholesale competition*" to Eircom being extinguished. This would then, in BT's view, result in Eircom having the freedom "*...to decide what retail competition will exist*"¹⁸⁸⁸ at Exchange Areas in the Urban WCA Market.

Sunset period for the Urban WCA Market

10.68 Eircom welcomed ComReg's assessment of SMP in the Urban WCA Market and the proposal to remove existing *ex ante* regulation in this market. However, Eircom noted that it had a number of concerns relating to the delineation of the Relevant WCA Markets (as addressed in its response to Question 10 relating to WCA market definition). Eircom also strongly objected to the sunset period that ComReg had proposed for the withdrawal of existing regulation in the Urban WCA Market, which, in its view, was unnecessary, unreasonable, disproportionate and contrary to the interests of consumers.

10.69 Eircom considered that the proposal was unnecessary, as the market, by virtue of the proposals in the Consultation, was likely to have already had at least six months to adjust to ComReg's proposed deregulation before the decision to de-regulate came into effect. Eircom further considered that the proposed sunset period would result in "*counterproductive ex-ante regulation*" leading to "*...distortion of the market.*"¹⁸⁸⁹

10.70 Sky broadly agreed with ComReg's assessment of SMP in the Relevant WCA Markets. However, Sky noted that, given the implications of releasing Eircom from its SMP obligations in the Urban WCA Market, it would be critical that ComReg act quickly in the event that there was evidence that Eircom's market power had not been diluted to the extent presumed in ComReg's preliminary analysis. Sky indicated that one approach ComReg might consider to ensure the market was operating as expected would be to maintain a longer sunset period on Eircom's transparency obligations. In Sky's view, this would allow ComReg and the wider market to observe Eircom's behaviour for a period of time where it no longer faced price and non-discrimination obligations.

¹⁸⁸⁷ *Ibid.*

¹⁸⁸⁸ *Ibid.*

¹⁸⁸⁹ See Eircom Submission at p.76 in its response to Q.14.

Impact of NBP in the Regional WCA Market

10.71 In relation to ComReg's statement in paragraph 11.117 of the Consultation,¹⁸⁹⁰ Eircom stated that ComReg had failed to adequately consider the effect that the NBP would have on the market, upon its commencement. Eircom considered that the NBP provider would provide sufficient CBP, but did not indicate how it would do so. Eircom also considered that ComReg should re-review its findings once the NBP rollout commences.

ComReg's Assessment of Respondents' Views

10.72 In this section, ComReg assesses Respondents' views under each of the key themes identified in paragraph 10.46 above, as follows:

- (a) SMP Assessment Criteria (see paragraphs 10.73 to 10.96 below);
- (b) Wholesale competition and leveraging between markets (see paragraphs 10.97 to 10.103 below);
- (c) Sunset period for the Urban WCA Market (see paragraphs 10.104 to 10.110 below); and
- (d) Impact of the NBP in the Regional WCA Market (see paragraphs 10.111 to 10.112 below).

SMP Assessment Criteria

ComReg's SMP analysis in the Relevant WCA Markets

10.73 In paragraph 10.47 above, ComReg noted Eircom's view that, apart from market shares, other factors should also have been considered by ComReg, notably access to capital markets, and economies of scale and scope. ComReg agrees with this point, which Eircom had also noted in respect of the Relevant WLA Market SMP analysis (see paragraph 5.39 above). In relation to Eircom's point that its competitors operate on a global scale and are well-resourced, ComReg has also responded to this point in Section 5.

10.74 Eircom has made the same points in respect of capital markets and economies of scale and scope in respect of both the Relevant WLA Market and the Relevant WCA Markets. For that reason, ComReg's views in this regard have already been set out at paragraphs 5.98 to 5.106, and these views apply equally to the Relevant WCA Markets.

¹⁸⁹⁰ In which ComReg stated: "As noted in paragraph 11.49, Eircom is the largest supplier of WCA in the Regional WCA Market and Access Seekers have limited options for switching to an alternative WCA supplier, although ComReg notes that BT Ireland does supply WCA services in some areas of the Regional WCA Market. In addition, because of the more rural nature of the Regional WCA Market, there is limited scope for a purchaser of Eircom's WLA products or an alternative network SP to supply WCA in the Regional WCA Market as any wholesale offering would need to have a wider geographic footprint to meet the expectations of WCA Access Seekers."

10.75 ComReg acknowledges Vodafone's disagreement with the assessment of SMP in the Urban WCA Market (as summarised in paragraphs 10.48 to 10.49 above), which stems from its disagreement with the delineation between the Urban and Regional WCA Markets. ComReg has responded to points previously raised by Vodafone in relation to the geographic delineation of the Relevant WCA Markets (see paragraphs 9.274 to 9.277), and responds below to points raised by CL in relation to the SMP assessment.

Existing Competition

10.76 In paragraphs 10.51 to 10.55 above, ComReg notes CL's assessment of the SMP analysis in the Relevant WCA Markets. CL's main concern related to ComReg's preliminary finding that no SP held SMP on the Urban WCA Market. CL also considered that ComReg had failed to demonstrate the presence of sufficiently effective indirect constraints on the exercise of SMP by Eircom.

10.77 In relation to the impact of indirect constraints on the Urban WCA Market, CL argued that ComReg had not, *inter alia*, assessed retailers' incentives and abilities to pass through WCA price increases. CL considers that ComReg's assumption of full pass-through risks failing to identify SMP.¹⁸⁹¹ ComReg does not agree, and considers that Eircom is effectively constrained in increasing its WCA prices.

10.78 ComReg's view is that, if Eircom were to increase its WCA prices, Access Seekers may either (i) absorb this increase in wholesale costs or (ii) pass it on to their customers in the form of higher retail prices. In the latter scenario, ComReg considers it likely that retail customers located within the Urban WCA Market have sufficient outside switching options (e.g. Vodafone services based on WLA inputs, Sky services based on BT inputs, or Virgin Media) to pose an effective constraint on Eircom. This is because switching by retail customers of Access Seekers in response to a pass-through of increased Eircom WCA prices could lead to reduced WCA purchases by Access Seekers, in line with their reduced customer numbers. Table 35 below shows that, in the Urban WCA Market, Virgin Media has the highest market share, followed by Eircom, BT Ireland and Vodafone. Similarly, Table 38 shows that, of the 1,203 Exchange Areas, 609 have three or more POs present. While the availability of switching options for End Users may vary by location, ComReg considers that, even where switching options are limited, this is unlikely to lead to a situation in the Urban WCA Market where Eircom will be capable of exercising its SMP.

Table 35: Market Shares in the Urban WCA Market as at Q4 2017 [REDACTED]¹⁸⁹²

Eircom	Virgin Media	BT Ireland	Vodafone
[REDACTED] ¹⁸⁹³	[REDACTED] ¹⁸⁹⁴	[REDACTED] ¹⁸⁹⁵	[REDACTED] ¹⁸⁹⁶

¹⁸⁹¹ See paragraph 2.25 of the CL Report.

¹⁸⁹² Market shares hypothetically include Virgin Media's CATV and SIRO's FTTH networks.

¹⁸⁹³ Less than 40%.

¹⁸⁹⁴ Less than 45%.

¹⁸⁹⁵ Less than 20%.

¹⁸⁹⁶ Less than 20%.

Table 36: Primary Operator presence by Exchange Area Q4 2017

Number of POs	No. of Exchanges (Total = 1,203)	Premises Coverage
1	298	281,127
2	296	392,722
3	474	629,525
4	108	685,652
5	27	216,862

- 10.79 Accordingly, in considering WCA price increases, Eircom would have to trade off any increase in revenue from higher WCA prices, as well as any new or additional Eircom retail customers that have switched from other Access Seekers (using Eircom's WCA) to Eircom's retail business, against any loss in revenue arising from reduced WCA purchases by Access Seekers. In the Urban WCA Market, ComReg is of the view that sufficient outside switching options exist, such that they are likely to discipline attempts by Eircom to increase WCA prices, due to the increased likelihood that the trade-off of doing so from Eircom's perspective would be negative. In the Regional WCA Market, it is not clear that similar constraints exist, in view of the reduced switching options available.
- 10.80 In response to CL's point at paragraph 10.52 above that the section on pricing in the Consultation does not assess past pricing behaviour, ComReg notes that it is obliged to carry out its analysis on a forward-looking basis, and that past conduct may not be the most accurate predictor of future conduct. Past pricing behaviour may not always be reliable, particularly where regulatory obligations change. For example, pricing behaviour in the past would have occurred in the context of a retail minus pricing obligation, whereas ComReg now proposes to move to a cost orientation pricing obligation.
- 10.81 In any case, ComReg noted WCA price increases in paragraph 10.34 of the Consultation and refers to Table 25 and Table 26 in Section 9 above, which illustrates wholesale price increases and purchase volumes under the regulatory regime then in force. ComReg also notes that CL recognises in the CL Report that ComReg assessed past WCA pricing behaviour elsewhere in the Consultation.¹⁸⁹⁷ As shown in Table 24 in Section 9, WCA volumes declined around the time that price increases were imposed by Eircom. However, as noted in paragraph 9.201, other developments may account for this rise, including, but not limited to, a general trend in Access Seeker preferences away from WCA Bitstream and towards VULA products.
- 10.82 CL also highlighted¹⁸⁹⁸ that Virgin Media implemented a number of price increases during 2016, and considered that ComReg had not discussed whether this was consistent with ComReg's proposed finding that Virgin Media provides meaningful indirect competitive pressure on Eircom's capacity to exercise its SMP by raising WCA prices.

¹⁸⁹⁷ See paragraphs 1.6, 2.24(e), 4.9 and 4.13 of the CL Report.

¹⁸⁹⁸ See paragraph 4.9 of the CL Report.

10.83 ComReg has assessed the ability of SPs to constrain the exercise of SMP the Relevant WCA Markets. ComReg considers, on a forward-looking basis, that both Vodafone and Virgin Media pose indirect competitive constraints on the exercise by Eircom of SMP on the Urban WCA Markets.

10.84 CL disagrees with ComReg's conclusions, on the grounds that ComReg has failed, in its WCA market definition exercise, to correctly carry out the tests stipulated by the European Commission for determining the presence of indirect constraints. Since, in CL's view, the correct tests were not applied by ComReg at market definition stage, ComReg's findings in respect of indirect constraints cannot then be relied upon in assessing SMP.

10.85 In this regard, CL is taking issue with the assessment of indirect constraints as part of the market definition exercise. ComReg has already disagreed with CL on this point for the reasons set out at paragraphs 9.175 to 9.220 above. CL does not comment specifically on ComReg's interpretation of indirect constraints as part of the SMP analysis exercise.

10.86 Table 37 updates Table 31 above. Eircom continues to maintain a high market share of close to 80% in the Regional WCA Market, even in a hypothetical scenario where Virgin Media and SIRO are included in the Regional WCA Market.

Table 37: Market Shares, Relevant WCA Markets, as at Q4 2017 [REDACTED]

	Eircom	Virgin Media	BT Ireland	Vodafone
Regional WCA ¹⁸⁹⁹	█ 1900	█% 1901	█ 1902	█ 1903
Change since March 2016	█	█	█	█
Urban WCA	█ 1904	█ 1905	█ 1906	█ 1907
Change since March 2016	█	█	█	█

¹⁸⁹⁹ Market Shares hypothetically include Virgin Media's CATV and SIRO's FTTH networks.

¹⁹⁰⁰ Eircom's Market Share is above 75%.

¹⁹⁰¹ Virgin Media's Market Share is less than 10%.

¹⁹⁰² BT Ireland's Market Share is less than 10%.

¹⁹⁰³ Vodafone's Market Share is less than 20%.

¹⁹⁰⁴ Eircom's Market Share is less than 40%.

¹⁹⁰⁵ Virgin Media's Market Share is less than 45%.

¹⁹⁰⁶ BT Ireland's Market Share is less than 20%.

¹⁹⁰⁷ Vodafone's Market Share is less than 20%.

- 10.87 Eircom's Urban WCA Market and Regional WCA Market shares are substantially different in the hypothetical scenario set out in Table 37 above. ComReg's view is that Eircom's market share in the Urban WCA Market suggests (but is not determinative in itself) that it faces sufficient constraints which may limit its ability to behave, to an appreciable extent, independently of competitors, customers and consumers.
- 10.88 Over the period covered by this market review, Eircom appears unlikely to face any effective indirect constraints in the Regional WCA Market. ComReg's position is that Eircom's market share in the Urban WCA Market suggests (but is not determinative in itself) that it likely faces sufficiently effective indirect constraints, which are likely (alongside other constraints) to limit its ability to act, to an appreciable extent, independently of competitors, customers and consumers.¹⁹⁰⁸ In particular, Virgin Media has a limited network presence in the coverage area of the Regional WCA Market. As set out in Table 37 above, this is reflected in the lower market shares of Virgin Media and other SPs in this area, relative to the Urban WCA Market.

Potential Competition

- 10.89 CL was the only respondent to raise issues regarding ComReg's preliminary conclusions on potential competition, focussing on the inclusion of SIRO as a potential entrant. ComReg has previously responded to points raised by CL in relation to the inclusion of SIRO in the Relevant WCA Markets in paragraphs 9.162 to 9.173 above. For the reasons set out therein, ComReg concludes that potential competition is unlikely to constrain Eircom's suggested SMP in the Regional WCA Market. ComReg also concludes that, absent regulation in the Urban WCA Market, potential competition from SIRO would – together with existing competition - likely constrain Eircom's ability to exercise SMP.
- 10.90 As set out above at paragraph 4.9, ComReg notes that, in April 2017, enet announced the planned rollout of fibre broadband to 10 towns, largely in the north west of Ireland.¹⁹⁰⁹ Following discussions with enet in April 2018, ComReg was made aware that [redacted]. As noted in paragraph 4.9, enet currently (as at April 2018) has [redacted] active subscribers across both residential and commercial premises passed and these are currently sold to [redacted] as a WCA Bitstream service, with handoff in Dublin.
- 10.91 enet also indicated that it intended to offer a Bitstream service based on aggregating the services of enet, SIRO¹⁹¹⁰ and Eircom; this would require enet to invest in an automated software platform that aggregates enet's own network, as well as third party infrastructure. The service would allow an SP to interconnect at one location (Telecity in Dublin) and be provided with a menu of options for serving End Users in an area using, for example, enet, SIRO and Eircom FTTH products.

¹⁹⁰⁸ See paragraphs 11.29 to 11.35 of the Consultation.

¹⁹⁰⁹ <https://www.enet.ie/news/167/138/enet-to-bring-high-speed-fibre-networks-to-ten-regional-towns.html>.

¹⁹¹⁰ <https://www.enet.ie/news/172/138/enet-SIRO-Announce-Partnership-Agreement.html>.

10.92 As at 30 June 2017, enet noted that it planned to have backhaul at [redacted] SIRO locations and [redacted] Eircom locations, predominantly in regional towns.¹⁹¹¹ enet also suggested that [redacted]. As of March 2018, enet had interconnected with SIRO at [redacted] locations¹⁹¹² and Eircom at [redacted] locations, giving it total coverage for this Bitstream aggregation service of [redacted] towns.¹⁹¹³

10.93 Following discussions with enet in April 2018, ComReg was made aware that [redacted]. enet currently has [redacted] subscribers on this service, with [redacted] from Eircom and [redacted] from SIRO. ComReg has taken the view that it is not expected to impact the competitive dynamics of the WCA market over the lifetime of this market review as enet's coverage is limited to a small number of towns, making it unlikely to pose a significant competitive constraint on Eircom and BT in the Relevant WCA Market.

Countervailing Buyer Power

10.94 ComReg's preliminary conclusion in the Consultation was that, on its own, CBP was unlikely to act as an effective constraint on the exercise of SMP in either the Regional WCA Market or the Urban WCA Market.¹⁹¹⁵ ComReg allowed for a greater – though still insufficient on its own - degree of CBP in the Urban WCA Market, stemming from an analysis of the size of WCA purchasers, alternative sources of supply and evidence of bargaining power from SP negotiations. Eircom suggested that the NBP operator would provide sufficient CBP on the Regional WCA Market. However, Eircom did not provide any explanation of how the NBP operator would do so.¹⁹¹⁶

¹⁹¹¹ enet response to SIR issued in July 2017.

¹⁹¹² [redacted].

¹⁹¹³ [redacted].

¹⁹¹⁴ [redacted].

¹⁹¹⁵ See paragraphs 11.108 to 11.123 of the Consultation.

¹⁹¹⁶ Following the withdrawal of SIRO in September 2017 and Eircom in January 2018, as of May 2018, enet is the sole remaining bidder in the NBP tender process. No final decision has been made regarding tender award.

10.95 Accordingly, ComReg concludes that it is unlikely that Eircom will be sufficiently constrained in the Regional WCA Market by CBP, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and consumers. While Eircom might face a stronger constraint from CBP on the Urban WCA Market, ComReg does not consider that it would be sufficient, in and of itself, to act as an effective competitive constraint, and notes stronger constraints on Eircom SMP in the Urban WCA Market arise from existing competition and potential competition.

Updated Urban WCA Market Exchange Area analysis

10.96 ComReg updates its analysis of SPs in the Urban WCA Market as of Q4 2017 below, and sets out the number of Exchange Areas where actual and potential participants are present (summarised in Table 38 below):

- (a) Eircom – present at [§< ██████████] Exchange Areas;¹⁹¹⁷
- (b) BT Ireland – capable of providing copper-based Bitstream services at [§< ██████████] Exchange Areas and FTTx-based Bitstream services at [§< ██████████] Exchange Areas (these sets of Exchange Areas overlap);
- (c) Virgin Media – capable of providing CATV-based services at [§< ██████████] Exchange Areas;
- (d) Vodafone – capable of providing FTTx-based services at [§< ██████████] Exchange Areas when network rollout is complete; and
- (e) SIRO – capable of providing FTTx WLA services at [§< ██████████] Exchange areas - network rollout underway, but over the lifetime of this review has potential to provide WCA services in certain areas.

Table 38: National Market Shares (absent regulation in WCA Market) Q4 2017

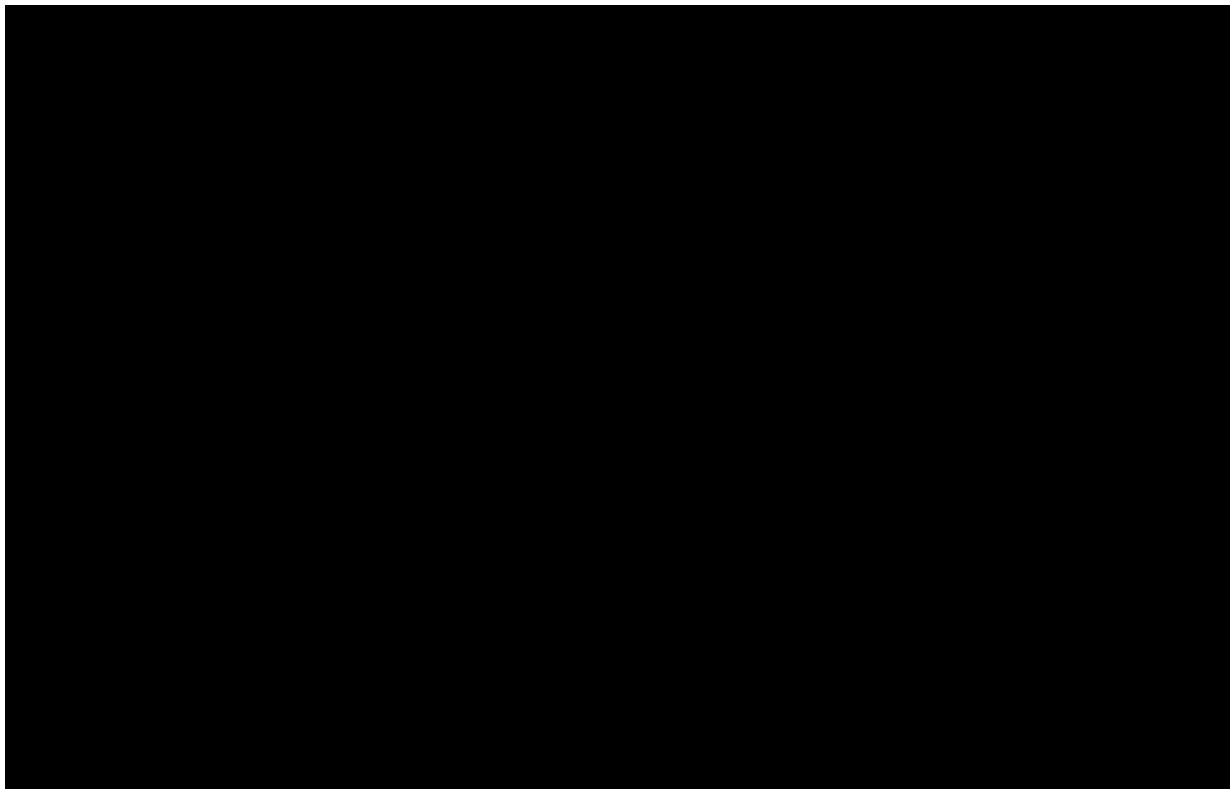
	Market Share	Premises Coverage as % of Total National Premises	Exchanges where SP is present or planning presence
BT Ireland	9.0%	[§< ██████████]	[§< ██████████]
Eircom	50.6%	100%	1,203
SIRO	0.0%	[§< ██████████]	[§< ██████████]
Virgin Media	27.9%	[§< ██████████]	[§< ██████████]
Vodafone	12.5%	[§< ██████████]	[§< ██████████]

¹⁹¹⁷ It should be noted that the initial Number of Exchange Areas identified in the Consultation (1,217) has fallen to 1,203, a decline of 14 Exchange Areas. This is because these 14 Exchange Areas have been identified as not being relevant for the assessment of the Relevant Markets, given they do not relate to the provision of WLA and/or WCA services. For example, they relate to test exchanges or data centre nodes.

Leverage between markets and wholesale competition

- 10.97 At paragraph 10.62 above, ComReg noted points raised by ALTO concerning the suggested opportunities for leveraging between the Urban WCA Market and Regional WCA Market. ComReg notes that ALTO did not specify in detail the extent or implications of this leveraging. ComReg considers that credible opportunities for leveraging between the markets are unlikely to arise, given the presence of a margin squeeze obligation. ComReg also notes that Eircom will be required to self-supply at regulated prices in the Regional WCA Market.
- 10.98 In respect of ALTO's criticisms of ComReg's enforcement approach, ComReg has responded to similar points raised in Section 6 above, and for the same reasons set out therein does not agree that it is not fit-for-purpose.¹⁹¹⁸
- 10.99 At paragraphs 10.63 to 10.67 above, ComReg summarised a number of points raised by BT, which suggested that ComReg's preliminary SMP analysis did not appear to be informed by how the market operated in practice and that, accordingly, ComReg's proposals increased the potential for Eircom to strengthen its market position.
- 10.100 ComReg does not agree with BT that deregulating the Urban WCA Market would allow Eircom to drive backhaul pricing down, with the intent of forcing competitors from the market. The deregulated Urban WCA Market will give Eircom the autonomy to offer WCA services on a commercial basis as it sees fit, in competition with other SPs present on the market.
- 10.101 Generally speaking, upstream regulation is designed to promote competition in downstream wholesale and retail markets. Deregulation of the Urban WCA Market is predicated (and dependent) on upstream regulation of the WLA Market, to ensure that SPs can compete alongside Eircom downstream. Thus, ComReg does not agree that the consequence of ComReg's proposal for the Urban WCA Market is to extinguish wholesale competition to Eircom.
- 10.102 ComReg notes BT's views on the [§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]
- 10.103 In respect of BT's comments regarding the provision by Eircom of VUA to Vodafone, ComReg suggests that BT's concerns about wholesale competition are not borne out by the evidence. In particular, ComReg notes that, since the publication of the Consultation, BT has recorded [§< [REDACTED]
[REDACTED]]. This is illustrated in Figure 7 below, which shows [§< [REDACTED]
[REDACTED]]. ComReg also note that in BT's response to a SIR in November 2017, it indicated [§< [REDACTED]
[REDACTED]] These data are not indicative of Eircom's success in driving out wholesale competition.

¹⁹¹⁸ See paragraphs 6.57 to 6.61 above.

Figure 25: BT purchases from Eircom Wholesale Q1 2014 - Q4 2017 [~~REDACTED~~]

Sunset period for the Urban WCA Market

- 10.104 The sunset period relates primarily to the proposed withdrawal of regulatory obligations on Eircom in the Urban WCA Market, and is therefore addressed in detail in Section 12 below. For the reasons set out therein, ComReg has concluded that a sunset period of six (6) months is appropriate in respect of the withdrawal of the requirement to maintain access to existing Bitstream services at prevailing prices in the Urban WCA market (insofar as they apply to those SPs that are currently supplied with WCA inputs by Eircom).
- 10.105 As noted in Section 14 of the Consultation,¹⁹¹⁹ in order to avoid undue disruption in the Urban WCA Market and, by implication, to competition and End Users, ComReg proposed that a six (6) month sunset period was necessary to afford Access Seekers a reasonable time period during which to negotiate commercial arrangements with Eircom, to secure alternate suppliers, or in which to connect customer premises using their own infrastructure (including infrastructure based on WLA inputs).
- 10.106 At paragraph 10.68 above, ComReg noted Eircom's objections to the proposed sunset period, which it described as unnecessary, unreasonable, disproportionate and contrary to the interests of consumers. Eircom also suggested that the sunset period would distort the market, but did not explain how or why this distortion would occur.

¹⁹¹⁹ See paragraph 14.7 of the Consultation.

- 10.107 ComReg does not consider the sunset period to be contrary to the interests of consumers, as the immediate withdrawal of WCA services from the date of this Decision could potentially leave Access Seekers (and hence End Users) without a broadband service (and related services).
- 10.108 ComReg addresses Respondents' views on the sunset period in Section 13 below, where it is noted that, *inter alia*, some Respondents did not consider the proposed sunset period of six months to be long enough.
- 10.109 ComReg also notes that during the sunset period, Eircom is not obliged to meet new requests for WCA inputs on a regulated basis. Eircom is, of course, free to do so on a purely commercial basis.¹⁹²⁰
- 10.110 ComReg also noted Sky's views in relation to the provision of a sunset period in paragraph 10.70 above. ComReg intends to monitor the Urban WCA Market during both the sunset period and the post-deregulation period. ComReg does not consider it proportionate or justifiable to impose a longer sunset period on Eircom's transparency obligations in the Urban WCA Market. ComReg has, using its legal powers, the ability to request information from Eircom and other SPs that is necessary to monitor market conditions, and intends to do so.

NBP in the Regional WCA Market

- 10.111 In paragraph 10.71, ComReg noted Eircom's view that ComReg failed to adequately consider the effect that the NBP would have on the Regional WCA Market. ComReg notes that the status of the NBP has yet to be finalised, following the withdrawal of both SIRO and Eircom from the tender process. enet remains as the sole remaining bidder. Given the ongoing lack of certainty in respect of the NBP contract award, the timing of the NBP rollout and any resulting impact on competition, ComReg is unable to include the NBP in its assessment on a forward-looking basis with sufficient certainty and accuracy.
- 10.112 Moreover, even if there were greater certainty in respect of the NBP, while some of the premises selected to be covered by the NBP fall within the Regional WCA Market,¹⁹²¹ ComReg considers that it is not possible to determine with certainty that the NBP provider will provide sufficient CBP over the period of this market review. While the NBP provider could potentially offer a credible alternative supply to end users, it is not possible at this stage to assert whether this would be sufficient to amount to CBP. The NBP provider will be obliged to offer a WLA-type broadband service within the NBP footprint at agreed prices, but, in ComReg's view, this is unlikely to act as an effective constraint on the exercise of SMP by Eircom over the period of this market review.

¹⁹²⁰ See paragraph 14.9 of the Consultation.

¹⁹²¹ <https://www.dccae.gov.ie/documents/County%20Statistics.pdf>.

ComReg's Position

- 10.113 In paragraphs 10.73 to 10.112 above, ComReg considered Respondents' views on the assessment of SMP in the Relevant WCA Markets and the proposed designation of Eircom with SMP on the Regional WCA Market only. Having regard to the analysis set out in the Consultation¹⁹²² and the consideration of Respondents' views, ComReg's position is set out below.
- 10.114 ComReg has considered a wide range of factors to identify whether any undertaking enjoys a position of SMP in each of the Relevant WCA Markets. These factors are those set out in the 2018 SMP Guidelines¹⁹²³ (and also those set out in Appendix 11 of the Consultation) as well as other relevant matters that have been identified. ComReg's position is as follows.

Existing Competition in the Relevant WCA Markets

- 10.115 In assessing existing competition in the Relevant WCA Markets, ComReg has considered vertical integration, market shares, relative strength of existing competitors, barriers to expansion, economies of scale and scope, indirect constraints, and pricing behaviour.
- 10.116 Table 37 above sets out changes to existing competition, as measured by market shares, since the publication of the Consultation in 2016.
- 10.117 Having reviewed Respondents' comments, ComReg considers that, on a forward-looking basis, Eircom will be sufficiently constrained by indirect competition arising from outside switching options at retail level on the Urban WCA Market, but that this constraint would not be effective on the Regional WCA Market, given, in particular, the comparatively limited network rollout in these areas of other SPs such as Virgin Media.

Potential Competition in the Relevant WCA Markets

- 10.118 In assessing potential competition in the Relevant WCA Markets, ComReg has considered the overall size of the undertaking, control of infrastructure not easily duplicated, barriers to entry in the Relevant WCA Markets, as well as the overall strength of potential competitors.
- 10.119 ComReg concludes that potential competition is unlikely to constrain Eircom's suggested SMP in the Regional WCA Market. However, absent regulation in the Urban WCA Market, potential competition from SIRO would, together with existing competition, likely constrain Eircom's ability to exercise SMP. ComReg further notes that, since the Consultation, SIRO has expanded its network rollout from seven towns (Carrigaline, Cavan, Drogheda, Dundalk, Letterkenny, Sligo and Tralee) to 21 towns in March 2018 (adding Athlone, Carlow, Castlebar, Ennis, Kilkenny, Limerick, Mallow, Mullingar, Naas, Newbridge, Portlaoise, Skibbereen, Westport and Wexford).¹⁹²⁴

¹⁹²² See Section 11 of the Consultation.

¹⁹²³ See paragraph 58 of the 2018 SMP Guidelines.

¹⁹²⁴ Detailed at <https://siro.ie/roll-out/>.

Strength of any Countervailing Buyer Power

- 10.120 In assessing existing competition in the Relevant WCA Markets, ComReg has considered the impact posed by any strong buyers of WCA on the competitive behaviour of WCA providers.
- 10.121 ComReg concludes that it is unlikely that Eircom will be sufficiently constrained in the Regional WCA Market by CBP, such that it would prevent it from exerting SMP. While Eircom might face a stronger constraint from CBP on the Urban WCA Market, ComReg does not consider that it would be sufficient, in and of itself, to act as an effective competitive constraint, unless accompanied by other constraints arising from existing competition and potential competition.

SMP Designation

- 10.122 In paragraphs 10.72 to 10.112 above (and in Section 11 of the Consultation), ComReg considered a wide range of factors to examine whether any undertaking enjoys a position of SMP in the Relevant WCA Markets identified in Section 9. These factors have included:
- (a) existing competition in the Relevant WCA Markets;
 - (b) potential competition in the Relevant WCA Markets; and
 - (c) the strength of any CBP.
- 10.123 ComReg's position is that the Regional WCA Market is not effectively competitive. Eircom would not be sufficiently constrained by the above factors such that it would be prevented from behaving, to an appreciable extent, independently of competitors, customers and consumers in those markets.
- 10.124 Where ComReg determines, based on market analysis carried out by it in accordance with Regulation 27 of the Framework Regulations, that a given market identified in accordance with Regulation 26 of the Framework Regulations is not effectively competitive, ComReg is obliged to designate an undertaking under Regulation 27(4) of the Framework Regulations with SMP.
- 10.125 Having regard to the conclusions reached in the above market analysis, ComReg's position is that Eircom should be designated as having SMP in the Regional WCA Market.
- 10.126 ComReg's position is that the Urban WCA Market is effectively competitive. Accordingly, ComReg has determined that no SP has SMP in the Urban WCA Market.

11 Competition Problems in the Regional WCA Market and Impacts on Competition and Consumers

Position set out in the Consultation

11.1 Having established that Eircom should be designated as having SMP in the Regional WCA Market, in Section 12 of the Consultation ComReg detailed the competition problems which could potentially arise, absent regulation in the Regional WCA Market (and related markets), but assuming upstream regulation in the Relevant WLA Market is in place, as per the Modified Greenfield Approach. This analysis informed the proposed imposition of appropriate remedies to address the identified competition problems, as outlined in Section 13 of the Consultation.

11.2 ComReg stated its preliminary view

“...that the underlying ability and incentives for Eircom to potentially engage in anti-competitive behaviour absent regulation is due to a lack of effective competition in the Regional WCA Market, coupled with Eircom’s position as a vertically-integrated supplier competing with its wholesale customers in downstream markets.”¹⁹²⁵

11.3 In considering the types of competition problems that could arise due to the anti-competitive exercise of SMP, ComReg noted that the purpose of *ex ante* regulation is to prevent, up-front, the possibility of an undertaking designated with SMP from engaging in anti-competitive conduct. Accordingly, it was not necessary for ComReg to catalogue examples of actual abuse, or to provide exhaustive examples of potential abuses.¹⁹²⁶

11.4 Absent regulation in the Regional WCA Market, ComReg considered that, by virtue of its SMP position, Eircom would have the ability and incentive to influence various parameters of competition, including prices, innovation, output and the variety or quality of goods and services provided. ComReg described the forms of competition problems that may arise in a market where a SP has SMP, including:

(a) Exploitation of consumers or customers by means of:¹⁹²⁷

- Excessive pricing;
- Distortion of investment incentives; and
- Reduced incentives to innovate.

¹⁹²⁵ See paragraph 12.5 of the Consultation.

¹⁹²⁶ See paragraph 12.6 of the Consultation.

¹⁹²⁷ See paragraphs 12.11 to 12.20 of the Consultation.

- (b) Leveraging market power into vertically-related markets, with a view to foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets by means of:¹⁹²⁸
- Refusal to deal, denial of access, or restrictions on access;
 - Non-price based vertical leveraging behaviour;
 - Information asymmetries; and
 - Price based vertical leveraging behaviour.
- (c) Leveraging market power into horizontally-related markets through price and non-price means, with a view to foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets by means of:¹⁹²⁹
- Tying and bundling;
 - Cross subsidisation and predation; and
 - Foreclosure by means of margin squeeze.
- (d) Excluding or delaying investment and market entry into the Regional WCA Market,¹⁹³⁰ to defend a position of SMP and foreclose the market.

11.5 Having set out the various competition problems which may arise in the Regional WCA Market, ComReg was of the preliminary view that, absent regulation, Eircom, as a SP designated with SMP, had:

*“.....the ability and incentive to engage in actions which could negatively impact on competition and customers in related retail and/or wholesale markets, as well as having the potential to reinforce its SMP in the Regional WCA Market over time.”*¹⁹³¹

11.6 Eircom’s position of SMP affords it the *ability* to engage in such actions because it is not subject to the same market disciplines as firms who do not hold SMP. Compared to a competitive market, competing firms are less able to either enter the market, or win business if already in the market, from an SMP firm due, in the case of Eircom to, *inter alia*, the ubiquity of its network, and the comparative lack of coverage of competing networks. Similarly, compared to a competitive market, consumers have less ability to influence an SMP firm’s conduct, as they have fewer credible switching alternatives, where that SMP firm chooses to exercise its SMP.

¹⁹²⁸ See paragraphs 12.24 to 12.39 of the Consultation.

¹⁹²⁹ See paragraphs 12.40 to 12.45 of the Consultation.

¹⁹³⁰ See paragraphs 12.46 to 12.48 of the Consultation.

¹⁹³¹ See paragraph 12.50 of the Consultation.

11.7 Eircom's position of SMP affords it the *incentive* to engage in such actions because (up to the point where marginal cost exceeds marginal revenue) it will maximize profits by generating increased revenues in doing so which are likely to outweigh the revenues lost from consumers who cease purchasing from it and switch to competitors. The SMP firm can earn greater profits than it would expect to in a competitive market, by engaging in practices designed to increase its revenues, including excessive pricing, foreclosure of competitors, and failing to innovate.

Respondents' Views

- 11.8 Seven of the eight Respondents to the Consultation expressed views on the potential competition problems that could occur absent regulation in the Regional WCA Market, and the impact that these problems could have on competition and consumers.
- 11.9 ALTO, BT, enet, Sky and Vodafone broadly agreed with the types of potential competition problems outlined by ComReg. enet agreed that ComReg had identified all relevant categories of competition problems that could potentially arise in the Regional WCA Market, given Eircom's SMP position. Sky considered that the competition problems identified by ComReg were similar to those identified in the Relevant WLA Market, and consequently agreed with ComReg's preliminary conclusions.
- 11.10 Vodafone agreed that the competition problems and the associated impacts on competition as identified were those which could potentially arise in the Regional WCA Market. Vodafone further indicated that the considerations it had referred to in its response to Question 6, concerning competition problems and impacts on consumers discussed in the context of the Relevant WLA Market were equally relevant for the Regional WCA Market. Vodafone therefore referred ComReg to its answer to Question 6, as summarised in paragraphs 6.25 to 6.28 above.
- 11.11 Virgin Media expressed no views on competition problems in the Regional WCA Market and referred instead also referred to its response to Question 6 (as summarised in paragraph 6.39 above).
- 11.12 Eircom disagreed with the identified competition problems on the basis of its contention that ComReg had incorrectly defined the Relevant WCA Markets, and had failed to appropriately address the level of direct and indirect constraints faced by Eircom. Eircom challenged ComReg's contention that it is able to charge excessive prices in the Regional WCA Market, in view of the presence of regulation in the Relevant WLA Market, and the switching opportunities afforded by the presence of Vodafone and BT in the Regional WCA Market (based on their use of WLA inputs). Eircom also noted that it is subject to competition law, which limited its ability to engage in the identified competition problems.
- 11.13 Eircom also argued that "*...it is hard to say that eir is able to charge excessive prices in the WCA market, especially in the presence of regulation in the WLA Market.*"¹⁹³²

¹⁹³² See p.72 of Eircom's Submission, responding to Q.12.

- 11.14 ComReg notes that some of Eircom's comments are addressed elsewhere in this Decision. In this respect, Eircom's views on ComReg's definition of the Relevant WCA Markets, including the impact of any direct and indirect constraints, are addressed in Section 9 above, at paragraphs 9.130 to 9.147, and 9.237 to 9.263. Eircom's views on whether it has SMP are addressed in Section 10 above, at paragraphs 10.68 to 10.71.
- 11.15 Colt provided no explicit views on this part of ComReg's assessment.
- 11.16 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following identified themes:
- (a) The competition problems analysis is invalid, given the incorrect market definition (see paragraphs 11.17 to 11.20 below); and
 - (b) Competition problems have arisen despite the presence of regulation (see paragraphs 11.21 to 11.24 below).

Competition problems analysis is invalid, given the incorrect market definition

- 11.17 Eircom disagreed that the competition problems and the associated impacts on competition and consumers identified by ComReg were those that could potentially arise in the Regional WCA Market (and related markets), on the basis that ComReg had failed to correctly define the market, or to appropriately assess the level of competition that Eircom faced in terms of both direct and indirect constraints. Eircom considered that the WCA Product Market should be delineated on the basis of CG and NG technologies.
- 11.18 In this respect, Eircom pointed to paragraph 12.13 of the Consultation,¹⁹³³ stating that, as noted by ComReg, Vodafone was switching to WLA based VUA services, which are in the WLA Market. Since BT also purchased VUA and Line Share, Eircom therefore suggested that it was unable to charge excessive prices in the Regional WCA Market, given the constraints generated by BT and Vodafone, as well as the presence of regulation in the Relevant WLA Market.
- 11.19 Eircom pointed to paragraph 12.50 of the Consultation,¹⁹³⁴ and suggested that, since, in its view, there was evidence of increased competition, ComReg could not simply have regard to an extensive hypothetical list of abusive conducts. Eircom also noted that, if it were designated with SMP in a market, it would be subject to the behavioural constraints imposed by *ex post* competition law.

¹⁹³³ In which ComReg stated: "For example, as outlined in paragraphs 10.119 to 10.124, if Eircom raised the price of WCA, this would raise input costs for purchasers of WCA from Eircom.⁹¹⁶ Given that such inflated wholesale prices may be passed on by the SPs to their retail and/or wholesale customers via higher retail prices, it could lead to reduced revenues for these SPs and possibly their exit from the downstream retail and/or wholesale markets. This way, Eircom's excessive pricing of WCA could lead to the distortion or foreclosure of competition in these markets." The footnote adds: "Assuming Eircom would provide them with such inputs absent regulation."

¹⁹³⁴ In which ComReg stated: "ComReg has presented examples of such behaviour and therefore considers that it is justified and proportionate to impose robust obligations on Eircom in the Regional WCA Market relating to access, transparency, non-discrimination, price control and cost accounting and accounting separation. The detail of these obligations is discussed in Section 11 below."

11.20 Eircom noted, finally, that its main competitors (Sky, BT, Vodafone and Virgin Media) form part of large international corporations who take advantage of substantial economies of scale in terms of network deployment, product development at both the wholesale and retail levels, and content purchasing power, and would readily make a complaint in the event of anti-competitive conduct by an SP designated with SMP.¹⁹³⁵

Competition problems have arisen despite the presence of regulation

11.21 ALTO agreed that the competition problems and the associated impacts identified by ComReg are those that could potentially arise in the Regional WCA Market (and related markets). ALTO noted, however, that some of these issues, such as constructive refusal to supply, were already occurring, despite the presence of regulation. ALTO therefore reiterated the concerns it had already set out in its response to Question 11 in the Consultation relating to ComReg's preliminary WCA SMP assessment that the remedies and enforcement measures proposed by ComReg were not fit-for-purpose.¹⁹³⁶

11.22 BT agreed with ComReg's preliminary conclusions, but considered that ComReg needed to address a loop-hole in the proposed remedies for the Regional WCA Market which, according to BT, could allow Eircom to use the proposed de-regulated leased lines market to supply WLA services directly to its own downstream retail arm, or to selected wholesale customers, by means of the leased lines market, which ComReg proposes to deregulate.

11.23 BT agreed that, aside from issues potentially arising from the de-regulation of the leased lines market, the competition problems and the associated impacts on competition and consumers identified by ComReg were those which could potentially arise in the Regional WCA Market (and related markets). However, BT considered that, as indicated in its response to Question 13 on proposed WCA remedies, the proposed Regional WCA Market remedies could be circumvented by Eircom, if Eircom could supply WLA services directly to its own downstream retail arm, or to selected wholesale customers by means of the deregulated leased lines market.

ComReg's Assessment of Respondents' Views

11.24 ComReg assesses Respondents' views under the key themes identified above:

- (a) Competition problems analysis is invalid, given the incorrect market definition (see paragraphs 11.27 to 11.35 below); and
- (b) Competition problems have arisen despite the presence of regulation (see paragraphs 11.36 to 11.40 below).

¹⁹³⁵ See p.72 of Eircom's Submission, responding to Q.12.

¹⁹³⁶ See paragraphs 10.62 to 10.67 above.

- 11.25 On a number of other occasions set out above, Respondents cross referred to responses they had given in answer to other questions. In the same vein, ComReg refers to its own assessments of those other questions. Thus, per paragraph 11.10 above, ComReg has already addressed Vodafone's response to Question 6 at paragraphs 6.79 to 6.82 in Section 6 above.
- 11.26 Similarly, per paragraph 11.11 above, ComReg has already addressed Virgin Media's response to Question 6 at paragraphs 6.105 to 6.108 in Section 6 above. In the context of WCA, ComReg agrees with Virgin Media that *"it is feasible that Eir could choose to provide wholesale broadband services even if it were not obliged to do so."*¹⁹³⁷ However, for the reasons set out in this Decision, ComReg is of the view that given Eircom's SMP position in the Regional WCA Market, absent regulation this supply would be on terms which would likely be more advantageous to itself, in comparison to its supply to its competitors, and would ultimately be less advantageous to all consumers, than in a market which was not characterised by SMP.

Competition problem analysis is invalid, given the incorrect market definition

- 11.27 In paragraphs 11.17 to 11.20 above, ComReg summarised a number of points raised by Eircom. Eircom disagreed with the characterisation of competition problems on the basis that ComReg had failed to define the Relevant WCA Markets correctly and, in particular, that ComReg had failed to correctly assess direct and indirect competition faced by Eircom. ComReg has previously responded to Eircom's views on the Urban WCA Market and Regional WCA Market definitions (including its contention that the WCA relevant Product Market should be delineated into separate CG and NG components) in Section 9, at paragraphs 9.130 to 9.142. For the reasons set out therein ComReg does not agree with Eircom's views.
- 11.28 ComReg agrees with Eircom, as set out at paragraph 11.18 above, that both BT and Vodafone purchase WLA products. Nevertheless, even allowing for regulation of the Relevant WLA Market, ComReg considers that Eircom still has the ability and incentive to engage in excessive pricing – despite its suggestions otherwise (in paragraph 11.13 above) - in those Exchange Areas that form part of the Regional WCA Market, in particular, where ComReg has identified in Section 10 that, based on an analysis of criteria (including existing competition, potential competition and CBP), Eircom has SMP. Absent regulation in the Regional WCA Market, ComReg considers that Eircom could potentially charge excessive prices compared to the Urban WCA Market, where there is a greater and likely sufficient competitive constraint on Eircom.
- 11.29 Eircom reiterated that ComReg cannot simply have regard to an extensive hypothetical list of abusive conducts. As ComReg noted in the Consultation (paragraph 12.6) and above at paragraph 11.3, ComReg is not required to catalogue examples of actual abuse, or to provide exhaustive examples of potential abuse. Rather, the purpose of *ex ante* regulation is to prevent the possibility of anti-competitive conduct by an SP designated with SMP.

¹⁹³⁷ See Virgin Media response to Q.8 of the Consultation, at p.4 of its Submission.

11.30 As noted in paragraph 12.4 of the Consultation, the underlying purpose of the *ex ante* regulatory framework is to deal with predictable competition problems that have their origin in structural factors in the industry.¹⁹³⁸ For example, the finding of an absence of effective competition in the Regional WCA Market indicates the potential for competition problems to arise within it (and related markets) over the review period in question, thereby justifying the imposition of *ex ante* regulation.

11.31 In this regard, ComReg notes that the Explanatory Note to the 2014 Recommendation states:¹⁹³⁹

“Evidence gathered through the Article 7 procedure suggests that both retail markets described above, i.e. the mass market as well as the market for high-quality business products, would in general remain characterised by a lack of effective competition in the absence of wholesale regulation in particular where there is only a single fixed network capable of offering access to broadband nationwide. In that case, regulatory intervention at the wholesale level would be required to address the competition failures at retail level. Regarding the mass-market, in the absence of appropriate wholesale regulation the fixed incumbent would in principle be the only operator with a ubiquitous network, which means that in certain areas, where alternative platforms are not present, the incumbent could act as a monopolist, for example by charging excessive prices.”

11.32 ComReg has carefully considered why Eircom has the ability and incentives to engage in the identified behaviours, as set out at paragraph 11.6 above, and as set out at length at Section 12 of the Consultation.

11.33 Eircom considered that it would be subject to the behavioural constraints imposed by *ex post* competition law in a scenario where it was determined to have SMP in a particular market. ComReg does not consider that, in the Regional WCA Market, Eircom would be sufficiently constrained by *ex post* competition law. The Explanatory Note to the 2014 Recommendation states:¹⁹⁴⁰

¹⁹³⁸ European Commission Explanatory Note to the 2014 Recommendation, page 9.

¹⁹³⁹ European Commission Explanatory Note to the 2014 Recommendation, page 57.

¹⁹⁴⁰ Explanatory Note to the 2014 Recommendation, page 45.

*“Experience under the market analysis and Article 7 notification procedures so far has indicated that in the majority of Member States the WCA market still exhibits, on a national scale, high and non-transitory entry barriers and is not expected to tend towards competition. This is due mainly to (a) at times slow take-up of LLU access products, (b) the lack of ubiquity of LLU-based entrants, which are not expected to provide their services on a national scale in the foreseeable future due to the strong economic disincentives to unbundle local loops or take up equivalent local access products in low-density and rural areas and (c) the lack of the presence of alternative infrastructure with nationwide coverage. As a result only one single infrastructure is usually – at least on a national market scale – able to offer wholesale central access and in view of this monopolistic market structure, and as a result, **competition law alone is not expected to be able to address sufficiently the market failures identified for the WCA market.** The three criteria test is therefore met for the WCA mass-market.”*

- 11.34 Competition law applied on an *ex post* basis is often unsuitable in preventing problems such as excessive pricing, and this is evidenced by the scarcity of successful *ex post* excessive pricing cases within EU jurisprudence. An *ex post* approach to excessive pricing in markets such as the Regional WCA Market, which is characterised by a lack of effective competition, is not likely to offer adequate protection for consumers or promote effective competition. This is because addressing such issues through competition law approaches (if it is proven to the required competition law standard) would likely occur substantially after the occurrence of the competition problem itself, thereby contributing to significant uncertainty amongst downstream market participants in the interim and undermining the development of effective competition to the detriment of consumers.
- 11.35 Eircom also argued that all of its main competitors operate as part of large international corporations who take advantage of substantial economies of scale and would readily make a complaint in the event of anti-competitive conduct by an SP designated with SMP. ComReg has responded to similar points raised by Eircom in relation to its main competitors in Section 6, paragraphs 6.101 to 6.102. Moreover, ComReg notes that, Market 3b (WCA) is identified in the European Commission’s 2014 Recommendation as being a market which is susceptible to *ex ante* regulation on the grounds that it fails the three criteria test, the third criterion of which is that competition law alone is insufficient to adequately address the identified.¹⁹⁴¹

¹⁹⁴¹ As set out at p.10 of the European Commission’s 2014 *Explanatory Note accompanying the document Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation.*

Competition problems have arisen despite the presence of regulation

- 11.36 In paragraphs 11.21 and 11.22 above, ComReg summarised points raised by ALTO and BT in relation to competition problems in the Regional WCA Market.
- 11.37 ALTO expressed concerns that the remedies and enforcement measures proposed by ComReg were not fit-for-purpose. ComReg has responded to similar points raised by ALTO in relation to enforcement measures in Section 6, paragraphs 6.58 to 6.64. ComReg also points to a number of compliance cases taken against Eircom for five breaches of SMP obligations in three regulated markets.¹⁹⁴²
- 11.38 ComReg notes that actual competition problems are evident in the Regional WCA Market, even in the presence of *ex ante* regulation. For example, Eircom's price increases for retail CG standalone broadband from September 2016 are indicative of a lack of effective competitive constraint, and cannot be explained with reference to Eircom's costs.
- 11.39 BT stated that, as indicated in its response to Question 13 (see paragraphs 11.22 to 11.23 above), it considered that there is a loop-hole in the proposed Relevant WCA Market remedies which could be exploited if the deregulated leased lines market were used by Eircom to supply WLA services directly to its downstream arm or selected wholesale customers.
- 11.40 BT's concerns relate to ComReg's proposed remedies, rather than to the identification of competition problems on the Relevant WCA Markets. Accordingly, ComReg addresses these issues in Section 12 below, at paragraphs 12.373 to 12.378. BT raised similar issues in the context of the proposed WLA remedies in its response to Question 7 of the Consultation, and ComReg has accordingly already addressed these issues in Section 7 above, at paragraphs 7.326 to 7.357. ComReg notes here, however, that the imposition of a Margin Squeeze obligation will eliminate the risk of Eircom self-supplying Bitstream at prices below those in the regulated Regional WCA Market.
- 11.41 ComReg also notes that it has taken steps to address inadequacies in Eircom's regulatory governance structures. In particular ComReg is currently reviewing Eircom's regulatory governance arrangements including, but not limited to, its Regulatory Governance Model ('**RGM**'). ComReg had appointed KPMG and Cartesian as independent advisors to assist ComReg with its review.
- 11.42 Following a call for input July 2017 requesting industry views on the observations of its Advisors, ComReg received responses from ALTO, BT Communications Ireland, Eircom, Sky Ireland and Vodafone Ireland.
- 11.43 ComReg has now initiated a project to identify what, if any, regulatory measures are appropriate to address the RGM issues, and plans to consult on proposals in this regard in the second half of 2018.

¹⁹⁴² ComReg Wholesale Compliance Cases 481 and 568 – See Information Notice 17/98: <https://www.comreg.ie/publication/comreg-wholesale-compliance-cases-481-568/>.

ComReg's Position

- 11.44 Having established that Eircom should be designated as having SMP in the Regional WCA Market, ComReg detailed in Section 12 of the Consultation the competition problems that could potentially arise in the Regional WCA Market (and related markets), absent regulation, but in the presence of upstream regulation in the Relevant WLA Market.
- 11.45 In the absence of regulation in the Regional WCA Market, ComReg considered that Eircom would have the ability and incentive to influence competition through effects on prices, innovation, output and the variety or quality of goods and services provided. These competition problems include, but are not limited to:
- (a) Exploitation of customers or consumers by virtue of its SMP position;
 - (b) Leveraging its market power into adjacent vertically or horizontally related markets through price and non-price means with a view to foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets; and
 - (c) Excluding or delaying investment and market entry into the Regional WCA Market, aimed at defending its position and/or foreclosing the market.
- 11.46 ComReg has considered Respondents' views above at paragraphs 11.24 to 11.40. ComReg remains of the view that, absent regulation, Eircom, as the SMP undertaking in the Regional WCA Market, has the ability and incentive to engage in actions which could negatively impact on competition and customers in related retail and/or wholesale markets, as well as having the potential to reinforce its SMP position in the Regional WCA Market over time.
- 11.47 ComReg considers that it is therefore justified and proportionate to impose robust obligations on Eircom in the Regional WCA Market relating to access, transparency, non-discrimination, price control and cost accounting and accounting separation, as set out in Section 12 below.

12 Remedies for the WCA Market

Approach to Specifying and Implementing Remedies

- 12.1 In Section 10 of the Consultation, ComReg set out its preliminary view that there are two WCA Markets, namely the Urban WCA Market and the Regional WCA Market.
- 12.2 In Section 11 of the Consultation, ComReg stated its preliminary view that, insofar as the Urban WCA Market is concerned, existing and potential competition are likely, within the lifetime of this market review, to prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers and consumers. ComReg's preliminary view was therefore that no undertaking was likely to have SMP in the Urban WCA market.¹⁹⁴³
- 12.3 In Section 11 of the Consultation, ComReg set out its preliminary view that Eircom is likely to have SMP in the Regional WCA Market. ComReg concluded this after considering the market is not effectively competitive and that Eircom would not be sufficiently constrained by existing competition, potential competition or CBP such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and consumers.
- 12.4 In Section 12 of the Consultation, ComReg identified a range of competition problems and End Users impacts that, absent regulation, could arise in the Regional WCA Market and the impacts on related markets. These competition problems related to, amongst other things, Eircom having the ability and the incentive to foreclose competition in the Regional WCA Market due to, for example, excessive pricing of WCA. Other competition problems included leveraging market power in the Regional WCA Market to impact entry and potential efficient infrastructural investments and exclusionary practices, all ultimately to the detriment of competition and End Users. ComReg concluded that Eircom as the SMP undertaking in the Regional WCA Market has the ability and incentive to engage in actions which could negatively impact on competition and customers in related retail and or wholesale markets as well as having the potential to reinforce its dominance in the Regional WCA Market overtime.¹⁹⁴⁴
- 12.5 In Section 13 of the Consultation, ComReg considered the imposition of regulatory remedies (or obligations) to address these competition problems, and in so doing ComReg:
- (a) Reviewed the legal framework for imposing remedies (paragraphs 12.6 to 12.12 below);
 - (b) Reviewed existing WCA remedies imposed under the 2011 WBA Decision, 2013 NGA Decision and in other related decisions (paragraphs 12.13 to 12.27 below); and
 - (c) Assessed the regulatory approaches to imposing regulatory remedies in the Regional WCA Market (paragraphs 12.28 to 12.33 below).

¹⁹⁴³ Page 485, paragraph 11.126 of the Consultation.

¹⁹⁴⁴ Page 494, paragraph 12.49 of the Consultation.

Legal Framework for Imposing Remedies

- 12.6 In accordance with Regulation 8(1) of the Access Regulations, where an undertaking is designated as having SMP in a relevant market, ComReg is required to consider the imposition of obligations as set out in Regulations 9 to 13. In this regard, the obligations that may be imposed by ComReg on SMP undertakings are those relating to:
- (a) Access;
 - (b) Transparency;
 - (c) Non-Discrimination;
 - (d) Price Control and Cost Accounting; and
 - (e) Accounting Separation.
- 12.7 In addition, Regulation 8(6) of the Access Regulations provides that any of the above obligations imposed must:
- (a) Be based on the nature of the problem identified;
 - (b) Be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations;¹⁹⁴⁵ and
 - (c) Only be imposed following public consultation and notification of the draft measures to the European Commission, BEREC and other NRAs in accordance with Regulation 12 of the Framework Regulations.
- 12.8 Regulations 12(1) and 12(4) of the Access Regulations also stipulates statutory criteria that ComReg must take into account before imposing access obligations on an SMP undertaking. These criteria include, *inter alia*, examining: the technical and economic viability of using or installing competing facilities; the feasibility of providing access; the initial outlay of investment by the undertaking; and the need to safeguard competition in the long term.
- 12.9 Regulation 13(2) and Regulation 13(3) of the Access Regulations provide that ComReg is also required, when imposing price control obligations, to:
- (a) Take into account the investment made by the SMP operator which ComReg considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project;¹⁹⁴⁶ and

¹⁹⁴⁵ Pursuant to Section 12 of the Communications Regulation Act 2002 (as amended), ComReg's relevant objectives in relation to the provision of electronic communications networks and services are: (i) to promote competition; (ii) to contribute to the development of the internal market; and (iii) to promote the interests of users within the Community. Regulation 16 of the Framework Regulations further specifies ComReg's objectives and sets out a number of obligations in relation to the pursuit of its objectives.

¹⁹⁴⁶ Pursuant to Regulation 13(2) of the Access Regulations.

- (b) Ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits.¹⁹⁴⁷

12.10 Regulation 6(1) of the Access Regulations provides that the Regulator shall acting in pursuit of its objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations, encourage and, where appropriate, ensure adequate access, interconnection and the interoperability of services in such a way as to:

- (a) Promote efficiency;
- (b) Promote sustainable competition;
- (c) Promote efficient investment and innovation; and
- (d) Give the maximum benefit to End Users.

12.11 Regulation 13(2) and Regulation 13(3) of the Access Regulations provide that ComReg is also required, when imposing price control obligations, to:

- (a) Take into account the investment made by the SMP operator which ComReg considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project,¹⁹⁴⁸ and
- (b) Ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits.¹⁹⁴⁹

12.12 These considerations are taken into account in Section 13 of the Consultation and now in Section 12 of this Decision, as appropriate, when assessing whether and what form of remedy to impose, and are also discussed in further detail in the context of the Regulatory Impact Assessment ('**RIA**') found in Section 14.¹⁹⁵⁰ ComReg has also taken the following into account in considering the imposition of remedies on Eircom:

- (a) the European Regulators Group ('**ERG**')¹⁹⁵¹ common position on the approach to appropriate remedies in the electronic communications networks and services regulatory framework;¹⁹⁵²

¹⁹⁴⁷ Pursuant to Regulation 13(3) of the Access Regulations.

¹⁹⁴⁸ Pursuant to Regulation 13(2) of the Access Regulations.

¹⁹⁴⁹ Pursuant to Regulation 13(3) of the Access Regulations.

¹⁹⁵⁰ A Draft RIA was also set out in Section 15 of the Consultation.

¹⁹⁵¹ Pursuant to Regulation (EC) No 1211/2009 of the European Parliament and the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications ('**BEREC**') and the Office ERG was replaced with the Body of European Regulators for Electronic Communications (BEREC) in 2010.

¹⁹⁵² Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework, ERG (06)33, May 2006, available at https://www.pfs.is/upload/files/erg_06_33_remedies_common_position_june_06.pdf.

- (b) BEREC common position on best practice in remedies;¹⁹⁵³ and
- (c) any relevant comments letters issued by the European Commission pursuant to Articles 7 and 7a of the Framework Directive in its review of regulatory measures notified by Member States under the EU consultation mechanism for electronic communications services.

Existing WCA Remedies

12.13 Before considering which remedies would best meet ComReg's statutory/regulatory objectives in regulating the Regional WCA Market, in the Consultation ComReg identified the existing remedies that are in place with respect to Eircom's provision of WBA¹⁹⁵⁴ arising from the obligations imposed in the 2011 WBA Decision, the 2013 NGA Decision and subsequently in other relevant decisions.

12.14 These regulatory obligations are primarily set out in 2011 WBA Decision (with respect to Current Generation services) and the 2013 NGA Decision (with respect to Next Generation services), and are discussed¹⁹⁵⁵ briefly below.

Existing WCA Access Remedies

12.15 Eircom is currently subject to a range of access obligations having been designated with SMP in the WBA market, under the 2011 WBA Decision and the 2013 NGA Decision respectively. These remedies were designed to address various competition problems that were identified at that time. The access obligations imposed under the 2011 WBA Decision and further specified under 2013 NGA Decision require Eircom to provide the following services and facilities:

- (a) Next Generation Bitstream combined with Multicast where required;
- (b) VUA combined with support for Multicast where required;¹⁹⁵⁶

¹⁹⁵³

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1126-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-broadband-access-including-bitstream-access-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1127-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-physical-network-infrastructure-access-including-shared-or-fully-unbundled-access-at-a-fixed-location-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

¹⁹⁵⁴ Refer to paragraphs 1.15 to 1.17 of the Consultation.

¹⁹⁵⁵ This does not purport to be an exhaustive list of each individual remedy currently imposed upon Eircom. Details of obligations imposed upon Eircom are available at https://www.ComReg.ie/telecoms/table_of_smp_obligations.563.1076.html.

¹⁹⁵⁶ This does not purport to be an exhaustive list of each individual remedy currently imposed upon Eircom. Details of existing obligations imposed upon Eircom are available at https://www.comreg.ie/telecoms/table_of_smp_obligations.563.107.

- (c) Backhaul for Next Generation Bitstream and VUA, including backhaul on Ethernet technology;
- (d) Co-Location;
- (e) Interconnection, including interconnection based on Ethernet technology to the following:
 - (i) IBH;
 - (ii) ISH;
 - (iii) CSH;
- (f) Migrations; and
- (g) In Premises Services.¹⁹⁵⁷

12.16 In addition, the 2013 NGA Decision imposed access obligations upon Eircom:

- (a) To provide access to service and facilities in accordance with the requirements of the Decision Instrument and with any product descriptions and conditions that were contained in the then current version of the Wholesale Bitstream Access Reference Offer (**'WBARO'**);
- (b) To negotiate in good faith with undertakings requesting access;
- (c) Not to withdraw access to facilities already granted without ComReg's prior approval;
- (d) To grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services; and
- (e) To provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services;

12.17 Eircom was additionally required to provide access in a fair, reasonable and timely manner. In that regard, Eircom was required to:

- (a) Conclude, maintain or update, as appropriate, legally binding Service Level Agreements which include provision for associated Performance Metrics with Other Authorised Operators (**'OAOs'**);
- (b) Negotiate in good faith with OAOs in relation to the conclusion of legally binding and fit-for-purpose SLAs;
- (c) Ensure that all SLAs include provision for service credits arising from a breach of an SLA, with details of how service credits are calculated;
- (d) Ensure that payment of service credits, where they occur, shall be made in a timely and efficient manner; and

¹⁹⁵⁷ 'In Premises Services(s)' means service(s) provided by Eircom to an Access Seeker which enable or support the provision of NGA WBA services and facilities.

- (e) Ensure that where a request for provision of Access, or a request for provision of information is refused or met only in part, Eircom shall provide the objective criteria for refusing a request for access or information.

Existing Non-Discrimination Remedies

12.18 Eircom is subject to non-discrimination obligations under the 2011 WBA Decision and the 2013 NGA Decision, with respect to the provision of WBA. These obligations include requirements on Eircom to:

- (a) Apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services; and
- (b) Ensure that all services and information are provided to other undertakings under the same conditions and of the same quality as the services and information that Eircom provides to its own services or those of its subsidiaries or partners.

12.19 In addition, services and information shall be provided by Eircom to Access Seekers in sufficient time, that is the earlier of

- (a) at the same time as the WBA service(s) or information is provided to Eircom's retail or downstream divisions; or
- (b) at least two (2) months prior to any Eircom retail service or facility, which relies on the provision of the WBA service(s) or information, being made available by Eircom in the retail or downstream market, unless otherwise agreed with ComReg.

12.20 Eircom was also required to ensure that access to OSS and information shall be of the same standard and quality as that which Eircom provides to itself.

12.21 The 2013 NGA Decision additionally imposed obligations on Eircom:

- (a) To provide pre-ordering, ordering, provisioning, fault reporting and repair for Next Generation Bitstream and VUA on an EoI basis;
- (b) To provide access to all other product services and facilities on an EoO basis;
- (c) To submit Statements of Compliance ('SoC') to ComReg within a specified time frame;
- (d) To provide specific information with respect to contents of the SoC;
- (e) Not to launch Next Generation WBA until 20 May 2013 or until all the conditions with respect to non-discrimination and transparency were met; and
- (f) To advise ComReg in writing of any potential co-investment arrangements in relation to NGA WBA products.

Existing Transparency Remedies

12.22 The 2011 WBA Decision and the 2013 NGA Decision required that Eircom should be transparent in relation to the provision of services, with ComReg imposing obligations requiring it to publish specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices.

12.23 The 2011 WBA Decision and the 2013 NGA Decision also subjected Eircom to a range of transparency obligations whereby, it was required to make certain information available. These include specific obligations on Eircom to:

- (a) Publish an WBARO which should contain a minimum specified set of details with respect to the access products defined, including prices; be sufficiently unbundled so that Access Seekers are not required to pay for services that are not requested; and be subject to a transparent change management process, including advance public notification of proposed changes to products and prices;
- (b) Provide, in accordance with specified timeframes, advance notification to Access Seekers and to ComReg of proposed changes to the WBARO, prices and the introduction of products, services and facilities;
- (c) Ensure transparency in its billing by making its wholesale invoices sufficiently disaggregated, detailed and clearly presented such that an Access Seeker can reconcile the invoice to Eircom's WBARO and WBARO prices;
- (d) Publish information in respect of Next Generation WBA products, services, facilities and processes which shall be sufficient to identify and justify any permissible differences between these products, services, facilities and processes and those which Eircom supplies to itself;
- (e) Publish on its publicly available website Key Performance Indicators ('KPIs'), Performance Metrics and SLAs relating to WBA products, services and facilities;
- (f) Publish in advance on its publicly available website information regarding its NGA rollout plans providing at different timeframes specific information with respect to geographic availability of the service;
- (g) Make available and keep updated on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg), information regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies; as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WBA (or such other information as reasonably required by ComReg), including as regards such products services or facilities to be offered to Eircom's retail or downstream division;
- (h) Provide details to ComReg in respect of the rollout of NGA;

- (i) Meet requirements concerning access to confidential and/or commercial information; and
- (j) Make available and keep updated on its publicly available website information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices as may be specified by ComReg from time-to-time.

Existing Price Control Remedies

12.24 Eircom's current generation 'CG' copper-based WCA services (Bitstream and Bitstream Managed Backhaul ('**BMB**')) are currently subject to a cost orientation price control obligation, a margin squeeze obligation and a price floor as set out in the 2011 WBA Decision. These obligations are further specified in the following decisions:

- (a) ComReg Decision D06/12¹⁹⁵⁸ (referred to throughout this section as the '**2012 WBA Price Floors Decision**');
- (b) ComReg Decision D11/14¹⁹⁵⁹ (referred to throughout this section as the '**2014 WBA Pricing Decision**');
- (c) ComReg Decision D03/16 ('**2016 Access Pricing Decision**'), in relation to the pricing approach of standalone broadband ('**SABB**').

12.25 The purpose of the 2012 WBA Price Floors Decision is to prevent Eircom from setting its Bitstream prices too low such that they could discourage investment in LLU by alternative operators. Arising from the 2014 WBA Pricing Decision Eircom is obliged to comply with a national cost orientation obligation, a sub-national cost orientation outside the LEA¹⁹⁶⁰ (referred to as '**Outside the LEA**') as well as a retail margin squeeze test (differentiated by larger exchange area¹⁹⁶¹ ('**LEA**') and Outside the LEA). The 2016 Access Pricing Decision further specifies, among other things, the pricing methodology and maximum price for SABB Outside the LEA.

12.26 Eircom's next generation ('**NG**') services i.e., VUA (now defined as falling within the WLA Market) and NG Bitstream, (i.e. the monthly rental element) are not currently subject to a cost orientation obligation but subject to a number of margin squeeze tests based on the 2013 NGA Decision.

12.27 CG and NG WCA ancillary services are also subject to the obligation of cost orientation based on the 2013 NGA Decision.

¹⁹⁵⁸ ComReg Document No 12/32: Wholesale Broadband Access: Further specification to the price control obligation and an amendment to the transparency obligation; dated 5 April 2012 ('**2012 WBA Price Floors Decision**').

¹⁹⁵⁹ ComReg Document No 14/73R: 'Wholesale Broadband Access: Price Control obligation in relation to current generation Bitstream ('**2014 WBA Pricing Decision**').

¹⁹⁶⁰ The meaning of "Outside the LEA" is described in Section 4 of the 2014 WBA Pricing Decision.

¹⁹⁶¹ This is the LEA as determined by Section 2.1 of the Decision Instrument at Annex 3 of ComReg Decision D04/13 ('**2013 Bundles Decision**').

Assessment of Regulatory Approaches to Imposing Remedies

12.28 In Section 11 of the Consultation ComReg set out its preliminary view that Eircom has SMP in the Regional WCA Market. Furthermore, in Section 12 ComReg identified a range of potential competition problems that may arise in the Regional WCA Market, absent regulation, arising from Eircom's position as a vertically integrated SMP undertaking that competes with Access Seekers in a number of other retail and wholesale markets. In the Consultation, ComReg assessed the regulatory options for addressing the competition problems that have been identified, before then proposing specific regulatory obligations.

Option of 'No Regulation' in the Regional WCA Market

12.29 In the Consultation ComReg considered whether the option of de-regulation or regulatory forbearance is appropriate in the WCA Market.

12.30 Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated as having SMP. In Section 11 ComReg set out its view that the Regional WCA Market is not effectively competitive (and is not likely to become effectively competitive within the timeframe covered by this review). In Section 12 of the Consultation ComReg identified a range of competition problems that could occur in the Regional WCA Market related markets, absent regulation.

12.31 In view of this assessment, it was ComReg's preliminary view that the Regional WCA Market (and related markets including downstream retail and wholesale markets) would be unlikely to function effectively absent regulation. This would not be in the interest of promoting sustainable retail competition. As discussed in Section 12 of the Consultation concerning competition problems, a number of service providers use WCA inputs to compete with Eircom in the provision of downstream services. ComReg has set out its preliminary view that Eircom has the ability and incentive to exclude or foreclose Access Seekers competing in the provision of downstream services by refusing to supply them with WCA (including constructive refusal), or by setting WCA prices at an excessive level.

12.32 It was ComReg's preliminary view that the option of regulatory forbearance in the WCA Market was not, therefore, appropriate or justified. The relevant issue to be considered, therefore, related to what form of regulation is appropriate. In particular, which of the remedies are appropriate having regard to the particular circumstances of the Regional WCA Market, the associated identified competition problems and taking account of the relevant statutory requirements to which ComReg must have regard when imposing remedies. In the Consultation ComReg set out its preliminary views on these issues, with this summarised below.

Option to impose remedies in the Regional WCA Market

12.33 As noted in paragraphs 12.13 to 12.27 above, Eircom has to date been subject to a range of SMP based regulatory obligations as imposed primarily in the 2011 WBA Decision and the 2013 NGA Decision, as well as in a number of other decisions that enhanced or amended existing remedies in the intervening period. On that basis, Eircom is already subject to a range of regulatory obligations requiring it to provide WCA to Access Seekers in the Regional WCA Market and to do so on non-discriminatory and transparent terms and conditions, including at regulated prices.

Remedies to be imposed in the Regional WCA Market

12.34 In the Sections below ComReg sets out its position regarding the remedies that it is imposing upon Eircom in the Regional WCA Market. These include:

- (a) Access obligations (discussed in paragraphs 12.35 to 12.192);
- (b) Non-discrimination obligations (discussed in paragraphs 12.193 to 12.232);
- (c) Transparency obligations (discussed in paragraphs 12.233 to 12.247);
- (d) Price control & cost accounting remedies in the Regional WCA Market (discussed in paragraphs 12.248 to 12.354);
- (e) Accounting separation remedies in the Regional WCA Market (discussed in paragraphs 12.355 to 12.378); and
- (f) Statement of Compliance ('SoC') Remedy (discussed in paragraphs 12.379 to 12.395).

WCA Access Remedies

12.35 As identified in Section 10 of the Consultation, ComReg notes that in providing downstream wholesale and retail services, a number of Access Seekers are wholly or largely dependent upon the use of Eircom's WCA services.¹⁹⁶² ComReg's view is that Eircom has the ability and incentive to refuse to supply WCA, in the Regional WCA Market, to Access Seekers, either actually or constructively, or to provide these services on discriminatory or unreasonable terms and conditions (including in relation to price or non-price means) and that this would likely hinder the development of sustainable competition in the Regional WCA market and related markets. This would ultimately be detrimental to the interests of End Users, and would be contrary to the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.

¹⁹⁶² When ComReg refers to 'services' throughout this Consultation, unless otherwise stated it also generally refers to related products and associated facilities.

- 12.36 ComReg's view is that there are likely to continue to be differences in bargaining power between Eircom and Access Seekers, particularly given the absence of widely available alternative sources of supply within the timeframe of this review period.¹⁹⁶³
- 12.37 Absent the presence of effective access remedies, ComReg would be left to address any such refusal by Eircom to supply WCA, in the Regional WCA Market, through either its general dispute resolution powers or its compliance functions, all of which would occur after the fact, take time to resolve, be specific to the bilateral circumstances between the relevant parties and would not thereby contribute to regulatory certainty amongst market players. As a consequence, this could be damaging to competition and ultimately End Users.
- 12.38 Such case-by-case interventions by ComReg would also be inefficient and ineffective in resolving the broader competition problem of denial/delayed access.
- 12.39 Additionally, ComReg could seek to use its *ex post* competition law powers. However, such powers could ultimately result in a finding by an Irish court that an undertaking has abused its dominant position, but not necessarily require access to be provided as an outcome of any such finding. Similar to the reasons above, use of competition law powers would also take significant time to resolve, be specific to the relevant circumstances of the case and may not contribute to regulatory certainty amongst market players.
- 12.40 Overall, therefore, ComReg considers that dispute resolution (which can be of relevance in resolving access and other issues in certain circumstances) and *ex post* competition law approaches would not be effective in resolving issues concerning denial of access in the Regional WCA Market.
- 12.41 Regulation 12(1) of the Access Regulations provides that ComReg may, in accordance with Regulation 8 of the Access Regulations, impose on an operator obligations to meet reasonable requests for access to, and use of, specific network elements and Associated Facilities¹⁹⁶⁴ where ComReg considers that the denial of such access, or the imposition by operators of unreasonable terms and conditions having a similar effect, would:
- (a) Hinder the emergence of a sustainable competitive retail market;
 - (b) Not be in the interests of End Users; or
 - (c) Otherwise hinder the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.
- 12.42 Obligations must also be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 16 of the Framework Regulations.

¹⁹⁶³ ComReg notes that while SIRO offers VULA based WLA based services, the expected coverage of the SIRO network during the lifetime of this market review is likely to be limited, in particular, relative to that of Eircom. This is noted in paragraph 5.45 above.

¹⁹⁶⁴ 'Associated Facilities' shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time-to-time.

- 12.43 Regulation 12(2)(a) to 12(2)(j) and Regulation 12(3) of the Access Regulations provide that ComReg can impose, where appropriate, additional access obligations and may attach conditions covering fairness, reasonableness and timeliness to those access obligations.
- 12.44 As noted above, pursuant to Regulation 12(4) of the Access Regulations, when considering whether to impose obligations referred to in paragraphs (1) and (2) of Regulation 12 and, in particular, when assessing whether such obligations would be proportionate to the objectives set out in Section 12 of the Communications Regulation Act 2002 (as amended), ComReg has to take the following factors into account the:
- (a) Technical and economic viability of using or installing competing facilities, in light of the rate of market development, taking into account the nature and type of interconnection and access involved;
 - (b) Feasibility of providing the access proposed, in relation to the capacity available;
 - (c) Initial investment by the facility owner, bearing in mind the risks involved in making the investment;
 - (d) Need to safeguard competition in the long-term;
 - (e) Where appropriate, any relevant intellectual property rights; and
 - (f) Provision of pan-European services.
- 12.45 ComReg is required to take utmost account of Recommendations issued by the European Commission under Article 19(1) of the Framework Directive, including the NGA Recommendation and the 2013 Non-Discrimination Recommendation. ComReg is similarly obliged to take utmost account of opinions and common positions adopted by BEREC, including the Common Position on best practice in remedies in the WPNIA market.¹⁹⁶⁵
- 12.46 In general terms, ComReg's approach to remedies is consistent with the approaches put forward by the EC and BEREC. Where ComReg proposes to depart from the various recommendations, opinions and common positions set out by those bodies, the exceptions and reasoning will be detailed in the relevant section of this Consultation.

¹⁹⁶⁵

https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/common_approaches_positions/1127-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-physical-network-infrastructure-access-including-shared-or-fully-unbundled-access-at-a-fixed-location-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

Position set out in the Consultation

12.47 In the Consultation,¹⁹⁶⁶ ComReg proposed to impose specific access obligations upon Eircom in order to address identified competition problems and ultimately to promote the development of competition to the ultimate benefit of End Users. This included obligations to:

- (a) Meet reasonable requests for Access;
- (b) Provide access to specified WCA products;
- (c) Provide access to 'Backhaul';¹⁹⁶⁷
- (d) Provide access to Migrations;
- (e) Provide access to Interconnection Services, including In-Building Handover ('**IBH**'),¹⁹⁶⁸ In-Span Handover ('**ISH**'),¹⁹⁶⁹ Customer-sited Handover ('**CSH**')¹⁹⁷⁰ and Edge Node Handover ('**ENH**');¹⁹⁷¹ 'Flexible Interconnection Services and Co-Location for Interconnection;
- (f) Provide access to Associated Facilities,¹⁹⁷² including Multicast¹⁹⁷³ and Class of Service ('**CoS**'),¹⁹⁷⁴
- (g) Negotiate in good faith with undertakings requesting Access;
- (h) Not to withdraw access to facilities already granted without ComReg's prior approval;
- (i) Grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services; and

¹⁹⁶⁶ See paragraphs 13.38 to 13.119 of the Consultation.

¹⁹⁶⁷ For the purpose of this Decision, '**Backhaul**' means access to transport services from a regional point of presence to the Access Seeker's premises.

¹⁹⁶⁸ In-building Handover or IBH means the connection from the Eircom network to the Access Seeker's equipment within the Exchange, or equivalent facility.

¹⁹⁶⁹ In-Span Handover or ISH means the connection between the Exchange and the Access Seeker's nominated Point of Handover.

¹⁹⁷⁰ Customer Sited Handover or CSH means the connection from the Eircom network to the Access Seeker's equipment in the Access Seeker's premises, which includes the installation of an Eircom NTU at the Access Seeker's premises.

¹⁹⁷¹ As set out in the Consultation, 'Edge Node Handover' ('**ENH**') means the connection from the Eircom network through a dedicated aggregation node interface to the Undertaking's equipment.

¹⁹⁷² Associated Facilities shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time-to-time.

¹⁹⁷³ Multicast means a service that accepts a single copy of a designated data stream from the Access Seeker and distributes these data streams within the Eircom network to multiple End Users.

¹⁹⁷⁴ As set out in the Consultation, Class of Service ('**CoS**') means a network traffic management technique and involves the autonomous treatment of traffic at a single router, switch or equivalent equipment using classes to group and manage traffic that have common forwarding characteristics.

- (j) Provide access to OSS or similar software systems necessary to ensure fair competition in the provision of services.

12.48 ComReg also proposed that certain conditions should apply to the provision of access namely: requirements governing fairness, reasonableness and timeliness of access, including SLAs and requirements regarding timeliness of product development. In the Consultation,¹⁹⁷⁵ ComReg also proposed to attach to relevant access obligations conditions governing fairness reasonableness and timeliness. These included the following obligations to:

- (a) Conclude, maintain and update legally binding, fit-for-purpose Service Level Agreements ('**SLA**') with Access Seekers for WCA products, services and facilities and the Unified Gateway ('**UG**'),¹⁹⁷⁶ which shall encourage an efficient level of performance;
- (b) Negotiate in good faith with undertakings in relation to the conclusion of legally binding and fit-for-purpose SLAs (either in the case of a new SLA or an amendment to an existing SLA);
- (c) Provide undertakings, at the end of the SLA Negotiation Period,¹⁹⁷⁷ with Eircom's best and final offer ('**BAFO**') in respect of the relevant SLA which, for the avoidance of doubt, shall be fit-for-purpose; include all relevant information that is specified and accord with specified principles set out in this Section 13.123. The SLA Negotiation Period ends with the closing of negotiations and the making of a BAFO by Eircom to undertakings with respect to the SLA. When Eircom makes its BAFO, the SLA is deemed by ComReg to be concluded;
- (d) Ensure that the SLA Negotiation Period includes a discussion on the process for suspension of an SLA and the associated terms and conditions, as described below;
- (e) Ensure that SLAs specify circumstances which trigger the payment of Service Credits¹⁹⁷⁸ such as a failure by Eircom to achieve committed service levels, or the occurrence of specified events (such as incidents of service outage or deterioration), or other appropriate criteria;
- (f) Ensure that SLAs specify the methodology for calculating the quantum of Service Credits and include an example calculation of Service Credits;

¹⁹⁷⁵ See paragraphs 13.120 to 13.171 of the Consultation.

¹⁹⁷⁶ Unified Gateway or '**UG**' is an interface into Eircom's OSS used by Access Seekers in order to avail of regulated wholesale services, including WLA and WCA products, services and facilities.

¹⁹⁷⁷ SLA Negotiation Period means the duration of time required by Eircom to close negotiations between it and Undertakings in respect of an amended or new SLA.

¹⁹⁷⁸ Service Credit(s) means a financial credit which is provided by Eircom to an Access Seeker where Eircom has failed to meet the service levels which Eircom commits to from time-to-time in its SLA.

- (g) Ensure that circumstances which trigger the payment of Service Credits and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable in that they adequately incentivise Eircom to deliver an efficient level of service quality and allow undertakings to recoup at a minimum the direct costs and any other loss of value that the undertakings incur as a result of the circumstances that had triggered the payment of Service Credits;
- (h) Ensure that application of Service Credits, where they occur, shall be applied automatically and in a timely and efficient manner;
- (i) Ensure that SLAs include, where appropriate, the comprehensive set of terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA. Such terms and conditions should be based on objectively defined and measurable parameters;
- (j) In relation to an existing product, service or facility, following a request from an undertaking (including Eircom) for an amendment to an SLA, Eircom is required, within one (1) month of the receipt of such a request, inform the undertaking in writing whether the request for an amendment is accepted or rejected and, if accepted, include details of the SLA Negotiation Period and the associated start date. Negotiations in respect of the amended SLA shall close, unless otherwise agreed with ComReg, within six (6) months of the date the undertaking makes such a request. Within one (1) month of the date the undertaking makes such a request Eircom may seek an extension to the six (6) month period from ComReg;
- (k) In relation to an amendment to an existing product, service or facility, where Eircom itself initiates the amendment, Eircom is required, within one (1) month of the initiated amendment, to inform and seek undertakings' views as to whether the proposed product amendment should result in an amendment to the relevant SLA;
- (l) Eircom is required to ensure that its obligations with respect to SLAs have been complied with prior to notifying ComReg of non-pricing amendments or changes to the ARO resulting from the offer of a new or an amendment to an existing product, service or facility which falls within the scope of the Regional WCA Market;
- (m) Eircom is required to ensure that the new or amended SLA is implemented and is made available to undertakings by the date on which:
 - (i) any amendment or change to an existing product, service or facility;
or
 - (ii) the offer of a new product, service or facility comes into effect;
- (n) Where the amended SLA does not relate to 12.48 (m) (i) or (ii) above, Eircom is required to ensure that the amended SLA is implemented and is made available to undertakings within three (3) months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg); and

- (o) Within six (6) months (unless otherwise agreed with ComReg) of the Effective Date of decision to be made on foot of the Consultation, Eircom is required to update its SLAs to include all relevant information and accord with the principles set out above.

12.49 In the Consultation, ComReg proposed the withdrawal¹⁹⁷⁹ of the following obligations:

- (a) In-Premises Services;
- (b) Notification of co-investment.

Proposed WCA Access obligations in the Regional WCA Market

12.50 In this section, ComReg examines issues raised with respect to each of the proposed obligations in the Regional WCA Market as follows:

- (a) Respondents' Views;
- (b) ComReg's Assessment of Respondents' Views; and
- (c) ComReg's Position.

12.51 Six Respondents to the Consultation, expressed views on the proposed obligation (ALTO, BT, Eircom, enet, Sky, and Vodafone). ALTO and enet only noted their agreement with ComReg's preliminary views, as set in the Consultation, but did not provide sufficient material to be included in the thematic assessment below.

12.52 All Respondents except Eircom agreed that obligations should be imposed on Eircom in the Regional WCA Market.

12.53 Respondents' views, ComReg's assessment of Respondent's views, and ComReg's position on the proposed obligations are identified below under the following themes:

- (a) Requirement to meet reasonable requests for access to WCA products, service and Associated Facilities (discussed in paragraphs 12.54 to 12.58 below);
- (b) Requirement to provide access to specified WCA products (discussed in paragraphs 12.59 to 12.77 below);
- (c) Requirement to provide access to Backhaul (discussed in paragraphs 12.78 to 12.89 below);
- (d) Requirement to provide access to Migrations (discussed in paragraphs 12.90 to 12.116 below);
- (e) Requirement to provide access to Interconnection Services, including IBH, ISH, and CSH, and ENH; Flexible Interconnection Services and Co-Location for Interconnection (discussed in paragraphs 12.117 to 12.123 below);

¹⁹⁷⁹ Paragraph 13.180 of the Consultation.

- (f) Requirement to provide access to Associated Facilities, including Multicast and Class of Service (discussed in paragraphs 12.124 to 12.128 below);
- (g) Requirement to negotiate in good faith with undertakings requesting access (discussed in paragraphs 12.129 to 12.134 below);
- (h) Requirement not to withdraw access to facilities already granted without ComReg's prior approval (discussed in paragraphs 12.135 to 12.142 below);
- (i) Requirement to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services (discussed in paragraphs 12.143 to 12.149 below); and
- (j) Requirement to provide access to Operational Support Systems or similar software systems necessary to ensure fair competition in the provision of services (discussed in paragraphs 12.150 to 12.160 below);
- (k) Requirement to provide access in accordance with a range of conditions governing fairness, reasonableness and timelessness including but not limited to SLA, Service credits, Timeline for the agreement of SLA etc. (discussed in paragraphs 12.161 to 12.173 below);
- (l) Requirement regarding Timeliness of Product Development (discussed in paragraphs 12.174 to 12.187 below);
- (m) Withdrawal of specific Access Obligations Imposed in the 2013 NGA Decision (discussed in paragraphs 12.188 to 12.192 below);

Obligation to meet all reasonable requests for WCA Access

Respondents' Views

12.54 Vodafone agreed with the proposed requirement that Eircom should be required to meet reasonable requests for access to WCA products, services and associated facilities.

ComReg's Assessment of Respondents' Views

12.55 ComReg notes that Vodafone agreed with the requirement that Eircom should meet reasonable requests for access to WCA products, services and associated facilities.

ComReg's Position

12.56 Having considered Vodafone's views as summarised in paragraph 12.55 above, and having regard to the analysis set out in the Consultation¹⁹⁸⁰ and above, ComReg maintains its position that the imposition of obligations upon Eircom to meet all reasonable requests for access for the provision of WCA products, services and associated facilities is reasonable, proportionate and justified.

¹⁹⁸⁰ Paragraphs 13.46 to 13.48 of the Consultation.

- 12.57 ComReg is cognisant that, during the lifetime of this review, the evolution of technology is likely to result in the potential for the development of and demand for new types of network access. ComReg considers that in order to develop and evolve its network, Eircom must take account of the state of development of, and the roadmap for, networking technology at a particular point in time, when investment decisions are being made. ComReg considers that one input to the decision making process should be reasonable consideration of potential forms of network access which could be required by Access Seekers. In this context ComReg observes that a refusal of an access request by Eircom due to limitations arising from a technology choice or an implementation decision may not be considered reasonable by ComReg.
- 12.58 The obligations requiring Eircom to meet all reasonable requests for Access are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Access to specific WCA products, services and facilities

Respondent's Views

- 12.59 Two of the eight Respondents to the Consultation (Eircom and Vodafone) expressed views regarding the requirement to provide access to specific WCA products,¹⁹⁸¹ services and associated facilities, their views are summarised below.
- 12.60 Eircom's Submission focussed specifically on CG Bitstream access and did not express any specific views on the NG Bitstream Plus access products.
- 12.61 Eircom disagreed with ComReg's proposed imposition of a requirement on Eircom to provide access to CG WCA based Bitstream for the reasons summarised in paragraphs 12.62 to 12.65 below.
- 12.62 Eircom argued that GG Bitstream access (including Eircom's '**Bitstream IP**',¹⁹⁸² '**Bitstream BMB**'¹⁹⁸³ and '**Bitstream BEA**'¹⁹⁸⁴ is unnecessary because these Bitstream products are legacy products, and the underlying CG Bitstream service technology is reaching end-of-life according to Eircom. Eircom also stated that it is proposing to retire a number of these legacy products from sale as only a subset of them are actively used by industry.
- 12.63 Eircom explained that End Users are migrating from CG WCA based Bitstream to NG WCA based Bitstream products. In the context of this technology evolution from CG to NG services Eircom stated:

*"Given ComReg's duties in relation to encouraging innovation it should facilitate such retirement."*¹⁹⁸⁵

¹⁹⁸¹ Bitstream BMB, Bitstream BEA, Bitstream IP Bitstream Plus and Bitstream Plus VEA.

¹⁹⁸² Bitstream IP is a current generation wholesale Bitstream product provided by Eircom.

¹⁹⁸³ Bitstream Managed Backhaul, or '**Bitstream BMB**', is a current generation wholesale Bitstream product provided by Eircom.

¹⁹⁸⁴ Bitstream Ethernet Access or '**Bitstream BEA**', is a current generation wholesale Bitstream product provided by Eircom.

¹⁹⁸⁵ Eircom Submission, page 69.

- 12.64 Vodafone agreed with ComReg's proposed requirement to provide access to specific CG and NG WCA products and their standalone variants.
- 12.65 In addition, Vodafone noted the relationship between the Relevant WCA Markets and the upstream WLA Market, and the consequences that proposed deregulation of the Urban WCA Market could have in terms of the retail broadband market.

ComReg's Assessment of Respondents' Views

- 12.66 ComReg does not agree with Eircom's view that access to CG WCA based Bitstream access should be withdrawn.
- 12.67 ComReg recognises that over time there is likely to be a reduction in the reliance by Access Seekers on CG WCA based Bitstream products as End Users migrate to higher speed broadband (and related) services. Such a migration will ultimately result in Access Seekers using NG WCA based services such as Bitstream Plus.
- 12.68 ComReg considers that it would be unreasonable and premature to remove the obligation to provide CG WCA based Bitstream products. While migrations are taking place (driven by End User demand) there remains a cohort of End Users that still use CG services.
- 12.69 Prematurely forcing a change to NG WCA based Bitstream services would cause disruption¹⁹⁸⁶ to customer service (End Users) as their Service Provider changes to a different wholesale input. While Eircom continues to supply retail its customers with CG broadband services.
- 12.70 The continuation of CG WCA based services is required as otherwise Access Seekers would be unable to maintain their provision of CG services to End Users in some geographic areas (i.e. those areas where CG WLA based services are economically and/or technically not feasible).
- 12.71 The potential impact of the removal of the obligation to provide CG WCA based Bitstream services on Access Seekers and End Users is such that ComReg considers that the obligations to provide access to CG WCA based services should remain in place.
- 12.72 ComReg notes that Eircom (as noted in paragraph 12.63) appears to suggest that ComReg is required to withdraw access to legacy CG access products to encourage innovation regardless of the consequences for competition and End Users. ComReg disagrees with Eircom's apparent interpretation that the continuation of CG WCA based services conflicts with ComReg's duties.¹⁹⁸⁷

¹⁹⁸⁶ This would include a technician site visit, a change of the NTU/modem, a change to the data port extension and possible changes to internal wiring.

¹⁹⁸⁷ Pursuant to Section 12 of the Communications Regulation Act 2002 (as amended), ComReg's relevant objectives in relation to the provision of electronic communications networks and services are: (i) to promote competition; (ii) to contribute to the development of the internal market; and (iii) to promote the interests of users within the Community.

12.73 In ComReg's view, encouraging innovation and new services is important but it must be balanced against protecting competition and End Users' interests. Encouraging innovation and new services would not justify the withdrawal of CGA WCA based products, service and associated facilities for the reasons explained in paragraphs 12.66 to 12.71 above.

12.74 ComReg notes and agrees with Vodafone's view that access to CG and NG WCA based products is required in the Regional WCA Market.

ComReg's Position

12.75 Having considered Respondents' views as summarised and assessed in paragraphs 12.59 to 12.74 above, and having regard to the analysis set out in the Consultation,¹⁹⁸⁸ ComReg has decided to maintain its view as set out in the Consultation.

12.76 Eircom is required to provide and grant Access to the following particular products and services:

(a) Current Generation Bitstream which includes the following:

- (i) Bitstream Managed Backhaul;
- (ii) Bitstream Internet Protocol; and
- (iii) Bitstream Ethernet Access.

(b) Next Generation Bitstream without limitation;

- (i) FTTC-based Bitstream;
- (ii) FTTH-based Bitstream; and
- (iii) Exchange launched Bitstream.

(c) Standalone Broadband (Current Generation and Next Generation).

12.77 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Access to Backhaul

Respondents' Views

12.78 Two of the eight Respondents to the Consultation (Eircom and Vodafone) expressed views on the proposed requirement for Eircom to provide access to Backhaul.

12.79 Eircom did not express a view on the general requirement for Backhaul services, but did express a view on specific types of Backhaul service.

12.80 Eircom stated:

¹⁹⁸⁸ Paragraphs 13.49 to 13.58 of the Consultation.

“BECS was notified as end of sale in June 2016 and no changes to existing circuits from January 2017. BECS via WEIL is the required interconnect for Bitstream IP and BMB products. BECS via WEIL allows Operators to utilise a single WEIL to interconnect with the open air network for all their traffic requirements.”¹⁹⁸⁹

- 12.81 Eircom also noted that (**‘BECS via WEIL’**)¹⁹⁹⁰ allows Access Seekers to utilise a single WEIL to interconnect with the Eircom network for all Bitstream traffic requirements. In short, in Eircom’s view the (**‘BECS’**)¹⁹⁹¹ is not required because the BECS via WEIL product is a more versatile alternative, and the BECS product is in the process of being retired by Eircom.
- 12.82 Vodafone agreed with ComReg’s proposed requirement to provide access to Backhaul services because Backhaul is required to transport End User’s traffic to and from the Eircom point of handover with the Access Seeker.

ComReg’s Assessment of Respondents’ Views

- 12.83 ComReg’s position is that fit-for-purpose (i.e. in terms of functionality and performance) Backhaul services are required to meet the needs of Access Seekers. ComReg did not propose access to specific Backhaul products in the Consultation, but did propose access be provided to Backhaul services. The specific products that Eircom provides to discharge its Backhaul obligation is a matter for Eircom once the products that are offered satisfy the access requirements of Access Seekers.
- 12.84 ComReg notes that in the case were a product is no longer the optimum technical solution (for example, because of technology changes), Eircom may propose to retire products once the appropriate safeguards are put in place to protect competition and End Users. ComReg approval is required before any facilities are withdrawn.¹⁹⁹²
- 12.85 ComReg also notes that Access Seekers can request access to specific Backhaul products on a reasonable request basis, if required.
- 12.86 ComReg notes Vodafone’s view in paragraph 12.82 above, that Backhaul is required to transport End User traffic to and from the point of handover. Therefore, access to Backhaul is a necessary obligation to ensure effective competition.

¹⁹⁸⁹ Eircom Submission, Page 69.

¹⁹⁹⁰ Bitstream Ethernet Connection Service via Wholesale Ethernet Interconnection Link or **‘BECS via WEIL’** is a product provided by Eircom.

¹⁹⁹¹ Bitstream Ethernet Connection Service or **‘BECS’** is a product provided by Eircom.

¹⁹⁹² This is in accordance with the obligation being imposed on Eircom not to withdraw access to facilities already granted without the prior approval of ComReg.

ComReg's Position

- 12.87 Having considered Respondents' views as summarised and assessed in paragraphs 12.78 to 12.86 above, and having regard to the analysis set out in the Consultation,¹⁹⁹³ ComReg has decided to maintain its view as set out in the Consultation.
- 12.88 Eircom is required to provide and grant Access to the following particular products and services:
- (a) Backhaul.
- 12.89 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Access to Migration services including Bitstream Soft Migrations

Respondents' Views

- 12.90 Two of the eight Respondents to the Consultation (Eircom and Vodafone) expressed views regarding the requirement to provide access to Migration services, including Bitstream Soft Migrations.
- 12.91 Eircom's Submission referred specifically to inter-generational¹⁹⁹⁴ Soft Migrations (i.e. migrations from CG WCA based Bitstream services to NG WCA based Bitstream Plus services), and to migrations from Bitstream IP to Bitstream BMB.
- 12.92 Eircom explained that in the case of a Bitstream Migration from CG WCA based services to NG WCA based services, a site visit (i.e. to customer premises and cabinet/exchange) is required to complete the migration given that the End User will be served by different network equipment e.g. via different ports on DSLAMs. Eircom also explained that a Migration from Bitstream IP to BMB can be electronically enabled where the same network equipment is used for both services (i.e. the same DSLAM port).
- 12.93 Eircom noted that, as outlined in its response to Question 7 of the Consultation relating to remedies in the WLA Market, migration from an NG service to CG service (referred to as 'Reverse Migration(s)') though possible, should be discouraged through charging arrangements, as ComReg should be encouraging investment by Service Providers and encouraging the adoption of new technology by consumers. In this respect Eircom noted:

*"...It is eir's continued view that efficient and swift migrations are key to the operation of a competitive market and require pan-industry processes and agreements."*¹⁹⁹⁵

¹⁹⁹³ Paragraphs 13.59 to 13.64 of the Consultation.

¹⁹⁹⁴ Eircom Submission, page 69.

¹⁹⁹⁵ *Ibid.*

12.94 Eircom set out its view that ComReg should penalise Reverse Migrations through regulated pricing because ComReg should be encouraging Access Seekers to invest and encouraging the adoption of new technologies by End Users.

12.95 Eircom stated that:

“Migrations from other operators to one another, and to eir, have also to operate swiftly and efficiently. eir expects ComReg to apply migration principles reciprocally and seeks a clear commitment to that effect.”¹⁹⁹⁶

12.96 Vodafone’s Submission was supportive of the requirement to provide access to Migration services. Vodafone noted that it had expressed similarly supportive views in its Submission with respect to WLA Migration obligations (see paragraphs 7.170 to 7.171 above) on Migrations in the WLA Market. Vodafone noted that, as explained in its response regarding the WLA Market:

“...without effective migrations it is simply not possible for challengers such as Vodafone to use Eircom’s access products to compete for customers, to invest and maintain the customer base accordingly, or to meet customer demand for new and better products.”¹⁹⁹⁷

12.97 Vodafone was also supportive of ComReg’s requirement to introduce a Bitstream Soft Migration facility, similar to the one developed for LLU Soft Migrations. Vodafone also noted that the absence of a Soft Migration service will result in an artificial impediment for Access Seekers when migrating their customer’s between services.

12.98 Vodafone explained that without Migrations services in general and, in particular, Soft Migration services, Access Seekers would not be able to migrate their customer’s efficiently between services, which would be harmful to competition.

ComReg’s Assessment of Respondents’ Views

12.99 The Bitstream Soft Migration scenario described by Eircom and summarised in paragraph 12.91 above is different from the Bitstream Soft Migration scenario described in the Consultation. ComReg described a Bitstream Soft Migration in the Consultation as follows:

“... from POTS based Bitstream Plus to standalone Bitstream plus, and Bitstream to standalone Bitstream”¹⁹⁹⁸

12.100 For the avoidance of doubt, the description of ComReg’s proposed Bitstream Soft Migration requirement does not contemplate ‘inter-generational’ migration between CG Bitstream and NG Bitstream Plus services or vice versa.

¹⁹⁹⁶ *Ibid.*

¹⁹⁹⁷ Vodafone Submission, paragraph 291.

¹⁹⁹⁸ Paragraph 13.71, footnote 955 of the Consultation.

- 12.101 The potential disruption envisaged by Eircom resulting from inter-generational service migration (i.e. from a CG based WCA service to NG based WCA service and vice versa) will not arise because inter-generational soft migrations are not required. A soft migration simply involves the electronic disablement of the SB-WLR service and associated number porting, if required.
- 12.102 ComReg notes and agrees Eircom's view that a migration from Bitstream IP to Bitstream BMB can be facilitated electronically.
- 12.103 ComReg disagrees with Eircom's view that End Users should be penalised if they migrate from NG services to CG services. Eircom expressed the same view in the context of migrations from NG WLA services to CG WLA services. ComReg has assessed Eircom's view on Reverse Migrations and set out its views in paragraphs 7.192 to 7.194 above in the context of WLA. These views equally apply with respect to the Regional WCA Market.
- 12.104 In relation to Eircom's view (as noted in paragraph 12.95 above) on the reciprocal application of migration principles and Eircom's request for ComReg to make a clear commitment to that effect. In ComReg's view it would be inappropriate for ComReg to make such a commitment. However, ComReg will continue to discharge its functions as required.
- 12.105 For the avoidance of doubt, migrations do not arise when an End User switches networks. However the Universal Service Regulations¹⁹⁹⁹ and, in particular, Regulation 25 apply in those circumstances.²⁰⁰⁰
- 12.106 ComReg notes and agrees with Vodafone's view that Migration services, including Bitstream Soft Migrations are required, and that the absence of a Soft Migrations capability would artificially impede Access Seekers when migrating customers between services.
- 12.107 ComReg recognises that the main demand²⁰⁰¹ for Bitstream Soft Migrations will more likely arise from those Access Seekers who wish to migrate their existing installed customer base from SB-WLR to VoIP services and use their existing Bitstream/Bitstream Plus services (i.e. broadband) to facilitate the delivery of VoIP services to the Access Seeker's customers (End Users).

¹⁹⁹⁹ European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (S.I. No. 337 of 2011), (the '**Universal Service Regulations**').

²⁰⁰⁰ Regulation 25(4) provides that: "(4) Undertakings referred to in paragraph (1) shall ensure that—

(a) the porting of numbers and their subsequent activation shall be carried out within the shortest possible time, (b) in the case where a subscriber has concluded an agreement to port a number to a new undertaking, that number shall be activated within one working day, and (c) loss of service during the porting process shall not exceed one working day."

²⁰⁰¹ Eircom has commenced its engagement with ComReg regarding the withdrawal of circuit based voice services https://www.comreg.ie/media/dlm_uploads/2017/01/ComReg-1705.pdf.

ComReg's Position

- 12.108 Having considered Respondents' views, as summarised and assessed in paragraphs 12.90 to 12.107, and having regard to the analysis set out in the Consultation,²⁰⁰² ComReg has decided to maintain its view as set out in the Consultation, save for an amendment to the definition of Bitstream Soft Migration.
- 12.109 Eircom is required to provide and grant Access to the following particular products and services:
- (a) Migrations services, including Bitstream Soft Migrations.
- 12.110 The obligations with respect to the provision of Access to specific products being imposed upon Eircom are more particularly detailed in the Decision Instrument set out at Appendix: 21 of this Decision.
- 12.111 In order to provide certainty and clarity regarding the number portability requirement for a Bitstream Soft Migration. ComReg has decided to amend the definition of a Bitstream Soft Migration.
- 12.112 The current migration processes from POTS based VUA to standalone VUA and from POTS based Bitstream plus to standalone Bitstream Plus is facilitated with the 'Provide NGA from WLR' order i.e. PNW order, which includes an option to port the telephone number(s).
- 12.113 The purpose of this amendment is to make it clear that the porting capability of the current migration processes must be included in the new soft migration process.
- 12.114 In ComReg's view the majority of End Users will want to retain their telephone number when they migrate from their POTS based service to their standalone broadband service, so that they use can voice over-broadband services with their current number. To facilitate this End Users must have the option to retain their telephone as part of the soft migration process. Without the inclusion of a porting option as part of the soft migration the objective of this obligation to promote long sustainable competition would be undermined.
- 12.115 The modified definition is as follows:
- "Bitstream Soft Migration means the facility whereby an End User can migrate from SB-WLR with Current Generation Bitstream or Next Generation Bitstream to standalone Current Generation Bitstream or Next Generation Bitstream and without the need for physical network intervention at the time of provisioning and must include the porting of their telephone number from the current service provider, if required"*
- 12.116 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

²⁰⁰² Paragraphs 13.65 to 13.81 of the Consultation.

Access to Interconnection Services, Flexible Interconnection and Co-Location for Interconnection

Respondent's Views

- 12.117 One of the eight Respondents expressed a view on this obligation (Vodafone).
- 12.118 Vodafone's Submission²⁰⁰³ was supportive of the requirement to provide interconnection service, flexible interconnection and Co-Location for interconnection.
- 12.119 Vodafone stated²⁰⁰⁴ that the full suite of proposed Interconnection Services is required to ensure there is sufficient flexibility to meet the varying needs of different Access Seekers that have followed different investment approaches, or are at a different stage in their development through the ladder of investment.

ComReg's Assessment of Respondents' Views

- 12.120 ComReg notes Vodafone's view as summarised in paragraphs 12.118 to 12.119 above that access to Interconnection Services, Flexible Interconnection and Co-Location for Interconnection are necessary obligations to enable Access Seekers to follow "*investment approaches*"²⁰⁰⁵ to rollout services to End Users.

ComReg's Position

- 12.121 Having considered Respondents' views as summarised and assessed in paragraphs 12.118 to 12.120 above, and having regard to the analysis set out in the Consultation,²⁰⁰⁶ ComReg has decided to maintain its view as set out in the Consultation.
- 12.122 Eircom is required to provide and grant Access to the following particular products and services:
- (a) Interconnection Services;
 - (b) Flexible Interconnection; and
 - (c) Co-Location for Interconnection.
- 12.123 The obligations with respect to Access to specific products being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

²⁰⁰³ Vodafone's Submission, paragraphs 293 to 295.

²⁰⁰⁴ Vodafone's Submission, paragraph 294.

²⁰⁰⁵ *Ibid.*

²⁰⁰⁶ Paragraphs 13.82 to 13.96 of the Consultation.

Associated Facilities – Multicast and Class of Service

Respondents' Views

12.124 Vodafone's Submission²⁰⁰⁷ was supportive of the proposed requirement to provide Multicast and CoS access in the Regional WCA Market. To summarise in Vodafone's CoS is required to support services such as VOIP services and Multicast is required to support IP based television ('IPTV') services. The combination of CoS and Multicast enables Access Seekers to provide services to End Users.

ComReg's Assessment of Respondent's Views

12.125 ComReg notes Vodafone's view that access to Multicast and CoS is a necessary obligation to enable Access Seekers to provide services to End Users. ComReg concludes that the obligation is necessary otherwise certain types of service such as IPTV, VoIP etc. would not be technically feasible.

ComReg's Position

12.126 Having considered Respondents' views as summarised and assessed in paragraphs 12.124 to 12.125 above, and having regard to the analysis set out in the Consultation,²⁰⁰⁸ ComReg has decided to maintain its view as set out in the Consultation.

12.127 Eircom is required to provide and grant Access to the following:

- (a) Associated Facilities, including Multicast and Class of Service.

12.128 The obligations with respect to Access to specific associated facilities being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Requirement to negotiate in good faith

Respondent's Views

12.129 One of the eight Respondents to the Consultation (Vodafone) expressed a view explaining that it supports of the proposed obligation requiring Eircom to negotiate in good faith. Vodafone also noted that its views on the proposed remedy to negotiate in good faith were explained in detail in its response on the same requirement for the WLA Market.²⁰⁰⁹

²⁰⁰⁷ Vodafone's Submission, paragraph 297.

²⁰⁰⁸ Paragraphs 13.97 to 13.105 of the Consultation.

²⁰⁰⁹ Vodafone's Submission, paragraph 298.

12.130 In its Submission,²⁰¹⁰ Vodafone urged ComReg to enforce this obligation vigorously as it is pivotal to achieving the outcomes that the access remedies are intended to deliver. Vodafone also requested – for particularly complex or contentious negotiations – that ComReg stay close to the negotiations so it can guide discussion and be better prepared to intervene should the negotiations not succeed, or should they lead to delays that are not acceptable.

ComReg's Assessment of Respondents' Views

12.131 ComReg notes Vodafone's support for the proposed obligation. However the issue of enforcement is a separate matter and not relevant to this Decision.

ComReg's Position

12.132 Having considered Respondents' views as summarised and assessed in paragraphs 12.129 to 12.131 above, and having regard to the analysis set out in the Consultation,²⁰¹¹ ComReg has decided to maintain its view as set out in the Consultation.

12.133 Eircom is required to negotiate in good faith.

12.134 The obligations with respect to - to negotiate in good faith being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Requirement not to withdraw access to facilities already granted without ComReg's prior approval

Respondent's Views

12.135 Two of the eight Respondents to the Consultation (Eircom²⁰¹² and Vodafone²⁰¹³) expressed views on the requirement not to withdraw access to facilities already granted.

12.136 Eircom agreed with ComReg's preliminary view that a five year advanced written notification is required to be given to ComReg for the closure of a main distribution frame or the closure/relocation of an Aggregation Node, in circumstances where there is agreement between Access Seekers and Eircom. Eircom considered that the notification period should be capable of being reduced as appropriate.

12.137 Vodafone supported the obligation not to withdraw access to facilities already granted, and the associated measures needed to give effect to this requirement.

²⁰¹⁰ Vodafone's Submission, paragraph 300.

²⁰¹¹ Paragraphs 13.106 to 13.107 of the Consultation.

²⁰¹² Eircom Submission, page 69.

²⁰¹³ Vodafone's Submission, paragraph 301.

ComReg's Assessment of Respondents' Views

- 12.138 ComReg notes that both Respondents (Eircom and Vodafone) agreed with the proposed remedy not to withdraw access to facilities already granted, without ComReg's prior approval.
- 12.139 ComReg notes Eircom's views in relation to a five year timeline for withdrawal of Access. For the avoidance of doubt ComReg will assess requests from Eircom for withdrawal of Access on a case-by-case basis.

ComReg's Position

- 12.140 Having considered Respondents' views as summarised and assessed in paragraphs 12.135 to 12.139 above, and having regard to the analysis set out in the Consultation,²⁰¹⁴ ComReg has decided to maintain its view as set out in the Consultation.
- 12.141 Eircom is required not to withdraw access to facilities already granted without the prior approval of ComReg and in accordance with the terms and conditions as may be determined by ComReg.
- 12.142 The obligations on Eircom, not to withdraw access to facilities already granted without the prior approval of ComReg and in accordance with the terms and conditions as may be determined by ComReg being imposed upon Eircom, are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Requirement to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products services or facilities

Respondents' Views

- 12.143 Two of the eight Respondents to the Consultation (Eircom and Vodafone) expressed views on the requirement to grant open access to technical interfaces, protocols and other key technologies.
- 12.144 Eircom's view on this requirement as set out in its Submission²⁰¹⁵ was unclear to ComReg. Consequently ComReg sought further clarification from Eircom. Eircom clarified²⁰¹⁶ that it:
- "...does not take issue with the proposal in 13.114 - 13.115" of the WCA Consultation (i.e. to grant open access to technical interfaces, protocols and other key technologies.)"*
- 12.145 Vodafone's Submission²⁰¹⁷ was supportive of the requirement.

²⁰¹⁴ Paragraphs 13.108 to 13.113 of the Consultation.

²⁰¹⁵ Eircom Submission, page 70.

²⁰¹⁶ Clarification provided by Eircom to ComReg via email, dated 13 October 2017 and 18 October 2017.

²⁰¹⁷ Vodafone's Submission, paragraph 302.

ComReg's Assessment of Respondents' Views

12.146 ComReg notes that Vodafone is supportive of this requirement and that Eircom “does not take issue” with this requirement.

ComReg's Position

12.147 Having considered Respondents' views as summarised and assessed in paragraphs 12.143 to 12.146 above, and having regard to the analysis set out in the Consultation,²⁰¹⁸ ComReg has decided to maintain its view as set out in the Consultation.

12.148 Eircom is required to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products services or facilities.

12.149 The obligations with respect to - to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products, services or facilities being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Requirement to provide access to OSS or similar software systems

Respondent's Views

12.150 Two of the eight Respondents to the Consultation (Eircom and Vodafone) expressed views regarding the proposed requirement to provide access to OSS or similar software systems.

12.151 Eircom's views in its Submission²⁰¹⁹ on this requirement were unclear to ComReg. ComReg consequently sought clarification from Eircom and Eircom clarified:

“... that the UG is firmly established as the route into RAP for both OAOs and eir's downstream businesses which in combination with the EoI obligation for NGA renders the need for an additional obligation unnecessary.”²⁰²⁰

12.152 Vodafone considers²⁰²¹ the proposed obligation to provide access to OSS or similar software systems to be necessary to ensure fair completion in the provision of services.

12.153 Vodafone highlighted the importance of Access Seekers having efficient and effective means to access OSS to enable them to compete effectively with Eircom's downstream business.

²⁰¹⁸ Paragraphs 13.114 to 13.115 of the Consultation.

²⁰¹⁹ Eircom Submission, page 70.

²⁰²⁰ Clarification provide from Eircom to ComReg via email, dated 18 October 2017.

²⁰²¹ Vodafone's Submission, paragraph 303.

12.154 Vodafone added that Eircom can use its upstream dominance to distort downstream competition by providing ineffective access to OSS and considered that this obligation was essential in order to allow Access Seekers to compete effectively with Eircom's downstream businesses.

ComReg's Assessment of Respondents' Views

12.155 ComReg disagrees with Eircom's view summarised in paragraph 12.151 above that the provision of access to OSS or similar software systems is an unnecessary additional obligation.

12.156 In the absence of an obligation requiring access to OSS or similar software systems, the effectiveness of the obligations requiring Eircom to provide access to other specific WCA products, services and facilities is likely to be undermined, compromising the objective of ensuring the development of effective competition.

12.157 ComReg notes and agrees with Vodafone's view that access to OSS or similar software systems is required because, in the absence of an obligation, Eircom could refuse or restrict such access which could distort downstream competition.

ComReg's Position

12.158 Having considered Respondents' views as summarised and assessed in paragraphs 12.150 to 12.157 above, and having regard to the analysis set out in the Consultation,²⁰²² ComReg has decided to maintain its view as set out in the Consultation.

12.159 Eircom is required to provide access to OSS or similar software systems.

12.160 The obligations with respect to Access to OSS or similar software systems being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 7 of this Decision.

Conditions of Access: Requirements regarding Service Level agreements

Position set out in the Consultation

12.161 In the Consultation,²⁰²³ ComReg proposed to attach relevant conditions to the access obligations covering fairness, reasonableness and timeliness. Such conditions of access included requirements governing SLAs. In the Consultation, ComReg set out its view that such obligations are needed to ensure that access to WCA products, services and facilities is provided in a fair, reasonable and timely manner, thereby promoting effective downstream competition to the ultimate benefits of End Users.

²⁰²² Paragraphs 13.116 to 13.119 of the Consultation.

²⁰²³ Paragraphs 13.120 to 13.171 of the Consultation and Section 8 of the Draft Decision Instrument.

12.162 The proposed obligations included requirements that Eircom.²⁰²⁴

- (a) Conclude, maintain and update legally binding, fit-for-purpose SLAs with Access Seekers for WCA products, services and facilities and the Unified Gateway ('UG'),²⁰²⁵ which shall encourage an efficient level of performance;
- (b) Negotiate in good faith with access seeker in relation to the conclusion of legally binding and fit-for-purpose SLAs (either in the case of a new SLA or an amendment to an existing SLA);
- (c) Provide undertakings, at the end of the SLA Negotiation Period,²⁰²⁶ with Eircom's best and final offer ('BAFO') in respect of the relevant SLA which, for the avoidance of doubt, shall be fit-for-purpose; include all relevant information that is required under this Section 12.162 and accord with the principles set out in this Section 12.162. The SLA Negotiation Period ends with the closing of negotiations and the making of a BAFO by Eircom to undertakings with respect to the SLA. When Eircom makes its BAFO, the SLA is deemed by ComReg to be concluded;
- (d) Ensure that the SLA Negotiation Period includes a discussion on the process for suspension of an SLA and the associated terms and conditions, as described below;
- (e) Ensure that SLAs specify circumstances which trigger the payment of Service Credits²⁰²⁷ such as a failure by Eircom to achieve committed service levels, or the occurrence of specified events (such as incidents of service outage or deterioration), or other appropriate criteria;
- (f) Ensure that SLAs specify the methodology for calculating the quantum of Service Credits and include an example calculation of Service Credits;
- (g) Ensure that circumstances which trigger the payment of Service Credits and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable in that they adequately incentivise Eircom to deliver an efficient level of service quality and allow undertakings to recoup at a minimum the direct costs and any other loss of value that the undertakings incur as a result of the circumstances that had triggered the payment of Service Credits;
- (h) Ensure that application of Service Credits, where they occur, shall be applied automatically and in a timely and efficient manner;

²⁰²⁴ The reasoning and the proposed requirement with respect to the requirements governing fairness reasonableness in respect of SLAs are set out in paragraph 13.124 to 13.171 of the Consultation.

²⁰²⁵ Unified Gateway or 'UG' is an interface into Eircom's OSS used by Access Seekers in order to avail of regulated wholesale services, including WLA and WCA products, services and facilities.

²⁰²⁶ SLA Negotiation Period means the duration of time required by Eircom to close negotiations between it and Undertakings in respect of an amended or new SLA.

²⁰²⁷ Service Credit(s) means a financial credit which is provided by Eircom to an Access Seeker where Eircom has failed to meet the service levels which Eircom commits to from time-to-time in its SLA.

- (i) Ensure that SLAs include, where appropriate, the comprehensive set of terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA. Such terms and conditions should be based on objectively defined and measurable parameters;
- (j) In relation to an existing product, service or facility, following a request from an undertaking (including Eircom) for an amendment to an SLA, Eircom is required, within one (1) month of the receipt of such a request, inform the undertaking in writing whether the request for an amendment is accepted or rejected and, if accepted, include details of the SLA Negotiation Period and the associated start date. Negotiations in respect of the amended SLA shall close, unless otherwise agreed with ComReg, within six (6) months of the date the undertaking makes such a request. Within one (1) month of the date the undertaking makes such a request Eircom may seek an extension to the six (6) month period from ComReg;
- (k) In relation to an amendment to an existing product, service or facility, where Eircom itself initiates the amendment, Eircom is required, within one (1) month of the initiated amendment, inform and seek undertakings' views as to whether the proposed product amendment should result in an amendment to the relevant SLA;
- (l) Ensure that its obligations with respect to SLAs have been complied with prior to notifying ComReg of non-pricing amendments or changes to the WBARO resulting from the offer of a new or an amendment to an existing product, service or facility which falls within the scope of the Regional WCA Market;
- (m) Ensure that the new or amended SLA is implemented and is made available to undertakings by the date on which:
 - (i) any amendment or change to an existing product, service or facility;
 - or
 - (ii) the offer of a new product, service or facility comes into effect;
- (n) Where the amended SLA does not relate to (m)i or (m)ii above, Eircom is required to ensure that the amended SLA is implemented and is made available to undertakings within three (3) months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg); and
- (o) Within six (6) months (unless otherwise agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update its SLAs to include all relevant information and accord with the principles set out above.

Requirements regarding fairness, reasonableness and timeliness of access (SLAs)

Respondent's views

- 12.163 Two of the eight Respondents to the Consultation (Eircom²⁰²⁸ and Vodafone²⁰²⁹) expressed views regarding the requirement to ensure that the terms and conditions for access are governed by an SLA.
- 12.164 Eircom explained²⁰³⁰ that its views on the suitability of the proposed remedies in the WLA Market also apply to equivalent remedies proposed in the Regional WCA Market, unless otherwise noted.
- 12.165 In the context of the WLA Market, Respondents expressed views on a subset of the proposed SLA obligations in its Submission, which were grouped into six themes as follows:
- (a) The requirements for an SLA (discussed in paragraphs 7.528 to 7.538);
 - (b) Service credits (discussed in paragraph 7.546);
 - (c) New product development and changes to existing products (discussed in paragraphs 7.551 to 7.555); and
 - (d) Suspension of SLAs (discussed in paragraphs 7.577 to 7.582).
 - (e) Proposed amendments to the draft WLA Decision Instrument (discussed in paragraphs 7.592 to 7.596); and
 - (f) Moving the obligation to provide individual SLA reports from transparency to conditions of access (discussed in paragraph 7.601).²⁰³¹
- 12.166 Vodafone's Submission was supportive of the requirement of having the terms and conditions of access governed by SLAs.
- 12.167 Vodafone explained that its views relating to the proposed obligation of fairness, reasonableness and timeliness of access with respect to SLAs are the same as its views that were set out in response to question seven relating to the WLA Market, because the proposed SLA remedies were common to both the WLA and WCA Markets.

ComReg's Assessment of Respondents' Views

- 12.168 ComReg notes that Eircom did not provide any views directly in relation to the proposed obligations governing SLAs, but noted that its views in relation to SLAs in the WLA Market also applied to the Regional WCA Market.

²⁰²⁸ Eircom's Submission, page 68.

²⁰²⁹ Vodafone's Submission, paragraphs 305 to 307.

²⁰³⁰ Eircom's Submission, page 70.

²⁰³¹ This theme arises from a change proposed by ComReg.

- 12.169 ComReg's assessment of Respondents' views are set out by theme in paragraph 12.170 below in the context of their applicability in the WLA Market and also apply equally to the similar obligations in the Regional WCA Market.
- 12.170 The Respondents' views have already been assessed in Section 7 under each of the themes below:
- (a) The requirements for an SLA (discussed in paragraphs 7.539 to 7.545);
 - (b) Service credits (discussed in paragraph 7.547 to 7.550);
 - (c) New product development and changes to existing products (discussed in paragraphs 7.556 to 7.576); and
 - (d) Suspension of SLAs (discussed in paragraphs 7.583 to 7.591).
 - (e) Proposed amendments to the draft WLA Decision Instrument (discussed in paragraphs 7.597 to 7.600); and
 - (f) Moving the obligation to provide individual SLA reports from transparency to conditions of access (discussed in paragraph 7.602).

ComReg's Position

- 12.171 Having considered Respondents' views as summarised and assessed in paragraphs 12.163 to 12.170 above, and having regard to the analysis set out in the Consultation,²⁰³² ComReg has decided to maintain its view regarding the requirements governing fairness, reasonableness and timeliness in respect of SLAs.
- 12.172 The obligation with respect to fairness, reasonableness and timeliness being imposed upon Eircom regarding SLAs are more particularly set out in the Decision Instrument in Appendix: 21, Section 8 of this document.
- 12.173 ComReg notes that the changes to its position regarding the condition of access obligation being imposed upon Eircom in the relevant WLA Market on SLAs as detailed in paragraph 7.605 above also apply in the context of the same obligation being imposed in the Regional WCA Market. In view of this ComReg cross references the relevant paragraphs to these obligations, in the section dealing with same obligation being imposed in the Regional WCA Market.

²⁰³² Paragraphs 13.124 to 13.171 of the Consultation.

Conditions of Access: Requirement regarding Timeliness of Product Development

Position set out in the Consultation

- 12.174 In the Consultation²⁰³³ ComReg proposed that certain conditions should apply to the provision of Access with respect to timeliness of product development. ComReg outlined in the Consultation that obligations are needed to ensure Access is provided in a fair, reasonable and timely manner. The obligations are required to further ensure efficient and timely product development and the availability of accurate information to Access Seekers to progress all product developments.²⁰³⁴ The obligations proposed in the Consultation are summarised below.²⁰³⁵
- 12.175 Following a request from an undertaking (including a request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall, from the date of receipt of such a request (unless otherwise agreed with ComReg) within:
- (a) Three (3) working days confirm in writing that the request has been received;
 - (b) Ten (10) working days confirm in writing the undertaking whether or not the request falls within the scope of Eircom's obligations contained in the Draft Decision Instrument. Eircom shall comply with Section 8.9 of the Draft Decision Instrument²⁰³⁶ in this regard and provide a unique reference to identify the request;
 - (c) Twenty-five (25) working days confirm in writing that the undertaking has provided it with sufficient information to process the request including the Access Seeker's view on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that undertaking. During the twenty five (25) day period Eircom may seek clarification from the undertaking;
 - (d) Fifty-five (55) working days confirm in writing to the undertaking whether it agrees to provide the requested product, service or facility or amendment thereto. Where the request is refused Eircom shall comply with Section 8.9 of the Draft Decision Instrument in its response to the undertaking;

²⁰³³ See paragraph 13.172 of the Consultation.

²⁰³⁴ The reasoning and proposed requirements with respect to timeliness of product development are set out in paragraphs 8.354 to 8.374 of the Consultation.

²⁰³⁵ As set out in section 8.10 of the Draft Decision Instrument contained in Appendix 15 of the Consultation.

²⁰³⁶ Section 8.9 of the Draft Decision Instrument stated that where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of the Draft Decision Instrument), or a request by an Undertaking for provision of information is refused or met only in part, Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.

- (e) seventy five (75) working days provide the undertaking with a detailed description of the relevant product, service or facility and the associated procedures.

12.176 ComReg also proposed in paragraph 8.372(f) of the Consultation that, within seventy five (75) working days, unless otherwise agreed with ComReg, Eircom is required to also provide the Access Seeker with a forecast date by which it expects to provide the requested products, services or facilities.

12.177 In addition, ComReg proposed²⁰³⁷ that without prejudice to the obligation to grant Access in a fair, reasonable and timely manner where Eircom receives a request for Access (including Access to those products, services and facilities referred to in Sections 7 and 8 of the Draft Decision Instrument) in accordance with the requirements of the Draft Decision Instrument at the same point in time as a request for another wholesale access product, service or facility, on foot of another Decision Instrument issued by ComReg, Eircom shall ensure that both Access requests are met concurrently.

Respondents' Views

12.178 Two of the eight Respondents to the Consultation expressed views regarding on the requirement regarding timeliness of product development.

12.179 Eircom explained²⁰³⁸ that its views on the suitability of the proposed remedies in the WLA Market also apply to equivalent remedies in the Regional WCA Market unless otherwise noted.

12.180 Eircom's views on requirement for the timeliness of product development with respect to WLA Market were discussed and grouped into several themes in Section 7 as follows:

- (a) Product development timelines (discussed in paragraphs 7.617 to 7.639);
- (b) Justification and reasonableness of product development timelines (discussed in paragraphs 7.640 to 7.644);
- (c) Requirements sought with respect to oversight of product development (discussed in paragraphs 7.645 to 7.647);
- (d) Concerns with respect to product development timelines (discussed in paragraph 7.648 to 7.650);
- (e) Absolute deadlines for the proposed timelines (discussed in paragraph 7.651);
- (f) Hard wiring of current processes into the decision (discussed in paragraph 7.652);
- (g) Proportionality of proposed requirements (discussed in paragraph 7.653); and
- (h) Meeting concurrent Access requests (discussed in paragraph 7.654).

²⁰³⁷ As set out in Section 8.2 of the Draft Decision Instrument, contained in Appendix 14 of the Consultation.

²⁰³⁸ Eircom's Submission, page 70.

12.181 Vodafone was supportive of the proposed obligation regarding the timeliness of product development in the Regional WCA Market. Vodafone explained that its views were explained in detail in its response to Question 7²⁰³⁹ concerning such obligations in the WLA Market also apply to similar obligations in the Regional WCA Market.

ComReg's Assessment of Respondents' Views

12.182 Eircom did not provide any views directly in relation to the proposed obligations governing the timeliness of product development, but noted that its views in relation to timeliness of product development in the WLA Market also applied to the WCA Market. ComReg's assessment of Eircom's views as set out in paragraphs 7.655 to 7.741 in the context of their applicability in the WLA Market and also apply to the equivalent obligations in the Regional WCA Market.

12.183 ComReg notes Vodafone's views as summarised in paragraph 12.181 above. In ComReg's view absent regulation Eircom would have the ability and incentive to deny access to WCA products in a timely manner. Therefore, obligations governing the timeliness of product development are necessary.

ComReg's Position

12.184 Having considered the Respondents' views as summarised and assessed in paragraphs 12.178 to 12.183 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on the Timeliness of Product Development, as set out in the Consultation,²⁰⁴⁰ with the exception of the amendments specified in paragraphs 12.186 to 12.187 below.

12.185 The obligations with respect to Timeliness of Product Development being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 8.

12.186 ComReg notes that the changes to its position regarding the condition of access obligation being imposed upon Eircom in the relevant WLA Market on the Timeliness of Product Development as detailed in paragraphs 7.742 to 7.763 above also apply in the context of the same obligation being imposed in the Regional WCA Market. In view of this ComReg cross references the relevant paragraphs to these obligations, in the section dealing with same obligation being imposed in the Regional WCA Market.

12.187 ComReg's position on the changes required to the Timeliness of Product Development obligation in the Regional WCA Market are as set out in paragraphs 7.746, 7.749, 7.752, 7.755, 7.758 to 7.760, 7.762 and 7.763

²⁰³⁹ Vodafone supports the requirements proposed by ComReg and explains its position in detail in response to Question 7, in paragraphs 146 to 151.

²⁰⁴⁰ Paragraph 13.172 of the Consultation.

Withdrawal of specific Access Obligations Imposed in the 2013 NGA Decision

Respondents' Views

12.188 One of eight Respondents (Vodafone) provided views on ComReg's proposal to withdraw²⁰⁴¹ the following obligations:

- (a) In-Premises Services; and
- (b) Notification of co-investment.

12.189 Vodafone has no objection to ComReg's proposals.²⁰⁴²

ComReg's Assessment of Respondents' Views

12.190 ComReg notes the Respondents' view set out in paragraph 12.189 above, is supportive of ComReg proposal to withdraw specific Access obligations as outlined in paragraph 12.188 above.

ComReg's Position

12.191 Having considered Respondents' views as summarised and assessed in paragraphs 12.188 to 12.190 above, and having regard to the analysis set out in the Consultation,²⁰⁴³ ComReg has decided to maintain its view as set out in the Consultation.

12.192 ComReg withdraws the following Access obligations:

- (a) In-Premises Services; and
- (b) Notification of co-investment.

Non-Discrimination Obligations

Position set out in the Consultation

12.193 In the Consultation²⁰⁴⁴ ComReg proposed to impose a range of non-discrimination obligations upon Eircom,²⁰⁴⁵ having regard to identified competition problems, including requirements that Eircom:

- (a) Applies equivalent conditions in equivalent circumstances to other undertakings requesting, or being provided with Access (including Access to WCA and Associated Facilities) or requesting or being provided with information in relation to such Access; and

²⁰⁴¹ Paragraph 13.180 of the Consultation.

²⁰⁴² Vodafone Submission, paragraph 322.

²⁰⁴³ Paragraphs 13.173 to 13.175 of the Consultation.

²⁰⁴⁴ See paragraphs 13.182 to 13.186 of the Consultation.

²⁰⁴⁵ The reasoning and justification for the proposed requirements regarding non-discrimination is set in paragraphs 13.188 to 13.234 of the Consultation.

- (b) Provides Access (including Access to WCA and Associated Facilities) and information to all other undertakings under the same conditions and of the same quality as Eircom provides to itself or to its subsidiaries, affiliates or partners.

12.194 These obligations are intended to ensure that Eircom does not favour its downstream arm, or unduly favour any particular Access Seeker(s) in the provision of WCA products, services and associated facilities such that it might otherwise restrict or distort competition in any downstream or adjacent markets, ultimately impacting on the development of sustainable retail and/or wholesale competition.

Specification of the non-discrimination standards with respect to the provision of WCA

12.195 ComReg has proposed a more specific non-discrimination obligation compared to the existing non-discrimination obligation²⁰⁴⁶ of EoO because EoI is the surest way to achieve effective protection from discrimination, and to improve ComReg's ability to monitor Eircom's compliance with its non-discrimination obligations.

12.196 The EoI standard was introduced for NG services in 2013 and the EoI standard is now being extended to CG WCA based services.

12.197 Pursuant to Regulation 10 of the Access Regulations ComReg proposed the imposition on Eircom of the following non-discrimination standards:

- (a) All NG WCA products, services and facilities are to be provided to a standard of EoI in all cases.
- (b) CG WCA products, services and facilities are required to be supplied to at least an EoO standard, unless specified otherwise elsewhere.
- (c) All new provisions of CG WCA products, services and facilities when used by Eircom's downstream arm for the provision of retail services to Consumers²⁰⁴⁷ are required to be provided to a standard of EoI, unless otherwise agreed with ComReg.
- (d) Service assurance for all CG WCA products, services and facilities, are to be provided to a standard of EoI, not including the Service Assurance Systems Interfaces.²⁰⁴⁸

²⁰⁴⁶ See paragraphs 12.18 to 12.21 of this Decision.

²⁰⁴⁷ Consumer is as defined in the Framework Regulations 2011, as follows: "*consumer means any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business or profession.*"

²⁰⁴⁸ Service Assurance Systems Interface: Refers to the system or systems to which operators connect to allow them to log faults relating to regulated services, in this case WCA services. This includes operators logging faults by submission of service assurance orders on an order handling system, for example, the Unified Gateway or by directly logging faults on to Eircom's Fault Handling system ('FHS').

- (e) The obligation to provide service assurance for all CG WCA products, services and facilities, to a standard of Eol (not including the Service Assurance System Interfaces) should be implemented by Eircom within six (6) months of the final decision on the market analysis for the Regional WCA Market being published, unless otherwise agreed with ComReg.
- (f) Eircom to supply all CG WCA products services and facilities, on the basis of Eol by 1 November 2018 unless otherwise agreed by ComReg.

Proposed Non-discrimination Obligation

Respondents' Views

- 12.198 Three of the eight Respondents to the Consultation (Eircom, Sky, and Vodafone) expressed views regarding the proposed Non-Discrimination obligation.
- 12.199 Eircom stated that :
- “Paragraph 13.186 suggests new CG WCA products should be provided on an Eol basis and not EoO basis. – This does not incentivise new products because of the additional overheads this introduces in a declining market. There is also no reason for this as new CGA products are likely to use existing systems. The same applies to CGA service assurance – given the likely migration to NGA and the NBP it is hardly economically efficient to require development of existing systems.”²⁰⁴⁹*
- 12.200 Eircom also noted that the timeline it provided to ComReg with respect to its IT programme was a draft timeline. The IT programme has experienced some delay and the timeline for the programme had now changed. Therefore, Eircom considered that the November 2018 target is no longer feasible.
- 12.201 Eircom in its Submission²⁰⁵⁰ noted that the European Commission Recommendation on consistent Non-Discrimination Obligations and Costing Methodologies relates to NGA access.
- 12.202 Vodafone supported the proposed Eol non-discrimination remedies, but noted that Eol on its own is insufficient to secure non-discrimination and considered that separation of Eircom’s upstream and downstream businesses will also be required.
- 12.203 While supportive of the proposal to have all CG WCA based products and services delivered to a standard of Eol, Vodafone noted its disappointment with the extended timeframe to implement Eol for all CG WCA based products and services considering the increased threat of discriminatory practice associated with the EoO standard.
- 12.204 Vodafone explained that in its view there must be a full migration of all CG WCA based customers to the Eol standard by the 1 November 2018, without the possibility of extension.

²⁰⁴⁹ Eircom Submission, page 70.

²⁰⁵⁰ *Ibid.*

- 12.205 Vodafone also noted its support for the interim measures to mitigate the risks arising from the continued provision of CG WCA based products and services to the EoO standard up until 1 November 2018.
- 12.206 Sky stated²⁰⁵¹ its support for the transition from EoO to EoI.

ComReg's Assessment of Respondents' Views

- 12.207 Eircom's Submission has two main concerns as noted in paragraphs 12.199 to 12.201 above, namely, the timeline for the implementation of EoI for all CG WCA based products by 1 November 2018 is not feasible, and that the EoI obligation for CG WCA based products will not incentivise the development of new CG WCA based products in a declining market.
- 12.208 ComReg notes that from [§< ██████████] Eircom started to provision the most significant segments of its CG WCA based customer base on its new IT systems. ComReg understands that Eircom's objective is to migrate all of its CG WCA customer base on to new IT systems for commercial and technical reasons, including having a common IT systems interface for NGA and CGA product portfolios. This means that WCA based products provisioned on Eircom's new IT systems will be EoI by default.
- 12.209 Therefore, the key issue is the pace of migration, which will determine the date by which all WCA based products, services and associated facilities will be provided on an EoI basis.
- 12.210 ComReg engaged with Eircom during the preparation of the Consultation to gather information to understand the project details.²⁰⁵²
- 12.211 Based on the information gathered²⁰⁵³ from Eircom, ComReg proposed in the Consultation a final EoI implementation date for CG WCA based products, service and facilities that ComReg considered was reasonable and proportionate at the time.
- 12.212 ComReg has considered Eircom's feedback in its Submission that the implementation timeline for EoI for all CG WCA based products, services and facilities are not feasible because of IT programme delays. To assess the validity of Eircom's claim, ComReg sought additional information from Eircom via a SIR²⁰⁵⁴ regarding its IT development programme.
- 12.213 As a result of this information and subsequent correspondence,²⁰⁵⁵ ComReg considers that it would now be inappropriate to maintain the November 2018 timeline for the implementation of EoI for all CG WCA based products, services and facilities. Therefore, ComReg is extending the relevant implementation deadline from 1 November 2018 to twelve (12) months from the effective date of this Decision (unless otherwise agreed by ComReg) for the implementation of EoI for CG WCA products and services, and facilities.

²⁰⁵¹ Sky's Submission, paragraph 70.

²⁰⁵² Migration from Eircom's legacy BSS (Business Support Systems) to its new BSS architecture.

²⁰⁵³ Eircom report 'EoI eir Report on CG WBA' dated 3 February 2016 version 1.1 and associated correspondence'.

²⁰⁵⁴ Eircom's Response to May 2017 SIR, dated 23 June 2017.

²⁰⁵⁵ Email response from Eircom, dated 9 January 2018.

- 12.214 Eircom also expressed another concern regarding the potential burden of implementing new CG WCA based products to an Eol standard at a time when the demand for CG WCA products is in decline, therefore discouraging new CG WCA based product developments.
- 12.215 ComReg has considered the scenario presented by Eircom that the obligation of Eol in a declining market
- “...does not incentivise new product because of the additional overheads this introduces in a declining market.”²⁰⁵⁶*
- 12.216 ComReg disagrees with Eircom’s view that the overhead of an Eol obligation for CG WCA based products, services and associated facilities will curtail new CG WCA based developments in a declining market. The need to develop new CG WCA products, services and associated facilities on legacy IT systems is unnecessary except perhaps in exceptional circumstances for the reasons explained in paragraphs 12.217 to 12.222 below.
- 12.217 ComReg notes that all new CG WCA based product bundles in the main market segments²⁰⁵⁷ introduced since [§< ██████████] are Eol by default, and that all CG WCA based product bundles and standalone products that pre-date [§< ██████████] will become Eol by default at some stage because of Eircom’s plans to retire its legacy IT systems. Therefore, only the incremental overhead is relevant in ComReg’s view.
- 12.218 Furthermore the CG WCA based products are mature products in terms of functionality because of this the market demand for significant new CG WCA product developments is unlikely to arise.
- 12.219 Similarly the likelihood of Eircom having to develop a new CG WCA based product on legacy IT systems has diminished and will continue to diminish overtime because of customer preference for bundled services.
- 12.220 In ComReg’s view the cause and effect relationship between the overhead of implementing Eol on legacy IT systems for CG WCA based products, service and associated facilities and the incentive to undertake new CG WCA based developments is tenuous for the reasons outlined above.
- 12.221 Furthermore, by using appropriate product migration strategy in conjunction with effective product management approaches such as retiring historical CG WCA packages, or by offering customer inducements to migrate to newer CG WCA bundles the potential overhead of implementing Eol could be further reduced.
- 12.222 Finally, in exceptional circumstances where the development of a new WCA CG based products or the implementation of changes to existing products is not technically or economically feasible. ComReg has decided that it is appropriate, to include in the text of the obligation, the possibility for a derogation to be sought from the Eol obligation. Specifically, ComReg will provide that the Eol standard for CG WCA must be implemented “...unless otherwise agreed by ComReg”.²⁰⁵⁸

²⁰⁵⁶ Eircom Submission, page 70.

²⁰⁵⁷ Consumers and SMEs.

²⁰⁵⁸ Paragraph 13.186 bullet (f) of the Consultation.

12.223 In relation to CG WCA based product service assurance, Eircom stated that:

“The same applies to CGA service assurance -- given the likely migration to NGA and the NBP it is hardly economically efficient to require development on existing system.”²⁰⁵⁹

12.224 ComReg notes that it has excluded the service assurance interface for CG WCA based products from the Eol obligation to facilitate the continued use of the legacy manual interface. In ComReg’s view changing the service assurance interface would be the most burdensome aspect of implementing Eol for CG WCA service assurance. Excluding the service assurance interface from the Eol obligations minimises²⁰⁶⁰ existing system developments requirements.

12.225 To summarise ComReg’s view is that the overhead to implement Eol obligation for new CG WCA based products, services and associated facilities and the overhead for service assurance has or can be minimised. As a result CG WCA based product developments should not be curtailed because of these WCA CG Eol obligations.

12.226 ComReg notes that Eircom’s observation regarding the European Commission’s 2013 Recommendations on non-discrimination and costing methodologies is accurate.

12.227 ComReg notes and agrees Vodafone’s views that the highest standard is required, but disagrees with Vodafone that the implementation timeline for the Eol obligation should not be extended.

12.228 As regards the extension of the timeline, ComReg disagrees with Vodafone’s view that there should be *“...no possibility being left open of a further extension.”*²⁰⁶¹ Considering the complexities of IT programmes, in ComReg’s view it would be unreasonable to have a deadline without the ability to extend it, if the extension to the deadline is justified by exceptional circumstances. ComReg notes that any request to extend the implementation date for Eol CG WCA based product, service and facilities would require detailed analysis and supporting documentation to demonstrate that all feasible options to achieve the deadline have been exhausted. ComReg may obtain independent expert advice to assess any case supporting the request for extension to the timeline.²⁰⁶²

12.229 As explained in paragraph 12.213 above ComReg considers it is reasonable to extend the deadline for the implementation of Eol, where applicable.

²⁰⁵⁹ Eircom Submission, page 70.

²⁰⁶⁰ See paragraphs 13.226 to 13.324 of the Consultation.

²⁰⁶¹ Vodafone Submission, paragraph 334.

²⁰⁶² See paragraph 13.224 of the Consultation.

ComReg's Position

- 12.230 Having considered Respondents' views as summarised and assessed in paragraphs 12.198 to 12.229 above, and having regard to the analysis set out in the Consultation²⁰⁶³ and above, ComReg maintains its view that the imposition of obligations of Non-discrimination upon Eircom is reasonable, proportionate and justified.
- 12.231 However, the implementation deadline to supply all CG WCA based products, services and facilities on an EoI basis has been changed from 1 November 2018, to the relevant implementation deadline, which is twelve (12) months from the effective date of this Decision unless otherwise agreed by ComReg.
- 12.232 The obligations with respect to non-discrimination being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 9 of this Decision.

Transparency Obligations

Position set out in the Consultation

- 12.233 In the Consultation, ComReg set out its preliminary view that Eircom should be required to comply with a range of transparency obligations in order to minimise information asymmetries and facilitate effective access to Regional WCA Market products, services and facilities and to ultimately promote effective competition in downstream and related markets.
- 12.234 These obligations are discussed below and include the following:²⁰⁶⁴
- (a) Maintenance and publication of an WBARO which is to contain a minimum list of items;
 - (b) Associated WBARO change management process;
 - (c) Advance notification timeframes for WBARO and price changes;
 - (d) Specification of information to be made publicly available and issuing of directions by ComReg regarding changes to the WBARO and associated documents ;
 - (e) Transparency in the billing of Regional WCA wholesale charges;
 - (f) Publication of KPIs, SLAs, and Eircom's performance in meeting the committed service levels within its SLAs;
 - (g) Publication of details with respect to requests for the development of regulated products, services or facilities;
 - (h) Publication of up-to-date Product Development Roadmap listing all developments and indicating relevant milestone and target dates;
 - (i) Provide notification with respect to proposed trials;

²⁰⁶³ See paragraphs 13.187 to 13.324 of the Consultation.

²⁰⁶⁴ The reasoning and justification for the proposed transparency requirements is set out in paragraphs 13.239 to 13.257 of the Consultation.

- (j) Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities; and
- (k) Provisions to cater for the issue of commercially sensitive or confidential information.

Respondents' Views

- 12.235 Three of the eight Respondents to the Consultation (Eircom, Sky and Vodafone) expressed views regarding the transparency obligations as summarised below.
- 12.236 Eircom explained²⁰⁶⁵ that its views on the suitability of the proposed transparency obligations in the WLA Market also applied to equivalent remedies in the Regional WCA Market, unless otherwise noted.
- 12.237 Sky stated²⁰⁶⁶ that it broadly agrees with the obligations proposed with respect to Regional WCA Market.
- 12.238 Vodafone noted that its views in relation to the proposed Transparency in WLA Market also apply to equivalent obligations in the Regional WCA Market.

ComReg's Assessment of Respondents' Views

- 12.239 ComReg note that Eircom did not provide any views directly in relation to the proposed transparency obligations, but noted that its views in relation to transparency obligations in the WLA Market also applied to the Regional WCA Market.
- 12.240 ComReg notes that Vodafone did not provide views directly in relation to the proposed transparency obligations, but noted that its views²⁰⁶⁷ expressed regarding the Regional WLA Market also applies to equivalent obligations in the WCA Market.
- 12.241 ComReg's assessment of Eircom's and Vodafone's views is set out in paragraphs 12.242 below, in the context of their applicability in the WLA Market also apply to the equivalent obligations in the Regional WCA Market.
- 12.242 ComReg's assessment of the Respondents' views with respect to the proposed Regional WCA Market transparency obligations are cross referenced to ComReg's assessment of the equivalent obligations in the WLA Market, where relevant below:
- (a) Maintenance and publication of an WBARO, containing a minimum list of requirements, as specified by ComReg (discussed in paragraphs 7.1063 to 7.1066);
 - (b) Associated WBARO change management process (discussed in paragraphs 7.1073 to 7.1074);
 - (c) Advance notification timeframes for WBARO and price changes (discussed in paragraphs 7.1075 to 7.1079);

²⁰⁶⁵ Eircom' Submission, page 68.

²⁰⁶⁶ Sky's Submission, Paragraph 68.

²⁰⁶⁷ Vodafone's Submission, Paragraphs 335 to 337.

- (d) Provide transparency in the billing of WCA wholesale charges (discussed in paragraphs 7.1082 to 7.1084);
- (e) Publication of KPIs, SLAs and reporting (discussed in paragraphs 7.1085 to 7.1090);
- (f) Publication of information with respect to the development of products, services and facilities (discussed in paragraphs 7.1118 to 7.1157);
- (g) Standardised process before a trial can commence (discussed in paragraph 7.1158 to 7.1164);
- (h) Provide notification with respect to proposed trials (discussed in paragraphs 7.1165 to 7.1178);
- (i) Provide information regarding Eircom's network, infrastructures, new technologies, products, services and facilities (discussed in paragraphs 7.1179 to 7.1180);
- (j) Provisions to cater for commercially sensitive or confidential information (discussed in paragraph 7.1181 to 7.1185); and
- (k) Impact of notification periods on timeline for product development (discussed in paragraph 7.1186 to 7.1190);

ComReg's Position

- 12.243 Having considered Respondents' views as summarised and assessed in paragraphs 12.235 to 12.242 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on transparency, as set out in the Consultation,²⁰⁶⁸ with the exception of the amendments specified in paragraphs 12.245 to 12.247.
- 12.244 The obligations with respect to transparency being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 10 of this Decision. In certain cases, such as Section 10.9 of the Decision Instrument, ComReg expressly retains the option to vary the timelines set out in the relevant Decision Instrument whether by agreement or at its own discretion. Where Eircom wishes to avail of a derogation (where provided for) from these timelines the onus is on Eircom to notify ComReg (in writing) of its request and the basis for any such requested derogation. ComReg does not consider that any conflict arises from the transparency (or any other) obligations set out the Decision Instrument however if an issue arises from the practical implementation of these obligations Eircom should seek a derogation; as appropriate.
- 12.245 ComReg notes that the changes to its position regarding the transparency obligation being imposed upon Eircom in the relevant WLA Market detailed in paragraphs 7.1191 to 7.1221 above also apply in the context of the same obligations being imposed in the Regional WCA Market. In view of this, ComReg cross references the relevant paragraphs to these obligations, in the section dealing with same obligation being imposed in the Regional WCA Market.

²⁰⁶⁸ Paragraphs 13.239 to 13.257 of the Consultation.

- 12.246 ComReg's position²⁰⁶⁹ on the changes required to the transparency obligations in the Regional WCA Market are as set out in paragraphs 7.1196 to 7.1197, 7.1200 to 7.1204, 7.1206 to 7.1209, 7.1211 to 7.1212, 7.1214 to 7.1215, 7.1217 and 7.1219 to 7.1220.
- 12.247 ComReg notes that the requirement for Eircom to provide information regarding the introduction of, changes to, or technical developments relating to Eircom's network, infrastructures or new technologies on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg) is not called out in the Consultation for the Regional WCA Market. However, this is an existing obligation in the WBA Market²⁰⁷⁰ and the same obligation has been imposed upon Eircom in the WLA Market. ComReg considers that it is appropriate to include the same obligation in the Regional WCA Market. The justification for this obligation is detailed in paragraphs 7.1179 to 7.1180 above also apply in the context of the same obligation being imposed in the Regional WCA Market.

Price control & cost accounting remedies in the WCA Markets

Position set out in the Consultation

- 12.248 Given the potential competition concerns of excessive pricing and potential leverage of Eircom's market power into adjacent markets as identified in Section 12 of the Consultation, ComReg considered that price control and cost accounting obligations were justified and proportionate in the Regional WCA Market.
- 12.249 As set out in Section 13 of the Consultation,²⁰⁷¹ ComReg proposed to continue to differentiate its pricing remedies to take account of the varying structural and competitive conditions prospectively between the more urban areas and the rural areas, as initially established in the 2013 Bundles Decision and as further assessed subsequently, most recently in the 2017 Bundles Consultation. ComReg's final decision in this matter falls to be considered in the 2018 Bundles Decision.
- 12.250 In Section 13 of the Consultation ComReg considered a number of options in terms of the appropriate price control relevant to the Regional WCA Market, including:
- (a) Regulatory forbearance;
 - (b) Benchmarking;
 - (c) Retail minus;
 - (d) Cost orientation obligations; and

²⁰⁶⁹ In ComReg's Position on Transparency in the Regional WCA Market in all cases references to the ARO are taken to refer to the WBARO.

²⁰⁷⁰ ComReg Decision D03/13, Document number 13/11, dated 31/01/2013.

²⁰⁷¹ See paragraphs 13.262 to 13.263 of the Consultation.

(e) Margin squeeze obligations.

- 12.251 Each one of the above options was discussed in Section 13 of the Consultation.²⁰⁷²
- 12.252 ComReg reached the preliminary view in the Consultation that regulatory forbearance, benchmarking and retail minus were not appropriate price control remedies in the context of the Regional WCA Market.²⁰⁷³
- 12.253 ComReg considered that a cost orientation obligation and an obligation not to cause a margin squeeze were more appropriate price control remedies to consider given the competition concerns identified in the Regional WCA Market and their potential impact on other related markets.
- 12.254 ComReg's preliminary views in the Consultation are summarised below, as follows:
- (a) Cost orientation obligation (discussed in paragraphs 12.255 to 12.260 below);
 - (b) Obligation not to cause a margin squeeze (discussed in paragraphs 12.261 to 12.274 below); and
 - (c) Cost accounting obligation (discussed in paragraphs 12.275 to 12.297 below).

Cost orientation obligation

Current Generation WCA services

- 12.255 In Section 13 of the Consultation, ComReg was of the preliminary view that, in the Regional WCA Market, a cost orientation obligation was appropriate and justified for CG WCA services. ComReg considered that the risk of excessive pricing remained in the Regional WCA Market where Eircom had a retail market share of [\approx ██████████].
- 12.256 In addition, ComReg considered in the Consultation that a cost orientation obligation across the Regional WCA Market should allow Eircom some flexibility to cross subsidise from the more urbanised areas of the Regional WCA Market to the more expensive to serve rural areas, thus distributing costs, while ensuring overall cost recovery (plus a reasonable rate of return) across the Regional WCA Market. Furthermore, by imposing a cost orientation obligation in the Regional WCA Market ComReg would avoid the risk that Eircom may use revenues from non-competitive areas falling within the Regional WCA Market to cross-subsidise its activities in the competitive Urban WCA Market. Therefore, the risk of cross-subsidy from the non-competitive Regional WCA Market to the competitive Urban WCA Market would be mitigated if cost orientation was applied in the Regional WCA Market.²⁰⁷⁴

²⁰⁷² See paragraphs 13.272 to 13.354 of the Consultation.

²⁰⁷³ See paragraphs 13.272 to 13.283 of the Consultation.

²⁰⁷⁴ See paragraphs 13.289 to 13.299 of Section 13 of the Consultation for the reasons why cost orientation is appropriate for current generation WCA services in the Regional WCA Market.

12.257 For Standalone Broadband (**'SABB'**) services in Regional Area 2²⁰⁷⁵ of the Regional WCA Market ComReg reached the preliminary view in the Consultation that the cost orientation obligation further specified in the 2016 Access Pricing Decision should be re-imposed.²⁰⁷⁶ It should be noted that the term 'SABB' in the context of the above refers only to a CG WCA service. The cost orientation obligation was originally imposed in the 2014 WBA Pricing Decision.²⁰⁷⁷ The 2014 WBA Pricing Decision at the time specified a national cost orientation obligation, with an additional specific cost orientation 'Outside the LEA'²⁰⁷⁸ which was now Regional Area 2.

12.258 For ancillary services associated with CG WCA, in Section 13 of the Consultation ComReg proposed that a cost orientation obligation remained appropriate for the Regional WCA Market, as further specified in the 2016 Access Pricing Decision.²⁰⁷⁹

Next Generation (FTTC) WCA services

12.259 In Section 13 of the Consultation, ComReg was of the preliminary view that a cost orientation price control was proportionate and justified for FTTC-based Bitstream in the Regional WCA Market for a number of reasons including:²⁰⁸⁰

- (a) Demand and costs can now be more reliably forecast given the historic data available on FTTC services since the initial rollout in 2013. Using this historical data it is now more practicable to reliably determine cost oriented prices.
- (b) Price changes from Eircom (both wholesale and retail changes) in July 2015 and September 2016 indicate that Eircom's ability to increase prices has not been effectively constrained and that existing price controls need to be updated to reflect new circumstances.
- (c) By imposing a cost orientation obligation on FTTC-based Bitstream in the Regional WCA Market, ComReg should avoid/mitigate the risk that Eircom may use revenues from less competitive parts of the Regional WCA Market to cross-subsidise its activities in the Urban WCA Market (which is to be deregulated).

²⁰⁷⁵ The Consultation proposed that the Regional WCA Market contained Regional Area 1 and Regional Area 2, and set out the proposed relationship between these areas and previously delineated areas. See paragraph 13.263 of the Consultation.

²⁰⁷⁶ See paragraph 13.300 of the Consultation for further details.

²⁰⁷⁷ ComReg Document No 14/73R: 'Wholesale Broadband Access: Price Control obligation in relation to current generation Bitstream (**'2014 WBA Pricing Decision'**)'.

²⁰⁷⁸ The meaning of 'Outside the LEA' is described in Section 4 of the 2014 WBA Pricing Decision.

²⁰⁷⁹ See paragraphs 13.301 to 13.303 of the Consultation for further details.

²⁰⁸⁰ See Section 13, paragraphs 13.304 to 13.307 of the Consultation for further details on why FTTC-based services should be based on a cost orientation obligation going forward.

- (d) A cost orientation obligation for FTTC-based Bitstream and Exchange launched Bitstream²⁰⁸¹ in the Regional WCA Market would ensure a consistent regulatory approach with the pricing of current generation Bitstream services. The consistency of pricing approaches between wholesale products using different technologies helps operators to make an efficient choice regarding the most optimal wholesale product to buy or to build their own network.
- (e) A cost orientation obligation for FTTC-based Bitstream in the Regional WCA Market should ensure that the access prices are not set too high to discourage further competition from developing, and the correct build/buy signal is sent to all participants in the market.
- (f) A cost orientation obligation should provide greater price certainty. Setting an upfront cost oriented price for FTTC-based Bitstream in the Regional WCA Market for the forthcoming price control period provides certainty to Eircom as to what it has to do in order to ensure compliance with its obligation and also to Access Seekers that use the regulated products as to what the price will be for the service they are buying.
- (g) With regard to cost recovery, the cost orientation obligation takes into account the investment made by the SMP operator and allows a reasonable rate of return on adequate capital employed, in line with Regulation 13 of the Access Regulations.

12.260 In Section 13 of the Consultation, ComReg reached the preliminary view that a cost orientation obligation remained appropriate for next generation WCA ancillary services in the Regional WCA Market. In this regard ComReg proposed to re-impose the cost orientation obligation as further specified for NGA WCA ancillary charges in the 2016 Access Pricing Decision.²⁰⁸²

Obligation not to cause a margin squeeze

12.261 In addition to the obligation of cost orientation for the products specified above, in Section 13 of the Consultation ComReg also considered that the imposition of both a retail and wholesale obligation not to cause a margin squeeze for all WCA products continued to be appropriate, proportionate and justified in the Regional WCA Market given concerns around market leverage.²⁰⁸³

12.262 Set out below is a summary of the key proposals from Section 13 of the Consultation in relation to the obligation not to cause a margin squeeze for CG and NG WCA services.

²⁰⁸¹ Reference to FTTC-based Bitstream includes Exchange launched Bitstream.

²⁰⁸² See paragraphs 13.310 to 13.312 in the Consultation.

²⁰⁸³ See paragraphs 13.315 to 13.319 in the Consultation.

Current generation WCA services**Wholesale Margin Squeeze Obligation**

- 12.263 In Section 13 of the Consultation, ComReg considered that Eircom's provision of a resale broadband product which ComReg has termed as End-to-End Bitstream, if not subject to appropriate regulatory controls for its regulated component parts, may conflict with the important regulatory goal of infrastructure investment — for example, if Eircom were offering resale or End-to-End Bitstream below the prices of its regulated WCA components this could undermine / discourage investment in LLU / VUA and lead to discriminatory pricing of WCA services.
- 12.264 In order to incentivise operators to invest in more infrastructure based services, rather than reselling Eircom's broadband (in the case of End-to-End Bitstream), it is important that the price of End-to-End Bitstream service is greater than the price of current generation Bitstream in the Regional WCA Market.
- 12.265 Therefore, ComReg reached the preliminary view that Eircom should not cause a wholesale margin squeeze between the price of End-to-End Bitstream and the price for Bitstream in the Regional WCA Market. However, ComReg welcomed the views of stakeholders on the likely future take-up or demand for CG End-to-End Bitstream based WCA services and whether it is necessary to continue to maintain such an obligation as the test may no longer be appropriate where there is little or no likely future demand for this service.

Retail Margin Squeeze Obligation

- 12.266 In Section 13 of the Consultation, ComReg was of the preliminary view that a retail margin squeeze obligation continued to be appropriate, proportionate and justified, in the Regional WCA Market for a number of reasons, including the following:
- (a) Eircom, as a vertically-integrated operator with SMP in the Regional WCA Market, has the incentive to use its market power in the upstream market to affect the competitive conditions in downstream wholesale and/or retail markets, in particular, through its ability to control the key inputs used by wholesale customers, which compete against Eircom in such markets. This could result in a distortion of, or restriction in, competition in these downstream markets, ultimately resulting in harm to End Users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced consumer choice;
 - (b) In the Regional WCA Market and absent regulation, Eircom had a market share in excess of [3% ██████████] which, together with its vertically integrated nature, means Eircom is in a position to either price excessively and/or cause a margin squeeze;

- (c) In the Regional WCA Market and absent regulation, Eircom had a [3< [REDACTED]] retail broadband market share while Virgin Media had approximately [3< [REDACTED]]²⁰⁸⁴ retail broadband market share and the remaining market share (of circa [3< [REDACTED]])²⁰⁸⁵ relates to BT, Vodafone and SIRO;
- (d) The retail margin squeeze tests should protect operators that rely on LLU and Line Share wholesale inputs (in the WLA Market) as it prevents Eircom from setting Bitstream prices so low such that investment in LLU/Line Share could be foreclosed; and
- (e) There are little or no alternative wholesale providers in some parts of the Regional WCA Market, and a number of smaller retail operators who are dependent on access to Eircom's WCA products.

12.267 In the Consultation ComReg proposed that the presence of a wholesale cost orientation obligation was no guarantee that Eircom could not impose a margin / price squeeze at the retail level. This is because Eircom continues to be the primary wholesale broadband supplier in Ireland, particularly in the Regional WCA Market and controls a ubiquitous access infrastructure which is not easily replicated by competitors.

12.268 Further, there is a risk that Eircom as a vertically integrated SMP operator controlling its own wholesale inputs provided to downstream operators could, through a combination of setting Bitstream prices at the upper limits of the cost oriented wholesale price control and pricing its retail broadband unprofitably low, engage in an anti-competitive margin squeeze with a view to leveraging its position of SMP from the Regional WCA Market to the downstream retail broadband market.

12.269 Therefore, ComReg was of the preliminary view that Eircom should not cause a retail margin squeeze between the price for retail CG broadband and the price for CG based Bitstream services in both Regional Area 1 and Regional Area 2 of the Regional WCA Market.²⁰⁸⁶

Next Generation WCA services

Wholesale Margin Squeeze Obligation

12.270 For the same reason as that summarised at paragraph 12.269 above, ComReg was of the preliminary view that Eircom should continue to ensure that it does not cause a wholesale margin squeeze between the price for End-to-End NG Bitstream and NGA Bitstream in the Regional WCA Market. This would apply to all forms of NGA including FTTC and FTTH.²⁰⁸⁷

²⁰⁸⁴ Virgin Media has a market share of less than 10%.

²⁰⁸⁵ The remaining market share is less than 10%.

²⁰⁸⁶ See Section 13, paragraphs 13.320 to 13.325 of the Consultation.

²⁰⁸⁷ See Section 13, paragraphs 13.336 to 13.338 of the Consultation.

Retail Margin Squeeze Obligation

- 12.271 ComReg considered in Section 13 of the Consultation that a margin squeeze obligation should be maintained for FTTH-based Bitstream as a control to prevent Eircom leveraging its market power in related markets. A margin squeeze test is considered more practical where it is difficult to determine an accurate estimation of costs, especially given the sensitivity of price to forecasted volume of users. A margin squeeze obligation also gives the regulated entity more pricing flexibility which is important to maintain investment incentives for the rollout of FTTH infrastructure. As set out at 12.273 below ComReg was of the preliminary view in the Consultation that this obligation is also justified because of concerns about foreclosure at the retail level.
- 12.272 ComReg was also of the preliminary view that a retail margin squeeze obligation was appropriate for FTTC-based NGA services (in addition to the cost orientation obligation) as ComReg recognised that absent regulation Eircom would have the ability and incentive to leverage market power into or from both horizontally and vertically related markets, given that Eircom would have around [3< ██████████]²⁰⁸⁸ retail market share in the Regional WCA Market. By doing so, Eircom could strengthen its position in those related markets and potentially also reinforce its existing market power in the Regional WCA Market.
- 12.273 ComReg considered that a retail margin squeeze obligation for NGA Bitstream was appropriate in the Regional WCA Market in order to ensure that there is no foreclosure of operators at a retail level, in the context of FTTH and/or FTTC services. Eircom has an incentive and ability to set retail prices at a level relative to its own wholesale prices that could foreclose competition. This could result in market foreclosure and/or a substantial lessening of competition in the retail broadband market, which would cause consumer harm.
- 12.274 As a result ComReg reached the preliminary view in Section 13 of the Consultation that the retail margin squeeze tests should be set as follows:²⁰⁸⁹
- (a) A retail margin squeeze test between the price for FTTC-based retail products and FTTC-based Bitstream in the Regional WCA Market; and
 - (b) A retail margin squeeze test between the price for FTTH-based retail product and FTTH-based Bitstream in the Regional WCA Market.

²⁰⁸⁸ Eircom has a market share greater than 80%.

²⁰⁸⁹ See Section 13, paragraphs 13.340 to 13.354 of the Consultation (16/96) for further details.

Cost accounting obligation

- 12.275 Having regard to the need to support the effectiveness of the proposed price control obligations set out in Section 13 of the Consultation, ComReg reached the preliminary view that the imposition of cost accounting obligations on Eircom in the Regional WCA Market was justified. In this respect, ComReg proposed that Eircom should ensure that it maintains appropriate cost accounting systems to justify its prices / costs of WCA products, services and facilities. In addition and in order to assess any potential price / margin squeezes, ComReg considered that it was important to understand the wholesale and retail costs associated with the Regional WCA Market and the Urban WCA Market. Therefore, ComReg proposed that Eircom should continue to provide cost data for the Urban WCA Market.
- 12.276 ComReg noted that the detailed nature of these cost accounting obligations are those currently imposed upon Eircom,²⁰⁹⁰ as specified in the 2010 Accounting Separation Decision.

Respondents' Views

- 12.277 ComReg notes that Respondents were asked in the Consultation whether they agreed with ComReg's proposed price control and cost accounting remedies in the Regional WCA Market. Seven of the eight respondents to the Consultation expressed views on the price control and cost accounting obligations in the Regional WCA Market.
- 12.278 ALTO, BT, enet, Sky and Vodafone generally agreed with the proposed remedies in the Regional WCA Market.
- 12.279 On the other hand, Eircom and Virgin Media disagreed with the imposition of cost orientation on NG FTTC-based WCA services.
- 12.280 Colt did not provide any response specifically relating to the proposed remedies relating to the WCA market.
- 12.281 A number of issues were raised by respondents, as set out further below.
- 12.282 The submissions from respondents are discussed under the following themes:
- (a) Pricing predictability (discussed in paragraph 12.283 below);
 - (b) Investment incentives (discussed in paragraphs 12.284 to 12.285 below);
 - (c) Need for cost orientation in the Regional WCA Market (discussed in paragraphs 12.286 to 12.289 below);
 - (d) Obligation not to cause a margin squeeze (discussed in paragraphs 12.290 to 12.291 below);
 - (e) Cost accounting and (discussed in paragraphs 12.292 to 12.295 below); and
 - (f) Other points raised (discussed in paragraphs 12.296 to 12.297 below).

²⁰⁹⁰ See Section 13, paragraphs 13.355 to 13.361 of the Consultation for further details.

Pricing Predictability

12.283 Vodafone agreed in principle with ComReg's proposal to extend the price control obligation to impose a cost orientation obligation on FTTC-based Bitstream services (access, ancillary services and Interconnection Services) in the Regional WCA Market. Vodafone considered that the demand for FTTC-based Bitstream services is now more predictable, making it easier to forecast volumes and associated cost levels. Vodafone also noted that the proposed approach for FTTC-based services will provide price certainty to operators like Vodafone who rely on these inputs and ensure that they are not at the mercy of Eircom's unilateral price increases (noting that Eircom has increased NGA wholesale prices twice since their launch in 2013).

Investment Incentives

12.284 Sky recommended that the backhaul and port charge elements of the Bitstream service be broken out in terms of determining cost oriented prices. Sky considered that it is not sufficient that the combined pricing of these elements meets the cost orientation obligation as occurs in the current WBA market. It further considered that ensuring the individual backhaul and port charge elements are cost oriented will increase the prospect of competition in the WCA market as clear 'build or buy' signals will be sent to prospective infrastructure providers as to the viability of building out backhaul links to Regional WCA exchanges. Sky stated that if Eircom is afforded flexibility on these two pricing elements it has the incentive and ability to exploit that flexibility in a way that discourages backhaul providers from investing in backhaul infrastructure.

12.285 Virgin Media disagreed with ComReg's proposal to impose a cost orientation obligation for the provision of FTTC-based Bitstream by Eircom. Virgin Media reiterated similar points raised in its response concerning the proposed WLA price control remedies. It stated that the imposition of cost oriented obligations on NGA services has the potential to undermine investment in competing broadband infrastructure and the availability of regulated cost oriented access to Eircom's fibre network could impact on decisions by operators, including Virgin Media, to deploy network.

Need for Cost Orientation in the Regional WCA Market

12.286 Eircom disagreed with the imposition of cost-based price regulation for the Regional WCA Market stating that there is no compelling evidence of any market problem warranting the imposition of such an obligation. It commented that in Regional areas "*WCA prices are constrained by both access to regulated VUA services as well as the adoption of national pricing for WCA,*"²⁰⁹¹ which leads to the effects of the acknowledged competitive pressure in urban areas extending to regional areas.

²⁰⁹¹ Eircom's Submission, page 53.

- 12.287 Furthermore, Eircom considered there is no longer any requirement for a cost orientation obligation for Current Generation WCA services given the reconciliation exercise in the Full Year 2014/2015 separated accounts which resulted in price reductions for usage charges and the implementation of a discount for operators taking delivery of Bitstream services closer to the End User. Eircom added that this pricing review projected CGA Bitstream revenues and costs to the end of FY18/19 in the presence of declining demand due to migration to Eircom NGA and to NGA services offered by two competing network providers. Eircom also considered that in the context of increasing build of competing NGA infrastructure by three parties, any price control that gives rise to further price reductions in Eircom's CG Bitstream could lead to delayed take-up of NGA service, which would have the inappropriate effect of delaying investment in rolling out NGA services. Eircom stated that *"a control that caps eir's current generation WCA service prices will be more sufficient to ensure that eir cannot avail of any residual SMP to damage consumer welfare."*²⁰⁹²
- 12.288 Eircom also disagreed with ComReg's view that the risk of cross-subsidy from the Regional WCA Market to the Urban WCA Market is mitigated if cost orientation is applied in the Regional WCA Market. Eircom stated that it is subject to competition law which prevents it from pricing below cost. Secondly, it stated that such a pricing strategy would make no economic sense as Eircom faces substantial competition in urban areas from competitors such as Virgin Media and BT with significant already sunk assets. Furthermore, Eircom considered that it would incur substantial losses if it were to attempt to foreclose competitors from urban areas and that Eircom would have no ability to recoup such losses as if it sought to raise prices above costs to recoup earlier losses, it would be constrained by the presence of Virgin Media's cable network assets and the ability of other players to obtain access to WLA inputs and to price their services at cost.
- 12.289 Vodafone stated that *"Although ComReg does not propose to impose a cost orientation obligation on FTTH-based Bitstream services, we note that SPs such as Vodafone, who will be relying on these more in the future, might be at risk of excessive pricing by Eircom."*²⁰⁹³ Vodafone therefore urged ComReg to monitor the market closely during the lifetime of this review and reconsider the need for a cost orientation obligation should the demand for FTTH-based Bitstream services become more predictable.

Obligation not to cause a margin squeeze

- 12.290 Vodafone agreed with ComReg's view that a general margin squeeze obligation continues to be appropriate in the Regional WCA Market. However, Vodafone urged ComReg to monitor the market closely during the lifetime of the market review and reconsider the need for a cost orientation obligation should the demand for FTTH Bitstream services become more predictable.

²⁰⁹² Eircom's Submission, page 60.

²⁰⁹³ Vodafone's submission, page 45.

12.291 Eircom disagreed with the imposition of the proposed margin squeeze test if wholesale prices are to be cost oriented. Eircom added that the retail to Bitstream margin squeeze test proposed in the Regional WCA Market will set retail prices in the urban area (as Eircom notes that the market analysis has recognised that all operators set national prices) so unless tests are flexible, ComReg will make Eircom's retail pricing in an already competitive market even more uncompetitive and create a pricing umbrella for other operators. In addition, Eircom considered that there is no sound economic reason to impose a margin squeeze test when there is cost orientation and so the imposition of such a remedy is disproportionate.

Cost Accounting

12.292 Vodafone noted that although the cost orientation obligation on CG Bitstream based WCA services mitigates the risk of cross-subsidy between the Regional and Urban WCA Markets, it considers that it does not remove the risk of Eircom allocating (and therefore recovering) more of its fixed and common costs through the regulated Regional WCA Market. Vodafone called on ComReg to closely scrutinise Eircom's cost allocation between the Regional and Urban WCA Markets in its Separate Pricing Consultation.

12.293 Vodafone agreed with ComReg's proposal that Eircom should be subject to a cost accounting obligation in the Regional WCA Market and that ComReg can only effectively monitor Eircom's compliance with its cost orientation obligation, if it can assess in detail Eircom's costs associated with the provision of its regulated WCA services. Vodafone noted this obligation will ensure that Eircom continues to maintain appropriate cost accounting systems to justify its prices and costs of WCA services.

12.294 Furthermore, Vodafone agreed with ComReg's proposal that Eircom should be required to provide revenue and cost data for the Urban WCA Market as this will ensure that ComReg is able to monitor Eircom's compliance with its various margin squeeze obligations.

12.295 Eircom noted that ComReg is proposing to impose Accounting Separation and Cost Accounting obligations on Eircom in respect of the Regional WCA markets by reference to the obligations mandated in its 2010 Accounting Separation Decision. However, Eircom considered that the 2010 Accounting Separation Decision outlines that separated accounting information can be provided in a number of different forms i.e., published HCA separated accounts on a 'fairly presents' basis, Additional Financial Statements ('**AFS**') which may be required to be prepared on a 'properly prepared' basis or as unaudited Additional Financial Information ('**AFI**'). Eircom stated that ComReg proposes to impose these obligations without outlining even at a summary level how Eircom is to fulfil these obligations and at a minimum it would expect that ComReg would outline where in the regulatory accounts it expects this data to be provided.

Other points raised

- 12.296 There were a number of other issues raised by Respondents. Eircom considered that, with ubiquitous VUA access implemented as a remedy to address Eircom's SMP in the national WLA Market for NGA, the WCA Markets for NGA *ipso facto* become competitive. Eircom considered that this is because the VUA service is delivered (to achieve 100% national coverage) to a set of sites for handover to downstream competitors that are reached by networks already built, or bought, for that purpose. In Eircom's view, it expected that the high-speed leased line market was about to be found to be competitive, and it considered that there were sufficient constraints on Eircom when setting prices for that service added to VUA (in the WLA Market) to generate NGA Bitstream Plus in the WCA Market. Furthermore, Eircom stated that this had been demonstrated by the loss of market share by Eircom, as over 70% of 'externally supplied NGA' had already migrated to VUA rather than Bitstream.
- 12.297 Vodafone referred to the 2013 Bundles Decision stating that ComReg "*defined two separate geographic WCA Markets*" based on areas with varying prospective competitive conditions (namely the LEA and outside the LEA) which it subjected to different pricing remedies. Vodafone noted that ComReg now proposed to carry this distinction into the Regional WCA Market but did not provide any justification for its proposed approach. Vodafone stated that as part of its Separate Pricing Consultation, it would expect ComReg to justify why this distinction was still relevant, particularly in light of the issues that Vodafone had raised in relation to ComReg's proposed geographic market definition.

ComReg's Assessment of Respondents' Views

- 12.298 ComReg has carefully considered Respondents' views on appropriate price controls in the Regional WCA Market.
- 12.299 In the Consultation, ComReg proposed to geographically differentiate price control remedies by identifying a 'Regional Area 1' and 'Regional Area 2'. The intention was to address the distinction between exchange areas identified in the market definition in the Consultation, and exchange areas used for pricing purposes associated with the 2013 Bundles Decision. ComReg has reviewed this analysis, and has decided that such a distinction no longer serves the intended purpose, and that there is merit in aligning exchanges used for pricing purposes with the exchange areas as identified in the defined WCA Markets. The context for the discussion of Respondents' views is therefore that price control and cost accounting remedies will apply to the Regional WCA Market, without further geographic differentiation.
- 12.300 Below, ComReg assesses Respondents' views according to the themes identified in paragraph 12.282 above, in particular, ComReg has considered all responses under the following themes:
- (a) Pricing predictability (discussed in paragraph 12.301 below);
 - (b) Investment incentives (discussed in paragraphs 12.302 to 12.305 below);
 - (c) Need for cost orientation in the Regional WCA Market (discussed in paragraphs 12.306 to 12.323 below);

- (d) Obligation not to cause a margin squeeze (discussed in paragraphs 12.324 to 12.335 below);
- (e) Cost accounting (discussed in paragraphs 12.336 to 12.339 below) and
- (f) Other points raised (discussed in paragraphs 12.340 to 12.341 below).

Pricing Predictability

12.301 ComReg notes Vodafone's comments at paragraph 12.283 which agreed with ComReg's points on the benefits of increased pricing predictability.

Investment Incentives

12.302 ComReg notes Sky's views as summarised at paragraph 12.284 that the backhaul and port charge elements of the Bitstream service should be broken out in terms of determining cost oriented prices, ComReg notes that in the 2017 Pricing Consultation,²⁰⁹⁴ it provided for separate port and usage charges. For further details on the attribution of costs between per port and per Mbps (usage) please see Section 8 (paragraphs 8.40-8.46) and Section 9 (paragraphs 9.18-9.20) of the 2018 Pricing Decision.

12.303 ComReg does not agree with Virgin Media's views as summarised at paragraph 12.285 where it considered that the imposition of cost oriented obligations on "NGA services" has the potential to undermine investment in competing broadband infrastructure. ComReg notes that the cost orientation obligation does not apply to all NGA services in the Regional WCA Market, as cost orientation is not being applied to FTTH-based Bitstream. In ComReg's view, the cost orientation price control on FTTC-based Bitstream, combined with continuing flexibility (subject to an obligation not to cause a margin squeeze) for FTTH-based Bitstream services, will not negatively affect fibre network investment over the lifetime of the review period, and is likely to encourage investment in FTTH-based services.

²⁰⁹⁴ See Sections 14.1 and 14.2 of the 2017 Pricing Consultation.

- 12.304 Specifically considering FTTC-based Bitstream, ComReg recognises that if an alternative operator plans to build its own NG access network, the regulated access price can act as a price constraint, and affect the return on investment. A similar effect could be considered with regard to Eircom's investment²⁰⁹⁵, where Eircom could reasonably expect a 'fair bet'²⁰⁹⁶ in terms of its decision to invest. ComReg recognised the uncertainty around potential demand for FTTC-based services when it previously forbore from imposing cost orientation. Eircom has not been subject to a cost orientation obligation on FTTC-based services since it began its rollout in 2013, and investment is now by and large complete. ComReg notes also that the 2010 NGA Recommendation stated that the investment risk for FTTC is significantly lower than that for FTTH.²⁰⁹⁷ However, in now deciding that cost orientation is required for FTTC-based services, ComReg notes that the regulated access price includes a reasonable rate of return (WACC) that takes into account the risk of investing in these kind of assets. As a consequence, efficient infrastructure deployment can be profitable (from the SMP operator's or from alternative players' perspective) in the presence of this price constraint. Therefore, ComReg does not consider that cost orientation will undermine investment in NGA networks.
- 12.305 ComReg notes that one of the objectives of cost orientation is to ensure that efficient infrastructure investment by Eircom and other operators is encouraged through offering a reasonable rate of return, but that this needs to be balanced by maintaining access prices at a level which allows an Access Seeker to operate profitably. If alternative operators plan to rely on access to the SMP operator's wholesale inputs, cost orientation ensures greater predictability of access prices, and reduces the risks to investment associated with relying solely on a margin squeeze approach. For example, absent a cost orientation obligation, Eircom could increase both retail and wholesale prices if competition is not sufficiently effective.

Cost orientation in the Regional WCA Market

- 12.306 As summarised at paragraph 12.286, Eircom disagreed with the imposition of all cost-based price regulation for the Regional WCA Market. In Eircom's view, there is no compelling evidence of any market problem warranting the imposition of such an obligation, on the basis that in regional areas WCA prices are constrained by both access to regulated VUA services as well as the adoption of national pricing for WCA which leads to the effects of the acknowledged competitive pressure in urban areas extending to regional areas.

²⁰⁹⁵ This point was raised by Eircom and by its advisers in response to the 2017 Pricing Consultation.

²⁰⁹⁶ An investment is considered to be a 'fair bet' when expected return is equal to the cost of capital, at the time of investment. This allows the investor to benefit from the risk of demand being higher than expected balanced against the risk of returns below the cost of capital if demand is low.

²⁰⁹⁷ See discussion of risk premium in the TERA Report, dated 7 April 2017, which accompanied the 2017 Pricing Consultation.

- 12.307 ComReg set out its preliminary assessment of the WCA Markets in Section 12 of the Consultation and has finalised its assessment in Section 12 of this Decision. Following its preliminary finding that Eircom should be designated with SMP in the Regional WCA Market, ComReg set out in the Consultation,²⁰⁹⁸ and has confirmed in this Decision, the types of competition problem in which Eircom would have the ability and incentive to engage, absent regulation in the Regional WCA Market.
- 12.308 ComReg does not agree that regulated VUA services are sufficient to constrain Eircom's pricing in the Regional WCA Market, and does not agree that the effect of competitive pressure in urban areas extends to regional areas. Cost oriented FTTC based VUA prices could only exert a competitive pressure on FTTC-based Bitstream in the geographic areas where FTTC-based VUA is available and has been actively taken up by Service Providers on Eircom's network. In the Regional WCA Market, Eircom sells more than three times as many Bitstream connections as VUA connections,²⁰⁹⁹ and faces limited competition from Service Providers. Further, there are Service Providers who have invested in and remain dependent on FTTC-based Bitstream, and may not necessarily wish to incur the additional investment required to move to FTTC-based VUA, should the lessening of regulation on FTTC-based Bitstream result in competition using FTTC-based Bitstream products becoming less viable.
- 12.309 This reasoning would apply also to a consideration of the extent to which CG WLA services such as LLU act as a constraint on Eircom's pricing of CG Bitstream. ComReg considers that the lack of effective constraint exercised by Eircom's legacy network indicates that LLU can no longer be considered as an anchor product that would constrain the pricing of FTTC-based services in a way that would avoid a negative knock-on effect for retail broadband prices. ComReg notes that the 2013 Non-Discrimination Recommendation²¹⁰⁰ acknowledges that the copper anchor could, in principle, be replaced by an NGA-based product if the legacy access product is no longer able to exercise a demonstrable retail price constraint on the NGA product, in this case, FTTC-based Bitstream. In light of this, ComReg considers that the imposition of a cost orientation obligation on FTTC-based Bitstream has taken utmost account of the 2013 Non-Discrimination Recommendation.

²⁰⁹⁸ See Section 12 of the Consultation.

²⁰⁹⁹ Based on information obtained in response to a SIR issued to Eircom in November 2017.

²¹⁰⁰ See Recital (56) of the 2013 Non-Discrimination Recommendation.

- 12.310 While maintaining that there is a need for a cost orientation obligation for FTTC-based Bitstream, ComReg has decided to continue to allow Eircom pricing flexibility on FTTH-based Bitstream, subject to the obligation not to cause a margin squeeze. ComReg noted in the Consultation that, given cost and demand uncertainties, the FTTH price was likely to be very sensitive to the penetration rate, such that an incorrect forecast could distort future market developments. If the price is too high, it may deter actual or potential purchasers of FTTH-based Bitstream from purchasing and if the price is too low, Eircom, and indeed other infrastructure investors, may reduce their investments in FTTH.²¹⁰¹ In ComReg's view, this justifies continuing to allow pricing flexibility for FTTH-based services. However, as set out below in paragraphs 12.324 to 12.334, ComReg assesses that, absent regulation, Eircom would have the ability and incentive to price its wholesale access inputs and/or retail prices in such a way that it would not allow an SP to cover the cost of provision in retail markets, after acquiring the wholesale inputs from Eircom. An obligation not to cause a margin squeeze is therefore required, and is discussed below.
- 12.311 For these reasons, ComReg maintains that cost orientation obligations are required in the Regional WCA Market, and this includes a cost orientation obligation on FTTC-based Bitstream.
- 12.312 In ComReg's view, absent regulation in the Regional WCA Market, ComReg has identified that Eircom has the ability and incentive to ultimately exploit end users by virtue of its SMP position by setting excessive wholesale charges in this market. This could raise the input costs for those SPs that purchase Eircom's wholesale services. Given that such above cost wholesale prices are likely to be passed on by SPs to their retail end users via higher retail prices, it could ultimately have the potential to harm the development of effective competition in downstream markets, through the actual or effective exclusion of downstream competitors or distorting competition. ComReg notes that absent regulation in the Regional WCA Market, Eircom would have a retail market share of [3< ██████████]. In light of this, ComReg considers that a cost orientation obligation is required to remedy the competition concern of excessive pricing.
- 12.313 ComReg has decided to impose a cost orientation obligation on CG and NG services in the Regional WCA Market, with the exception of FTTH-based Bitstream. ComReg notes Vodafone's point summarised at paragraph 12.289 where it suggested that ComReg should also consider a cost orientation obligation on FTTH-based Bitstream should this become necessary. In the case of FTTH-based Bitstream, ComReg considers that an obligation not to cause a margin squeeze is more appropriate at this time and this is discussed further at paragraphs 12.324 to 12.333 below.
- 12.314 ComReg notes Eircom's views at paragraph 12.287 where Eircom considered that there is no longer any requirement for a separate price control of cost orientation for CG WCA based Bitstream services based on the reconciliation exercise completed for FY14/15 separated accounts which resulted in price reductions for CG Bitstream usage charges.

²¹⁰¹ See Section 13 of the Consultation.

- 12.315 ComReg does not agree with Eircom's analysis. Firstly, the existing price control remedy of cost orientation for CG Bitstream services was imposed under the 2011 WBA Decision. ComReg has now reassessed the WLA Market and the WCA Markets identified in the EC's 2014 Recommendation. This includes an assessment of the appropriate price control remedies. Therefore, given the updated market analysis for the WCA Markets, including the assessment of the associated competitive dynamics and the likelihood of competition problems arising, it is no longer appropriate to rely on the analysis in the 2011 WBA Decision.
- 12.316 Secondly, ComReg does not agree with Eircom that "*...there is no longer any requirement for a separate price control by cost orientation for eir current generation WCA services.*" In fact, ComReg considers that the risk of excessive pricing remains in the Regional WCA Market for CG WCA services. In the Regional WCA Market and absent regulation in the WCA Market, Eircom has a retail market share of [██████████]. In the context of the SMP assessment, ComReg has, apart from existing competition, also considered other factors such as potential competition and found that Eircom's pricing behaviour is not likely to be sufficiently constrained by this. The cost orientation obligation should ensure that Eircom can only recover its efficiently incurred costs which are relevant to the provision of CG WCA products, services and facilities in the Regional WCA Market. This should, in turn, lead to efficient price and investment signals (build-or-buy) being provided to all market participants.
- 12.317 The retail price increases by Eircom for standalone CG broadband services from 1 September 2016 are suggestive that Eircom's retail prices are not sufficiently constrained, even in the presence of upstream wholesale regulation in the current WBA market. Further, ComReg's assessment of Eircom's costs shows that price increases for wholesale products in the Regional WCA Market cannot be justified solely on the basis of increased costs. Therefore, a cost orientation obligation alleviates the risks associated with excessive pricing for CG WCA services as the prices should reflect no more than actual costs adjusted for efficiencies plus a reasonable rate of return. A cost orientation obligation for CG WCA services across the Regional WCA Market should also allow Eircom some flexibility to cross subsidise from lower cost areas to higher cost areas within the Regional WCA market while ensuring overall cost recovery (plus a reasonable rate of return) across the Regional WCA Market. Furthermore, by imposing a cost orientation obligation on Eircom in the Regional WCA Market, supported by accounting separation obligations, ComReg avoids the risk that Eircom may use revenues from less competitive areas in the Regional WCA Market to cross-subsidise its activities in the Urban WCA Market. Therefore, the risk of cross-subsidy from the Regional WCA Market to the Urban WCA Market for CG WCA services is mitigated if cost orientation, supported by accounting separation, is applied in the Regional WCA Market.
- 12.318 As outlined at paragraph 12.287 Eircom also expressed a view
- ".....that any price control that gives rise to further price reductions in Eircom's current generation Bitstream will have the inappropriate effect of delaying investment in rolling out NGA services and it would be more sufficient to cap Eircom's current generation WCA service prices to ensure that Eircom cannot avail of any residual SMP to damage consumer welfare".*

- 12.319 This issue has been addressed in detail in the 2017 Pricing Consultation which further specifies the cost orientation obligation, and is considered in Section 5 and Section 9 of the 2018 Pricing Decision. In order to prevent excessive pricing while at the same time balancing the need to provide the appropriate investment signals in the Regional WCA Market to both Eircom and other operators, ComReg proposed that the BU-LRAIC+ approach should be applied going forward in relation to current generation Bitstream and BMB services in the Regional WCA Market.²¹⁰²
- 12.320 In addition, ComReg considered in the 2017 Pricing Consultation that it is timely to streamline the costing methodology across the Regional WCA Market (previously Regional Area 1 and Regional Area 2). Therefore, the application of the LRAIC+ approach will be applied across the Regional WCA Market and this is considered in Section 9 of the 2018 Pricing Decision.
- 12.321 At paragraph 12.288 ComReg noted that Eircom disagreed with ComReg's view that the risk of cross-subsidy from the Regional WCA Market to the Urban WCA Market is mitigated if cost orientation is applied in the Regional WCA Market and Eircom referred to competition law as a remedy. ComReg considers that the *ex post* enforcement provided under competition law would be inadequate. As such remedies would be applied after the occurrence of the competition problem to which they relate – in this case excessive pricing - this would contribute to significant uncertainty for operators.
- 12.322 ComReg considers that the express imposition of *ex ante* regulatory obligations, in particular the obligation of cost orientation and the obligation not to cause a margin squeeze, is more appropriate. Given the competition concerns surrounding Eircom's ability and incentive to engage in anticompetitive behaviour such as excessive pricing and leverage/foreclosure arising from Eircom's SMP in the Regional WCA Market, ComReg considers that identifying the issue only after it has occurred would not sufficiently protect against possible market foreclosure and the associated consumer harm. An *ex post* approach would therefore not be sufficient, and would not meet ComReg's objectives to promote competition.

²¹⁰² See Section 5 of the 2017 Pricing Consultation.

12.323 With regards to the point raised by Eircom at paragraph 12.288 that “...it would incur substantial losses if it were to attempt to foreclose competitors from urban areas” and that “...eir would have no ability to recoup such losses...”, ComReg notes that Eircom’s view is predicated on its contention that its pricing is constrained by Virgin Media and BT operating in the retail market with sunk assets. As ComReg has explained throughout the Consultation, and has confirmed in this Decision,²¹⁰³ ComReg does not consider that competition at the retail level is sufficient to constrain Eircom’s pricing of wholesale products in the Regional WCA Market. Further, ComReg considers that there are well established economic arguments on predatory pricing that seek to show the dynamics of predatory behaviour and its motivations — which can manifest in the form of a margin squeeze by either reducing or eliminating the economic space between retail and wholesale prices to the extent that losses are incurred. The fact that losses are incurred and even to the extent that they may or may not be recovered is irrelevant in the context as an abuse of market power. The effect or intention of such a margin squeeze may be to leverage market power by Eircom (either vertically or horizontally) and/or foreclose such markets to competitors/new entrants. Such outcomes would not be consistent with ComReg’s regulatory objectives, particularly to promote competition and to promote the interests of users. It is therefore appropriate and proportionate that ComReg should impose pricing remedies on Eircom (as the SMP operator) to prevent potential abuses.

Obligation not to cause a margin squeeze

12.324 Further to Vodafone’s views as summarised at paragraph 12.290, ComReg notes that Vodafone agrees that a margin squeeze regime is appropriate in the Regional WCA Market at this time.

12.325 ComReg notes Eircom’s point at paragraph 12.291 where it disagreed with the imposition of the proposed margin squeeze test if wholesale prices are to be cost oriented. ComReg considers that the margin squeeze obligation is necessary to ensure that economic replicability is a realistic prospect for Eircom’s competitors using Eircom’s wholesale products, services and facilities. Given Eircom’s SMP designation in the Regional WCA Market, Eircom has the ability and incentive to leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or wholesale markets. Eircom, as a vertically-integrated operator with SMP, has the incentive to use its market power in the Regional WCA Market to affect the competitive conditions in downstream markets, in particular, through its ability to control the key inputs used by Access Seekers which compete against Eircom in such markets. This could result in a distortion of or restriction in competition in these downstream markets, ultimately resulting in harm to end users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced consumer choice.

²¹⁰³ See Section 10 of the Decision.

- 12.326 ComReg considers that, in the absence of an appropriate price control on Eircom obliging it not to cause a margin squeeze between its wholesale products, and between retail and wholesale products, by virtue of its control of the underlying access infrastructure and its presence at both wholesale and retail levels, Eircom would have the ability and incentive to price its wholesale access inputs and/or retail prices in such a way that it would not allow an SP to cover the cost of provision in downstream retail markets, after acquiring the wholesale inputs from Eircom. In particular, as a vertically-integrated operator with SMP in the WLA Market and Regional WCA Market, Eircom has the potential to delay investment in its network in order to fund a margin squeeze, and behaviour like this – even on a short-term basis – has the potential to adversely affect its competitors. Access Seekers who are dependent on the purchase of Eircom’s wholesale inputs are unlikely to be able to finance a response, because they do not have a similar cash flow flexibility. If SPs cannot profitably replicate Eircom’s retail offers, they may exit the wholesale or retail markets, and/or market entry may be deterred. This would be to the detriment of End Users because it would restrict choice and could eventually lead to higher prices.
- 12.327 There is a risk that even if cost oriented prices for FTTC-based Bitstream and for CG Bitstream and Bitstream Managed Backhaul (**BMB**) services in the Regional WCA Market would prevent Eircom from increasing its wholesale charge unless justified by costs, Eircom can, by reducing its retail price, still ensure that Access Seekers may not be able to match the prevailing retail price and still earn sufficient margin to cover their own costs. In essence, Access Seekers may not be able to sell profitably at a retail price comparable to Eircom’s and as a result Eircom could foreclose competitors or indeed, distort competition. Any Access Seekers that had been forced out of the market(s) due to these price reductions would be inhibited from returning even when margins are restored if they feared that Eircom would respond by repeating the retail price reductions to squeeze margins again.
- 12.328 Absent the imposition of an obligation not to cause a margin squeeze, and given Eircom’s level of economies of scale and scope, an efficient alternative operator may not be able to compete at the retail level. Therefore, an obligation not to cause a margin squeeze in the Regional WCA Market continues to be proportionate and justified.
- 12.329 ComReg’s justification²¹⁰⁴ for the imposition of a margin squeeze test in the WLA Market applies similarly in the context of the Regional WCA Market.

²¹⁰⁴ See paragraphs 7.1334 to 7.1345.

- 12.330 With regard to Eircom's additional point summarised at paragraph 12.291 where it considered that the Bitstream to retail margin squeeze test in the Regional WCA Market would set retail prices in the urban area and create a pricing umbrella for other operators, ComReg notes that at present there is no obligation on Eircom to set geographically averaged prices for broadband services. Therefore, Eircom has the flexibility to set geographically differentiated prices. As a consequence, national pricing is not the result of a regulatory decision by ComReg but rather a commercial pricing decision from SPs themselves. Therefore, ComReg considers that there is no such mandatory 'pricing umbrella' for other SPs.
- 12.331 Having considered the views of Respondents to the Consultation, along with further comments received in responses to the subsequent 2017 Pricing Consultation and the 2017 Bundles Consultation, ComReg has concluded that an obligation not to cause a margin squeeze is required in the Regional WCA market to ensure that Eircom does not engage in a margin squeeze between its wholesale products, and between its wholesale and retail products. High level obligations with reference to margin squeeze tests are imposed in this Decision. These fall to be further specified in the 2018 Pricing Decision and in the 2018 Bundles Decision.
- 12.332 In the Consultation, ComReg proposed that Eircom should be subject to a specific obligation not to cause a margin squeeze between NG and CG Bitstream and End-to-End Bitstream, and asked for Respondents' views. ComReg has decided that the obligation not to cause a margin squeeze between CG and NG Bitstream and End-to-End Bitstream in the Regional WCA Market is no longer warranted. ComReg notes that End-to-End Bitstream is a low volume product, and that its use is decreasing. It currently represents a very small percentage of the overall lines provided by Eircom to Access Seekers, including Eircom's retail business. Further, ComReg notes that the majority of Exchange Areas where End-to-End products are provided fall within the newly designated Urban WCA Market, which has been found to be competitive.
- 12.333 ComReg maintains the need for an obligation not to cause a margin squeeze between Eircom's wholesale services and its retail services in the Regional WCA Market.²¹⁰⁵ In particular, Eircom should be obliged not to cause a margin squeeze between FTTH-based Bitstream and retail services when sold singly and delivered by FTTH-based Bitstream. Eircom should also be obliged not to cause a margin squeeze between its CG Bitstream services provided in the Regional WCA Market and retail services provided by CG Bitstream.
- 12.334 ComReg notes that given the sufficiency of other measures (including obligations of access and transparency, as well as cost orientation) there will be no standalone margin squeeze test between FTTC-based WCA services and FTTC-based retail services sold singly. However, given the potential for Eircom to cross subsidise between its retail products when sold in a bundle, all FTTC-based services (i.e. whether sold singly, or as part of a bundle) will be included in the overall retail margin squeeze tests, which falls to be further outlined in the 2018 Bundles Decision.

²¹⁰⁵ While the Consultation proposed geographic differentiation of remedies within the Regional WCA Market, the Decision applies to the Regional WCA Market without differentiation.

12.335 Eircom's SMP position on upstream wholesale markets affords it the ability and incentive to engage in anti-competitive conduct on downstream wholesale or retail markets by means of leveraging conduct. ComReg considers that cost orientation alone does not fully remove the ability and incentive of Eircom to leverage its SMP position on upstream wholesale markets, onto downstream wholesale (which are regulated by ComReg in the case of Regional WCA) or retail (which are not regulated by ComReg) markets. This is because, for instance, Eircom could, even in the presence of cost orientation at the wholesale level, set its retail prices at a level which was low enough to cause a margin squeeze on the part of its competitors. The effect of a margin squeeze would be to distort or restrict competition from Eircom's retail competitors, thereby ultimately reducing retail competition. Consequently, ComReg is of the view it is justified and proportionate to impose a margin squeeze test on Eircom.

Cost Accounting

- 12.336 ComReg notes Vodafone's point summarised at paragraph 12.292 where it raised concerns regarding the risk of Eircom allocating (and therefore recovering) more of its total fixed and common costs to the regulated Regional WCA Market. In Section 8 of the 2017 Pricing Consultation, ComReg set out the cost modelling approach in relation to the CG Bitstream services based on the NGN Core Model. The NGN Core Model described in Section 8 of the 2017 Pricing Consultation assesses the underlying costs associated with the provision of WCA services across 20 separate aggregation regions.²¹⁰⁶ Furthermore, the NGN Core Model assesses the costs associated with the WCA service at an individual Exchange level. In this context it is possible for ComReg to closely align the fixed and common costs contained in the NGN Core Model in line with the exchanges across the Urban WCA Market and Regional WCA Market. Therefore, this should reduce the risk of Eircom allocating more of its fixed and common costs to the Regional WCA Market.
- 12.337 ComReg notes Eircom's views summarised at paragraph 12.295 where Eircom disagreed with the proposed obligations of cost accounting and accounting separation as it considered that 'the WCA Market' is effectively competitive and its expectation is that the obligation to produce separated accounts will not be required and it can therefore be included in the unregulated market. ComReg's analysis at Section 11 of this Decision concludes that Eircom has SMP in the Regional WCA Market and a number of obligations, including cost accounting and accounting separation are considered necessary.
- 12.338 In addition, in order to assess any potential price / margin squeeze issues, it is important for ComReg to understand the wholesale and retail costs associated with both the Regional WCA Market and the Urban WCA Market. This view was also shared by Vodafone (at paragraph 12.294) where it stated that "*Eircom should be required to provide revenue and cost data for the Urban WCA Market. This will ensure that ComReg is able to monitor Eircom's compliance with its various margin squeeze obligations.*" Therefore, ComReg considers that Eircom should continue to provide relevant data for the Urban WCA Market.

²¹⁰⁶ See subsection 8.3 of the 2017 Pricing Consultation.

12.339 Furthermore, ComReg notes Eircom's views summarised at paragraph 12.295 where it stated that ComReg failed to consider the implications of its proposal to maintain accounting separation and cost accounting obligations in the Regional WCA Market and that ComReg proposes to impose obligations, in line with the 2010 Accounting Separation Decision, without outlining at a summary level how Eircom is to fulfil these obligations. ComReg refers to Section 7, paragraphs 7.1389 to 7.1391 for its views in this regard.

Other points raised

12.340 ComReg notes Eircom's point summarised at paragraph 12.296 where it considered that with ubiquitous VUA access implemented as an obligation in the national WLA Market, the 'NGA WCA' market *ipso facto* becomes competitive. Eircom also referred in this context to the leased line market. ComReg does not agree with Eircom's points on the competitive conditions in the WLA Market and WCA Markets, and refers to its reasoning in Section 11 of the Consultation and of this Decision.

12.341 ComReg notes Vodafone's views as summarised at paragraph 12.297 where it stated that it expected ComReg to justify the distinction of the two separate areas (Regional Area 1 and Regional Area 2) within the Regional WCA Market in light of the issues raised by it in relation to ComReg's proposed geographic market definition, ComReg notes that it has taken Respondents' views into account in concluding that it is no longer appropriate to geographically differentiate remedies between separate areas within the Regional WCA Market.²¹⁰⁷

Comments by the European Commission

12.342 In the EC Response on ComReg's Notified Draft Measures, the EC commented on the need for an appropriate and consistent price control of wholesale products and the need for updated current generation access prices (see EC Response in Appendix: 2). In Appendix: 3, ComReg has confirmed that it will review the Revised CAM and the associated prices set in the 2016 Access Pricing Decision as quickly as possible, and will inform the EC in due course of the outcome of any changes to the prices as a result of that review process.

²¹⁰⁷ See Section 4 of the 2017 Bundles Consultation and Section 4 of the 2018 Bundles Decision for further analysis and justification.

ComReg's Position

- 12.343 Having considered the views of respondents summarised in paragraphs 12.277 to 12.297, ComReg is of the view that price control and cost accounting obligations are both proportionate and justified in relation to the Regional WCA Market. In general, ComReg considers that, absent regulation, Eircom has the ability and incentive to leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or wholesale markets. Eircom, as a vertically-integrated SP being designated with SMP, has the incentive to use its market power in the Regional WCA Market to affect the competitive conditions in downstream retail markets, in particular, through its ability to control the key inputs used by wholesale customers which compete against Eircom in such markets. This could result in a distortion of or restriction in competition in these downstream markets, ultimately resulting in harm to End Users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced End User choice. Therefore, ComReg considers that price control obligations are justified and proportionate in the Regional WCA Market. The detail and implementation of these price control obligations falls to be further specified in the 2018 Pricing Decision and the 2018 Bundles Decision.
- 12.344 ComReg considers that a cost orientation obligation is appropriate for services in the Regional WCA Market, including but not limited to CG Bitstream, BMB, FTTC-based Bitstream, Exchange launched Bitstream, and CG and NG ancillary services. Where applicable, the cost orientation obligation as set out in the 2016 Access Pricing Decision shall be re-imposed in this Decision, and shall continue to apply.
- 12.345 ComReg notes at this point that the price control obligation in the WCA Decision Instrument set out at Appendix: 21 of this Decision contains the two alterations set out below, compared to the Notified Draft Measures in June 2018.
- 12.346 The first alteration arises due to a drafting error. Section 12.2 of the WCA Decision Instrument indicated that Eircom's cost orientation obligations applied only to *"products, services or facilities referred to in Section 7.2"* of the Decision Instrument. This reference was incorrect and did not accurately reflect the analysis set out at paragraphs 12.255 to 12.260 above, and in this sub-section. Accordingly, the text at Section 12.2 of the WCA Decision Instrument set out at Appendix: 20 of this Decision has been amended to read *"products, services or facilities referred to in Section 7"* to correctly mirror the analysis set out herein.
- 12.347 The second alteration to the cost orientation obligations set out in the WCA Decision Instrument makes clear that, in keeping with the analysis set out at paragraph 12.353 below, the specific obligations are not limited to monthly rental charges alone, but, rather, extend to rental charges of any frequency. ComReg has accordingly adjusted the language in Section 12 of the WCA Decision Instrument to refer to rental charges in general, rather than specifically monthly rental charges.

- 12.348 FTTC-based Bitstream and Exchange launched Bitstream were not previously subject to a cost orientation obligation, but were subject to an obligation not to cause a margin squeeze. However, as set out in the Consultation²¹⁰⁸ and discussed further above, ComReg considers that a margin squeeze test alone has not been sufficient to address competition problems in the provision of FTTC-based Bitstream. ComReg has discussed above the lack of a demonstrable retail price constraint, either from alternative operators or from Eircom's own copper network, and economic replicability has been shown not to be sufficient to constrain Eircom's pricing. ComReg notes that Eircom's FTTC network rollout is almost complete and so costs and volumes can now be more reliably forecast than was the case when the previous price control was imposed. The implementation of a cost orientation obligation is now more feasible, and is consistent with ComReg's approach to CG WCA services. For all of these reasons, ComReg has decided that a cost orientation obligation on FTTC-based Bitstream and Exchange launched Bitstream is appropriate and justified in the Regional WCA Market. ComReg notes its expectation of the sufficiency of other measures (including obligations of access and transparency, as well as cost orientation), and that there will be no standalone margin squeeze test between FTTC-based services and retail services sold singly. All FTTC-based services will be included in the overall retail margin squeeze tests which fall to be further outlined in the 2018 Bundles Decision.
- 12.349 In the Consultation, ComReg proposed that Eircom should be subject to an obligation not to cause a margin squeeze between its wholesale services in the Regional WCA Market and other wholesale services. In particular, Eircom would be subject to an obligation not to cause a margin squeeze between CG and NG Bitstream and End-to-End Bitstream in the Regional WCA Market. ComReg has decided that this specific obligation is no longer warranted. ComReg notes that End-to-End Bitstream is a low volume product, and that its use is decreasing. It currently represents a very small percentage of the overall lines provided by Eircom to Access Seekers and Eircom's retail business. Further, ComReg notes that the majority of Exchange Areas where End-to-End products are provided fall within the newly designated Urban WCA Market, which has been found to be competitive.
- 12.350 In considering Eircom's ability and incentive to use its power in the Regional WCA Market to affect the competitive conditions in the downstream retail broadband markets, ComReg has decided that remedies should be imposed that will oblige Eircom not to cause a margin squeeze between WCA services and downstream retail services.
- 12.351 ComReg has decided that Eircom shall be obliged specifically not to cause a margin squeeze between FTTH-based Bitstream provided in the Regional WCA Market and FTTH-based retail services when sold singly and delivered by FTTH-based Bitstream. In the absence of a cost orientation obligation on FTTH-based services, ComReg considers that a specific margin squeeze obligation is necessary to ensure that Access Seekers can compete in the retail market.

²¹⁰⁸ See paragraphs 13.304 to 13.307 of the Consultation.

12.352 ComReg has decided that a specific obligation should apply such that Eircom is obliged not to cause a margin squeeze between CG Bitstream services and retail products delivered by CG Bitstream in the Regional WCA Market.

12.353 In summary, ComReg has decided that:

- (a) Eircom shall be subject to a cost accounting obligation in the Regional WCA Market.
- (b) Eircom shall be subject to the obligation of cost orientation, including but not limited to prices for CG Bitstream, Bitstream Managed Backhaul services, FTTC-based Bitstream, Exchange launched Bitstream and ancillary services.
- (c) For ancillary services, the cost orientation obligation as further specified in the 2016 Access Pricing Decision shall be re-imposed in this Decision.
- (d) For Current Generation Standalone Broadband in the Regional WCA Market, Eircom shall be subject to the obligation of cost orientation as further specified in the 2016 Access Pricing Decision to be re-imposed on Eircom such that that the rental charge offered or charged by Eircom should be no more than Eircom's total actual incurred costs in the Regional WCA Market (adjusted for efficiency) plus a reasonable rate of return associated with the provision of Current Generation Standalone Broadband. The relevant costs are based on a Top-Down HCA costing methodology except for Active Assets where the costs are calculated using a BU-LRAIC+ methodology.
- (e) Eircom shall be subject to an obligation not to cause a margin squeeze between WCA services and wholesale services downstream from the Regional WCA Market.
- (f) Eircom shall be subject to an obligation not to cause a margin squeeze between WCA services and services in retail markets downstream from the Regional WCA Market.
- (g) Eircom shall not cause a margin squeeze between Current Generation Bitstream and retail services, whether sold singly or as part of a bundle, delivered by CG Bitstream.
- (h) Eircom shall not cause a margin squeeze between FTTH-based Bitstream and FTTH-based retail services sold singly and delivered by FTTH-based Bitstream in the Regional WCA Market.

12.354 The above obligations are set out in Section 12 of the Decision Instrument attached at Appendix: 21 of this Decision. Further specification of price control obligations falls to be set out in the 2018 Bundles Decision and in the 2018 Pricing Decision.

Accounting separation remedy in the Regional WCA Market

Position set out in the Consultation

12.355 Having regard to Eircom's (i) integrated position across several upstream and downstream markets (in particular noting its SMP designations in a number of these markets), (ii) the scope for Eircom to leverage its market power and (iii) the associated need to ensure sufficient visibility of how costs are allocated across WCA products, services and facilities and other horizontally and vertically-related input services, ComReg proposed in Section 13 of the Consultation that the obligation of cost accounting and accounting separation was justified in the WCA Market. In this regard ComReg proposed to maintain the obligations set out under the 2010 Accounting Separation Decision.²¹⁰⁹

Respondents' Views

- 12.356 ComReg notes that Respondents were asked in the Consultation whether they agreed with ComReg's proposed accounting separation remedies in the Regional WCA Market.
- 12.357 Vodafone agreed that Eircom should be subject to accounting separation obligations in the Regional WCA Market as this will ensure that ComReg is able to monitor whether Eircom has allocated costs correctly to the relevant WCA services and products.
- 12.358 Eircom disagreed with the proposed obligations of cost accounting and accounting separation as it considered that the whole of the WCA Markets are effectively competitive and its expectation is that the obligation to produce Separated Accounts will not be required and it can therefore be included in the unregulated market.
- 12.359 Eircom considered that ComReg failed to consider the implications of its proposal to maintain Cost Accounting and Accounting Separation obligations in the Regional WCA Market. Furthermore, Eircom asserted that instead of using the market review and the consultation process as an opportunity, in the light of a rapidly evolving technological and competitive environment, to critically examine the on-going necessity for the maintenance of the full suite of obligations outlined in ComReg's 2010 Accounting Separation Decision, ComReg merely imposes everything, regardless of the detrimental impact such stringent regulation might have on Eircom or the industry in general.

²¹⁰⁹ See Section 13, paragraphs 13.363 to 13.366 of the Consultation for further details.

12.360 Eircom also noted that ComReg is proposing to impose Accounting Separation and Cost Accounting obligations on Eircom in respect of the Regional WCA markets by reference to the obligations mandated in its 2010 Accounting Separation Decision. However, Eircom considered that the 2010 Accounting Separation Decision outlines that separated accounting information can be provided in a number of different forms i.e., published HCA separated accounts on a “*fairly presents*” basis, Additional Financial Statements (‘**AFS**’) which may be required to be prepared on a “*properly prepared*” basis or as unaudited Additional Financial Information (‘**AFI**’). Eircom stated that ComReg proposes to impose these obligations without outlining even at a summary level how Eircom is to fulfil these obligations and at a minimum it would expect that ComReg would outline where in the regulatory accounts they expect this data to be provided.

ComReg’s Assessment of Respondents’ Views

- 12.361 ComReg notes Eircom’s views summarised at paragraph 12.358 where Eircom disagreed with the proposed obligations of cost accounting and accounting separation as it considered that the WCA market is effectively competitive and its expectation is that the obligation to produce separated accounts will not be required and it can therefore be included in the unregulated market. ComReg’s analysis at Section 11 of this Decision concludes that Eircom has SMP in the Regional WCA Market and a number of obligations, including accounting separation are considered necessary.
- 12.362 In addition, in order to assess any potential price / margin squeeze issues, it is important for ComReg to understand the wholesale and retail costs associated with both the Regional WCA Market and the Urban WCA Market. This view was also shared by Vodafone (at paragraph 12.294) where it stated that “*Eircom should be required to provide revenue and cost data for the Urban WCA Market. This will ensure that ComReg is able to monitor Eircom’s compliance with its various margin squeeze obligations.*” Therefore, ComReg considers that Eircom should continue to provide relevant data for the Urban WCA Market.
- 12.363 Furthermore, ComReg notes Eircom’s views summarised at paragraph 12.295 where it stated that ComReg failed to consider the implications of its proposal to maintain accounting separation and cost accounting obligations in the Regional WCA market and that ComReg proposes to impose obligations, in line with the 2010 Accounting Separation Decision, without outlining at a summary level how Eircom is to fulfil these obligations. ComReg refers to the Consultation²¹¹⁰ for its views in this regard.

²¹¹⁰ See paragraphs 13.284 to 13.354, and 13.363 to 13.376, of the Consultation.

ComReg's Position

- 12.364 Having considered the views of respondents summarised in paragraphs 12.356 to 12.360, ComReg is of the view that accounting separation obligations are both proportionate and justified in relation to the Regional WCA Market. In general, ComReg considers that, absent regulation, Eircom has the ability and incentive to leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or wholesale markets. Eircom, as a vertically-integrated SP being designated with SMP, has the incentive to use its market power in the Regional WCA Market to affect the competitive conditions in downstream retail markets, in particular, through its ability to control the key inputs used by wholesale customers which compete against Eircom in such markets. This could result in a distortion of or restriction in competition in these downstream markets, ultimately resulting in harm to End Users, potentially in the form of higher prices, lower output/sales, reduced quality or reduced End User choice. Therefore, ComReg considers that accounting separation obligations are justified and proportionate in the Regional WCA Market.
- 12.365 In the Regional WCA Market, Eircom shall be subject to an accounting separation obligation consistent with the requirements set out in the 2010 Accounting Separation Decision.
- 12.366 The above obligations are set out in Section 11 of the Decision Instrument attached at Appendix: 21 of this Decision.

Other Issues raised by Respondents

- 12.367 BT noted that while it agreed with ComReg's proposed remedies for the Regional WCA market, it was seriously concerned there is a major 'loop-hole' in that Eircom could circumvent these remedies by simply purchasing WLA services and using leased line type products to create an alternative solution.
- 12.368 BT pointed to Figure 1 of the Consultation which highlighted that the difference between WLA and WCA is that with WLA there is access to the local exchange whereas WCA Bitstream access is to a central access point. Hence, BT noted, in simple terms the difference between the WLA and WCA markets is the backhaul element. BT considered that as entrant operators have the ability to purchase VUA and leased lines (either from Eircom, other providers or self-supply) it can be argued Eircom could do the same for its downstream business and this would appear to be equivalent.
- 12.369 BT argued that hence, whilst Eircom could be mandated to provide the regional WCA solution which would maintain the obligation to supply to the wholesale market, there is possibility the leased lines de-regulated market could allow Eircom to drive down costs to its downstream business without similar offers being available to other operators.
- 12.370 BT noted that ComReg is proposing to make Regional WCA services cost oriented (including a reasonable margin), however, the opportunity and motive would exist for Eircom to provide its downstream business a better deal through using leased lines/wholesale Ethernet services. BT added that there is also opportunity and motive to discriminate in the supply of backhaul to different wholesale customers.

12.371 BT considered that as ComReg has concluded through its extensive market analysis that the Regional WCA market is not competitive and regulatory remedies are required, the onus is with ComReg to close the loop-hole that the proposed de-regulation of the leased lines market creates. BT added that hence, whilst the remedies in the regional market would initially look appropriate the loop-hole has the potential of undermining competition in this market and effectively makes it the same as the urban market.

ComReg's Assessment of Respondents' Views

12.372 In paragraphs 12.367 to 12.371 above, ComReg noted a number of points from BT in relation to the proposed remedies in the Regional WCA Market.

12.373 BT considered that there was a 'loop-hole' in the proposed Pricing remedies²¹¹¹ which, coupled with proposed deregulation of the leased lines market, could potentially allow Eircom to purchase WLA services and use leased line type products to create an alternative solution. BT suggested that this would give Eircom a retail competitive advantage and potentially also an advantage in the sale of Bitstream in the Urban WCA market.

12.374 ComReg notes that Bitstream prices (both CGA and NGA) will be subject to the obligation of cost orientation in the Regional WCA market, and hence in this market, Eircom must self-supply at those regulated prices. This should eliminate the possibility of Eircom being able to self-supply its retail arm at lower prices in the Regional WCA exchanges.

12.375 ComReg considers BT's concern to relate to the potential for Eircom to provide Bitstream services in the Urban WCA market at competitive prices using WLA inputs and deregulated leased lines services, i.e. a potential margin squeeze.

12.376 ComReg view is that the margin squeeze obligations²¹¹² which aim to ensure sufficient economic space between Bitstream and WLA products should mitigate the risks of such behaviour. ComReg notes that a margin squeeze obligation will still be in place in the Urban WCA market.

12.377 In relation to BT's assertion that there is also opportunity and motive to discriminate in the supply of backhaul to different wholesale customers, ComReg does not agree as the proposed obligations in the WHQA market contain provisions for non-discrimination.

12.378 Hence, ComReg does not consider that any such 'loop-hole' exists from the proposed deregulation of the WHQA market.

Statement of Compliance ('SoC') Remedy

Position set out in the Consultation

12.379 In paragraphs 8.686 to 8.725 of the Consultation, ComReg set out and justified proposals with respect to obligations to be imposed upon Eircom governing requirements on it to submit a Statement of Compliance ('SoC') to ComReg. The proposed obligation was as follows:

²¹¹¹ Paragraphs 13.258 to 13.354 of the Consultation.

²¹¹² Paragraphs 13.313 to 13.354 of the Consultation.

12.380 ComReg proposed to require that Eircom submit to ComReg a written SoC adequately demonstrating its compliance with its regulatory obligations in the WLA Market, to include the following:

- (a) A full and true written statement, signed by a person of appropriate expertise and authority within Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations and confirming to the best of its knowledge that Eircom is in compliance with its regulatory obligations;
- (b) The information relied upon, and the process followed, by the signatory in order to be satisfied that to the best of its knowledge that Eircom is in compliance with its regulatory obligations.
- (c) A description and explanation of the governance measures implemented by Eircom in order to ensure that it is and remains in compliance with its regulatory obligations, in particular:
 - (i) A description and explanation of the relevant reporting structures and reporting processes implemented by Eircom.
 - (ii) The information relied upon and the process followed by Eircom managers to assess the operation and effectiveness of the processes used to identify and mitigate risks of non-compliance in their areas of responsibility.
- (d) A description of the risks identified and the controls developed to mitigate potential risks of non-compliance with Eircom's regulatory obligations, as they relate to the categories of activities in (e) below and including the following in particular:
 - (i) A description of the purpose of each process which was analysed for risks of non-compliance.

A detailed description of the risk analysis process, to include the following:

1. A description of the expertise employed by Eircom.
2. A list of all material including all relevant documentation.
3. A description of how the material and expertise was used.

A detailed description of the control development process to include the following:

1. A description of the expertise employed by Eircom.
2. A list of all material including all relevant documentation used.
3. A description of how the material and expertise was used.
4. A description of the process used to assess the effectiveness of the controls.

- (e) The obligations set out in (a) to (d) above apply, but for the avoidance of doubt, are not limited to, the following categories of activities:
- (i) Pre-provisioning, Provisioning and Service Assurance for WLA products services and facilities.
 - (ii) Product development including product enhancements, and pre product development screening of Access requests.
 - (iii) Product prioritisation and investment decisions.
 - (iv) Access to shared resources including IT and Product Development resources.
 - (v) The management of information, both structured and unstructured²¹¹³ in conformance with regulatory requirements.
 - (vi) Other categories as reasonably required by ComReg.

12.381 The documentation referred to in the SoC obligations was also to be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the SoC for completeness and accuracy. Such documentation and information will enable ComReg, or a third party as determined by ComReg, to assess whether Eircom has taken all reasonable steps to ensure that the risk assessment and control and governance measures provide reasonable assurance to ComReg that Eircom is compliant with its regulatory obligations.

12.382 ComReg proposed to require Eircom to clearly identify, explain, document and demonstrate the following in particular:

- (a) In respect of the standard of EoI, any and all differences as between systems and processes used to supply Access Seekers and Eircom's downstream arm setting out why it believes that any such differences are very minor and insignificant and can be objectively justified; and
- (b) In respect of the standard of EoO, any and all differences as between systems and processes used to supply Access Seekers and Eircom's downstream arm. The explanation shall include a description as to how and what controls are in place to ensure an EoO standard notwithstanding the differences in systems and processes used.

12.383 Statements of Compliance were to be kept updated by Eircom as required to reflect material changes to the documentation and information. These updates will be provided to ComReg within one (1) month of the update being required.

²¹¹³ As described in the Consultation, '**Structured Information**' is information which is documented and managed through an established business process in a formal manner and includes Memos, Email messages, Letters, Order forms, Invoices, Agendas and Reports etc. '**Unstructured Information**' is managed in a less formal manner and includes information which is passed between individuals or business units through informal communications.

- 12.384 Updates or changes to any SoC provided to ComReg were required to be presented such that the changes are highlighted and the SoC documents include a Version Control²¹¹⁴ and Revision History.²¹¹⁵
- 12.385 Eircom was also to be required to publish the SoC, and updates to the SoC, on its publicly available website within one (1) month of providing it to ComReg, unless otherwise agreed with ComReg.
- 12.386 Eircom was also to be required to provide a SoC, as referred to in paragraphs 8.689 to 8.691 of the Consultation, to ComReg within six (6) months of the effective date of this Decision or:
- (a) In the case of any offer of a new WLA product, service or facility, seven (7) months in advance of its being made available;
 - (b) In the case of any change to an existing WLA product, service or facility, three (3) months in advance of it being made available;
 - (c) As may otherwise be required by ComReg.

Respondents' Views

- 12.387 Four of the eight Respondents expressed views on the SoC obligations, namely ALTO, BT, Eircom and Vodafone.
- 12.388 ComReg grouped and considered respondents submissions and related issues (in Section 7 of this Decision) using the following themes:
- (a) Transparency – Publication of the SoC (see paragraphs 7.1406 to 7.1407);
 - (b) Potential impact of the SoC on Product Development (see paragraph 7.1408);
 - (c) Scope of the SoC (see paragraphs 7.1409 to 7.1411);
 - (d) SoC Signatory (see paragraph 7.1412);
 - (e) Publication of confidential information (see paragraph 7.1413); and
 - (f) Other issues raised by Respondents (see paragraphs 7.1414 to 7.1418).

ComReg's Assessment of Respondents' Views

- 12.389 ComReg grouped and considered respondents submissions and related issues (in Section 7 of this Decision) using the following themes:

²¹¹⁴ Version Control in this context refers to a standardised regime for the management of changes to documents. Versions should be identified by a number or letter code, associated with a date and timestamp and include the identity and role of the person making the change. Revision History is included as part of the Version control regime.

²¹¹⁵ Revision History is a documented list of changes from the previous draft which is maintained and printed in a dedicated and indexed section of each Statement of Compliance. The list will be cumulative and identify the changes from the preceding versions of the SoC.

- (a) Transparency – Publication of the SoC (see paragraphs 7.1420 to 7.1429);
- (b) Potential impact of the SoC on Product Development (see paragraphs 7.1430 to 7.1434);
- (c) Scope of the SoC (see paragraphs 7.1435 to 7.1436);
- (d) SoC Signatory (see paragraphs 7.1437 to 7.1448);
- (e) Confirmation regarding effectiveness of Eircom’s Regulatory Governance arrangements (see paragraphs 7.1449 to 7.1467);
- (f) Management of Regulatory Governance data (see paragraphs 7.1468 to 7.1472);
- (g) Publication of confidential information (see paragraphs 7.1473 to 7.1482); and
- (h) Other issues raised by Respondents (see paragraphs 7.1483 to 7.1486).

ComReg’s Position

12.390 Having considered Respondents’ views as summarised and assessed in paragraphs 7.1406 to 7.1486 above, and having reflected further on the proposed obligations, ComReg is maintaining its position on SoC, as set out in the Consultation,²¹¹⁶ with the exception of the amendments specified in paragraphs 12.391 and 12.386.

12.391 ComReg amends Section 13.1 of the proposed SoC obligation in the Draft Decision Instrument,²¹¹⁷ as follows (amended text is shown in italics):

12.392 Pursuant to Regulations 9, 10, 11, 12 and 13 of the Access Regulations Eircom shall submit to ComReg a written Statement of Compliance that adequately demonstrates its compliance with its regulatory obligations in the WLA Market, to include the following:

- (a) *A full and true written statement, signed by one or more Directors of Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations, in which:*
 - (i) *The Directors confirm that, in their opinion, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its regulatory obligations.*
 - (ii) *The Directors explain the basis upon which the confirmation in (a) above is made including a description of the information relied upon, and the process followed, by the Directors of Eircom in order to be satisfied that to the best of their knowledge the arrangements, structures and internal controls in place provide reasonable assurance that Eircom is in compliance with the obligations set out in this Decision Instrument.*

²¹¹⁶ Paragraphs 13.367 to 13.376 of the Consultation.

²¹¹⁷ As published in the Consultation.

- 12.393 ComReg amends the obligations as set out in Section 13, in particular as set out in section 13.2 of the Draft Decision Instrument, by removing 13.2 (vi) which required Eircom to provide a SoC for other categories as reasonably required by ComReg.
- 12.394 Section 13.1(iv) of the Draft Decision Instrument shall be amended as follows to include items (d) and (e), shown in italics below:
- (d) *a description of the operation of controls including the method employed by Eircom to record and store the data produced when controls are operated.*
 - (e) *a description of and the identification of the repository in which the data from the operation of each control is recorded and stored.*
- 12.395 The obligations with respect to SoC being imposed upon Eircom are more particularly set out in the Decision Instrument in Appendix: 21, Section 13 of this Decision.

Updating the WCA Geographic Market Assessment over the period of the Market Review

- 12.396 As noted in paragraph 9.257, given the need for market reviews to be forward-looking (where possible), and the potential dynamic nature of the Regional WCA Market, given the ongoing rollout of the SIRO and Virgin Media networks and the potential for Access Seekers to increase their WLA based footprints, ComReg intends to reapply Criteria 1 to 5 during the lifetime of the market review (and to consult within 24 months of the publication of this Decision) in order to examine the appropriateness of the continued imposition of regulatory obligations (the '**Mid-term Assessment**'). This could lead to, for example, the maintenance of existing regulation or its lessening or removal, as appropriate, in those Exchange Areas falling within the Regional WCA Markets. Where regulation is to be lessened or removed, the sunset period discussed in Section 13 of this Decision would be applied.

Decision Instrument for WCA Market

- 12.397 ComReg has made some amendments to the language contained in a number of Sections of the WCA Decision Instrument (Appendix: 21) for the purpose of clarifying the nature of certain obligations contained therein. However, these changes do not impact the substance of the overall obligation and the outcomes remain effectively the same. Any substantive changes to obligations contained in the final WCA Decision Instrument are described in the relevant Sections throughout the Decision.

13 Withdrawal of SMP and Obligations in the Urban WCA Market

Position set out in the Consultation

- 13.1 In cases where Eircom has previously been designated as having SMP in a market and has been subject to regulatory obligations, ComReg noted that Regulation 27(2) of the Framework Regulations allowed ComReg to give reasonable notice to any parties which it considered to be affected by the withdrawal of any such obligations.
- 13.2 As noted in Section 10 of the Consultation, ComReg's preliminary view was that no SP was likely to have SMP in the Urban WCA Market. This preliminary view was predicated on a number of factors, including a forward-looking assessment of the direct competitive constraints arising in the Urban WCA Market, as well as the indirect constraints created by Service Providers active at the retail level (some of which arose by virtue of the then-proposed imposition of regulatory obligations on Eircom in the upstream Relevant WLA Market, as set out in Section 8 of the Consultation).
- 13.3 In Section 14 of the Consultation, ComReg proposed to withdraw existing regulatory obligations imposed on Eircom, given its preliminary finding that no SP had SMP in the Urban WCA Market. In this respect, ComReg proposed that those existing obligations, other than those applying during a sunset period, would, subject to the implementation of obligations imposed in the Relevant WLA Market, be withdrawn at the date on which ComReg made its final decision.
- 13.4 In order to facilitate an orderly transition to de-regulation of the Urban WCA Market, ComReg proposed a six month sunset period during which access to existing WCA-based Bitstream services would be maintained at prevailing prices. At the end of this six month sunset period, these obligations would be withdrawn.²¹¹⁸ During this sunset period, ComReg also proposed that Eircom would not be obliged to meet new requests for WCA services on a regulated basis, but would be free to do so on a purely commercial basis.
- 13.5 ComReg proposed that all other existing obligations imposed under the 2011 WBA Decision (and the 2013 NGA Decision) would be withdrawn at the date on which ComReg made its final decision.

²¹¹⁸ See paragraph 14.6 of the Consultation.

Respondents' Views

- 13.6 Six of the eight Respondents to the Consultation expressed views on ComReg's proposed sunset period for obligations in the Urban WCA Market.
- 13.7 enet agreed with ComReg's sunset period proposal, stating that it was a sensible proposal which would facilitate an orderly unwinding of regulation.
- 13.8 Sky broadly agreed with ComReg's proposal. Sky proposed that a further 6-12 month sunset period on Eircom's pricing transparency obligations should be implemented.
- 13.9 Both ALTO and BT disagreed with ComReg's proposal. BT considered that
*"...without supporting obligations to ensure capacity and facilities are available from substitute products"*²¹¹⁹
 ComReg's proposal would lead to new entrants being stranded.
- 13.10 Vodafone disagreed with the proposed six (6) month sunset period and suggested that this timescale would be inadequate to allow it to equip itself for the new regime. Vodafone called on ComReg to implement a transition period of twelve (12) months from the date of ComReg's final decision.
- 13.11 Eircom did not agree with the proposed sunset period, which it considered to be neither proportionate nor appropriate.
- 13.12 Neither Colt nor Virgin Media provided any views in their Submissions regarding ComReg's proposed sunset period in the Urban WCA Market.
- 13.13 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following identified themes:
- (a) Six (6) month sunset period is insufficient on its own (see paragraphs 13.14 to 13.17 below);
 - (b) Disagreement with the proposal that Eircom should not be obliged to meet new requests (see paragraphs 13.18 to 13.19 below);
 - (c) Sunset Period is neither proportionate nor appropriate (see paragraphs 13.20 to 13.21 below); and
 - (d) Sunset Period does not give Access Seekers sufficient time to facilitate transition to alternative SPs (see paragraphs 13.22 to 13.25 below).

Six month sunset period is insufficient on its own

- 13.14 ALTO did not agree that a six (6) month sunset clause was appropriate as a standalone solution, based on the negative experiences of its members dealing with Eircom in the case of regional handover of NGA Bitstream traffic, which it described as a '*debacle*'.²¹²⁰

²¹¹⁹ See page 4 of BT Submission.

²¹²⁰ See page 12 of ALTO's Submission, in response to Q.14 of the Consultation.

13.15 ALTO expressed the view that there was a real and present risk that ComReg would put the industry in a position where no supply, or unreasonable supply, of WCA could become the norm. Consequently, ALTO noted, ComReg should, at the very least, require that Eircom make facilities and capacity available for Access Seekers to move to substitutes such as VUA and regional handover solutions, provided that capacity and processes are available – otherwise any proposed sunset period would be immediately circumvented.

13.16 BT also considered the six month sunset clause to be inappropriate as a standalone solution, similarly alluding to the regional handover process described above by ALTO. BT recommended the implementation of a similar solution to that proposed by ALTO. ALTO and BT both suggested, therefore, that ComReg should:

“.....at least make provision that eir must make available facilities and capacity (there and then) for operators to move to substitutes such as WLA VUA and regional handover solutions.”²¹²¹

13.17 While it agreed with ComReg’s proposal, Sky stated that, given the risks associated with such a large-scale deregulation programme, a 6-12 month sunset period on Eircom’s pricing transparency obligation should be implemented in order to give the market and ComReg

“...comfort that Eircom’s market power has been sufficiently diluted so as to constrain its incentives to charge excessive prices.”²¹²²

Disagreement with proposal that Eircom should not be obliged to meet new requests

13.18 Vodafone disagreed with the proposal that Eircom should not be obliged to meet new requests for WCA inputs during the sunset period. Vodafone considered that [§< [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]].

13.19 Vodafone therefore called on ComReg to require Eircom to meet new requests for WCA inputs on a regulated basis during the sunset period.

Sunset Period neither proportionate nor appropriate

13.20 Eircom disagreed with the proposed sunset period, noting that it related to a market that ComReg has determined to be competitive. Eircom considered that the imposition of the six month sunset period proposed by ComReg would be neither proportionate nor appropriate. Instead, in Eircom’s view, all existing regulations should be withdrawn as of the effective Decision date, particularly given the passage of time between the Consultation and the Decision caused by the delay in the publication of the 2017 Pricing Consultation.

²¹²¹ See page 15 of the BT Submission and page 12 of ALTO’s Submission, in response to Q.14 of the Consultation.

²¹²² See paragraph 71 of Sky Submission.

13.21 Eircom further considered that the proposed sunset period would effectively result in a competitive market being subject to counterproductive *ex ante* regulation until the effective decision date (which Eircom considered could potentially be delayed, given the delay that occurred in publishing the Consultation itself). Eircom considered that this would lead to distortion of the market, and that a sunset period was not necessary, as publication of the Consultation would serve as sufficient notice to Access Seekers. Eircom did not stipulate precisely how the market would be distorted as a result.

Sunset Period does not give Access Seekers sufficient time to facilitate transition to alternative SPs

13.22 Vodafone disagreed with ComReg's preliminary proposal for a six month sunset period, as well as the failure to oblige Eircom to meet new requests for WCA inputs on a regulated basis.

13.23 Vodafone alluded to its earlier discussion,²¹²³ in which it disagreed with ComReg's assessment of competitive constraints in the Urban WCA Market and ComReg's deregulation proposals. Vodafone expressed concern about the ability of Access Seekers to serve the market, as, in Vodafone's view, deregulation would leave significant gaps in the availability of access products needed to serve customers in Exchange Areas in the Urban WCA Market. Vodafone considered that ComReg was proposing to remove the regulatory backstop at a time when competitive supply was insufficient.

13.24 Vodafone further stated that it did not believe a six month sunset period would be sufficient²¹²⁴ [3< [REDACTED]

(a) [REDACTED]

(b) [REDACTED]

(c) [REDACTED]

(d) [REDACTED]

²¹²³ ComReg assumes Vodafone refers to its views (along with those of Compass Lexecon) in relation to ComReg's product and geographic market definition and SMP assessment.

²¹²⁴ Vodafone's Submission, pages 48 to 49.

(e) [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]]²¹²⁵

13.25 Vodafone therefore called on ComReg to implement a transition period of twelve (12) months from the date of the final decision. Vodafone also called on ComReg to procure a commitment from Eircom on its system and field force capabilities in the context of potential customer movement away from open eir.²¹²⁶

13.26 In its response to Question 13,²¹²⁷ Vodafone noted that it relies on these products [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]]

13.27 Vodafone stated that it does not believe that there is a prospect of effective competition in these 88 exchanges and consider that Vodafone would be severely disadvantaged in the national retail broadband market as a result. ComReg notes that this would be a direct consequence of Eircom's dominance and the serious gap in regulation that would result if there is deregulation of the urban WCA market as defined by ComReg.

13.28 As Vodafone stated in its response to Question 7, a partial mitigation of the damage done through patchy availability of competitive CGA WCA products would be for Eircom to be obliged to deliver a CGA variant of VUA, which would allow Vodafone to continue to serve its CGA customers in the event of deregulation in the 88 exchanges in the Urban WCA market.

ComReg's Assessment of Respondents' Views

13.29 In this section, ComReg assesses Respondents' views under each of the key themes identified in paragraph 13.13 above:

- (a) Six month sunset period is insufficient on its own (see paragraphs 13.30 to 13.34 below);
- (b) Disagreement with the proposal that Eircom should not be obliged to meet new requests (see paragraphs 13.36 to 13.37 below);

²¹²⁵ See paragraph 362 of Vodafone Submission.

²¹²⁶ See paragraph 363 of Vodafone Submission.

²¹²⁷ Vodafone Submission, page 40, paragraphs 287 to 289.

- (c) Sunset Period is neither proportionate nor appropriate (see paragraphs 13.38 to 13.40 below); and
- (d) Sunset Period does not give Access Seekers sufficient time to facilitate transition to alternative SPs (see paragraphs 13.42 to 13.45 below).

Six month sunset period is insufficient on its own

- 13.30 In paragraphs 13.14 to 13.17, ComReg noted a number of points from ALTO, BT and Sky which suggested that the six month sunset period was, on its own, an insufficient measure, and should be accompanied by other measures to promote competition.
- 13.31 ALTO and BT suggested that ComReg should require Eircom to immediately make available facilities and capacity for Access Seekers to move to substitutes such as VUA and regional handover solutions for NGA Bitstream, subject to availability – otherwise, any proposed sunset period would be immediately circumvented.²¹²⁸
- 13.32 ComReg's view is that the sunset period allows for transitioning of Access Seekers' retail End Users on WCA products in the Urban WCA Market to alternative arrangements, such as services delivered over WLA products. The total number of Access Seeker WCA customers in the Urban WCA Market that, absent regulation, could potentially be left without service (in circumstances where Eircom were to withdraw access) totalled [redacted] ²¹²⁹ as at Q4 2017, a small increase of [redacted] ²¹³⁰ since the Consultation in November 2016. Insofar as BT and Vodafone are concerned, these figures totalled [redacted] ²¹³¹ as at Q4 2017, a small increase of [redacted] ²¹³² Table 39 below gives an outline of access to Eircom VUA services in the Urban WCA Market. BT has access to Eircom VUA in [redacted] Exchange Areas, while Vodafone has access to Eircom VUA in [redacted] Exchange Areas²¹³³. The sunset period aims to give sufficient time for Access Seekers serving these customers to acquire a commercial agreement from Eircom for the continued provision of WCA services, or to put in place alternative arrangements to supply these customers. ComReg does not see the need to require Eircom to make available facilities and capacity for Access Seekers to move to substitutes such as VUA and/or regional handover, as access to VUA and associated facilities is being required pursuant to obligations now being imposed upon Eircom in the WLA Market.

²¹²⁸ See p.12 of the ALTO Submission and p.15 of the BT Submission, both responding to Q.14 of the Consultation.

²¹²⁹ The total number of such customers is less than 45,000.

²¹³⁰ Less than 6,000 subscribers.

²¹³¹ The total number of such customers is less than 20,000.

²¹³² Less than 3,000 subscribers.

²¹³³ See Appendix: 11 for details on calculation of boundaries for the Relevant WCA Markets.

Table 39: Access to Eircom VUA services in the Urban WCA Market [REDACTED]

	Access to Eircom VUA (number of exchange areas)	Access to Eircom VUA (number of exchange areas in Urban WCA Market)
BT	[REDACTED]	[REDACTED] of 154 exchange areas
Vodafone	[REDACTED]	[REDACTED] of 154 exchange areas

13.33 Sky suggested a 6-12 month sunset period on Eircom's pricing transparency obligation in the Urban WCA Market in order to give comfort that Eircom's market power has been sufficiently diluted so as to constrain its incentives to charge excessive prices.

13.34 ComReg considers that, based on the SMP analysis carried out at Section 10 above, the competitive conditions on the Urban WCA Market are such that Eircom is unlikely to occupy a position of SMP on the Urban WCA Market. Accordingly, Eircom will have neither the ability nor the incentive to behave, to an appreciable extent, independently of its competitors, its customers and ultimately of its consumers. For this reason, ComReg does not see the need for a specific sunset period on Eircom's pricing transparency obligation.

13.35 Moreover, although ComReg concludes that regulation is no longer required on the Urban WCA Market, ComReg is imposing regulatory obligations in the Relevant WLA Market which, *inter alia*, will subject the supply of WLA services within the Urban WCA footprint to price control obligations. These obligations will enter into force from the date of the Decision.

Disagreement with proposal that Eircom should not be obliged to meet new requests

13.36 In paragraphs 13.18 to 13.19, ComReg noted a number of points from Vodafone in relation to ComReg's proposal that Eircom should not be obliged to meet new requests for access to WCA services in the Urban WCA Market during the six (6) month sunset period. Vodafone disagreed with the proposal, and called on ComReg to require Eircom to meet new requests for WCA inputs on a regulated basis during the sunset period.

13.37 ComReg does not deem it appropriate to require Eircom to meet new requests for access to WCA during the sunset period, as once the sunset period comes to an end and regulation is removed in the Urban WCA Market, this could (where Eircom does not provide commercial access) still leave retail customers without a service in the Urban WCA Market. The sunset period aims to ensure the orderly phasing out of regulation in the Urban WCA Market and reliance on regulated WCA inputs in this market and give SPs the opportunity to move to alternative sources of supply, whether by negotiating commercial arrangements with Eircom, to secure alternate suppliers, or to connect customer premises using their own infrastructure (including based on WLA inputs). In these circumstances, requiring the continued provision of access during the sunset period would not, in ComReg's view be appropriate or justified. As noted in the Consultation,²¹³⁴ the rationale for this approach is that it would be counter-intuitive to require Eircom to meet new requests for WCA on regulated terms during the sunset period, only to have such requirements withdrawn no more than six months later.

Sunset Period is neither proportionate nor appropriate

13.38 As summarised in paragraphs 13.20 and 13.21, Eircom considered that the imposition of a six month sunset period would be neither proportionate nor appropriate, and that all existing regulations should be withdrawn as of the effective date of the decision.

13.39 ComReg does not agree. Withdrawing all obligations on the effective date of a decision would not provide sufficient time for Access Seekers relying on WCA services in the Urban WCA Market to obtain an alternative source of supply, if necessary. In addition, ComReg notes that the list of Exchange Areas in the Urban WCA Market outlined in the Consultation²¹³⁵ is preliminary only, and that this Decision outlines the final list of Exchange Areas in the Urban WCA Market and the Regional WCA Market respectively (see Appendix: 11). The final list of Exchange Areas in these markets has not previously been made publicly available and hence does not afford Access Seekers sufficient time to facilitate an orderly transition towards the de-regulation of the Urban WCA Market, in accordance with the boundaries of the geographic markets.

13.40 ComReg does not agree that the sunset period would result in a competitive market being subject to counterproductive *ex ante* regulation and lead to distortion of the market. ComReg notes that many other NRAs impose a sunset period on the incumbent SP when it has been decided to phase out regulation in the relevant market. For example, the Hungarian NRA has imposed a transition period of fourteen (14) months on the incumbent in its WLA Market.²¹³⁶ ComReg has, in the past, imposed sunset periods, most recently imposing a six month sunset period in the FACO market.²¹³⁷

²¹³⁴ See paragraph 14.9 of the Consultation.

²¹³⁵ See Appendix 6 of the Consultation.

²¹³⁶ https://circabc.europa.eu/sd/a/5e60654e-3a28-46eb-8aba-f468b6e419a8/HU-2017-2021-2022%20Adopted_EN_Redacted.pdf.

²¹³⁷ See paragraph 9.57 of the 2015 FACO Decision.

13.41 For the reasons outlined above, ComReg therefore does not consider publication of the Consultation on its own to serve as sufficient notice to Access Seekers, and considers instead that an adequate notice period is necessary.

Sunset Period does not give Access Seekers sufficient time to facilitate transition to alternative SPs

13.42 ComReg noted additional points from Vodafone as summarised in paragraphs 13.22 to 13.28 above. ComReg has previously responded (at Section 10) to these points regarding competitive constraints in the Urban WCA Market and ComReg's finding that no SP has SMP.²¹³⁸

13.43 ComReg does not agree that the withdrawal of obligations in the Urban WCA Market will leave significant gaps in the availability of access products needed to serve customers in these Exchange Areas. ComReg notes that both CG and NG WLA services are available in the Urban WCA Market, and Access Seekers can avail of these services, in addition to WCA services provided by a third party (e.g. BT) on a commercial basis.

13.44 ComReg notes that, during 2016 and 2017, Vodafone switched from purchasing WCA inputs to purchasing VUA-based WLA, and has done so at a significant pace. For this reason, ComReg does not consider that it would either be technically difficult, or take considerable time and effort, for Vodafone to switch its [redacted] customers in the Urban WCA Market from WCA services to WLA services. ComReg data indicate that Vodafone has a VUA presence in [redacted] of 154 Exchange Areas in the Urban WCA Market.²¹³⁹

13.45 Given the total number of subscribers [redacted] in the Urban WCA Market that rely on WCA services, ComReg does not consider it necessary to model a worst-case migration scenario and obtain a commitment from Eircom to support this migration. In ComReg's view, there is unlikely to be a 'bow wave' (which ComReg takes to mean a large one-off migration of customers) of orders seeking to move away from Eircom, as described by Vodafone. Even if a substantial one-off migration were to occur, ComReg is of the view that, given the volume of subscribers involved, and the capacity of Eircom to throughput orders to facilitate migration to alternative SPs, subscriber migration could be accomplished without significant disruption.

13.46 In relation to Vodafone's point summarised in paragraph 13.28 above that Eircom should be obliged to deliver a CGA variant of VUA, ComReg has responded to this point in paragraph 7.69.

²¹³⁸ See paragraphs 10.75 to 10.79 above.

²¹³⁹ A figure in excess of 80% of Exchange Areas located within the Urban WCA Market.

ComReg's Position

13.47 In order to facilitate an orderly transition to de-regulation of the Urban WCA Market, ComReg's position is that a six month sunset period is appropriate, starting from the effective date of this Decision. During this period, access to existing Bitstream services will be maintained at prevailing prices. At the end of this six month sunset period, these obligations will be withdrawn. During this sunset period Eircom is not obliged to meet new requests for WCA inputs on a regulated basis. Eircom may, at its discretion, meet any such new requests on a purely commercial basis.

14 Regulatory Impact Assessment

Position set out in the Consultation

- 14.1 The purposes of a Regulatory Impact Assessment ('RIA') are to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation, and to consider any alternative courses of action. In the Consultation, ComReg noted that its approach to the RIA took into account ComReg's own RIA Guidelines,²¹⁴⁰ the Department of An Taoiseach's 'Better Regulation' programme²¹⁴¹ and international best practice.²¹⁴²
- 14.2 ComReg applied the following methodology in conducting the RIA, having regard, firstly, to its proposals to impose (or not to impose) the regulatory obligations identified in the Consultation, and, secondly, to other regulatory options:²¹⁴³
- Step 1:** Describe the policy issue and identify the objectives;
 - Step 2:** Identify and describe the regulatory options;
 - Step 3:** Determine the impacts on stakeholders;
 - Step 4:** Determine the impacts on competition; and
 - Step 5:** Assess the impacts and choose the best option.
- 14.3 Having regard to the competition problems identified in Sections 7 and 12 of the Consultation, ComReg noted that its ultimate objectives were to enhance the development of effective competition in relevant downstream markets, and to help ensure that consumers maximise benefits in terms of price, choice and quality of service.
- 14.4 In pursuing its objectives, ComReg considered the impact of specific forms of regulation in the Relevant WLA Market and the Regional WCA Market, alongside other regulatory options. ComReg grouped the regulatory obligations which it had proposed in respect of these markets into four options for the purpose of considering the incremental impact of each option on stakeholders:²¹⁴⁴

²¹⁴⁰ See [ComReg Document 07/56a](#), ComReg, 'Guidelines on ComReg's Approach to Regulatory Impact Assessment', 10 August 2007 (the '**RIA Guidelines**').

²¹⁴¹ See Department of the Taoiseach, 'Regulating Better', January 2004. See also 'Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis', June 2009, (the '**Revised RIA Guidelines**'): https://govacc.per.gov.ie/wp-content/uploads/Revised_RIA_Guidelines_June_2009.pdf.

²¹⁴² See paragraph 15.2 of the Consultation.

²¹⁴³ See paragraph 15.5 of the Consultation.

²¹⁴⁴ See pages 594 to 603 of the Consultation for the WLA Market, and pages 612 to 621 of the Consultation for the Regional WCA Market.

- (a) **Option 1:** Impose Access obligation only.
 - (b) **Option 2:** Impose Access, Transparency and Non-Discrimination obligations.
 - (c) **Option 3:** Impose Access, Transparency, Non-Discrimination and Price Control and Cost Accounting obligations.
 - (d) **Option 4:** Impose Access, Transparency, Non-Discrimination, Price Control and Cost Accounting and Accounting Separation obligations.
- 14.5 As set out in the Consultation, ComReg's proposal to maintain regulation of Eircom in the Relevant WLA Market (specifically, **Option 4**) was considered justified to ensure that Eircom did not exploit its SMP on the Relevant WLA Market to the detriment of competition in that market and related markets, and to the ultimate detriment of consumers.²¹⁴⁵
- 14.6 Similarly, ComReg's proposal to retain regulation of Eircom in the Regional WCA Market only (specifically, **Option 4**) was considered justified to ensure that Eircom did not exploit its SMP on the Regional WCA Market to the detriment of competition in that market and related markets, and to the ultimate detriment of consumers.
- 14.7 In respect of both the Relevant WLA Market and the Regional WCA Market, ComReg considered that Eircom's strong position on downstream retail markets suggested that its ability and incentives to engage in vertical leveraging or foreclosure appeared to be particularly strong.²¹⁴⁶
- 14.8 ComReg also proposed to remove regulation from the Urban WCA Market and to monitor²¹⁴⁷ the effectiveness of competition in that market. ComReg also noted that it reserved the right to re-examine competitive conditions within the Urban WCA Market and, if appropriate, to intervene accordingly.

Respondents' Views

- 14.9 Five of the eight Respondents to the Consultation expressed views on ComReg's RIA.
- 14.10 **ALTO** and **BT** agreed with the RIA for the WLA Market and the Regional WCA Market, but noted that ComReg needed to create incentives for Eircom to comply with Option 4 outlined by ComReg. ALTO and BT reiterated their disagreement with ComReg's proposal to deregulate the Urban WCA Market.

²¹⁴⁵ See paragraph 15.57 of the Consultation for the WLA Market, and paragraph 15.94 of the Consultation for the Regional WCA Market.

²¹⁴⁶ See paragraph 15.58 of the Consultation.

²¹⁴⁷ See paragraph 15.99 of the Consultation.

- 14.11 **Eircom** disagreed with the RIA, viewing it as a cursory and subjective analysis which failed to sufficiently address relevant costs and benefits. While **Vodafone** broadly agreed with the RIA in the round, it reiterated its concerns that certain regulatory obligations should be refined, and that the Urban WCA Market had been incorrectly defined. Vodafone considered that the RIA captured the benefits and risks of different options for regulatory obligations where SMP had been identified, and that it was justifiable to implement Option 4 in both the Relevant WLA Market and Regional WCA Market.
- 14.12 **Virgin Media** did not explicitly respond to Question 15 in its Submission, and instead referred to its responses to Question 6 (see paragraph 6.39 above) and Question 13 (neither of which specifically allude to ComReg's RIA).
- 14.13 Neither **Colt**, **enet** nor **Sky** provided any explicit views in their respective Submissions regarding ComReg's RIA.
- 14.14 ComReg has summarised the Respondents' main views below, grouping the key issues raised into the following identified themes:
- (a) ComReg should create incentives for Eircom to comply with Option 4 (see paragraphs 14.15 to 14.18 below);
 - (b) The RIA is a cursory and subjective analysis (see paragraphs 14.19 to 14.25 below); and
 - (c) Disagreement with proposed deregulation of the Urban WCA Market (see paragraphs 14.26 to 14.27 below).

ComReg should create incentives for Eircom to comply with Option 4

- 14.15 ALTO noted that the preliminary conclusions of the RIA were structured to consider the impact of increasing levels of regulation, and summarised ComReg's four options, as set out above.
- 14.16 ALTO and BT both agreed with ComReg's RIA of the Relevant WLA Market and the Regional WCA Market, "as far as they go".²¹⁴⁸ However, both ALTO and BT argued that, while the existing regulatory environment generally aligned with Option 4, Option 4 had not worked properly to date, as evidenced by the RGM Updates issued by Eircom as well as the numerous non-compliance notices issued to Eircom by ComReg. ALTO accordingly submitted that, in respect of both the Relevant WLA Market and the Regional WCA Market, ComReg should create incentives for Eircom to comply with Option 4, and

*"facilitate pro-active intrusive transparency from the outset which would seek to foster a wider incentivised culture of compliance within Eircom."*²¹⁴⁹

²¹⁴⁸ See ALTO Submission response to Question 15, at page 13, and BT Submission response to Question 15, at page 15.

²¹⁴⁹ *Ibid.*

14.17 BT considered that the incentives which ComReg needed to develop in order for Eircom to comply with Option 4 should be listed as a separate Option 5, and alluded in this regard to its response to Question 7.²¹⁵⁰

14.18 Neither ALTO nor BT agreed that the Urban WCA Market should be de-regulated, as Eircom

*“...would have the opportunity and motive to drive wholesale competition out of the market, which would ultimately limit choice of wholesale carrier for retail providers.”*²¹⁵¹

The RIA is a cursory and subjective analysis

14.19 Eircom generally disagreed with ComReg’s RIA, noting that the ultimate aim of a RIA was to ensure that all measures are appropriate, proportionate and justified. As such, Eircom stated that a RIA should include a detailed examination of costs, benefits and impacts on stakeholders, as well as consideration of alternatives to regulation.

14.20 Eircom considered that the RIA was *“...particularly poor in this regard”*.²¹⁵² Eircom noted that, for each of the relevant markets, ComReg considered 4 options (having ruled out forbearance, as it is required to impose at least one of the five categories of obligations)²¹⁵³ and that the options considered by ComReg were combinations of each of those categories.

14.21 Eircom stated that the RIA amounted to a subjective discussion regarding which categories of obligations to impose. Eircom noted that, although it may not be proportionate to conduct a full cost benefit analysis, ComReg had insufficiently assessed the impacts of the proposed regulatory regime on Eircom and had not at any point given consideration to the costs and benefits of the detailed requirements within each obligation.

14.22 Eircom also claimed that ComReg had provided insufficient information for it to reach an informed opinion regarding the proportionality of its proposals, including the imposition of EoI on CEI access, which would have a material cost for Eircom.

14.23 Eircom argued that the RIA was cursory, and failed to address the burden that would be placed on Eircom in terms of continued compliance costs. It added that costs and benefits associated with regulatory regimes should be quantified where possible.

²¹⁵⁰ See BT’s response to Question 7 on Remedies for the WLA Market in Section 7 above (BT Submission pages 6 to 8).

²¹⁵¹ See ALTO Submission response to Question 15, at page 13, and BT Submission response to Question 15, at page 15.

²¹⁵² See Eircom Submission response to Question 15, at page 76.

²¹⁵³ As set out at Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations (per paragraph 15.25 of Consultation).

- 14.24 Eircom suggested that, although ComReg was obliged to apply at least one of the regulatory measures described, where it had established the presence of SMP on a particular market, insufficient consideration had been given to how these measures might work in conjunction with alternative measures, or the effect of applying only one of them. In addition, Eircom noted that ComReg had not given due consideration to the likely impact of *ex post* competition law in achieving the same objectives.
- 14.25 Eircom considered that the RIA was neither comprehensive nor thorough and did not sufficiently address relevant costs and benefits in a manner that identified the potential burdens on business. Eircom argued that the measures chosen to address the issues identified should be the least intrusive means possible, so that the least burdensome effective remedy that best met the objectives could be selected. Eircom stated that ComReg's analysis did not appear fully committed to identifying the measure which best met these criteria; rather it simply imposed more intrusive obligations.

Disagreement with proposed deregulation of the Urban WCA Market

- 14.26 Vodafone disagreed with ComReg's preliminary conclusion that no undertaking had SMP in the Urban WCA Market (and that, accordingly, the RIA did not consider regulatory obligations on that market).
- 14.27 Vodafone stressed the negative impact that would result from the incorrect market definition proposed for the Urban WCA Market. In particular, Vodafone noted that severe consequences would arise where ComReg incorrectly concluded that Eircom's WCA product would be constrained by competition in the Urban WCA Market which ComReg wrongly deemed to be competitive. Vodafone argued that, in the presence of SMP, and absent any regulatory obligations, Eircom had the ability and incentive to engage in exploitative and/or exclusionary behaviour, and that the Urban WCA Market was likely not to function effectively, to the detriment of Irish consumers and businesses.²¹⁵⁴

ComReg's Assessment of Respondents' Views

- 14.28 Below, ComReg assesses Respondents' views under each of the key themes identified in paragraph 14.14 above, as follows:
- (a) ComReg should create incentives for Eircom to comply with Option 4 (see paragraphs 14.32 to 14.35 below);
 - (b) The RIA is a cursory and subjective analysis (see paragraphs 14.36 to 14.50 below); and
 - (c) Disagreement with proposed deregulation of the Urban WCA Market (see paragraphs 14.51 to 14.54 below).

²¹⁵⁴ See Vodafone Submission response to Question 15, at paragraph 368.

- 14.29 Where, in relation to the RIA, Respondents repeated views which they had already raised in relation to earlier parts of the Consultation, ComReg has addressed those views in the relevant section of this Decision. For example, ComReg addresses views already raised by Respondents in relation to the definition of the Relevant WLA Market and WCA Markets in Sections 4 and 9 of this Decision, in relation to SMP in these markets in Sections 5 and 10 of this Decision, and, in relation to the imposition of particular remedies in these markets, in Sections 7 and 12 of this Decision.
- 14.30 In respect of Virgin Media's response, which referred to its responses to other Consultation questions, ComReg has already responded to these points above; see paragraphs 6.105 to 6.108 in Section 6.
- 14.31 ComReg has set out its final RIA, having considered Respondents' views, in Appendix: 19 of this Decision

ComReg should create incentives for Eircom to comply with Option 4

- 14.32 In paragraphs 14.15 to 14.18 above, ComReg summarised the views of ALTO and BT. Both ALTO and BT noted that Option 4 (where ComReg imposes Access, Transparency, Non-Discrimination and Price Control and Cost Accounting obligations upon Eircom) had not worked properly to date, as indicated by the RGM Updates issued by Eircom and, separately, the non-compliance notices issued to Eircom by ComReg.
- 14.33 ComReg has previously responded to points raised by ALTO in relation to the RGM project and non-compliance issues in Section 6 above (paragraphs 6.42 to 6.64).
- 14.34 In relation to ALTO and BT's respective views that ComReg should seek to create incentives for Eircom to comply with Option 4, and "*facilitate pro-active intrusive transparency*" to foster a culture of compliance within Eircom, ComReg notes that the Statement of Compliance ('SoC') obligation²¹⁵⁵ set out at Section 12 above will serve to provide for increased transparency regarding Eircom's compliance with its obligations, and will require Eircom not only to provide evidence of compliance, but also to actively affirm that it is in compliance with its regulatory obligations.
- 14.35 BT referred in its response to Question 13 of the Consultation, regarding a loop-hole by means of which Eircom could circumvent ComReg's proposed supply obligations by making use of WLA products and leased lines, rather than offering a regulated WCA service. ComReg has previously addressed this point in Section 12, paragraphs 12.367 to 12.373.

²¹⁵⁵ See paragraphs 8.686 to 8.701 of the Consultation.

The RIA is a cursory and subjective analysis

- 14.36 Eircom disagreed with ComReg's RIA overall, as summarised in paragraphs 14.19 to 14.25 above. Eircom noted, in particular, that there had been insufficient assessment of the impacts of the proposed regulatory regime on Eircom, and that at no point did ComReg give consideration to the costs and benefits of the detailed requirements within each obligation.
- 14.37 At the outset, and as noted in the Consultation²¹⁵⁶ the RIA:
- “.....in conjunction with the rest of the analysis and discussion set out elsewhere in this Consultation, represents a RIA”*
- 14.38 ComReg notes that the Consultation and this Decision both explore, in detail, the suitability of different regulatory approaches for the Relevant WLA Market and the Relevant WCA Markets. As such, the overall analysis considers the likely and potential impacts of various regulatory options, taking account of the specific characteristics of each of the Relevant Markets. Therefore, the RIA forms part of a broader regulatory impact assessment which extends throughout a number of Sections in the Consultation and this Decision.
- 14.39 In particular, ComReg's assessment of Competition Problems and Impacts on Competition and Consumers (Sections 7 and 12 of the Consultation, and Sections 6 and 11 of this Decision) considers the ability and incentives for exploitative behaviour and/or exclusionary strategies to arise as a consequence of having SMP positions in the Relevant Markets.
- 14.40 In ComReg's remedies assessment (Sections 8 and 13 of the Consultation and Sections 7 and 12 of this Decision), ComReg has further undertaken a detailed assessment of a range of possible regulatory options for addressing the competition problems identified. In this regard, ComReg took a balanced and incremental approach to its assessment of regulatory options by first considering the lightest potential form of remedial action and the likely resultant impacts on competition and consumers. ComReg then incrementally considered additional remedial actions with a view to revealing the appropriate mix of regulatory obligations to address the specific market failures and consequential competition impacts identified.
- 14.41 The Consultation and this Decision thus incorporate a full and objective assessment of the various regulatory options available for the Relevant Markets in an Irish context. As part of that assessment, ComReg has undertaken detailed analysis of the specific structure and characteristics of the Relevant Markets and a graduated impact assessment of potential regulatory options for addressing each of the specific problems identified (however, a formal cost benefit analysis is not always necessary). The RIA should, therefore, be read in conjunction with the Consultation and this Decision as a whole.

²¹⁵⁶ See paragraph 15.11 of the Consultation.

- 14.42 ComReg notes that it has engaged Cartesian consultants to provide it with independent analysis of the costs of the some of the various regulatory obligations that were proposed to be imposed on Eircom.²¹⁵⁷ In relation to benefits, it is ultimately difficult to quantify the likely benefits of the proposed interventions in numerical terms, but ComReg considers that ongoing and improved access to WLA and WCA inputs reaps benefits for End Users by allowing Access Seekers to compete alongside Eircom in downstream markets, compared to a counterfactual in which Eircom is not restricted by means of regulation in exercising its SMP on the Relevant WLA Market and the Regional WCA Market. ComReg also notes that, in Section 15 of the Consultation (at pages 594 to 603 and pages 612 to 621), each option was considered in terms of impact on Eircom, competition and consumers.
- 14.43 Eircom also expressed concern at the potentially significant negative effects on it of some of the detailed requirements. For example, changing the price control methodology for VDSL would, in Eircom's view, have a chilling effect on investment.²¹⁵⁸ ComReg does not agree that the price control on VDSL will have a chilling effect on investment, and has responded to this point previously in Section 12, at paragraphs 12.343 to 12.353. ComReg argues that significant investment in VDSL (FTTx) has already taken place in terms of national coverage, and the network rollout was close to complete by the end of 2017. ComReg notes that its approach to price controls in the WLA Market has balanced measures to encourage infrastructure investment with measures to ensure that prices for Access Seekers are reasonable, and notes that the use of BU-LRIC should set the right balance between ensuring return on investment and setting the correct build or buy signals. Further, the level of access prices derived from the cost orientation obligation are sustainable, as they allow for the recovery of costs as well as a reasonable rate of return (or WACC). The ultimate goal is to ensure that end users benefit from increased choice and fair prices. For these reasons, ComReg does not agree that the shift to cost orientation for NGA WLA and WCA services is likely to curtail continued investment.
- 14.44 Eircom also claimed that ComReg provided insufficient information to allow it to reach an informed opinion regarding the proportionality of proposals including the imposition of EoI on CEI access. Eircom argued that the assessment completed was cursory in nature and did not address the burden that would be placed on Eircom in terms of continued compliance costs. Eircom added that the benefits and costs associated with regulatory regimes should be quantified, where possible.

²¹⁵⁷ Cartesian has provided three Reports to ComReg. The first Cartesian Report for ComReg, 'CEI Service Delivery Process Equivalence Options Analysis of alternative service delivery approaches', is published in Appendix 10 of the Consultation while the second and third Cartesian Reports for ComReg, 'CEI Service Delivery Process Equivalence Options' are published in at Appendix: 13 of this Decision.

²¹⁵⁸ See Eircom Submission response to Question 15, at page 76.

- 14.45 ComReg has previously responded to Eircom's views on the imposition of EoI for CEI in Section 7, at paragraphs 7.832 to 7.927. ComReg engaged Cartesian consultants, who estimated (directionally accurate) costs based, *inter alia*, on information gathered from Eircom. ComReg considers that the information it provided in the Consultation, and now in this Decision, provides a fully reasoned justification for the regulatory obligations that it is now imposing and rejects Eircom's assertion that Eircom had insufficient information upon which it could form an opinion on the approach proposed and now being adopted.
- 14.46 Eircom argued that insufficient consideration had been given to how these measures might work in conjunction with alternative measures, or the effect of applying only one of them. In addition, Eircom noted that ComReg had not given due consideration to the likely impact of *ex post* competition law in achieving the same objectives.
- 14.47 ComReg has previously responded to Eircom's view on *ex post* competition law above at Section 11, paragraphs 11.33 to 11.5, and remains of the view that competition law would not be sufficient to give Access Seekers certainty that required services will be made available in order for them to compete with Eircom in downstream markets. An *ex post* abuse of dominance case would not achieve the same objectives as a regulatory obligation. Moreover, as set out at Section 11 above, the Explanatory Note to the 2014 Recommendation notes that a market should only be susceptible to *ex ante* regulation where it fails the 'three criteria test'. One of these criteria is that "*Competition law alone is insufficient to adequately address the identified market failure*".²¹⁵⁹ Accordingly, by definition, competition law is an inadequate tool to remedy market failures in markets deemed susceptible to regulation.
- 14.48 Eircom argued that the measures chosen to address the issues identified should be the least intrusive means possible which place the minimum burden on business, so that the least burdensome effective remedy that best meets the objectives can be selected.
- 14.49 ComReg has sought to balance the burden on Eircom of complying with its regulatory obligations on the one hand, against the resultant benefits to competition and End Users, on the other hand. ComReg notes that, relative to the 2010 WPNIA Decision, the 2011 WBA Decision and the 2013 NGA Decision, the obligations imposed on Eircom have been altered and, in some cases, the burden reduced in some areas, even if increased in other areas. In addition, ComReg has proposed to remove regulatory obligations in those 143 Exchange Areas in the Urban WCA Market, on the basis of a detailed competitive assessment and has set out clearly the justification and reasoning for each of the specific obligations that it is now imposing on Eircom (as well as why it is not imposing other obligations).

²¹⁵⁹ 2014 European Commission Explanatory Note at page 10.

14.50 Accordingly, on the basis of comparison with its earlier decisions in the relevant (and adjacent) markets, ComReg is satisfied that it has set the regulatory burden on Eircom to the level required, consistent with ComReg's approach to addressing identified competition problems in an effective and efficient manner, having regard to its statutory obligations under Regulation 8(6) of the Access Regulations and Section 12(1)(a) of the Communications Regulation Act 2002 (as amended).

Disagreement with proposed deregulation of the Urban WCA Market

14.51 In paragraphs 14.26 to 14.27 above, ComReg summarised a number of points from Vodafone in relation to the RIA.

14.52 ComReg has already responded to Vodafone's disagreement with ComReg's finding that no undertaking has SMP in the Urban WCA Market above in Section 10, paragraphs 10.75 to 10.88. ComReg has also responded to Vodafone's view that certain remedies require refinement and improvement in Section 12, paragraphs 12.338 to 12.339.

14.53 Vodafone stressed the negative impact that would result from the incorrect market definition proposed for the Urban WCA Market. Vodafone argued that in the presence of SMP, and absent any regulatory obligations, Eircom would have the ability and incentive to engage in exploitative and/or exclusionary behaviour, and that the Urban WCA Market was likely not to function effectively, to the detriment of Irish consumers and businesses.

14.54 ComReg has responded to Vodafone's disagreement in Section 9, paragraphs 9.154 to 9.220 and, in general, does not agree that the deregulation of the Urban WCA Market will lead to negative outcomes for Access Seekers and End Users.

ComReg's Position

14.55 For the purposes of the analysis of the relevant markets, ComReg has considered Respondents' views in paragraphs 14.28 to 14.54 above. ComReg has updated its RIA in light of Respondents' views, where appropriate, and its final RIA is now set out in Appendix: 19 of this Decision (the '**Final RIA**'). The Final RIA should be read in conjunction with Consultation and the analysis and discussion set out in this Section 14, and elsewhere in this Decision.

14.56 Having considered the impacts on stakeholders and competition, including the impact on the development of competition within the internal market and, ultimately, the impact on end users, it is ComReg's position that regulatory forbearance is not appropriate and that Option 4 represents the most justified, reasonable and proportionate of the available regulatory approaches. Thus, ComReg's reasoned final position is to impose the Access, Transparency, Non-discrimination, Price Control (including cost accounting) and Accounting Separation obligations as set out in Sections 7 and 12 of this Decision.

- 14.57 ComReg's maintenance of regulation on Eircom in the Relevant WLA Market, and also in the Regional WCA Market (i.e. **Option 4**) was considered justifiable, in that it is required to ensure that Eircom does not exploit its SMP on the relevant markets to the detriment of competition in those and in related markets, to the ultimate detriment of consumers.²¹⁶⁰
- 14.58 ComReg is removing regulation in the Urban WCA Market, and will continue to monitor the effectiveness of competition within the Urban WCA Market. ComReg reserves its right to re-examine competitive conditions within the Urban WCA Market and, if appropriate, to intervene accordingly.
- 14.59 ComReg is of the view that the RIA outlined in the Consultation and the Final RIA now in this Decision adequately weigh up the impact of imposing the various regulatory obligations and has informed the appropriate Option to take. In this case, ComReg has decided to maintain regulation on Eircom in the Relevant WLA Market and in the Regional WCA Market (i.e. Option 4).
- 14.60 ComReg considers this course of action to be justifiable, in that it is required to ensure that Eircom does not exploit its SMP at the wholesale level to the detriment of competition in related markets, and to the ultimate detriment of consumers. In Sections 6 and 11 of this Decision, ComReg identified a broad range of potential competition problems which could arise from the ability and incentive of Eircom to engage in both exploitative and exclusionary anti-competitive practices, given its continuing significant presence in upstream and downstream markets.

²¹⁶⁰ Paragraph 15.57 of the Consultation for the WLA Market and paragraph 15.94 of the Consultation for the Regional WCA Market.

15 Next Steps

- 15.1 ComReg has set out its position in the preceding sections regarding its analysis of the Relevant WLA Market and the Relevant WCA Markets, and has today published its Decision on its publicly available website www.comreg.ie.
- 15.2 Eircom Limited (trading as eir), which is subject to the regulatory obligations set out in the Decision Instruments appended to this Decision, is hereby notified of this Decision.
- 15.3 As set out at paragraphs 9.257 to 9.259, ComReg intends to carry out a Mid-term Assessment within twenty-four (24) months of the publication of this Decision.

Appendix: 1 Consultation with the Competition and Consumer Protection Commission

A 1.1 Copy of letter from CCPC to ComReg, dated 11th June 2018:



Gerry Fahy
Chairperson
Commission for Communications Regulation
1 Dockland Central
Guild Street
Dublin 1, D01 E4X0

11th June 2018

Re: Market Review of WLA Market and WCA Markets

Dear Gerry,

Pursuant to Regulation 27(1) of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), the Commission for Communications Regulation ("ComReg") has consulted the Competition and Consumer Protection Commission (the "Commission") with respect to ComReg's proposed draft measures arising from its analysis of the Wholesale Local Access ("WLA") provided at a fixed location market and Wholesale Central Access ("WCA") provided at a fixed location for mass market products markets.

On the basis of the facts and analysis presented by ComReg, the Commission is satisfied that there are no compelling grounds for altering the market definitions proposed by ComReg.

On the basis of the facts and analysis presented by ComReg, the Commission is satisfied that there are no compelling grounds to disagree with ComReg's conclusion that Eircom Limited should be designated as having significant market power in the WLA market and in the Regional WCA Market as defined by ComReg.

Yours sincerely

Ibrahim Bah
Director – Competition Enforcement & Mergers Division
Direct line: (+353)1 470 3683
E-mail: ibrahimbah@ccpc.ie

Appendix: 2 European Commission Response to ComReg's Notified Draft Measures

A 2.1 Copy of letter from European Commission to ComReg, dated 13th July 2018:



EUROPEAN COMMISSION

Brussels, 13.7.2018
C(2018) 4786 final

Commission for Communications
(ComReg)
One Dockland Central, Guild Street
Dublin 1
Ireland
D01 E4X0

For the attention of
Mr. Kevin O'Brien
Chairperson of the Commission

Fax: +35318788193

Dear Mr O'Brien,

Subject: Commission Decision concerning

Case IE/2018/2089: Wholesale local access provided at a fixed location in Ireland

Case IE/2018/2090: Wholesale central access provided at a fixed location for mass-market products in Ireland

Comments pursuant to Article 7(3) of Directive 2002/21/EC

1. PROCEDURE

On 15 June 2018, the Commission registered a notification from the Irish national regulatory authority, ComReg¹, concerning the markets for wholesale local access provided at a fixed location and wholesale central access provided at a fixed location for mass-market products² in Ireland.

¹ Under Article 7 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), OJ L 108, 24.4.2002, p. 33, as amended by Directive 2009/140/EC, OJ L 337, 18.12.2009, p. 37, and Regulation (EC) No 544/2009, OJ L 167, 29.6.2009, p. 12.

² Corresponding to markets 3a and 3b in Commission Recommendation 2014/710/EU of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services

The national consultation³ ran from 11 November 2016 to 30 January 2017.

On 25 June 2018, a request for information⁴ (RFI) was sent to ComReg and a response was received on 28 June 2018. On 29 June 2018, a second RFI was sent to ComReg and a response was received on 2 July 2018.

Pursuant to Article 7(3) of the Framework Directive, national regulatory authorities (NRAs), the Body of European Regulators for Electronic Communications (BEREC) and the Commission may make comments on notified draft measures to the NRA concerned.

2. DESCRIPTION OF THE DRAFT MEASURE

2.1. Background

2.1.1. Wholesale local access provided at a fixed location

The market for wholesale (physical) network infrastructure access at a fixed location⁵ in Ireland was last notified to and assessed by the Commission under case IE/2009/0875⁶.

The relevant market, which was considered to be national in scope, included partially or fully unbundled access to the copper and fibre loop, but excluded access provided through cable and wireless networks⁷.

ComReg concluded that Eircom had significant market power (SMP) in the market and maintained a number of regulatory remedies on Eircom, including (i) access, (ii) transparency, (iii) non-discrimination, (iv) price control and cost accounting, and (v) accounting separation.

The Commission made comments, among others, on the inclusion of fibre networks owned by alternative operators as well as the need to notify details of remedies in the future.

In a number of other notifications to the Commission⁸, ComReg gave further details of the remedies imposed in case IE/2009/0875.

(Recommendation on Relevant Markets), OJ L 295, 11.10.2014, p. 79.

³ In accordance with Article 6 of the Framework Directive.

⁴ In accordance with Article 5(2) of the Framework Directive.

⁵ Corresponding to market 4 of the 2007 Recommendation on Relevant Markets.

⁶ C(2009) 1283.

⁷ ComReg decided to exclude from the market access to fibre networks provided by alternative operators, given the limited scale of fibre-to-the-home (FTTH) projects in Ireland and the low probability that they would be deployed to an extent that would make them an alternative to the incumbent's network.

⁸ Cases IE/2009/0918, IE/2009/0923, IE/2009/0924, IE/2009/0969, IE/2010/1104, IE/2011/1185, IE/2012/1382, IE/2012/1404, IE/2014/1649 and IE/2016/1858-1859.

In case IE/2016/1858⁹, ComReg introduced an update to the copper access model in order to determine the cost oriented prices for the fixed wholesale access services provided in the wholesale local access (WLA) and wholesale central access (WCA) markets for the July 2016 - June 2019 period.

ComReg notably determined the regulated charges to be applied for local loop unbundling (LLU), sub-loop unbundling (SLU), line share (LS), poles, ducts and dark fibre (market 3a).

In some cases, ComReg proposed bottom-up long run average incremental cost plus an apportionment for joint and common costs (BU-LRAIC+) pricing¹⁰ and in others top-down historic cost accounting (TD HCA)¹¹. The former have been generally applied to those assets that cannot be reused for the provision of NGA services, while Eircom's TD data have been generally applied to those assets that can be reused, such as poles and ducts.

2.1.2. Wholesale central access provided at a fixed location for mass-market products

The market for wholesale broadband access (WBA)¹² in Ireland was previously notified to and assessed by the Commission under case IE/2011/1207¹³.

The relevant market, which was considered to be national, covered non-physical or virtual network access at a fixed location, including 'bitstream' access, via both DSL/copper and fibre networks (including the incumbent's self-supply).

ComReg designated Eircom as an operator with SMP and imposed the full set of obligations, including (i) access, (ii) non-discrimination, (iii) transparency, (iv) accounting separation, and (v) price control and cost accounting.

The majority of the obligations were established in general terms and then further specified in a number of subsequent notifications to the Commission¹⁴. Bitstream access prices were cost oriented (based on top-down historical costs) and also a retail margin squeeze test was applied.

⁹ C(2016) 3034 final.

¹⁰ The BU-LRAIC+ methodology values the operator's assets at current market value and allows for changes in asset prices. A potential entrant is charged an access price (in principle) similar to what it might pay to build its own network, and thus faces a balanced 'build-or-buy' decision.

¹¹ The TD methodology uses Eircom's actual accounting data adjusted for efficiencies, as well as the forecast for future expenditure over the price control period, similarly adjusted for efficiencies.

¹² Corresponding to market 5 in the 2007 Recommendation on Relevant Markets (wholesale broadband access market)

¹³ C(2011) 350.

¹⁴ Cases IE/2012/1295, IE/2012/1404, IE/2014/1571 and IE/2014/1649.

In case IE/2016/1858¹⁵, ComReg further specified the existing price control obligation of cost orientation for standalone broadband outside the LEA¹⁶. This maximum monthly price was based on Eircom's TD costs (adjusted for efficiencies) associated with the provision of standalone broadband outside the LEA.

The Commission reiterated its previous comment, inviting ComReg to analyse markets 3a and 3b together as soon as possible, thus ensuring a coherent approach to NGA regulation.

2.2. Market definition

2.2.1. Retail market

ComReg defines the retail broadband market as including broadband services provided over copper (Eircom's legacy network), FTTx, and CATV. The market does not include narrowband dial-up internet access, mobile broadband via 3G/4G networks and broadband products provided over fixed wireless access ('FWA'), satellite networks and leased lines.

ComReg explains that the number of subscribers to retail copper-based services has been declining while the number of subscribers to retail FTTx services has been continuously increasing¹⁷.

2.2.2. Wholesale local access provided at a fixed location

ComReg defines the relevant WLA market as including: a) Current Generation ("CG") WLA products provided over copper networks, including LLU, LS and SLU products; and b) Next Generation ("NG") WLA products provided over FTTx networks, including Virtual Unbundled Access ("VUA") products¹⁸.

¹⁵ C(2016) 3034 final.

¹⁶ Already in 2012, ComReg had undertaken a detailed exchange-by-exchange analysis of the structural conditions in the market, and established a set of criteria to identify areas in the country with more competitive conditions. Areas (mainly urban) where uptake of unbundled services was likely to be viable or with potential for future deployment of alternative infrastructures were grouped together in the 'large exchange area' (LEA). In subsequent years, ComReg increased the number of exchanges included in the LEA as these became more competitive.

¹⁷ As of Q4 2017, the retail market subscriptions were as follows: 359,002 for copper (ADSL, ADSL2); 375,546 for cable; 574,768 for FTTC; 39,612 for FTTH/P; 47,443 for FWA; and 4,985 for satellite.

¹⁸ VUA is the wholesale product that is Eircom's implementation of VULA. ComReg's analysis has identified two types of Eircom VUA product: a) Local VUA – Eircom's MDF or ODF and the customer traffic handover point (the serving Aggregation node ('AGG Node') or Wholesale Ethernet Interconnection Link ('WEIL')) are co-located in the same exchange; and b) Remote VUA – Eircom's MDF/ODF and the customer traffic handover point (the serving AGG Node or WEIL) are not co-located in the same exchange. In the case of Eircom's Local VUA product, the traffic handover point is at the same point in the network hierarchy as a physical LLU product (i.e. at the local exchange). In the case of Eircom's Remote VUA product, the traffic handover point is not at the local exchange as the exchange does not have an AGG Node/WEIL. Instead, it connects to an exchange at a higher point in the network hierarchy which does have an AGG Node or WEIL. In that case the access seeker must invest in backhaul facilities to the AGG Node which, in turn, allows for purchasing remote VUA at a non-AGG Node.

Having regard to the likely lack of effective indirect constraints, broadband services provided over CATV¹⁹, FWA, mobile (3G/4G), leased lines and satellite broadband are not included in the relevant WLA market. ComReg also excluded from the market the services provided over the alternative localised FTTH networks, specifying that the coverage of these networks is so small (collectively at less than 1% of total premises) that even if it was included in the WLA product market definition, ComReg's overall conclusions would not be affected.

The relevant geographic market is national in scope.

2.2.3. Wholesale central access provided at a fixed location for mass-market products

ComReg defines the relevant WCA market as including CG and NG products provided over copper, fibre and CATV. In particular, ComReg considered: (a) Bitstream products provided over copper and FTTx networks, including wholesale Bitstream products provided using upstream WLA inputs; (b) self-supply of Bitstream by Eircom and BT Ireland; (c) Bitstream products that may hypothetically be offered by SIRO; (d) self-supply of CATV retail broadband products offered by Virgin Media in areas where its network is present; and (e) self-supply of retail broadband products offered by service providers using WLA upstream inputs and having widespread coverage (such as Vodafone).

Having regard to the likely lack of effective indirect constraints, broadband services provided over FWA, mobile (3G/4G) and leased lines are not included in the relevant WLA market. Bitstream-based WCA products hypothetically provided over alternative very small-scale FTTH networks are excluded from the WCA market as there are no WCA products currently being supplied over these networks which could, or could likely, serve as an effective substitute for the WCA offering of a hypothetical monopolist supplier. Considering the small-scale FTTH alternative networks, ComReg considers that, even if these networks were included in its analysis, they would not alter ComReg's conclusions on the relevant WCA market.

Based on a series of cumulative criteria²⁰, ComReg divided the wholesale central access market into two separate markets: (i) the Urban WCA Market²¹, and (ii) the Regional WCA Market²².

¹⁹ ComReg considered that it is not possible, nor will it likely be possible over the lifetime of this review, to provide a VULA-type service over a CATV network.

²⁰ **Criterion 1:** An Exchange Area in which at least three Primary Operators (i.e. BT, Eircom, SIRO, Virgin Media and Vodafone) would be capable, within a sufficiently short period, of providing WCA, WLA, or broadband services at the retail level to End Users; and
Criterion 2: An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users; and
Criterion 3: An Exchange Area where any Primary Operator(s) using third-party WLA inputs, if present, collectively provide(s) retail broadband services to at least 10% of End Users; and
Criterion 4A: An Exchange Area in which an Alternative Network Operator (ANO), if present provides or could provide, within a sufficiently short period, retail broadband services to End Users to at least 30% of the premises in that particular Exchange Area; and
Criterion 4B: An Exchange Area in which any ANO(s), if present, collectively provide(s) retail broadband services to at least 10% of End Users; and
Criterion 5: Exceptionally, on a case-by-case basis, where an Exchange Area: (i) fails no more than one of criteria (2) to (4B) above, and fails the criterion by a small margin (i.e. less than 10% of the

2.3. Finding of significant market power

2.3.1. Wholesale local access provided at a fixed location

ComReg proposes to designate Eircom with SMP in the WLA market. When assessing existing competition, ComReg considered the following criteria: (i) vertical integration, (ii) market shares²³, (iii) relative strength of existing competitors, (iv) barriers to expansion, (v) indirect constraints, and (vi) pricing behaviour. When assessing the potential competition, ComReg considered the following criteria: (i) size of the undertaking, (ii) control of infrastructure not easily duplicated, (iii) barriers to entry, (iv) product/service diversification, (v) economies of scale and scope, and (vi) overall strength of potential competitors. ComReg considered also the countervailing buyer power.

2.3.2. Wholesale central access provided at a fixed location for mass-market products

ComReg proposes to designate Eircom with SMP in the Regional WCA market. When assessing existing competition, ComReg considered the following criteria: (i) vertical integration, (ii) market shares²⁴, (iii) relative strength of existing competitors, (iv) barriers to expansion, (v) economies of scale and scope, (vi) indirect constraints, and (vii) pricing behaviour. When assessing the potential competition, ComReg considered the following criteria: (i) size of the undertaking, (ii) control of infrastructure not easily duplicated, (iii) barriers to entry, and (iv) overall strength of potential competitors. ComReg considered also the countervailing buyer power.

ComReg finds that the Urban WCA Market is competitive²⁵ and therefore proposes to lift regulation in this market within a six months sunset period.

percentage specified); or (ii) fails no more than one of criteria (2) to (4B) above, and where an Alternative Network Operator provides broadband services, either at the wholesale level or at the retail level, which equates to at least 60% of End Users, that Exchange Area will be deemed to have satisfied the relevant criterion.

²¹ The Urban WCA market comprises 145 exchange areas in which all the necessary cumulative criteria are met.

²² The Regional WCA market comprises 1058 exchange areas.

²³ The market shares of the service providers active in the WCA market as of Q4 2017 were as follows: Eircom █ % and SIRO █ %.

²⁴ The market shares of the service providers active in the Regional WCA market as of Q4 2017 were as follows: Eircom █ %, Vodafone █ %, Virgin Media █ %, and BT █ %.

²⁵ The market shares of the service providers in the Urban WCA market as of Q4 2017 were as follows: Virgin Media █ %, Eircom █ %, BT █ % and Vodafone █ %.

2.4. Regulatory remedies

2.4.1. Wholesale local access provided at a fixed location

ComReg intends to impose on Eircom the following obligations: access, transparency, non-discrimination, accounting separation, cost accounting and price control.

2.4.1.1. Access

Eircom will be mandated to provide the following access services: LLU, SLU, LS, Civil engineering infrastructures ("CEI"), or, if not available, dark fibre (where reasonable), VUA, co-location and other ancillary services.

2.4.1.2. Non-discrimination

In ComReg's view some of the conditions set out in the 2013 Recommendation on Non-Discrimination and Costing²⁶ and underpinning ComReg's 2013 NGA Decision²⁷ have not been adequately and transparently met.

According to ComReg's proposed non-discrimination regime, CEI and VUA services shall be provided on an equivalence of input (EoI) basis, while CG copper-based WLA services shall be provided on an equivalence of output (EoO) basis²⁸.

ComReg considers that Eircom's failure to fully and transparently meet its non-discrimination obligations, as evidenced by compliance breaches and in the review of internal governance also confirm the need for additional price controls in the form of cost orientation applied to FTTC based services.

2.4.1.3. Price control

ComReg proposes to impose on Eircom a set of price control obligations including cost orientation and a margin squeeze test (MST), as summarised in the following table.

Table 1: Summary of the proposed price control obligations in the WLA market

Products	Cost orientation	Margin Squeeze Test (MST)	Current situation
LLU, LS, CEI and Dark Fibre	Yes	Yes (wholesale)	Cost orientation

²⁶ Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU) — 'the 2013 Recommendation'; O.J. L251, p.13.

²⁷ Case IE/2012/1404, C(2012) 9843 final.

²⁸ However, Eircom shall offer a migration from a CG copper-based WLA service to VUA (NG WLA) service on an EoI basis.

FTTH based VUA	No	Yes (retail and wholesale)	Margin squeeze test
FTTC based VUA	Yes	Yes (retail)	Margin squeeze test
NGA and CGA ancillary services	Yes	No	Cost orientation

ComReg explains that the recent price increases by Eircom for both standalone retail broadband services and for wholesale POTS-based NG services²⁹ support the view that pricing constraints from other retail operators have not been sufficiently effective to constrain Eircom's pricing in the WLA and WCA markets. Furthermore, ComReg's assessment of Eircom's costs shows that price increases for wholesale products in the WLA market cannot be justified solely on the basis of increased costs. ComReg further alludes to the fact that the wholesale price constraint from CG WLA services (copper anchor) is diminishing given the declining demand for these services.

Therefore, ComReg considers that there is need to introduce cost orientation for FTTC services. In consequence of this, the margin squeeze test for these services will be modified as explained in table 2 below.

Regarding the price methodology, ComReg explains that the prices for LLU, SLU, LS, CEI and dark fibre will continue to be set in line with the 2016 Access Pricing Decision (IE/2016/1858), namely by a combination of BU-LRAIC+ costing methodology and a Top-down HCA costing methodology (the revised copper access model - CAM). ComReg clarifies that the 2016 Access Pricing Decision also specified, for transparency purposes, the (indicative) prices that shall apply from 1 July 2019 until 30 June 2021 also in the event that a subsequent review is not completed by then. Indeed, such pricing decision will remain in place until further notice.

ComReg further clarifies that prices for FTTC services (and for copper-based Bitstream services) as well as the implementation of the margin squeeze tests will be further specified in the 2018 Pricing Decision³⁰ and in the 2018 Bundles Decision³¹, which will be notified to the Commission in the coming weeks. ComReg

²⁹ Fibre access products (including VUA and Bitstream) can be provided with a telephone service (POTS based) or on a standalone basis.

³⁰ In particular, in the reply to the Commission's RFI, ComReg explains that the 2018 Pricing Decision will specify (i) the costing methodology, the details of the cost models and the prices for FTTC services, and for copper-based Bitstream services; (ii) the principles/implementation of the standalone margin squeeze tests, namely similarly efficient operator (SEO)/ equally efficient operator (EEO) cost base; and (iii) the notification procedures for prices changes.

³¹ In particular, in the reply to the Commission's RFI, ComReg explains that the 2018 Bundles Decision will specify (i) the principles/implementation of the bundles margin squeeze test, namely SEO/EEO cost base, bundle level assessment, free services included with a bundle; and (ii) pre- and post- launch considerations for bundles, including on-going monitoring.

also considers that the proposed costing methodology for FTTC services (and for copper-based Bitstream services) should be consistent with the costing methodology applied to LLU, SLU, CEI and dark fibre.

ComReg explains that the present draft measure and the above Pricing and Bundles Decisions will be issued simultaneously.

All the regulated wholesale products (WLA and WCA) have to be subject (even if already subject to a cost orientation obligation) to a margin squeeze test which can be: a) a wholesale test or b) a retail test.

Table 2: Summary of margin squeeze tests on WLA and WCA products

Products	Standalone or bundle test ³²	Competition problem addressed	Current regulation
Wholesale margin squeeze test			
FTTH-based VUA (and FTTH-based Bitstream)	Standalone test	Excessive pricing and potential leveraging ³³	Standalone test
WLA services (and WCA services) ³⁴	Standalone test	Potential leveraging	Standalone test (between LLU and copper-based standalone broadband)
Retail margin squeeze test			
FTTH-based VUA	Standalone test and Bundles test	Excessive pricing and potential leveraging	Standalone test and Bundles test
FTTC-based VUA	Bundles test	Potential leveraging	Standalone test and Bundles test
FTTH-based Bitstream	Standalone test and Bundles test	Excessive pricing and potential leveraging	Standalone test and Bundles test
FTTC-based Bitstream	Bundles test	Potential leveraging	Standalone test and Bundles test
Copper Bitstream services	Bundles test	Potential leveraging	Bundles test

The main change compared to current regulation is that FTTC services (VUA and Bitstream) will be subject only to a retail bundle margin squeeze test because they will be cost oriented.

³² ComReg clarifies that the only case where ComReg proposes to implement a standalone retail margin squeeze test is for services that are not cost oriented when sold on their own, i.e., FTTH-based VUA and FTTH-based Bitstream.

³³ Such margin squeeze tests aim to prevent the SMP operator from applying excessive prices and leveraging its market power into other markets with a view to foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets.

³⁴ ComReg has re-imposed a margin squeeze obligation between LLU and copper-based standalone broadband.

Finally, Eircom shall submit to ComReg a written statement of compliance (Statement of Compliance) that adequately demonstrates its compliance with its regulatory obligations in the WLA market.

2.4.2. Regional WCA market

ComReg intends to impose on Eircom the following obligations: (i) access, (ii) transparency, (iii) non-discrimination, (iv) accounting separation, (v) cost accounting and (vi) price control.

2.4.2.1. Access

Eircom will be mandated to provide the following access services: a) bitstream on copper, b) bitstream on fibre and c) standalone broadband, and d) co-location and other ancillary services³⁵.

2.4.2.2. Non-discrimination

According to ComReg's proposed non-discrimination regime, NG FTTx WCA services (including Bitstream Plus³⁶) and new requested CG copper-based WCA services³⁷ will be provided on an EoI basis.

2.4.2.3. Price control

ComReg proposes to impose on Eircom a set of price control obligations including cost orientation and a margin squeeze test. The details are summarised in the following table.

Table 3: Summary of the price control obligations in the Regional WCA market

Products	Cost orientation	Margin Squeeze Test (MST)	Current situation
Copper Bitstream	Yes	Only for bundles	Cost orientation, and standalone retail margin squeeze test in LEA area
FTTH based	No	Yes	Margin squeeze test

³⁵ In particular, (i) Backhaul; (ii) Associated Facilities to Next Generation Bitstream such as Multicast and Class of Service; (iii) Interconnection services; (iv) Co-Location for Interconnection services; (v) Migration(s).

³⁶ The Bitstream Plus service is a wholesale Bitstream service in the WCA market and is a combination of access and backhaul services.

³⁷ While currently CG WCA services are provided on an EoO basis, they will move to EoI within 12 months of the effective date of the WCA Decision (concerning pre-ordering, ordering, provisioning and fault reporting) and within 6 months of the effective date of the WCA Decision (concerning fault repair).

Bitstream			
FTTC Bitstream	Yes	Only for bundles	Margin squeeze test
NGA and CGA ancillary services	Yes	No	Cost orientation

ComReg explains that the costing methodologies to determine FTTC-based Bitstream and copper Bitstream prices (as well as the prices themselves) will be further specified in the 2018 Pricing Decision and the 2018 Bundles Decision, which will be notified to the European Commission shortly.

The margin squeeze obligations are listed in table 2 above.

3. COMMENTS

The Commission has examined the notification and the additional information provided by the ComReg and has the following comments³⁸:

Inclusion of alternative operators' FTTH network infrastructures in the market definition

As in the previous market analysis, ComReg includes fibre networks in the relevant market but excludes the FTTH network infrastructure of alternative operators. In this respect, the Commission would again like to remind ComReg that the definition of a relevant product market should be made with reference to the product characteristics, which at present do not indicate that the functionality of possible access products provided over separate FTTH networks would differ to such an extent that this would justify their exclusion from the relevant market. However, since the regulatory outcome is not affected given the still very limited coverage of these fibre networks, the Commission does not challenge ComReg's finding but would nevertheless like to stress the need for ComReg to include all access products based on fibre networks, whether or not such network is owned by the incumbent operator, within the relevant market in its final measure.

Need for an appropriate and consistent price control of wholesale products

In the presently notified draft measure, ComReg introduces cost orientation for FTTC based virtual and central access services. ComReg justifies this with observed price increases in standalone retail broadband services, suggesting that retail price constraints are not sufficiently strong to rely on a margin squeeze test only, as well as the diminishing role of copper access services as a possible anchor product and past compliance failings by Eir with its non-discrimination obligations.

³⁸ In accordance with Article 7(3) of the Framework Directive.

The Commission recognises that NGA based access products should be controlled in principle by means of a more flexible form of price control, such as an economic replicability test. The Commission therefore ask ComReg to explain in detail, in the specific circumstances of the Irish market, the difference in approach to FTTH products and FTTC products as regards forms of prices control. In this regard, ComReg may want to pay particular attention to the role FTTC based access products play as an anchor product for FTTH based access products, in light of the decline in market demand for copper-based CG retail services, and monitor price developments on relevant retail and wholesale markets accordingly.

Need for updated current generation access prices

The Commission understands that prices for LLU, SLU, LS, CEI and dark fibre will continue to be set in line with the 2016 Access Pricing Decision, possibly extending into the period 1 July 2019 – 30 June 2021 in case ComReg does not update the 2016 price decision prior to that.

Considering that the prices set in the 2016 Pricing Decision for the period 1 July 2019 – 30 June 2021 were merely indicative and are based on older data, the Commission urges ComReg to revisit these prices and at least update the results of the copper access model (the Revised CAM) with more recent data.

In the interest of regulatory predictability, the Commission asks ComReg to notify the resulting prices without undue delay.

Pursuant to Article 7(7) of the Framework Directive, ComReg shall take the utmost account of the comments of other NRAs, BEREC and the Commission and may adopt the resulting draft measure; where it does so, shall communicate it to the Commission.

The Commission's position on this particular notification is without prejudice to any position it may take *vis-à-vis* other notified draft measures.

Pursuant to Point 15 of Recommendation 2008/850/EC³⁹ the Commission will publish this document on its website. The Commission does not consider the information contained herein to be confidential. You are invited to inform the Commission⁴⁰ within three working days following receipt whether you consider that, in accordance with EU and national rules on business confidentiality, this document contains confidential information which you wish to have deleted prior to such publication.⁴¹ You should give reasons for any such request.

Yours sincerely,

For the Commission,
Roberto Viola
Director-General



³⁹ Commission Recommendation 2008/850/EC of 15 October 2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 301, 12.11.2008, p. 23.

⁴⁰ Your request should be sent either by email: CNECT-ARTICLE7@ec.europa.eu or by fax: +32 2 298 87 82.

⁴¹ The Commission may inform the public of the result of its assessment before the end of this three-day period.

Appendix: 3 ComReg's Consideration of the European Commission Response to ComReg's Notified Draft Measures

- A 3.1 At Appendix: 2 above, ComReg set out the EC Response to ComReg's Notified Draft Measures (Case IE/2018/2089 in respect of WLA, and Case IE/2018/2090 in respect of WCA, respectively).
- A 3.2 The EC commented on three main areas. ComReg has taken utmost account of each of these comments, as set out below:
- (i) the inclusion of alternative operators' FTTH network infrastructures in the market definition (discussed in paragraphs A 3.3 to A 3.10 below);
 - (ii) the need for an appropriate and consistent price control of wholesale products (discussed in paragraphs A 3.11 to A 3.18 below); and
 - (iii) the need for updated current generation access prices (paragraphs A 3.19 to A 3.22 below).

Inclusion of alternative operators' FTTH network infrastructures in the market definition

A 3.3 In relation to alternative operators' FTTH networks, the EC noted that:

*"As in the previous market analysis, ComReg includes fibre networks in the relevant market but excludes the FTTH network infrastructure of alternative operators. In this respect, the Commission would again like to remind ComReg that the definition of a relevant product market should be made with reference to the product characteristics, which at present do not indicate that the functionality of possible access products provided over separate FTTH networks would differ to such an extent that this would justify their exclusion from the relevant market. However, since the regulatory outcome is not affected given the still very limited coverage of these fibre networks, the Commission does not challenge ComReg's finding but would nevertheless like to stress the need for ComReg to include all access products based on fibre networks, whether or not such network is owned by the incumbent operator, within the relevant market in its final measure."*²¹⁶¹

²¹⁶¹ As set out at p.11 of the EC Response.

- A 3.4 With regard to the definition of the Relevant WLA Market definition (Section 4 of the Decision), ComReg outlined three reasons for the exclusion of alternative FTTH networks from the relevant market in paragraph 4.9, namely that:
- (i) In the context of supply-side substitution, localised alternative FTTH networks that are not active sellers in the wholesale market should not be included in the WLA Product Market because it is unlikely that there will be sufficient demand from Access Seekers for this type of WLA product;
 - (ii) Such a notional type of WLA product is unlikely to be provided to third parties in the short term (without significant additional costs or risks being incurred); and
 - (iii) The coverage of localised alternative FTTH networks is so small in any event, at 2% of total premises (currently approximately 15,000 premises)²¹⁶² that, even if it were included in the WLA Product Market definition, ComReg's overall conclusions were unlikely to be affected.
- A 3.5 In paragraph 4.10 above, ComReg outlines in detail the rollout and coverage of enet, one of the alternative FTTH networks, which served to illustrate the limited network reach of one of this FTTH network.
- A 3.6 Following on from the above, at paragraph 5.4 above, ComReg noted that alternative FTTH-based networks are also unlikely to provide a sufficiently effective indirect competitive constraint in the Relevant WLA Market over the period covered by this market review, such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers or End Users. As illustrated by Table 19, based on data as at Q4 2017, ComReg finds that, even if the self-supply of vertically integrated retail-only SPs were included within the WLA Market, Eircom would have a high and stable market share of approximately [redacted] compared to market shares for other operators of [redacted].
- A 3.7 With regard to the Relevant WCA Market(s) (Section 9 of the Decision), ComReg considered in paragraph 9.9(b) that, because the scope for supply-side substitution into the Relevant WCA Market via alternative FTTH networks (other than Eircom and SIRO) was currently limited, it was therefore unlikely that such alternative FTTH networks would satisfactorily meet the requirements of Access Seekers.²¹⁶³ ComReg nonetheless recognises that, from a functional perspective, the technical capabilities of retail services offered on alternative FTTH networks are likely to be similar to those offered over other FTTH networks that have broader coverage.

²¹⁶² Magnet's FTTH coverage is 15,000 premises (<https://www.magnet.ie/residential/home-broadband/>).

²¹⁶³ As at Q4 2017 [redacted] subscribers were on localised alternative FTTH networks (enet and Magnet).

- A 3.8 ComReg notes also that none of the respondents to the Consultation made reference to the need for alternative FTTH networks to be included in the market definitions.
- A 3.9 Overall, ComReg agrees with the EC's comments that the product characteristics and functionality of alternative FTTH networks are comparable to that of more widely available FTTH networks. However, ComReg considers that the inclusion of such alternative FTTH networks in the Relevant Markets is not warranted and their exclusion, as noted by the EC, does not have a material impact on the analysis and findings.
- A 3.10 ComReg remains of the view that the exclusion of alternative FTTH networks from the definition of the Relevant WLA Market and Relevant WCA Markets is not warranted and, in any event does not alter the regulatory outcome, namely, that Eircom enjoys position of SMP in such markets.

Need for an appropriate and consistent price control of wholesale products

- A 3.11 The EC's second comment focussed on ComReg's approach to FTTC and FTTH pricing:

"In the presently notified draft measure, ComReg introduces cost orientation for FTTC based virtual and central access services. ComReg justifies this with observed price increases in standalone retail broadband services, suggesting that retail price constraints are not sufficiently strong to rely on a margin squeeze test only, as well as the diminishing role of copper access services as a possible anchor product and past compliance failings by Eir with its non-discrimination obligations.

*The Commission recognises that NGA based access products should be controlled in principle by means of a more flexible form of price control, such as an economic replicability test. The Commission therefore ask ComReg to explain in detail, in the specific circumstances of the Irish market, the difference in approach to FTTH products and FTTC products as regards forms of prices control. In this regard, ComReg may want to pay particular attention to the role FTTC based access products play as an anchor product for FTTH based access products, in light of the decline in market demand for copper-based CG retail services, and monitor price developments on relevant retail and wholesale markets accordingly."*²¹⁶⁴

²¹⁶⁴ As set out at p.11 of the EC Response.

FTTC-based VUA and Bitstream

- A 3.12 ComReg has imposed on Eircom obligations including cost orientation in respect of FTTC. ComReg has not imposed cost orientation obligations with respect to FTTH, instead, *inter alia*, imposing obligations not to impose a margin squeeze in both the Relevant WLA Market and the Regional WCA Market.
- A 3.13 ComReg notes that the 2013 Non-Discrimination Recommendation acknowledges that the copper anchor could, in principle, be replaced by an NGA-based product if the legacy access product is no longer able to exercise a demonstrable retail price constraint on the NGA product. As recognised in the EC Response, ComReg considers that the lack of effective constraint exercised by Eircom's legacy copper access network indicates that LLU can no longer be considered as an anchor product²¹⁶⁵ that would constrain the pricing of FTTC-based services in a way that would avoid a negative knock-on effect for retail broadband prices.
- A 3.14 ComReg accordingly considers that the conditions set out at paragraphs 49 (d) and (e) of the 2013 Non-Discrimination Obligation are not met, because products offered over the legacy copper network and retail services provided over alternative infrastructures do not create a sufficiently demonstrable retail pricing constraint.²¹⁶⁶ This lack of constraint also means that the legacy copper product cannot be considered as an anchor product for FTTC based services, in line with Recital (56) of the 2013 Non-Discrimination Recommendation which acknowledges that the copper anchor could, in principle be, replaced by a basic NGA-based product where the access product offered by the SMP operator on the legacy (copper) access network is no longer able to exercise a demonstrable retail price constraint on the NGA product.
- A 3.15 Accordingly, ComReg considers that the decision to impose a cost orientation obligation on FTTC-based VUA and FTTC-based Bitstream has taken utmost account of, and is therefore consistent with, the 2013 Non-Discrimination Recommendation. ComReg also confirms that it will, as recommended by the EC, continue to monitor pricing developments on all relevant retail and wholesale markets.

²¹⁶⁵ See, for example, paragraph 8.626(b) of the Consultation.

²¹⁶⁶ *Ibid.* For example, on 01.09.2016 open eir increased FTTC based VUA prices from €19.50 to €23.

FTTH-based VUA and Bitstream

- A 3.16 ComReg has decided to continue to allow Eircom greater pricing flexibility on FTTH-based VUA and FTTH-based Bitstream, subject to the obligation not to cause a margin squeeze. ComReg noted in the Consultation²¹⁶⁷ that, given cost and demand uncertainties, FTTH prices are likely to be very sensitive to the penetration rate of FTTH-based VUA and Bitstream, such that an incorrect forecast of penetration rates could distort future FTTH investment incentives.²¹⁶⁸ If the regulated cost oriented price for FTTH-based VUA and FTTH-based Bitstream were too **high**, it may deter actual or potential purchasers of FTTH-based VUA and FTTH-based Bitstream from purchasing FTTH. Furthermore, and if the regulated price were too **low**, Eircom and, indeed, other infrastructure investors may reduce their investments in FTTH.²¹⁶⁹
- A 3.17 In ComReg's view, this justifies continuing to allow Eircom comparatively greater pricing flexibility for FTTH-based services, than for FTTC-based services. However, as set out above at paragraphs 7.1334 to 7.1345 and 12.324 to 12.334, absent appropriate regulation, Eircom would have the ability and incentive to price its FTTH wholesale access inputs and/or retail prices in such a way that it would not allow a SP to cover the cost of provision in downstream wholesale markets or in retail markets, after acquiring the wholesale inputs from Eircom. An obligation not to cause a margin squeeze is therefore required.
- A 3.18 ComReg considers that this approach allows Eircom the flexibility to set higher prices for FTTH than for FTTC, to the extent end users or OAOs are willing to pay more for the higher quality services available over FTTH compared to FTTC, therefore giving Eircom the incentive to invest in FTTH. ComReg also confirms that it will, as recommended by the EC, continue to monitor pricing developments on all relevant retail and wholesale markets.

Need for updated current generation access prices

- A 3.19 The EC's final comment focussed on ComReg's access pricing modelling:

“The Commission understands that prices for LLU, SLU, LS, CEI and dark fibre will continue to be set in line with the 2016 Access Pricing Decision, possibly extending into the period 1 July 2019 – 30 June 2021 in case ComReg does not update the 2016 price decision prior to that.

²¹⁶⁷ See paragraphs 8.646 to 8.651, and 13.340 to 13.342 of the Consultation.

²¹⁶⁸ See paragraphs 8.646 and 13.340 of the Consultation.

²¹⁶⁹ See paragraphs 8.647 and 13.341 of the Consultation.

Considering that the prices set in the 2016 Pricing Decision for the period 1 July 2019 – 30 June 2021 were merely indicative and are based on older data, the Commission urges ComReg to revisit these prices and at least update the results of the copper access model (the Revised CAM) with more recent data.

In the interest of regulatory predictability, the Commission asks ComReg to notify the resulting prices without undue delay.”

- A 3.20 The EC’s understanding that the prices for LLU, SLU, Line Share, CEI and dark fibre will continue to be set in line with ComReg’s 2016 Access Pricing Decision is correct.
- A 3.21 The price control period in the 2016 Access Pricing Decision was set for at least three years (from 1 July 2016 to 30 June 2019) but, in any event, will remain in place until further notice by ComReg. The 2016 Access Pricing Decision also specified the prices that shall apply beyond that period (from 1 July 2019 – 30 June 2021) for transparency purposes, and in the event that a subsequent review is not completed by then.
- A 3.22 ComReg is commencing a review of the Revised CAM and the associated prices set in the 2016 Access Pricing Decision, with a view to completing this work as quickly as possible. Following that review, ComReg will notify the EC in accordance with Article 7 of the Framework Directive of that review process.

Appendix: 4 Correspondence between Eircom and ComReg

Copy of letter from Eircom to ComReg, dated 15 February 2018:



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Dublin 8
T +353 1 671 4444
eir.ie

Gerry Fahy
ComReg
1 Dockland Central,
Guild Street,
Dublin D01 E4X0

cc: Donal Leavy

15 February 2018

Re: ComReg's Review of the WLA/WCA Markets

Dear Mr. Fahy,

I am writing to express eir's view that given a number of recent developments in the Irish telecommunications market, it is now appropriate and necessary that ComReg engage in the process of re-consulting on the Wholesale Local Access (WLA) and Wholesale Central Access (WCA) markets.

ComReg published its Consultation and Draft Decision on the WLA and WCA markets (ComReg 16/96) on 11 November 2016, 15 months ago. At that time, ComReg considered that *"there remains too much uncertainty at this time regarding the eventual contract award, the successful tenderers and the timing of the subsequent roll-out to draw any firm conclusions on the potential impact of the NBP on the WLA Market at this stage"*¹ and that *"given the status of the procurement process it remains to be seen whether this will result in a new entrant to the WLA market or the extension of the network footprint of and existing competitor"*.² With regard to the Regional WCA market, ComReg noted the expected awarding of the National Broadband Plan (NBP) contract during the lifetime of this review, but in line with its view on the WLA market considered that *"given the timing and uncertainty regarding which SP(s) will be awarded the NBP contracts, such entry is not likely to act as a sufficient constraint competitive on Eircom in the Regional WCA Market"*. However, ComReg also noted that it would *"keep this under review"*.³

SIRO exited the NBP tender process in September 2017, while eir withdrew at the end of January 2018. enet is now the only remaining bidder. The Irish Government has signalled its intention to award the 25 year contract to enet by September 2018 with rollout to commence at the beginning of 2019. It is expected that the last premises in the Intervention Area (IA) will be passed by 2023. The IA officially comprises of 537,587 premises, which represents 23% of all premises in the State. This is an area where eir will no longer be the de facto wholesale provider and therefore an area where the competitive conditions will significantly differ from other parts of Ireland. As a result, it is extremely unlikely that concluding on a WLA market that is national in scope remains either accurate or appropriate. The

¹ Paragraph 1.37, ComReg 16/96

² Paragraph 5.185, ComReg 16/96

³ Paragraph 11.86, ComReg 16/96

Directors: Carl Leaver (UK) (Chairman),
Huib Costermans (NL), Richard Moat (UK),
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uncertainty that previously inhibited ComReg from drawing any firm conclusions on the potential impact of the NBP on the WLA and WCA markets has now dissipated.

In addition, eir notes that in the intervening period since the publication of ComReg's review of the WLA and WCA markets, there have been a number of other market developments that will contribute to the fundamental differences in the structure of the communications market in Ireland that are likely to be observed over the coming years;

- SIRO with a network of over 125,000 premises passed as of February 2018 is now Ireland's second largest FTTH/B operator. SIRO is live in 20 towns with construction advanced in a further 2 towns. SIRO has contracted with 8 different retail service providers (RSPs) and has network agreements with both BT and enet.
- enet-SEE, a new commercial joint venture between enet and Ireland's second largest energy utility SSE, announced plans in September 2017 to commercially rollout fibre to 115,000 premises in regional Ireland by 2019. It is believed that FTTH/B rollout has started in 9 towns, totalling 18,000 premises.
- Virgin Media Ireland has signalled that it could be in a position to potentially serve between 75% and 80% of the population of Ireland with cable broadband. The company is working incrementally on a regional roll-out strategy, focusing primarily on key towns and has confirmed that it plans to expand its footprint by an additional 200,000 new homes and businesses over the next two years, a 25% increase on its current network coverage.
- Imagine and Huawei have announced the formation of a strategic partnership with plans to deploy the first national Wireless-to the-x (WTTx) network. Imagine will commence the rollout of its network in October with the objective of 85% market coverage by 2019
- enet and SIRO have announced a partnership agreement whereby enet will become a SIRO aggregator and will integrate SIRO's last mile fibre access with the Metropolitan Area Networks (MANs) as well as its own national fibre network to provide a full end-to-end offering to all RSPs.

When carrying out a market analysis under Article 16 of Directive 2002/21/EC, the assessment of a market should be done from a forward-looking perspective. The analysis should assess whether the market is prospectively competitive and whether any lack of competition is durable, by taking into account expected or foreseeable market developments. The analysis should also reflect the specific characteristics of the market and the expected timing for the next review of the relevant market by the NRA.⁴

eir notes that the Commission is currently proposing that the market review period will change from three years to five years and that in exceptional circumstances this could be extended by one year upon notification to the Commission. The Council of Europe has suggested that there should also be the possibility of a market review cycle of seven years for new networks. Whatever the outcome of the trilogue negotiations, it is envisaged that the 3 year market review timeframe will be extended. Given that the regulatory environment over the next number of years will be shaped by the current round of market reviews, it is of utmost importance that such market reviews are therefore sufficiently forward looking and create the correct balance between dynamic and static efficiency thereby encouraging the levels of investment required to deliver ubiquitous very high capacity networks (VHCNs).

eir is therefore of the view that additional engagement with industry in the form of a further consultation is now required. eir is extremely concerned, particularly in light of recent events, that ComReg's proposals with regards to the WLA and WCA markets are based on assumptions that no longer hold and as such will cause harm to consumers in the long run by creating a very material deterrent to future investment in network infrastructure in Ireland, thereby discouraging network competition. This appears to be a view shared by other network providers. eir and other current and prospective investors will be discouraged by

⁴ Point 20 of the Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)



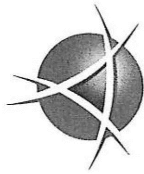
the prospect of diminishing returns, making already challenging business cases, particularly those where the returns are likely to be marginal, uneconomic.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Gary Healy'.

Gary Healy
Director of Regulatory and Public Policy

Copy of response from ComReg to Eircom, dated 16 February 2018:



An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

16 February 2018

Mr Gary Healy
Eircom Ltd
1 Heuston South Quarter
St John's Road
Dublin 8


Ref: Market Review of WLA /WCA

Dear Gary

I acknowledge receipt of your letter of 15 February.

We will give it careful consideration as part of our deliberations. As it is not marked as being confidential, we plan to publish it in due course unless I hear otherwise from you by close of business 23 February 2018.

Yours sincerely



Gerry Eahy
Chairperson

An Coimisiún um Rialáil Cumarsáide
Commission for Communications Regulation
1 Lárcheantar na nDugaí, Sráid na nGildeanna, BÁC 1, Éire, D01 E4X0.
One Dockland Central, Guild Street, Dublin 1, Ireland, D01 E4X0.
Teil | Tel +353 1 804 9600 Suíomh | Web www.comreg.ie

Copy of letter from Eircom to ComReg, dated 1 June 2018:



1 Heuston South Quarter
St. John's Road
Dublin 8
T +353 1 671 4444
eir.ie

Gerry Fahy
Chairperson
Commission for Communications Regulation
1 Dockland Central Guild Street
Dublin D01 E4X0

cc: Donal Leavy

1 June 2018

Re: ComReg's Review of the WLA/WCA Markets

Dear Gerry

I am writing to once again express eir's view that, given the significant developments in the Irish telecommunications market and the delay since the consultation on the Wholesale Local Access (WLA) and Wholesale Central Access (WCA) markets, it is now of utmost necessity that ComReg engage in the process of re-consulting on these markets.

As noted in eir's previous letter to ComReg dated 15 February 2018, there have been a number of significant market developments over the nearly two year period since the publication of ComReg's initial consultation on the WLA and WCA markets. In particular, eir and other operators have continued to expand their network footprint in the interim and a number of operators have announced and are implementing ambitious plans to invest heavily in their networks. For example:

- eir's rollout of high speed FTTH broadband continues and there are currently over 200,000 premises passed. This figure is expected to reach nearly 280,000 by the end of 2018 (eir's overall FTTH fibre rollout has now passed 1.8 million or 75% of all Irish homes and businesses).
- Virgin Media continues to expand its footprint. The company is understood to have passed 842,000 homes with broadband services by the end of 2017 and through its multi-year network expansion programme, Project Lightning, anticipates that it could potentially serve between 75% and 80% of the population of Ireland. Project Lightning has included, for example, the recent acquisition of Casey Cablevision in Dunganran and Virgin Media has hinted at further expansion of fibre services in the south-east.
- SIRO announced in March 2018 that it has now passed 165,000 of its 500,000 planned homes and businesses. The company also announced plans in March to connect an additional 35,000 homes in 10 towns across South-East Ireland over the next 2 years.
- Imagine Communications Group has secured an investment of €120m from the Canadian investment firm Brookfield. It has indicated that it will now commence full commercial rollout of its network and plans to invest €310m over the next three years, building a wireless broadband network covering 325 sites and 1.4m premises, which will provide high-speed broadband services of 150Mbps or more.
- enet has developed a joint venture with SSE Ireland to bring fibre broadband to 115,000 homes and businesses in the western and north-western regions of Ireland by 2019. The joint venture is also the sole remaining bidder for the National Broadband Plan (NBP) contract.

Directors: Carolan Lennon, Stephen Tighe

eir is a trading name of eircom Limited,
Registered as a Branch
in Ireland Number 907674
Incorporated in Jersey Number 116389

Branch Address: 1 Heuston South Quarter,
St. John's Road, Dublin 8
VAT registration: IE 3286434NH



With regard to the NBP in particular, SIRO exited the tender process in September 2017, while eir withdrew at the end of January 2018. The Irish Government has signalled its intention to award the 25 year contract to the sole remaining bidder, enet, by September 2018 and remains resolute in its intention to commence rollout at the beginning of 2019. At the time of the market review consultation (almost two years ago), the outcome of the tendering and award process was highly uncertain thereby inhibiting ComReg's ability to draw any firm conclusions as to how this may affect the relevant wholesale markets over the market review period. This is no longer the case.

eir raised these points in its previous letter, although we note that we have not received a response to that letter. It appears therefore that ComReg is unwilling to reconsider its original position even in the face of significant developments affecting the relevant markets. This would seem in stark contrast to ComReg's position with regard to its review of the Wholesale High Quality Access (WHQA) Market, where ComReg considered it appropriate to issue a further consultation in February of this year, having published its initial consultation in August 2016. ComReg stated in its Information Notice on Further Consultation on the WHQA market (ComReg 17/28) that this was on the basis that respondents had "raised a number of issues that ComReg considers require further detailed consideration". The issues at hand with regard to the WLA and WCA markets are significant and require no less further detailed consideration.

Similarly, as noted in our formal submission to the WLA and WCA market price control consultation, no other EU regulator has imposed cost-based regulation of FTTC VUA when the incumbent operator has as low a share of the national retail broadband market as eir or at a time in the investment cycle where regulators need to encourage further investment. Furthermore, if price control by cost-orientation were appropriate, which it is not, as highlighted in eir's submission and in our engagement throughout, ComReg's proposed approach in the consultation strands access costs between the current regulated WLR wholesale prices and proposed FTTC wholesale prices. While bi-lateral workshops remain on-going to address this under-recovery it is unclear at this time whether the model in its current form and construct is capable of supporting those prices which allow appropriate access cost recovery. On this matter, any proposed re-allocation of costs between sub-geographic markets, in this specific case between NBP intervention and commercial areas, was not in ComReg's reasonable contemplation when originally consulting on the various pricing methodology options. Finally, no other EU regulator imposes both cost-orientation and a margin squeeze test on FTTC Bitstream. ComReg has failed to undertake the required Three Criteria Test in order to demonstrate that the retail market is or remains susceptible to ex-ante regulation — contrary to the 2014 Recommendation — and it has consequently failed to analyse the retail bundles market in its consultations to date.

There appears to be significant appetite to invest in the Irish market. FTTH coverage in Ireland has been steadily increasing and is expected to increase further. However, Ireland is significantly behind in relation to the majority of its European counterparts and operators often face practical deployment and regulatory challenges. It is also important to remember that while FTTH coverage is improving, Ireland is starting from a low base and an extensive FTTC network has already been rolled out, which has implications for the pricing of FTTH services and thereby a ripple effect for alternative NGA investment sentiment. It should be noted therefore that the comments made by other network investors in their responses to consultation on WLA and WCA shared eir's concern at the policy direction ComReg was taking.

It would appear that the vision of a 'Gigabit' Ireland is not shared by ComReg and that the regulatory approach is not driven by an investment led strategy or recognition of market dynamism but rather by an overarching focus on the enforcement of outdated regulation and short term service-based retail competition.

eir is concerned that ComReg's process to date in respect of these markets is fundamentally flawed in that it is not assessing significant market developments and consulting on the impact of those changes to the SMP regime. ComReg accepted in re-reviewing the WHQA market the validity of re-consulting in these circumstances. The significant developments that have taken place since the WLA and WCA market review consultations means that the obligations ComReg has proposed to impose on eir are not

Copy of response from ComReg to Eircom, dated 11th June 2018:



11 June 2018

Mr. Gary Healy
Eircom Ltd
1 Heuston South Quarter
St. John's Road
Dublin 8
D08 A9RT.

Ref: ComReg's Review of the WLA/WCA Markets

Dear Gary,

I acknowledge receipt of your letter dated 1 June, 2018 concerning ComReg's ongoing review of the WLA/WCA Markets and setting out Eir's view that ComReg should re-consult on its review of these markets given purported developments since the publication of ComReg's consultation in November 2016.

ComReg's view is that a re-consultation on these markets, as suggested by Eir, is unwarranted.

As flagged in the Consultation, in preparing its final decision ComReg has - and continues to have - regard to relevant market developments, including those set out in your letters of 15 February and 1 June. Indeed, ComReg has engaged on several occasions with Eircom and other stakeholders to obtain updated information concerning issues such as network roll-out. As also set out in my letter to you of 16 February last, I assured you that ComReg would give "*careful consideration*" to the matters raised in your letter of 15 February.

I note your views on the application of cost orientation to FTTC services, and that these views are consistent with those expressed by Eir in its various responses to the review of the WLA/WCA Markets and to the separate Pricing Consultation and the separate Bundles Consultation. You can be assured that ComReg takes the views of all respondents into account in the consultation process, and in coming to a final decision. I do not propose to address your specific points on cost modelling in this letter. As you recognise, ComReg staff have engaged, and are continuing to engage, directly with Eir in order to develop the modelling approach.

Eir has also contended that ComReg's proposals represent a deviation from the views of the European Commission in respect of appropriate remedies and are unjustified under the EU telecoms legislative framework, given purported flaws in the original consultation. I reject these contentions, and assure Eir that ComReg's final decision will not only take account of relevant prevailing and foreseeable market conditions, but also have regard to the relevant regulatory and legislative framework.

As your letter is not marked as being confidential, ComReg plans to publish it in due course unless I hear otherwise from you by close of business on 18 June 2018.

Yours sincerely,



Gerry Fahy
Chairperson

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Appendix: 5 2017 WLA/WCA Market Research

A 5.1 The updated 2017 WLA/WCA Market Research conducted for ComReg by RedC Research & Marketing Ltd is published alongside this Decision in ComReg Document 18/94a.

Appendix: 6 WLA/WCA Market Research Assessment

Introduction

- A 6.1 This Appendix presents findings from independent research on the WLA/WCA Markets, updating findings from Appendix 2 of the Consultation.
- A 6.2 The purpose of the 2017 WLA/WCA Market Research is to update the key findings from the 2014 WLA/WCA Market Research study undertaken by RedC Research & Marketing Ltd. Key aspects of the survey research, conducted by RedC Research & Marketing Ltd in April/June 2017, include:
- Access to broadband for residential and non-residential users;
 - Access to broadband across different platforms and in different areas;
 - Incidence of bundling and switching of products among residential and non-residential users.
- A 6.3 The following sections outline the key findings from the research among Irish consumers and businesses. The relevant slide number in the 2017 WLA/WCA Market Research document is given in parenthesis above each figure.

Results from research among Irish Residential Consumers

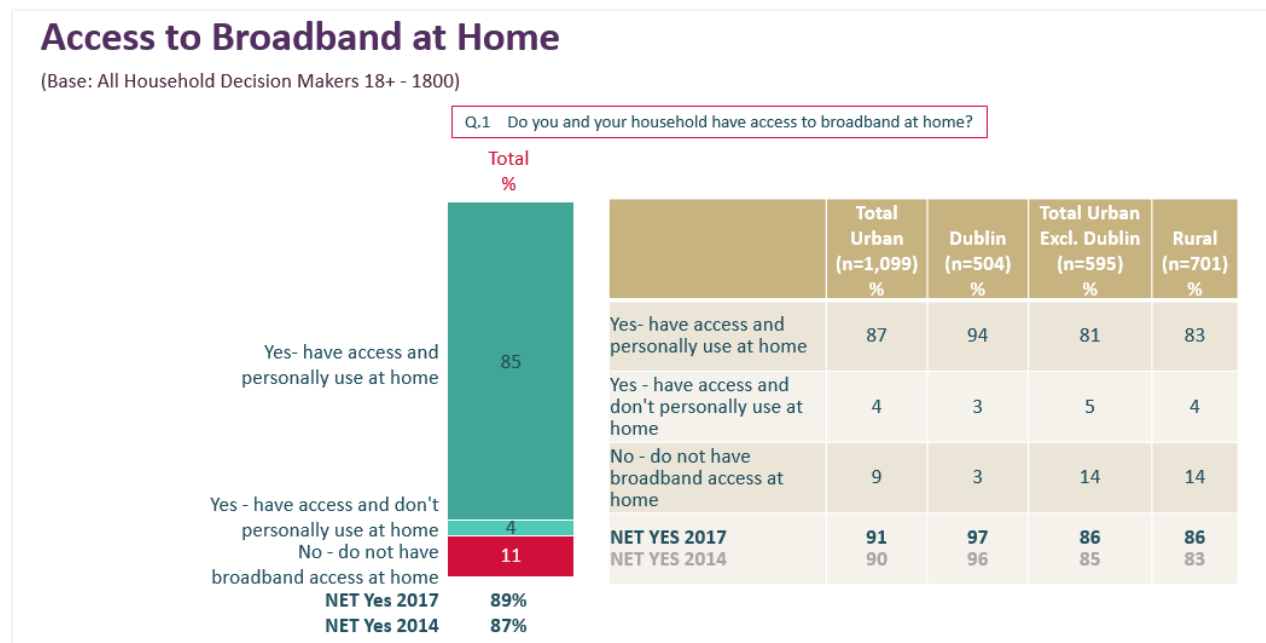
- A 6.4 The research among residential respondents is presented for the complete sample (1,800 respondents) and is also divided into three geographic regions based on where the respondents lived. These regions were as follows:
- Dublin;
 - Other Urban Areas (excluding Dublin); and
 - Rural areas (with a population of less than 1,500).
- A 6.5 Household decision makers for telecommunications (aged 18+) were interviewed face-to-face and quota controls were imposed to ensure the sample is representative of this population. In some cases, small sample sizes are found in the research. These survey results, which are indicated throughout, should be interpreted with caution.
- A 6.6 In the sections below, ComReg presents the key conclusions from the residential broadband survey, using the following themes:
- Broadband Access at Home;
 - Means of Access;
 - Usage Patterns;
 - Download Speeds;

- Bundling;
- Knowledge of Cost;
- Contract Lengths;
- Switching; and
- Responses to hypothetical price increases

Broadband Access at Home

A 6.7 Of the 1,800 respondents to the 2017 WLA/WCA Consumer Market Research, 85% of these reported that they had broadband access at home and personally used their broadband connection, and a further 4% of respondents indicated that they had broadband access but did not personally use it. 11% of respondents indicated that they do not have broadband access at home. Figure A6.1²¹⁷⁰ below, gives the breakdown for each region, with some variation. In Dublin, 97% of respondents have broadband access while in rural areas, the corresponding figure is 86%.

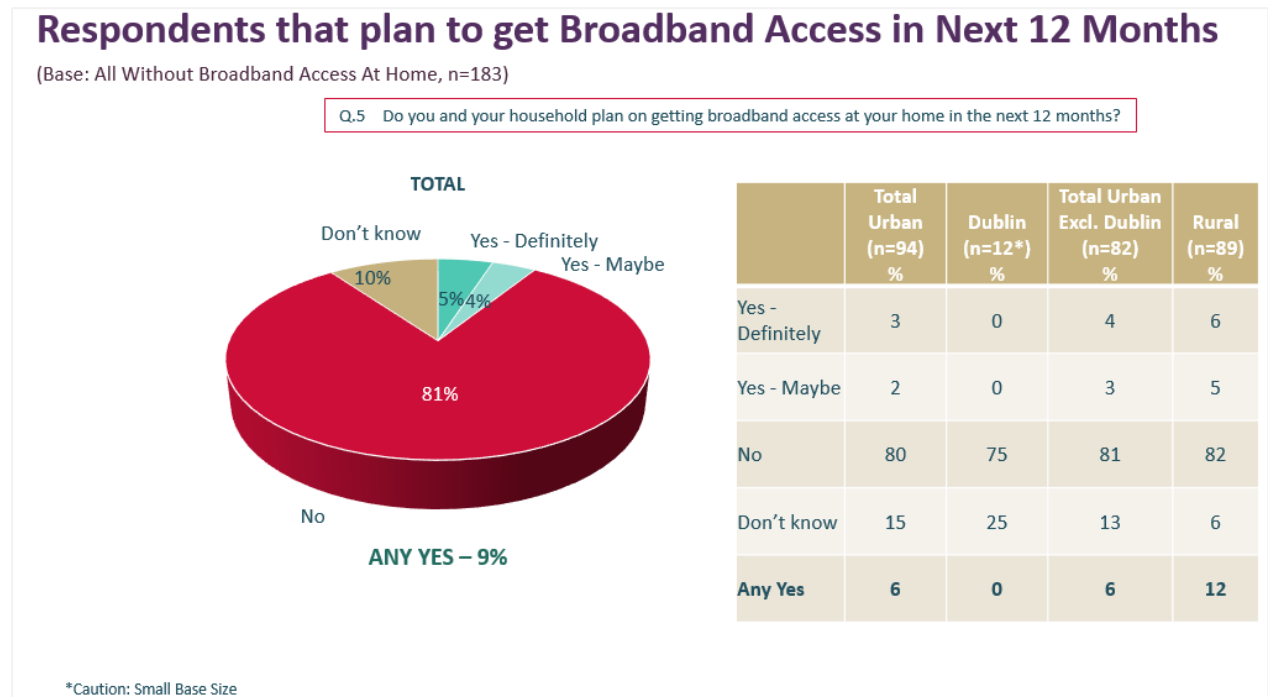
Figure A6.1: Access to Broadband at Home



²¹⁷⁰ Slide 11, 2017 WLA/WCA Consumer Market Research.

A 6.8 Of the respondents that do not have access, 81% indicated that they do not plan on getting broadband access within the next year, while a further 10% indicated that they did not know if they would. 5% of the respondents that do not have access, indicated that they definitely plan on getting broadband access within the next year, with the highest proportion in rural areas (Figure A6.2, below).²¹⁷¹

Figure A6.2: Respondents that plan to get Broadband Access in the next 12 Months



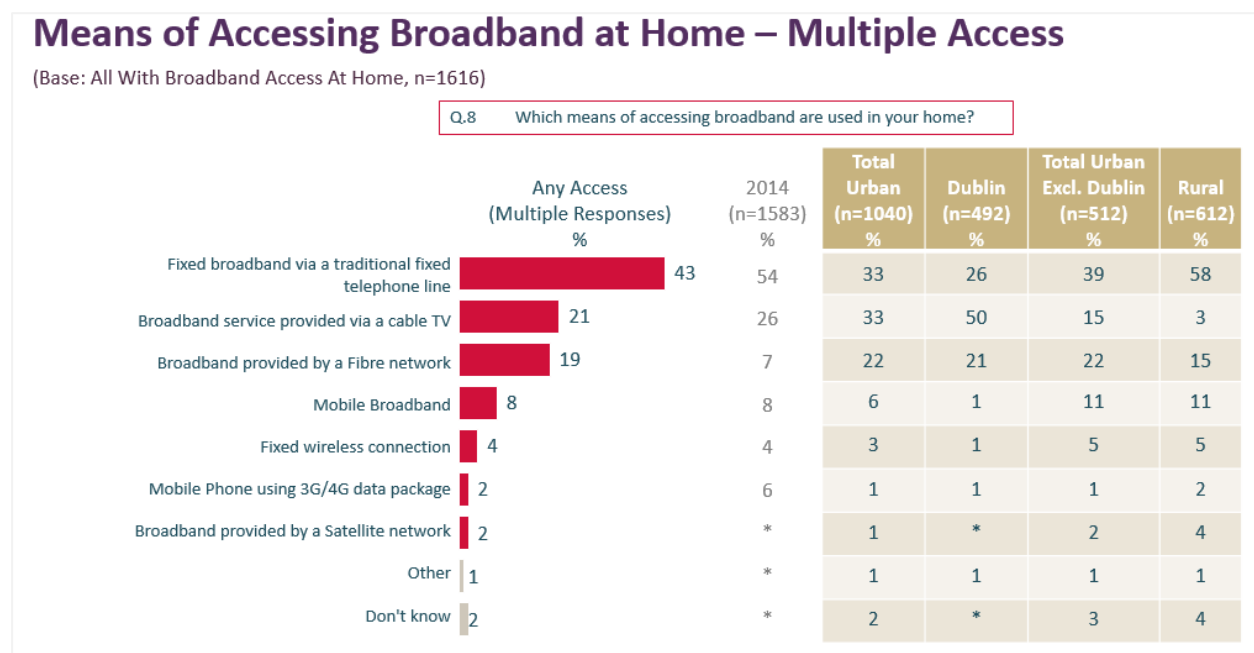
Means of Access

A 6.9 As set out in Figure A6.3 below,²¹⁷² 43% of respondents reported that they have access to fixed broadband through a traditional phone line, a further 21% reported that they have access via a CATV network. 19% of respondents reported accessing broadband provided by a fibre network, compared with 7% in the 2014 WLA/WCA Consumer Market Research. Less than 10% each reported that they have access through mobile broadband, fixed wireless connection, mobile phone and Broadband provided by a Satellite network.

²¹⁷¹ Slide 12, 2017 WLA/WCA Consumer Market Research.

²¹⁷² Slide 16, 2017 WLA/WCA Consumer Market Research.

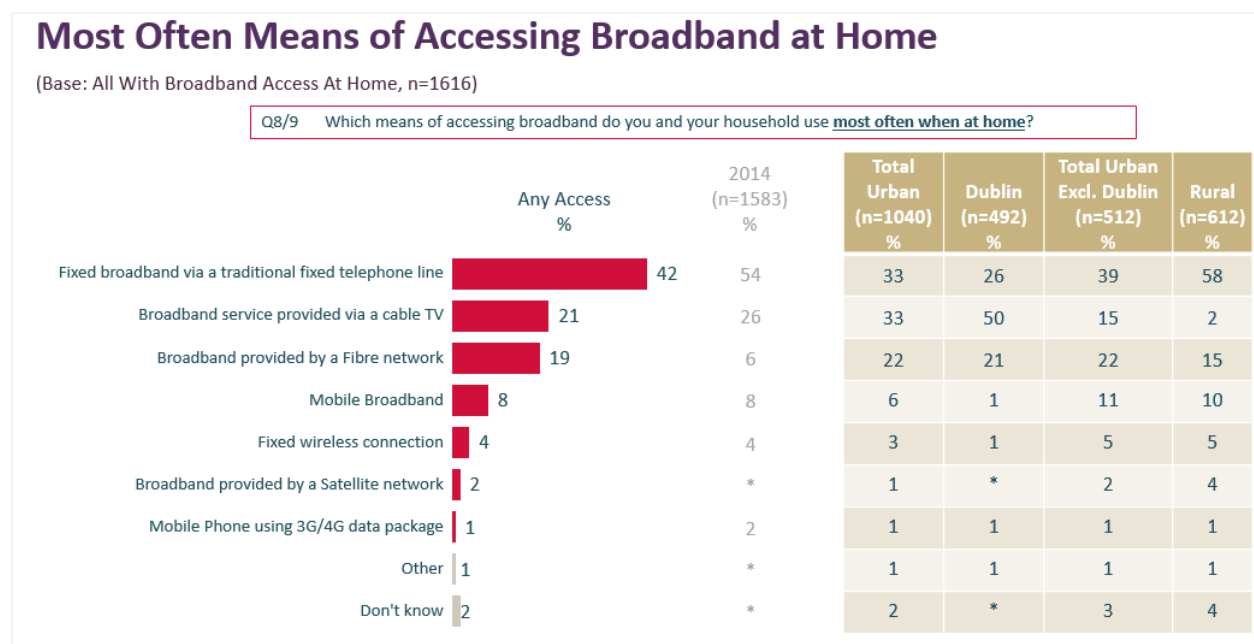
Figure A6.3: Means of Accessing Broadband at Home – Multiple Access



A 6.10 As set out Figure A6.4 below,²¹⁷³ fixed broadband through a traditional phone line is the most frequent means of accessing broadband (42%), followed by cable (21%), fibre network (19%) and mobile broadband (8%). Figure A6.4 also shows significant variation in the platforms used to access broadband services throughout Ireland. While broadband access via a traditional phone line is the most frequent means of access for those respondents living in rural areas (58%), only 26% of respondents living in Dublin accessed services using the Copper Network. Conversely, 50% of respondents in Dublin accessed broadband services using a CATV network, compared to just 2% in rural areas.

²¹⁷³ Slide 17, 2017 WLA/WCA Consumer Market Research.

Figure A6.4: Most Often Means of Accessing Broadband at Home

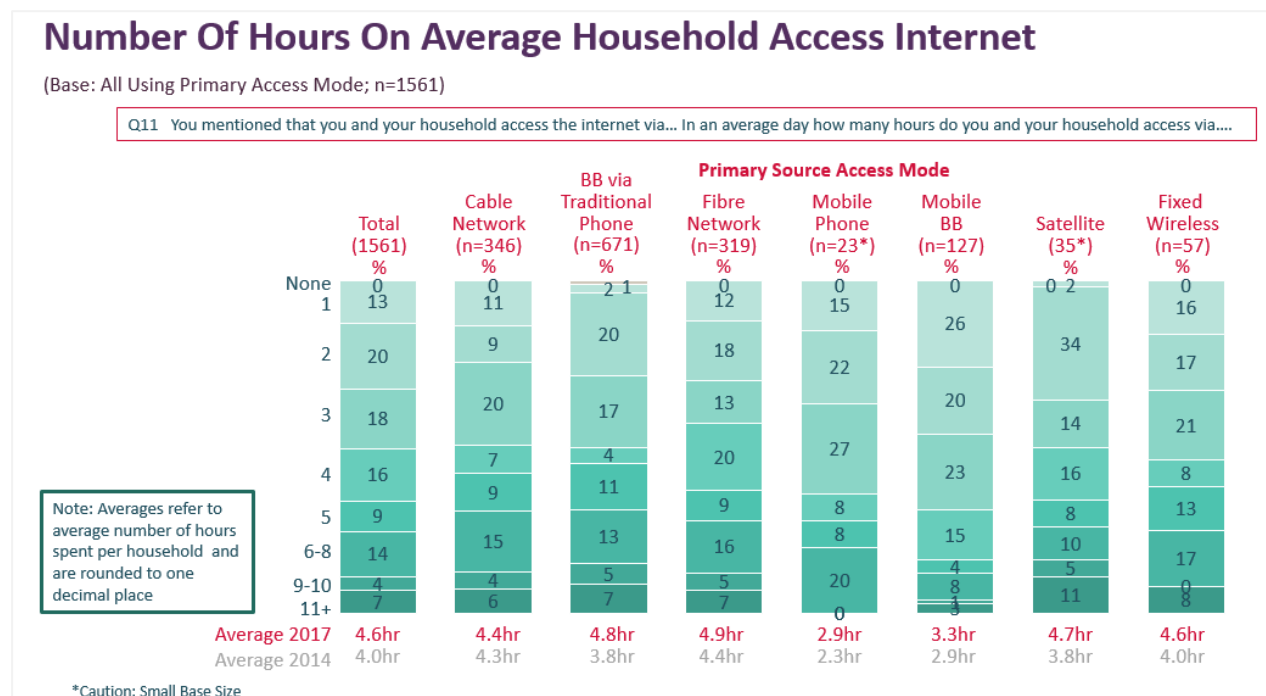


Usage Patterns

A 6.11 Survey respondents were asked the number of hours they spend per day on the internet using their primary access mode. As set out in Figure A6.5,²¹⁷⁴ below, on average, respondents spent 4.6 hours online. As in the 2014 WLA/WCA Consumer Market Research, respondents using a fibre broadband connection spent the most time online, on average (4.9 hours), while respondents whose primary access mode was mobile broadband or their mobile phone spent less time online (2.9-3.3 hours) than respondents who used a broadband service via a traditional telephone line, cable or fibre network (4.4-4.8 hours). It is important to note that time spent ‘online’ can include viewing streamed content.

²¹⁷⁴ Slide 18, 2017 WLA/WCA Consumer Market Research.

Figure A6.5: Household Daily Estimate of Time Spent – Primary Access Mode

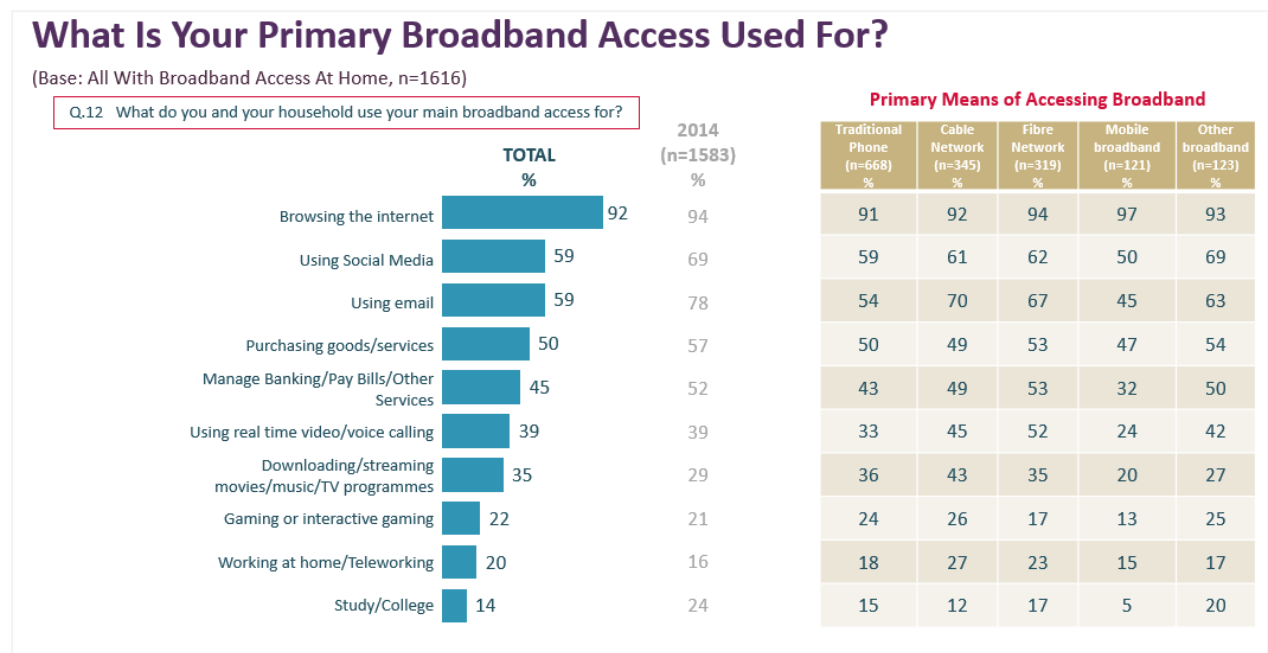


A 6.12 When asked what their main broadband access was used for, 92% of respondents stated that they used their broadband for browsing the internet, followed by email and social media (58%), online shopping (50%), banking and bills (45%), voice messaging/real-time communication (39%) and streaming content (35%). These findings are summarised in Figure A6.6²¹⁷⁵ below. Comparing the survey results with the 2014 WLAWCA Consumer Market Research, using social media and using email over primary broadband has declined significantly since 2014 while downloading/streaming movies has increased, as has working from home.

A 6.13 In some cases, respondents using mobile broadband or broadband access via a mobile phone were less likely to use their service for certain tasks, when compared to respondents using a fixed broadband service. Figure A6.6 shows that respondents using mobile broadband were less likely to use their broadband service for Gaming, Online Banking or Teleworking when compared to respondents who used a fixed service.

²¹⁷⁵ Slide 20, 2017 WLAWCA Consumer Market Research.

Figure A6.6: What is your Primary Broadband Access Used For?

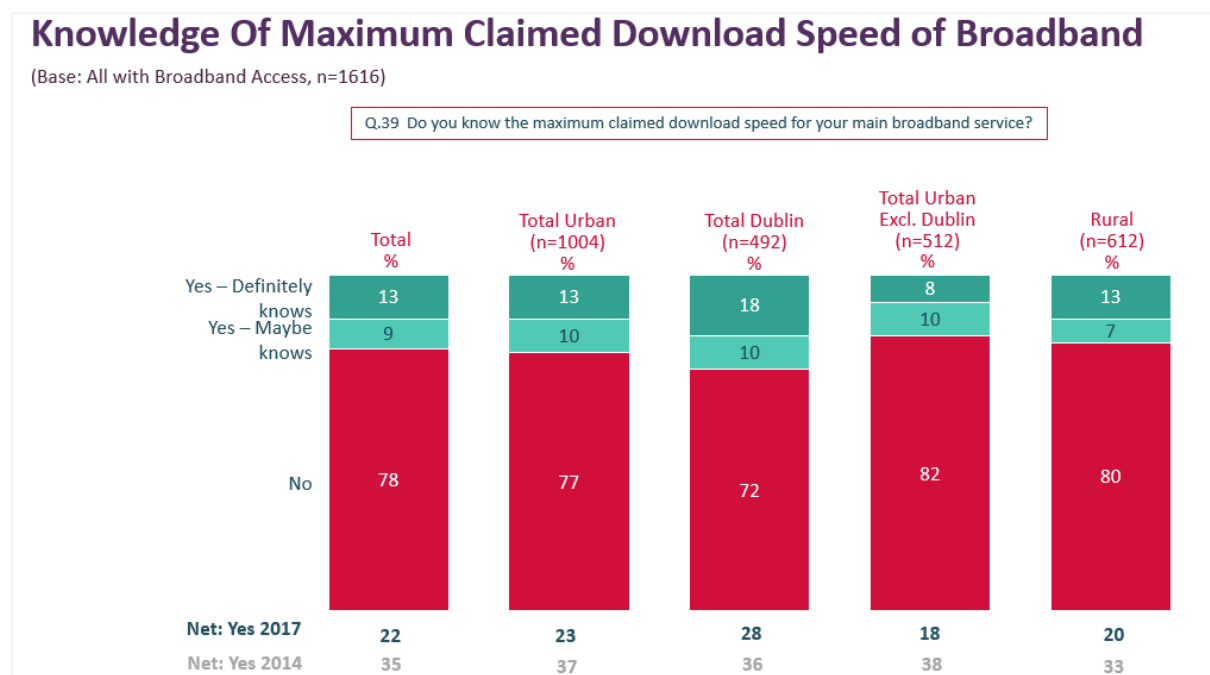


Download Speeds

A 6.14 The survey research among residential consumers revealed important insights into consumers’ knowledge and understanding of broadband speeds (Figure A6.7).²¹⁷⁶ When asked if they know the maximum claimed download speed for their main broadband service, 13% said they definitely know compared with 25% in the 2014 WLA/WCA Consumer Market Research, while 78% said that they did not know compared with 65% in the 2014 WLA/WCA Consumer Market Research.

²¹⁷⁶ Slide 84, 2017 WLA/WCA Consumer Market Research.

Figure A6.7: Knowledge of Claimed Maximum Download Speed



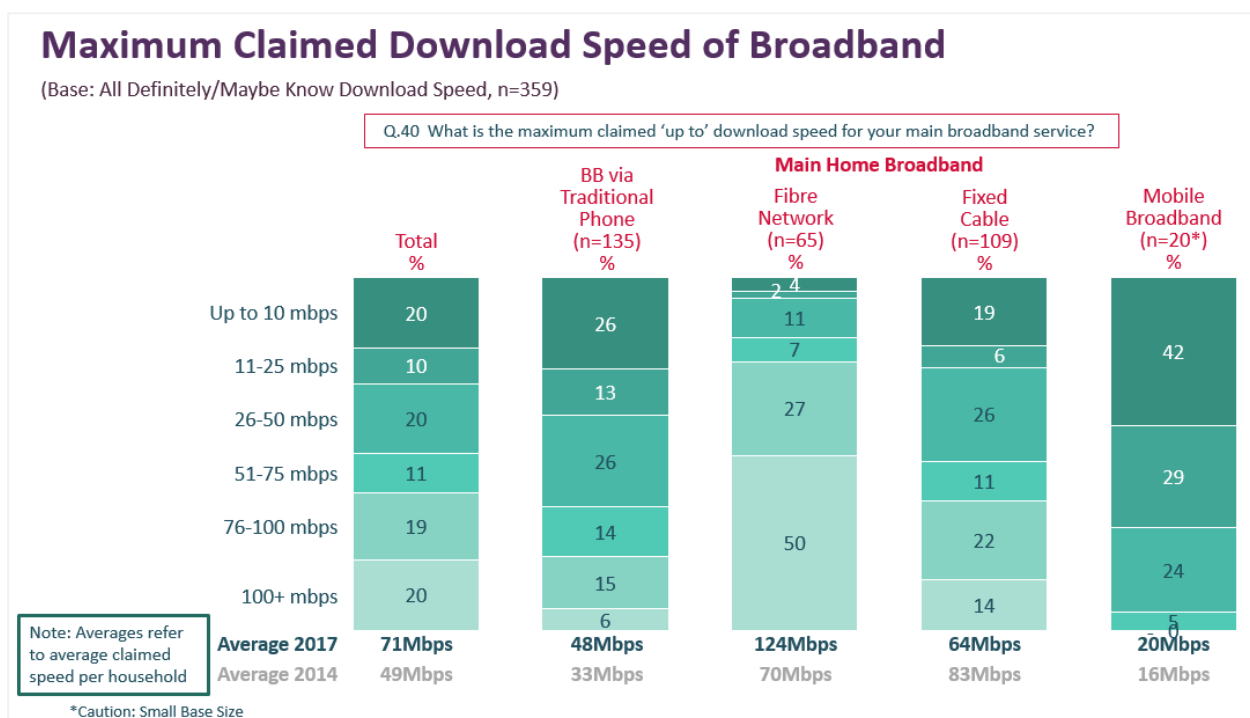
A 6.15 Of those respondents that claim to know their maximum speed, 20% avail of 101+ megabits per second (mbps), 19% avail of 76-100 mbps, 11% avail of 51-75mbps and 20% avail of 26-50 mbps (Figure A6.8 below).²¹⁷⁷ According to the survey findings, the average claimed download speed of service is higher for those residential customers served by a fibre network (124Mb) or CATV network (64Mb) than those served via a traditional phone or Copper Network (48Mb) or via mobile broadband (20Mb).

A 6.16 Claimed download speeds in the 2017 WLA/WCA Consumer Market are higher than claimed download speeds were in the 2014 WLA/WCA Consumer Market Research on fibre network, mobile broadband, and broadband via traditional phone, while the claimed download speeds on fixed cable has decreased.

A 6.17 It is worth noting that the maximum attainable download speed possible over a traditional phone line or Copper Network is 24Mb. In the 2017 WLA/WCA Consumer Market Research, 61% of respondents using a traditional phone or Copper Network to access broadband indicated they achieved speeds of greater than 26Mb, up from 32% in the 2014 WLA/WCA Consumer Market Research.

²¹⁷⁷ Slide 88, 2017 WLA/WCA Consumer Market Research.

Figure A6.8: What is Maximum Claimed Download Speed by Access Type?



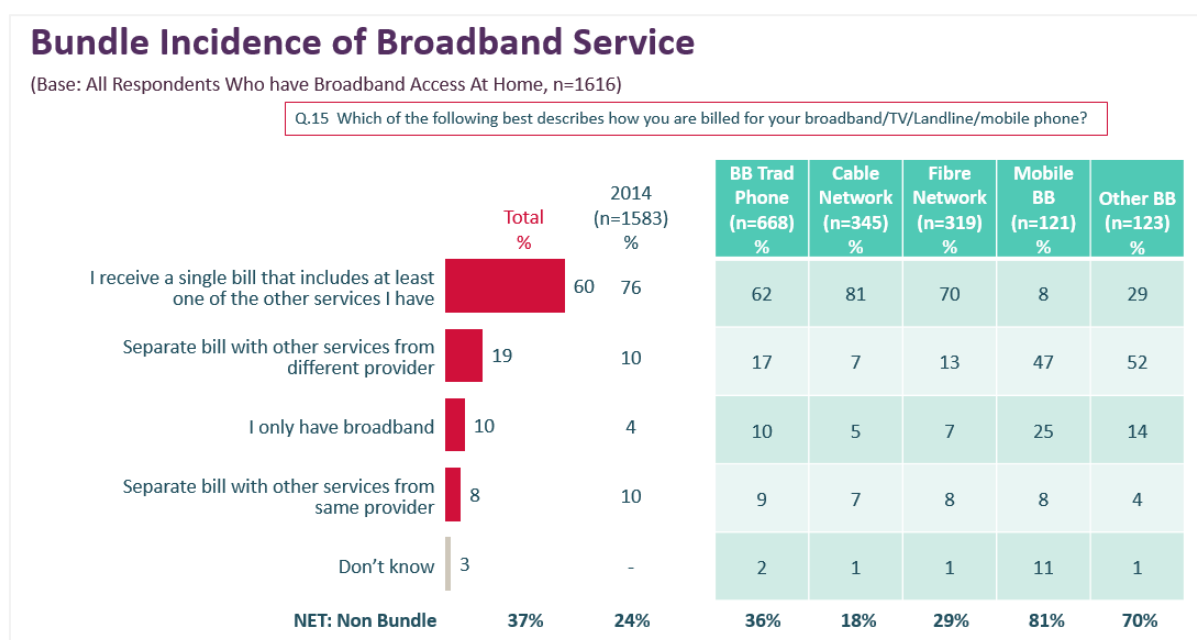
Bundling

- A 6.18 To get an idea of the extent of bundling of services, survey respondents were asked to indicate how they are billed for their broadband/TV/landline/mobile phone services. These findings are outlined in Figure A6.9 below.²¹⁷⁸ 60% of those with broadband access pay for their service as part of a bundle of telecommunications services, down from 76% in the 2014 WLA/WCA Consumer Market Research. 37% of respondents are not paying as part of a bundle. Bundling is highest among respondents on a CATV network, followed by those with broadband access via a fibre network. Bundling was less likely among respondents who used mobile broadband or other forms of broadband.
- A 6.19 The proportion of respondents bundling their broadband on fixed cable, broadband through a traditional phone line, and fibre networks in the 2017 WLA/WCA Consumer Market Research is lower than the proportion who bundled their broadband in the 2014 WLA/WCA Consumer Market Research.

²¹⁷⁸ Slide 29, 2017 WLA/WCA Consumer Market Research.

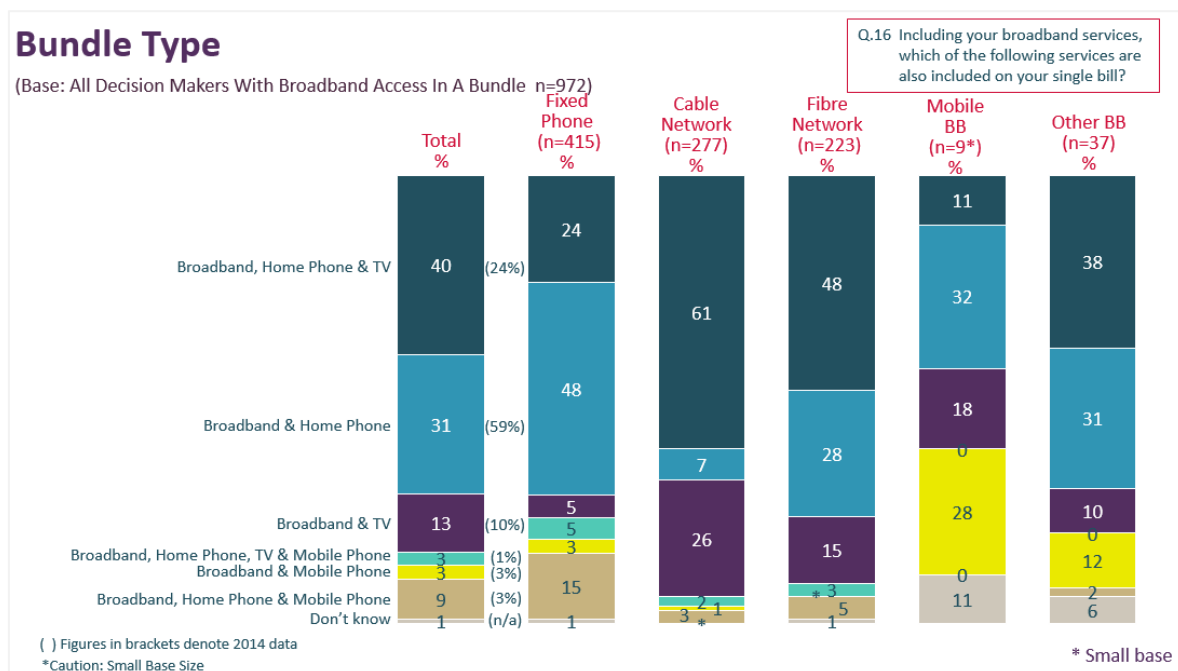
A 6.20 When those respondents with broadband access as part of a bundle were asked about the type of services offered in their bundle, the most popular bundle was broadband, home phone and TV (40%), followed by broadband and home phone (31%). This is a change from the 2014 WLA/WCA Consumer Market Research, in which the broadband and home phone bundle was most popular. Respondents using a CATV network to access broadband services were more likely to have a triple-play bundle than those respondents with a traditional fixed phone or fibre based broadband service. These findings are summarised in Figure A6.10 below.²¹⁷⁹

Figure A6.9: Bundle Incidence of Broadband Service



²¹⁷⁹ Slide 32, 2017 WLA/WCA Consumer Market Research.

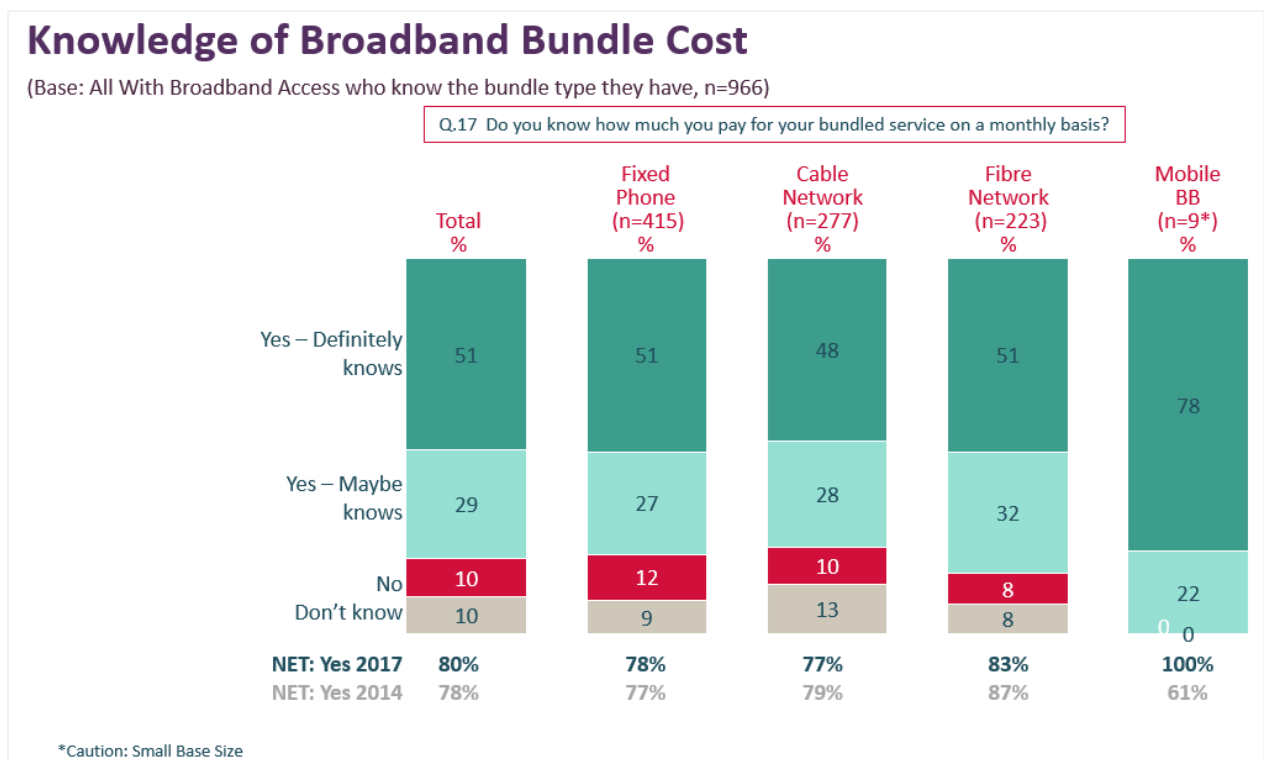
Figure A6.10: Bundle Type



Knowledge of Cost

A 6.21 Survey participants were asked about their knowledge of the monthly cost of their broadband bundle, the findings from which are outlined in Figure A6.11 below. 51% report that they ‘definitely’ know the monthly cost of their bundle, while 10% report that they do not. The highest prevalence of definite knowledge is among respondents with a mobile broadband connection (78%), followed by those respondents with a broadband service provided by fibre network or fixed phone (51%).

Figure A6.11: Knowledge of Broadband Bundle Cost

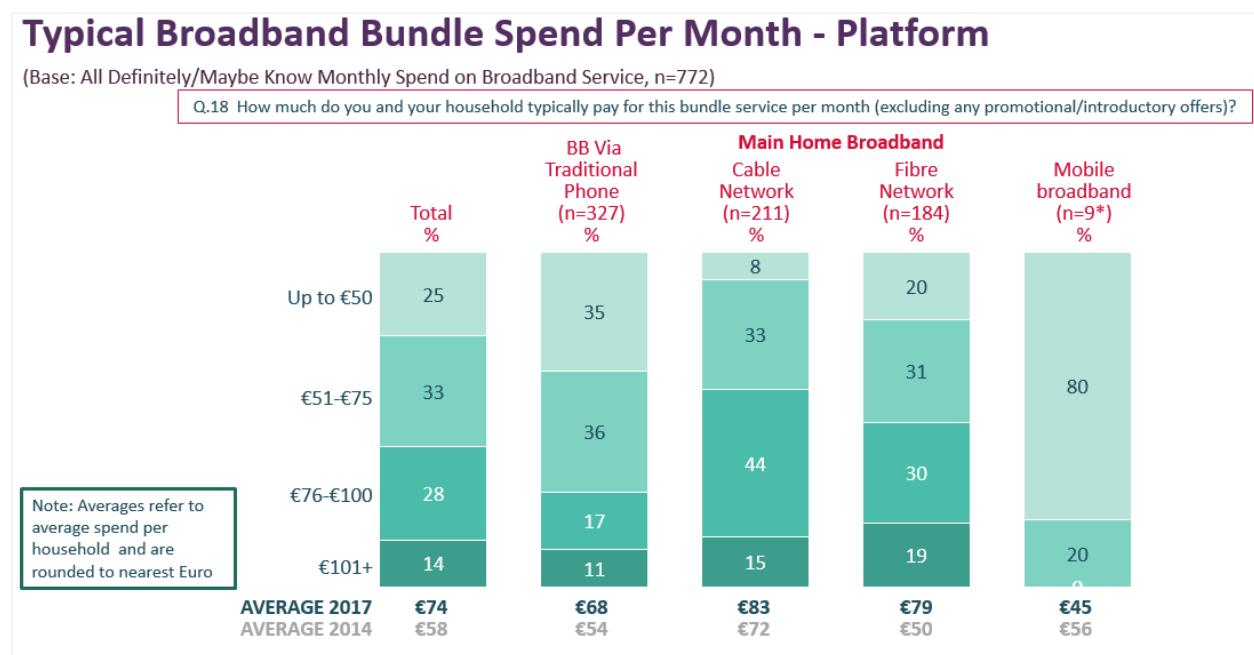


A 6.22 Respondents with broadband access as a part of a bundle and who knew the monthly cost were asked the price they pay per month, net of any promotional offers (Figure A6.12 below).²¹⁸⁰ The average spend per month was €74. The average spend per month is highest for respondents on a CATV network and 15% of respondents on a CATV network are spending more than €100 per month.

A 6.23 The average spend on broadband bundles is higher on all platforms except for mobile broadband, when compared to the average spend on broadband bundles in the 2014 WLA/WCA Consumer Market Research.

²¹⁸⁰ Slide 38, 2017 WLA/WCA Consumer Market Research.

Figure A6.12: Typical Broadband Bundle Spend Per Month – Platform



A 6.24 Respondents with broadband access who are not part of a bundle were asked if they knew how much they pay for their broadband per month, the findings from which are outlined in Figure A6.13.²¹⁸¹ 43% report that they ‘definitely’ know how much they pay while 14% said that they did not know. By contrast, 68% of respondents in the 2014 WLA/WCA Consumer Market Research ‘definitely’ knew how much they paid.²¹⁸²

A 6.25 Respondents with broadband access that is not part of a bundle and who previously said that they knew the monthly cost were asked the amount they pay per month, as outlined in Figure A6.14 overleaf.²¹⁸³ The average spend per month came in at €45. The average spend per month among respondents to the 2017 WLA/WCA Consumer Market Research (€45) was higher than the average spend among respondents in the 2014 WLA/WCA Consumer Market Research (€32). Average spend among respondents increased across all platforms.

²¹⁸¹ Slide 50, 2017 WLA/WCA Consumer Market Research.

²¹⁸² Slide 75, 2014 WLA/WCA Consumer Market Research.

²¹⁸³ Slide 52, 2017 WLA/WCA Consumer Market Research.

Figure A6.13: Knowledge of Broadband Cost (Non-Bundle)

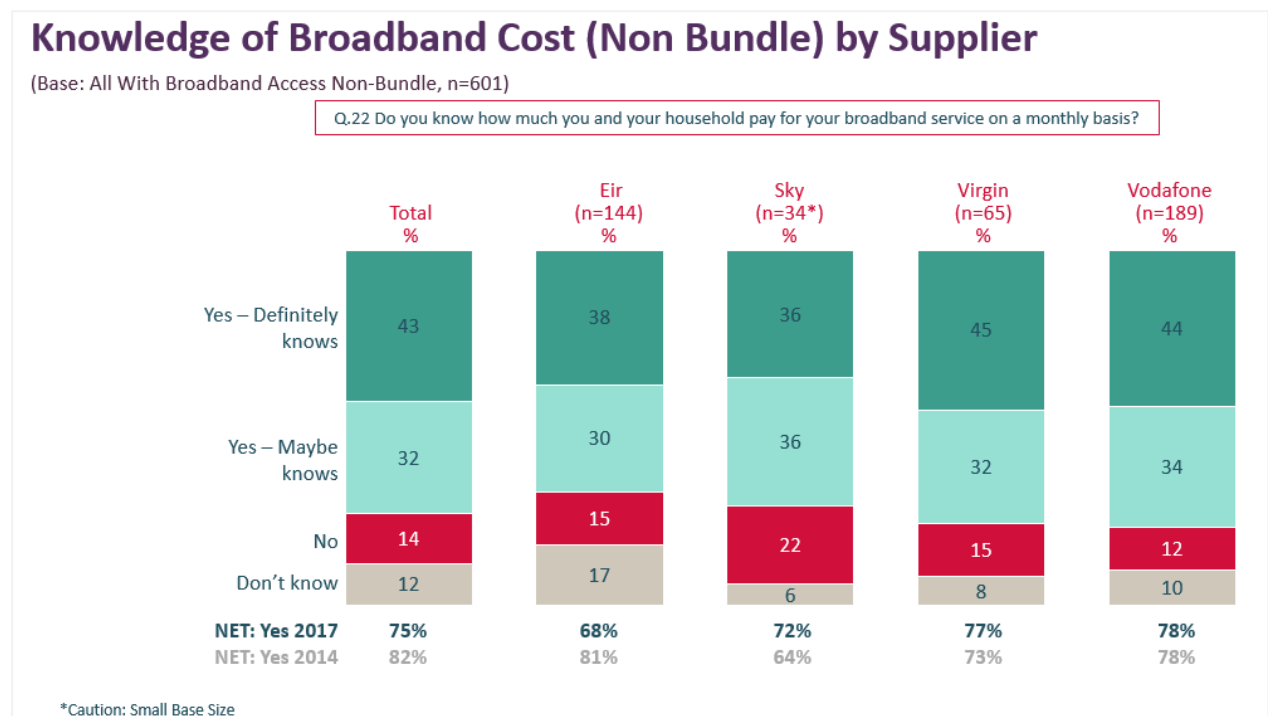
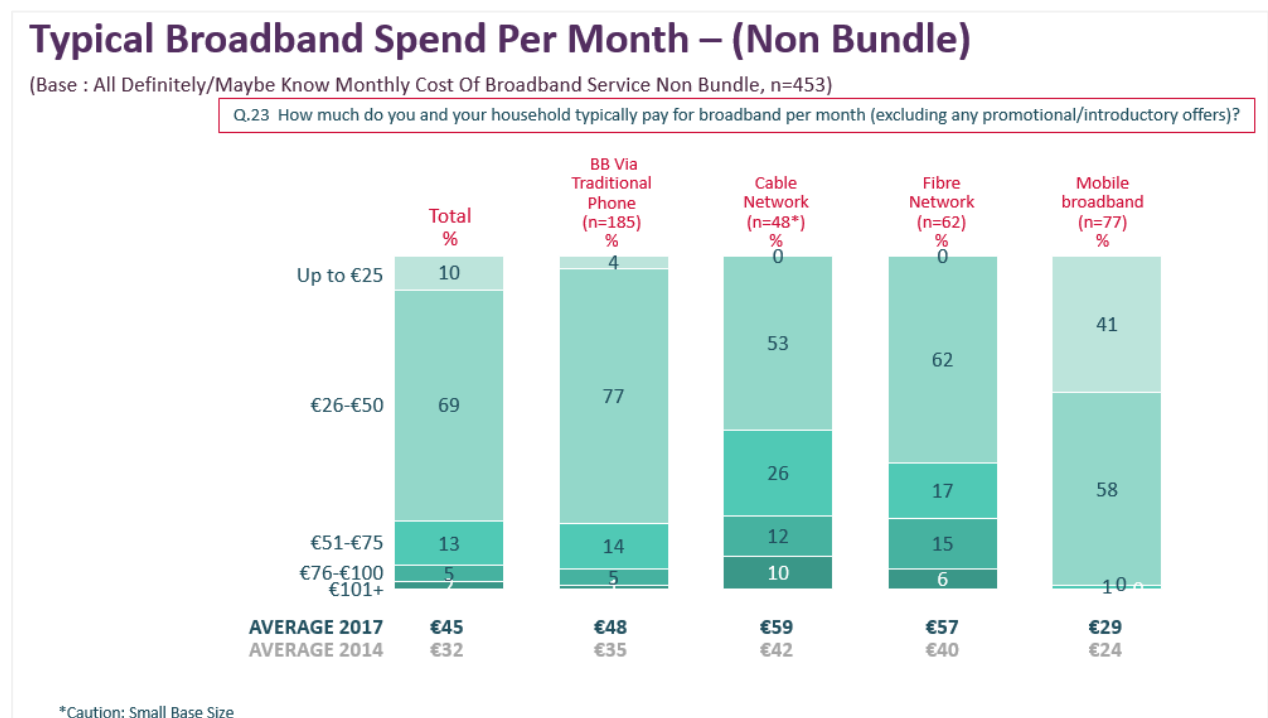


Figure A6.14: Typical Broadband Spend per Month (Non-Bundle)

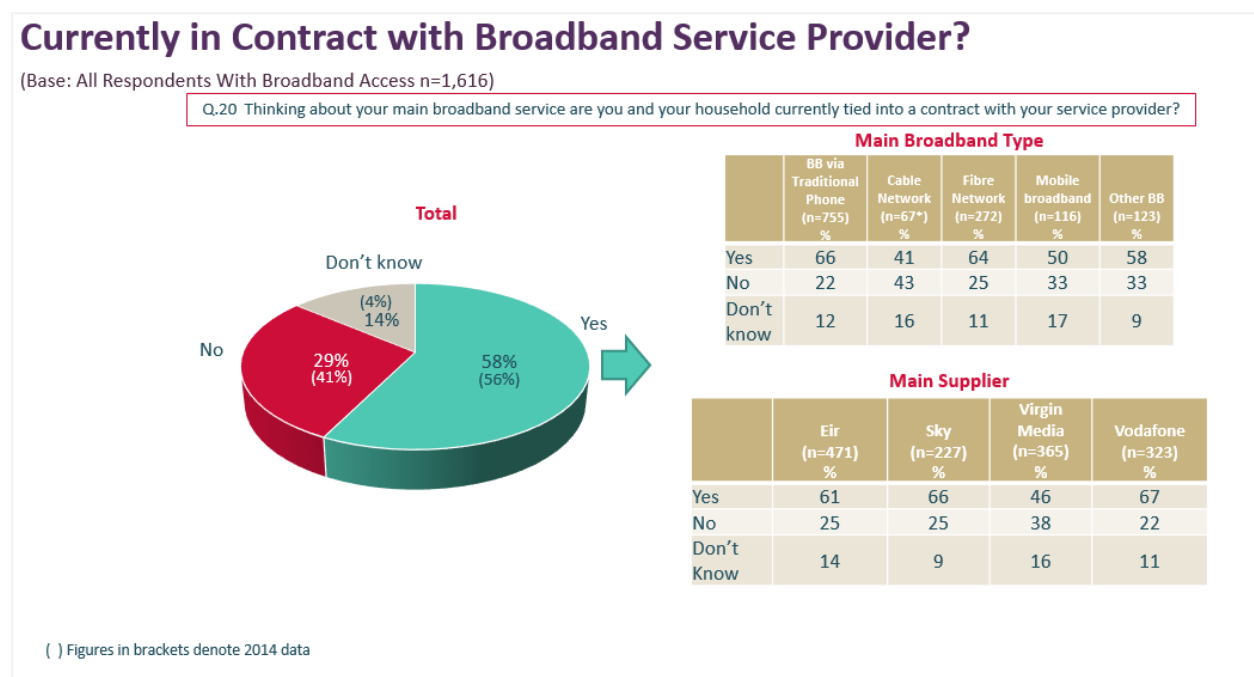


Contract Length

A 6.26 The 2017 WLA/WCA Consumer Market Research provides insights into the switching behaviour by residential consumers and the types of considerations they take on-board.

A 6.27 When asked if they are tied into a contract with their broadband provider, 58% of residential respondents said that they were, while 29% said that they were not, as illustrated in Figure A6.15 below.²¹⁸⁴ 64% of residential respondents on a fibre network said they were in a contract, while 66% of residential respondents on a broadband connection via phone line were in a contract.

Figure A6.15: Currently in Contract with Service Provider

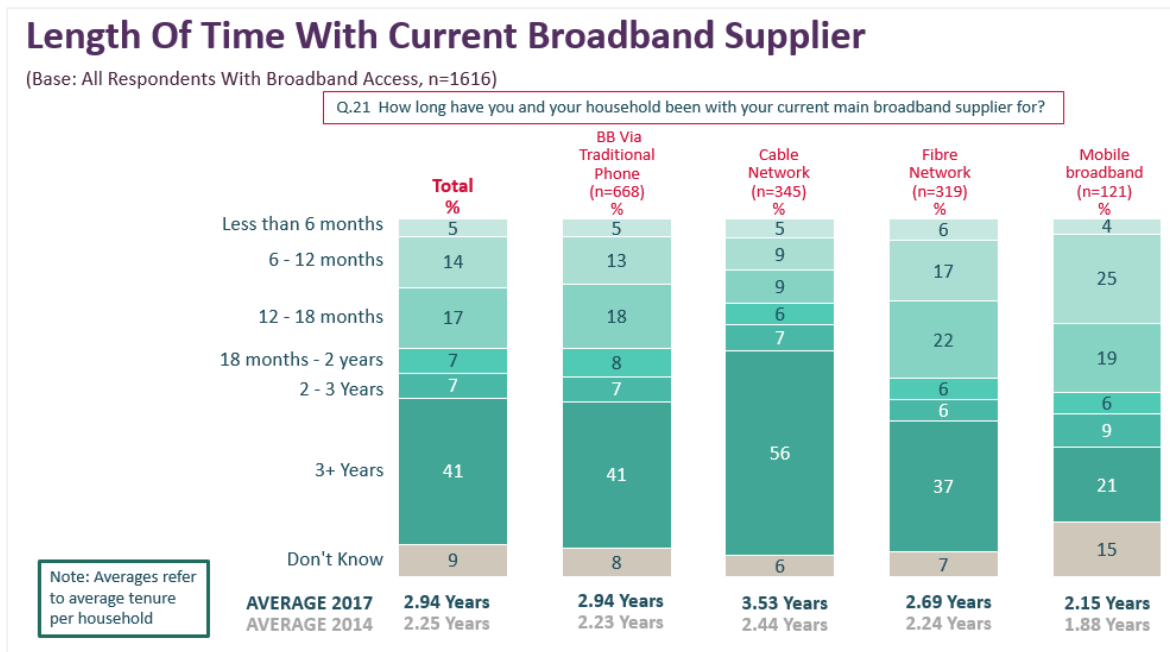


A 6.28 When asked how long they were with their main broadband supplier, the average time was 2.94 years (Figure A6.16).²¹⁸⁵ Contract length is longest for those respondents accessing broadband services on a CATV network, with contracts on mobile broadband being the lowest.

²¹⁸⁴ Slide 44, 2017 WLA/WCA Consumer Market Research.

²¹⁸⁵ Slide 47, 2017 WLA/WCA Consumer Market Research.

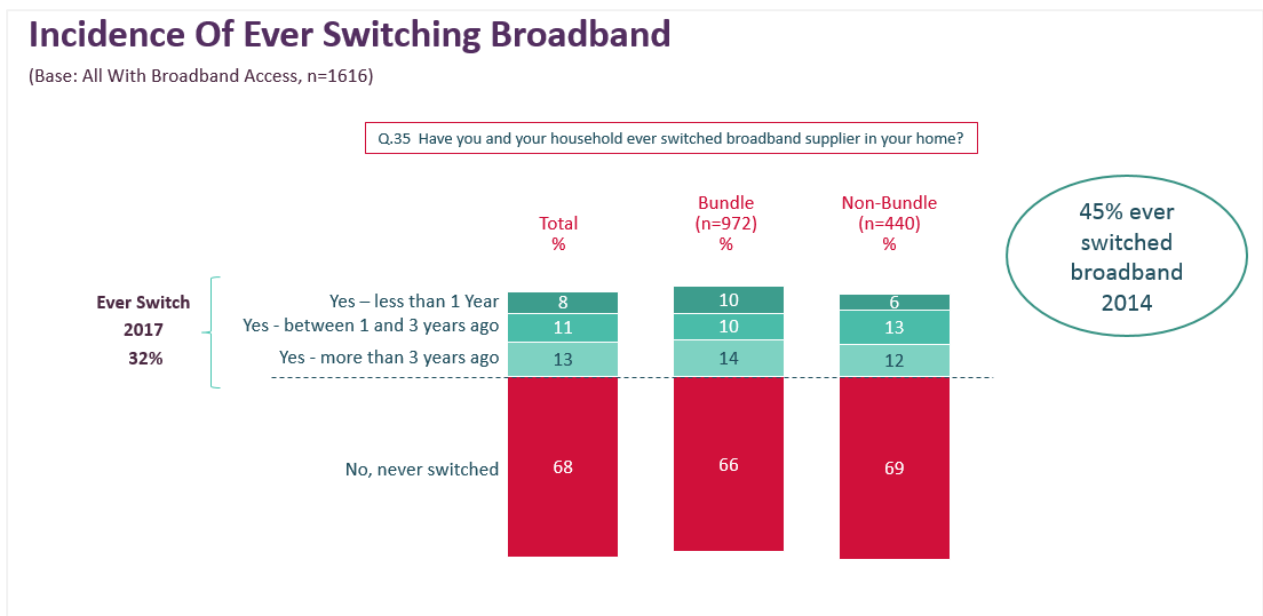
Figure A6.16: Length of Time with Current Broadband Supplier



Switching

A 6.29 When asked about switching in the past (Figure A6.17 below), 32% of respondents indicated they had previously switched broadband supplier. Those respondents with broadband services in a bundle are more like to switch (34%) than those not in a bundle (31%).²¹⁸⁶ A higher proportion of respondents in the 2014 WLA/WCA Consumer market research had switched (45%).

Figure A6.17: Incidence of Ever Switching Broadband Supplier at Home?

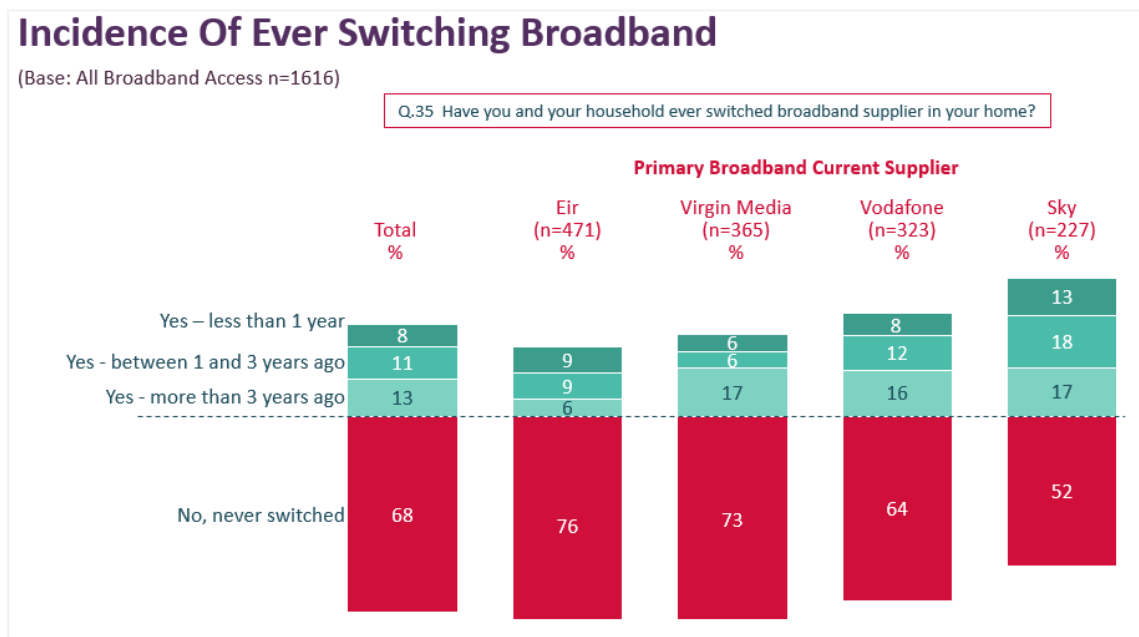


²¹⁸⁶ Slide 75, 2017 WLA/WCA Consumer Market Research.

A 6.30 Respondents were also asked about switching by broadband provider (Figure A6.18 overleaf). 76% of respondents who currently used Eircom claim to have never switched, while 48% of respondents who use Sky for their broadband access claim to have switched broadband supplier.²¹⁸⁷

A 6.31 The breakdown by platform is outlined in Figure A6.19.²¹⁸⁸ As in the 2014 WLA/WCA Consumer Market Research, the highest incidence of switching took place among respondents accessing broadband on an FTTC network.

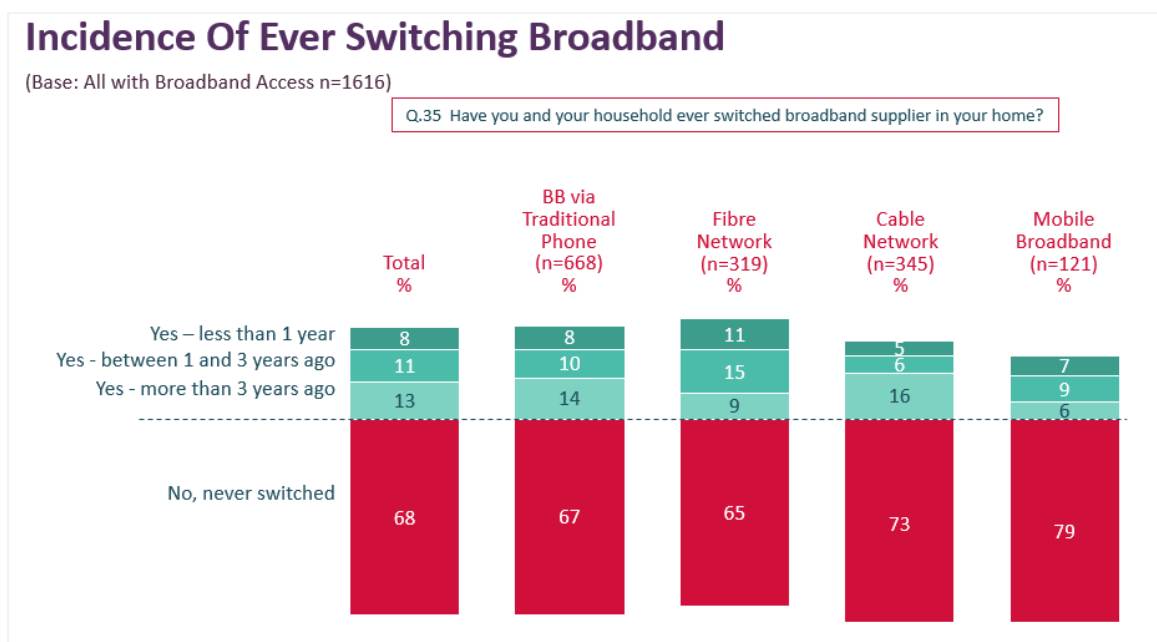
Figure A6.18: Incidence of Ever Switching Broadband – by Supplier



²¹⁸⁷ Slide 77, 2017 WLA/WCA Consumer Market Research.

²¹⁸⁸ Slide 78, 2017 WLA/WCA Consumer Market Research.

Figure A6.19: Incidence of Ever Switching Broadband – by Platform



A 6.32 When asked the reason for switching, respondents noted that cost (69%), the completion of a contract/new supplier offering a short-term contract (31%) and switching supplier to bundle broadband service with other communication services (16%) were the main motivations for switching, as outlined in Figure A6.20 below.²¹⁸⁹

A 6.33 Cost was the main reason for switching for 60% of respondents in the 2017 WLA/WCA Consumer Market Research while cost was the main reason in just 35% of cases in the 2014 WLA/WCA Consumer Market Research.²¹⁹⁰

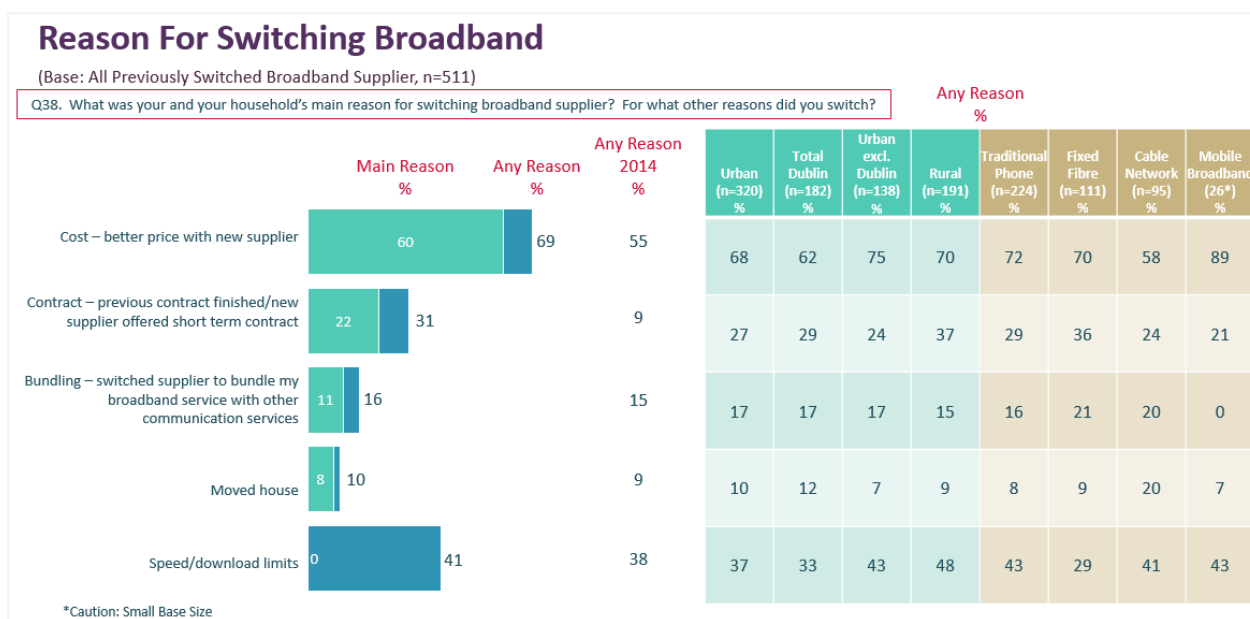
A 6.34 In the 2014 WLA/WCA Consumer Market Research, 16% of respondents cited download speed as the main reason for switching, with a further 22% noting download speed to be a contributing factor to the decision to switch.²¹⁹¹ In the 2017 WLA/WCA Consumer Market Research, 0% of respondents claimed that download speed was the main reason for switching, while download speed/download limits was part of the reason for switching for 41% of respondents.

²¹⁸⁹ Slide 81, 2017 WLA/WCA Consumer Market Research.

²¹⁹⁰ Slide 105, 2014 WLA/WCA Consumer Market Research.

²¹⁹¹ *Ibid.*

Figure A6.20: Reason for Switching Broadband



Responses to Hypothetical Price Increases: Customers in a Bundle

A 6.35 When respondents were asked exactly what they would do in response to a €2 increase in the cost of broadband (within the bundle), 81% said that they would keep their subscription, with the vast majority of these (74%) doing nothing, while the remaining 6% would downgrade their bundle. 8% of respondents claimed they would cancel their subscription, with just 3% cancelling the entire bundle, 2% only switching broadband and 3% switching all services. This is illustrated in Figure A6.21 overleaf.²¹⁹² The highest likelihood of cancelling was reported among customers on broadband via traditional phone line.

A 6.36 Customers were subsequently asked how likely they were to make the change in behaviour they described previously, this would serve as a type of further verification of their answers given above. The survey findings are outlined in Figure A6.22 overleaf.²¹⁹³ 96% of customers are likely to make the change in behaviour that they indicated, which from A 6.35 above, suggests that nearly all of the 8% who said they would change their behaviour, would in effect change their behaviour. Those most likely to change their behaviour were on broadband via a traditional phone line (98%).

²¹⁹² Slide 55, 2017 WLA/WCA Consumer Market Research.

²¹⁹³ Slide 58, 2017 WLA/WCA Consumer Market Research.

Figure A6.21: Action Taken If Broadband Price Increases By €2 in Bundle

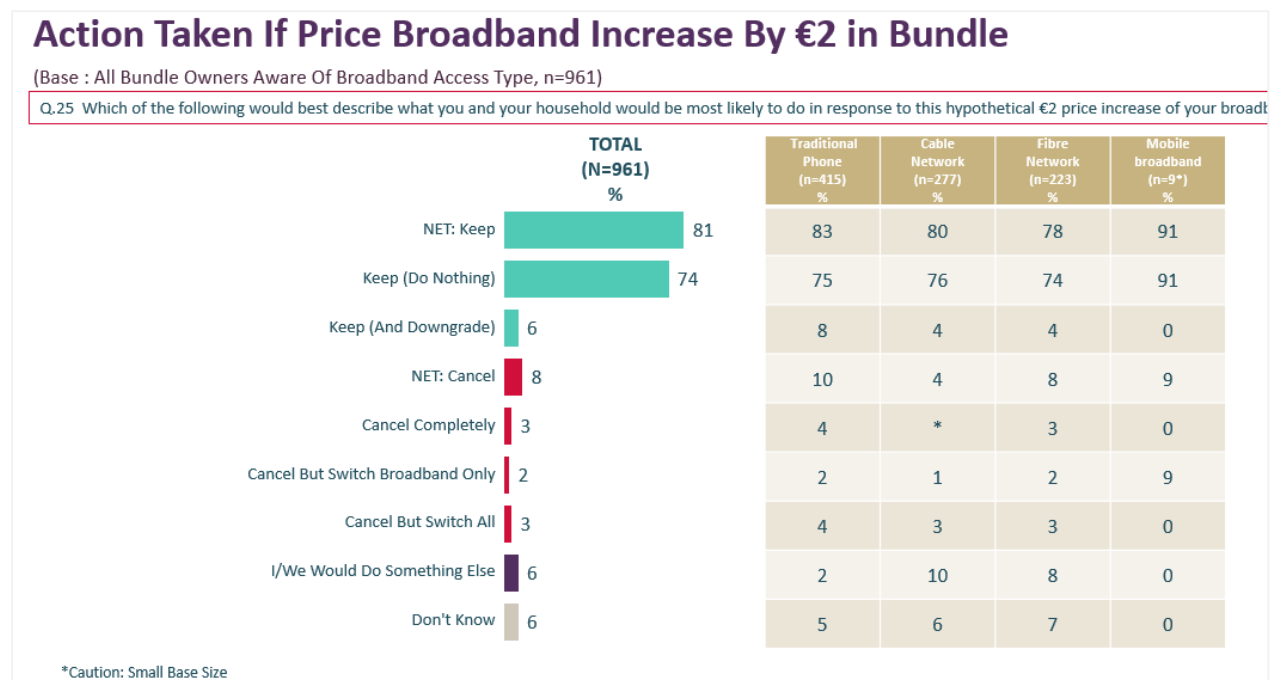
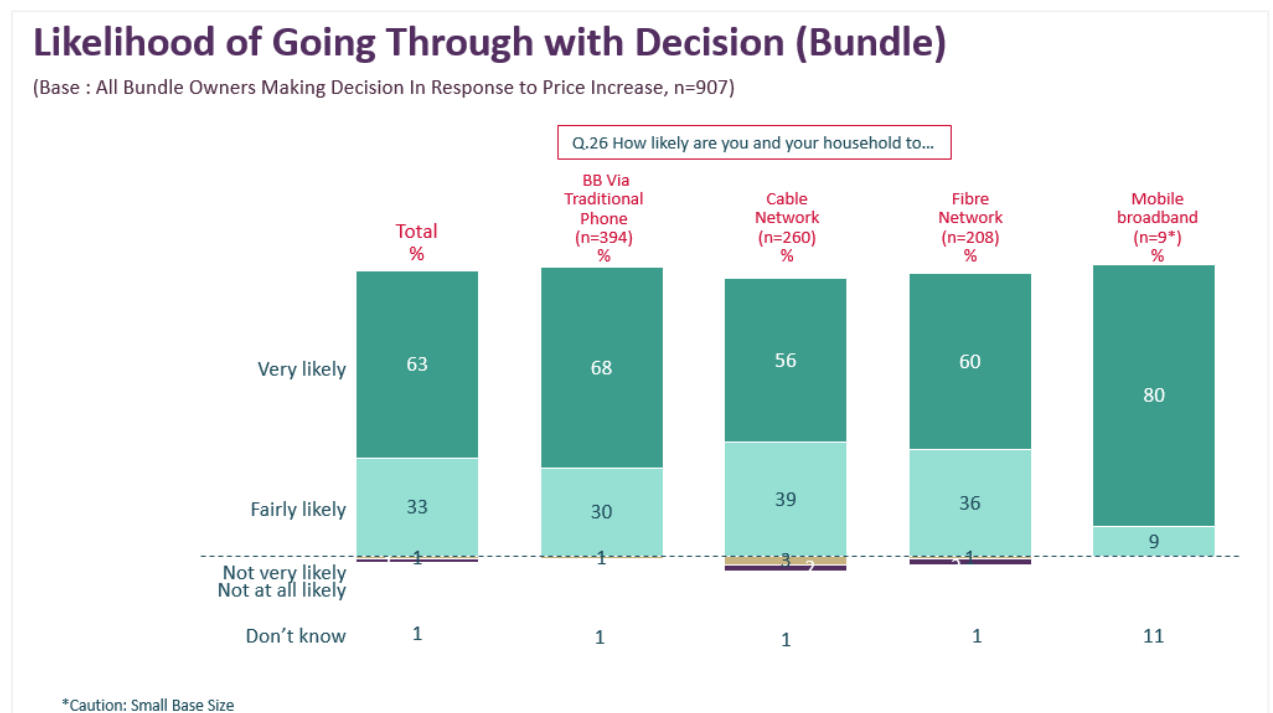
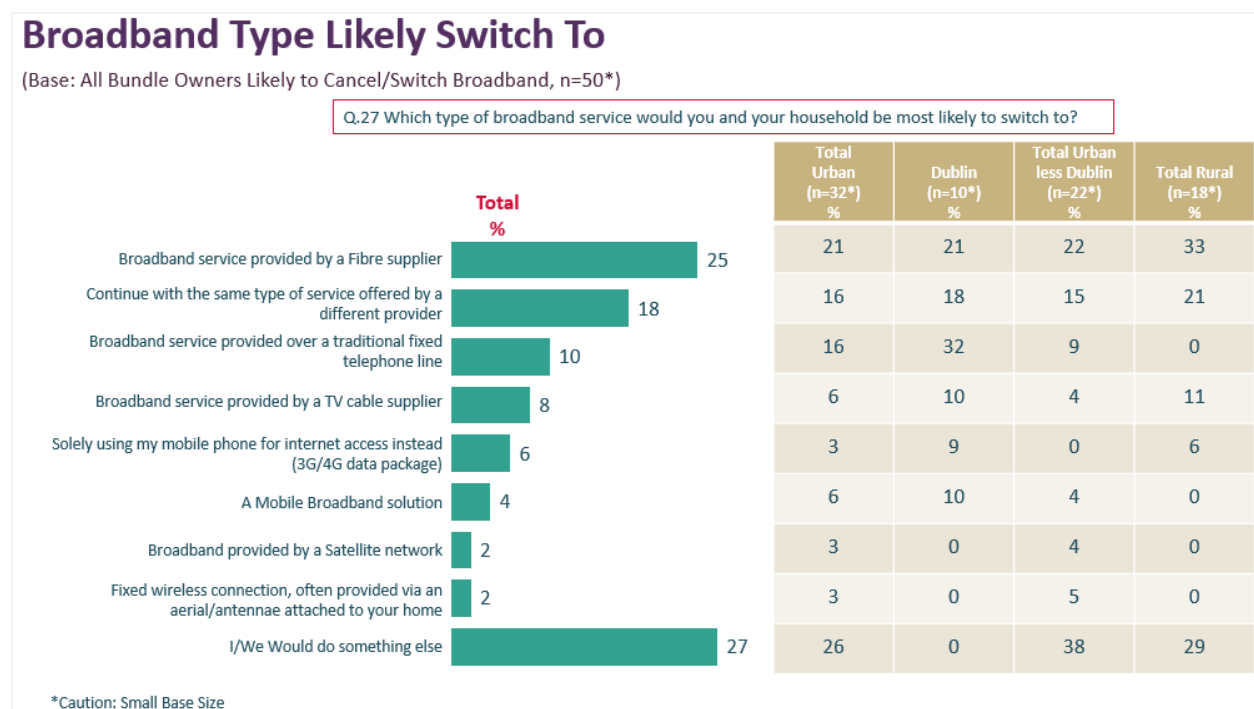


Figure A6.22: Likelihood of Going through with Decision (Bundle)



A 6.37 Respondents were asked which type of broadband they would switch to and 25% said that they would switch to a fibre powered connection. Customers living in rural areas (33%) are most likely to switch to fibre compared with those living in Dublin (21%). This is illustrated in Figure A6.23 below.²¹⁹⁴ This makes for a notable change by comparison to the 2014 WLA/WCA Consumer Market Research in which respondents living in rural areas were least likely to switch to a fibre powered connection (16%) and respondents from Dublin were most likely to do so (39%).²¹⁹⁵

Figure A6.23: Broadband Type Likely Switch To



Responses to Hypothetical Price Increases: Customers not in a Bundle

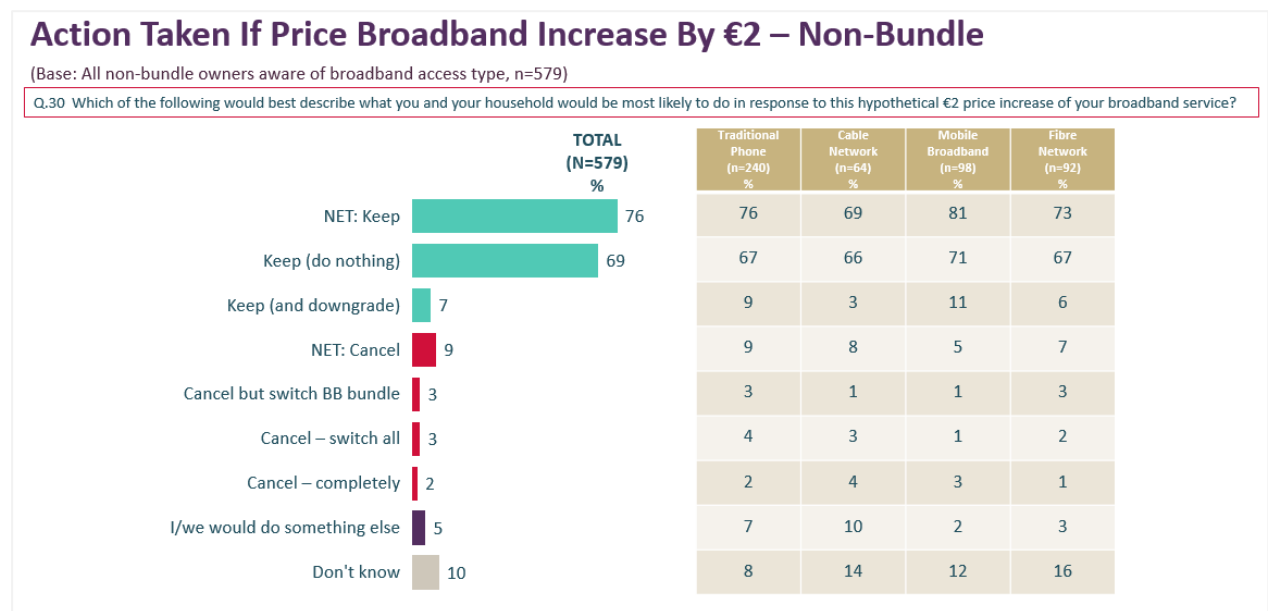
A 6.38 Respondents whose broadband was not part of a bundle were asked exactly what they would do in response to a €2 increase in price of their broadband service, 76% of respondents said they would keep their subscription while 9% claimed they would cancel their subscription. The findings are presented in Figure A6.24 below.²¹⁹⁶

²¹⁹⁴ Slide 60, 2017 WLA/WCA Consumer Market Research.

²¹⁹⁵ Slide 118, 2014 WLA/WCA Consumer Market Research.

²¹⁹⁶ Slide 66, 2017 WLA/WCA Consumer Market Research.

Figure A6.24: Action Taken if Broadband Increase by €2 – Non-Bundle



A 6.39 Figure A6.25 overleaf summarises the responses of respondents when asked how likely they would be to change the behaviour that they described above.²¹⁹⁷ 96% indicated that they would be likely to change their behaviour and, based on the findings in A 6.38, this equates to 9% of respondents effectively changing their behaviour.

A 6.40 Respondents were asked which type of broadband they would switch to. Figure A6.26 summarises results. 29% claim they would switch to a different provider but stay on the same platform, while 22% would switch to a fibre network.

²¹⁹⁷ Slide 69, 2017 WLA/WCA Consumer Market Research.

Figure A6.25: Likelihood of Going through with Decision (Non-Bundle)

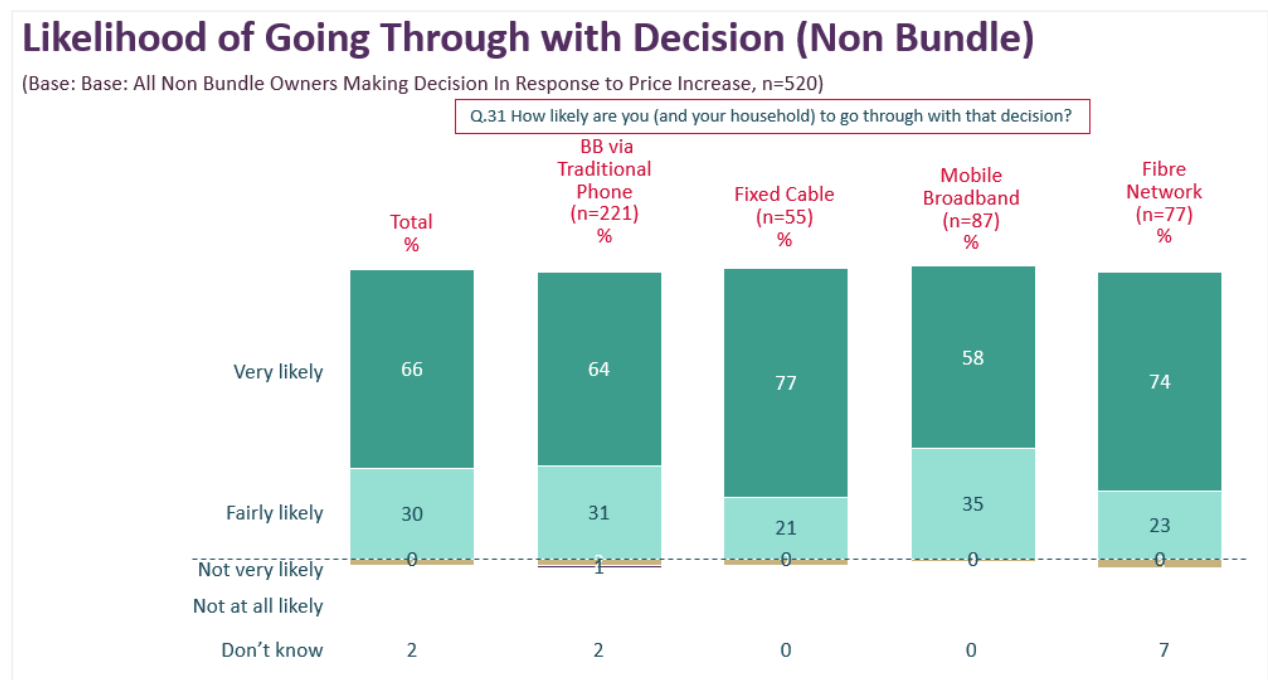
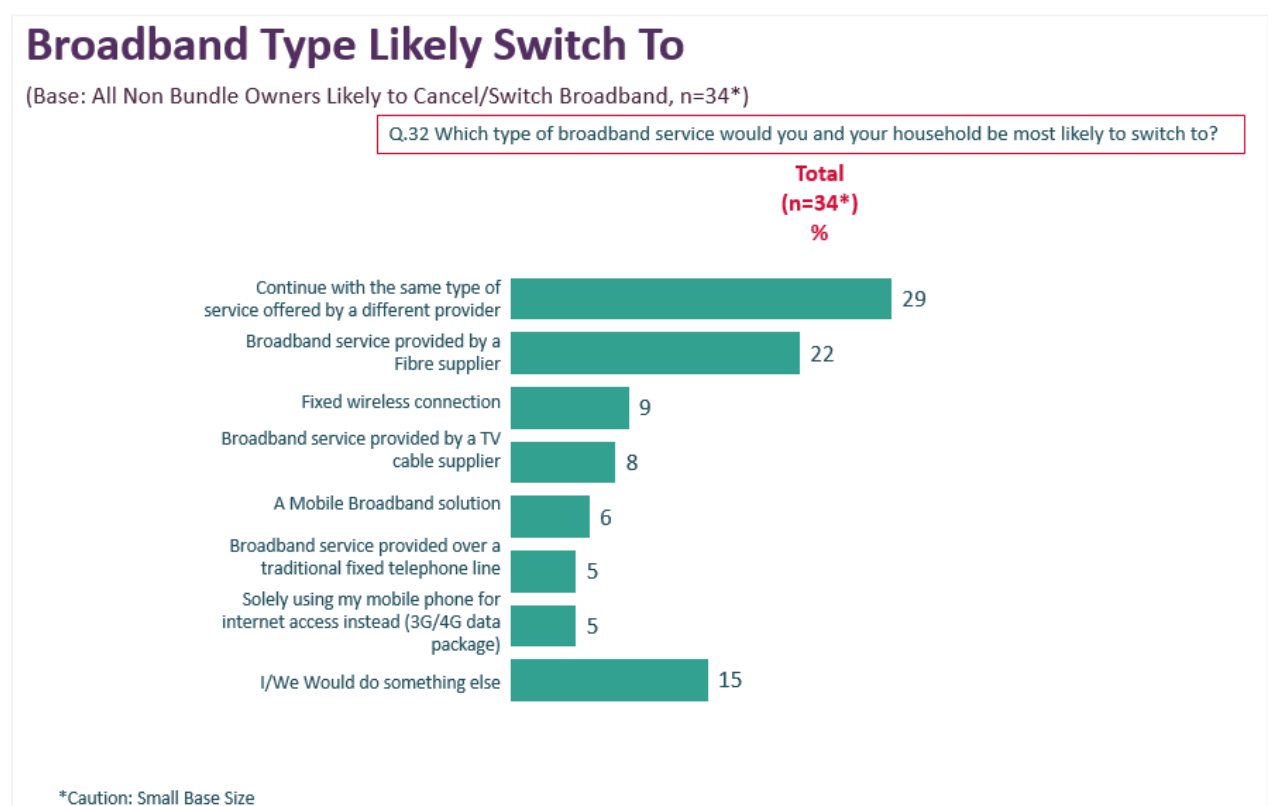


Figure A6.26: Broadband Type Likely Switch to (Non-Bundle)



Results from Research among Irish Businesses

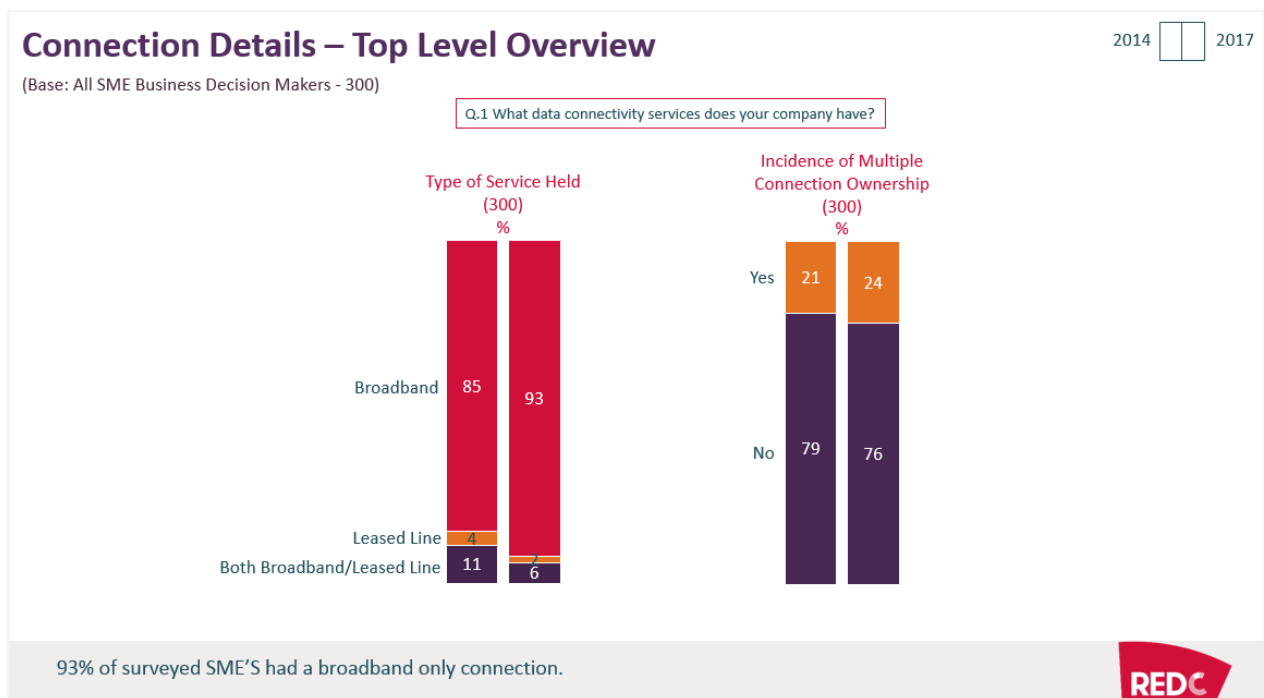
- A 6.41 The research among Irish businesses examines access to broadband and leased lines and the impact of different access modes on businesses.
- A 6.42 A total of 301 interviews were conducted among a nationally representative sample of Irish businesses by sector, size and region. Fieldwork took place during April and May 2017.
- A 6.43 Within each company, the person responsible for making decisions in relation to telecommunications was consulted and in larger companies this was typically an IT Manager, while in smaller companies it was more likely to be the owner/manager.
- A 6.44 In some cases, small sample sizes are found in the research. These survey results, which are indicated throughout, should be interpreted with caution.
- A 6.45 In the sections below, ComReg presents the key conclusions from the business broadband survey, using the following themes:
- Means of Access;
 - Usage Patterns;
 - Speed of Connection;
 - Contract Length;
 - Bundling;
 - Switching; and
 - Responses to hypothetical price increases.

Means of Access

- A 6.46 Figure A6.27 below²¹⁹⁸ gives an overview of the type of service held by Irish businesses (based on the full sample). In the 2017 WLA/WCA Business Market Research, 93% of Irish businesses have a broadband connection compared with 85% in the 2014 WLA/WCA Business Market Research. In the 2017 WLA/WCA Business Market Research, 2% have a leased line connection. Of those businesses with a connection, 24% have access to two or more connections.

²¹⁹⁸ Slide 9, 2017 WLA/WCA Business Market Research.

Figure A6.27: Connection Details – Top Level Overview



A 6.47 Figure A6.28 outlines the access type by the size of responding companies.²¹⁹⁹ Overall, 56% of companies had a fixed broadband connection via a traditional phone line, while 28% had access through an FTTC network (up from 15% in the 2014 WLA/WCA Business Market Research) and 15% had access via mobile broadband (i.e. dongle device). Access via fixed broadband through a phone line is highest for micro enterprises (57%) and small enterprises (50%). Fixed broadband provided by a fibre network is most popular among medium enterprises (48%). Just 7% of respondents and 22% of medium enterprises use leased lines in the 2017 WLA/WCA Business Market Research, compared with 15% and 59% respectively, in the 2014 WLA/WCA Business Market Research.²²⁰⁰

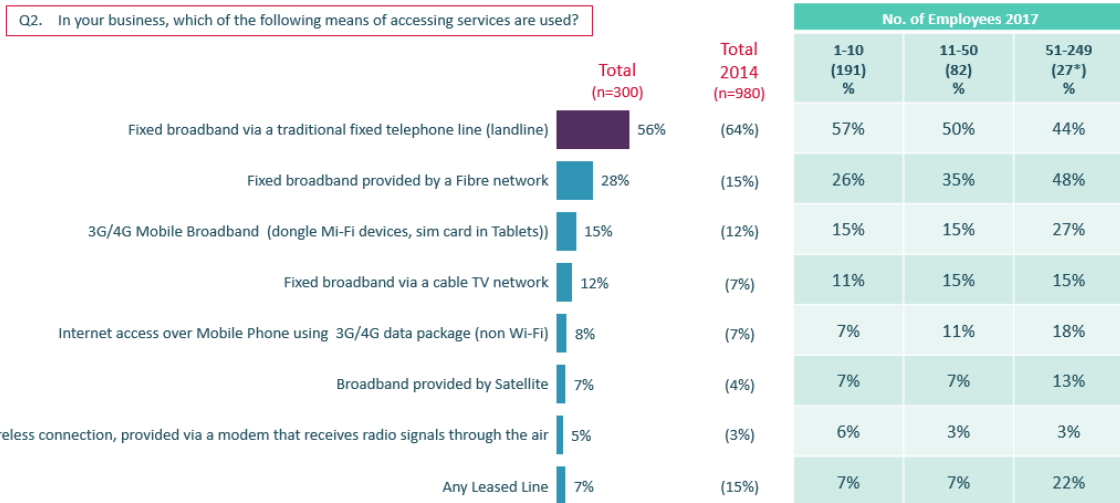
²¹⁹⁹ Slide 10, 2017 WLA/WCA Business Market Research.

²²⁰⁰ Slide 13, 2014 WLA/WCA Business Market Research.

Figure A6.28: Access Type by Company Size

Access Type by Company Size (Multiple Responses)

(Base: All Respondents Who Use Data Connectivity Services, N= 300)



* Caution: Small Base Size

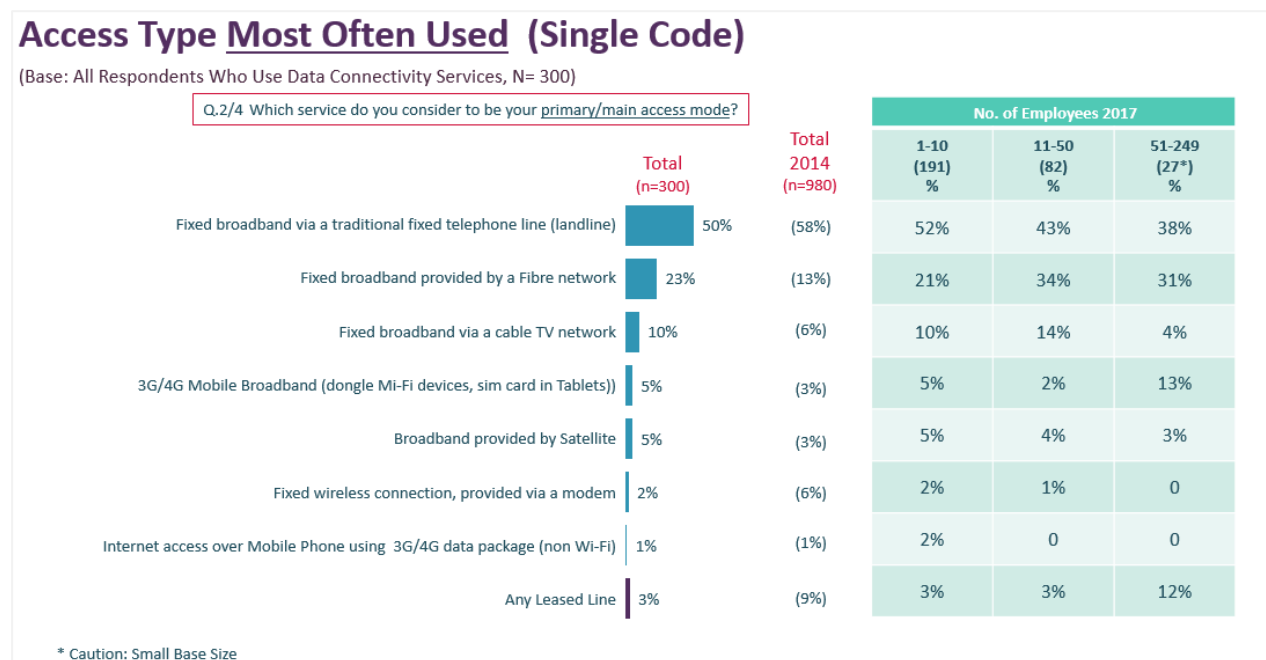
56% of surveyed SME's connect to broadband via a traditional phone line down from 2014 (64%). According to the survey Fibre access has increased to 28% of all access types up from 15% in 2014.



A 6.48 Survey participants were asked about the access type that they use most often and 50% reported that they rely on fixed broadband (via traditional phone line), while 23% relied on fixed broadband over an FTTC network (Figure A6.29 overleaf).²²⁰¹ Reliance on fixed broadband (via traditional phone line) has fallen from 58% while reliance on fibre networks has increased from 13% from the 2014 WLA/WCA Business Market Research.

²²⁰¹ Slide 11, 2017 WLA/WCA Business Market Research.

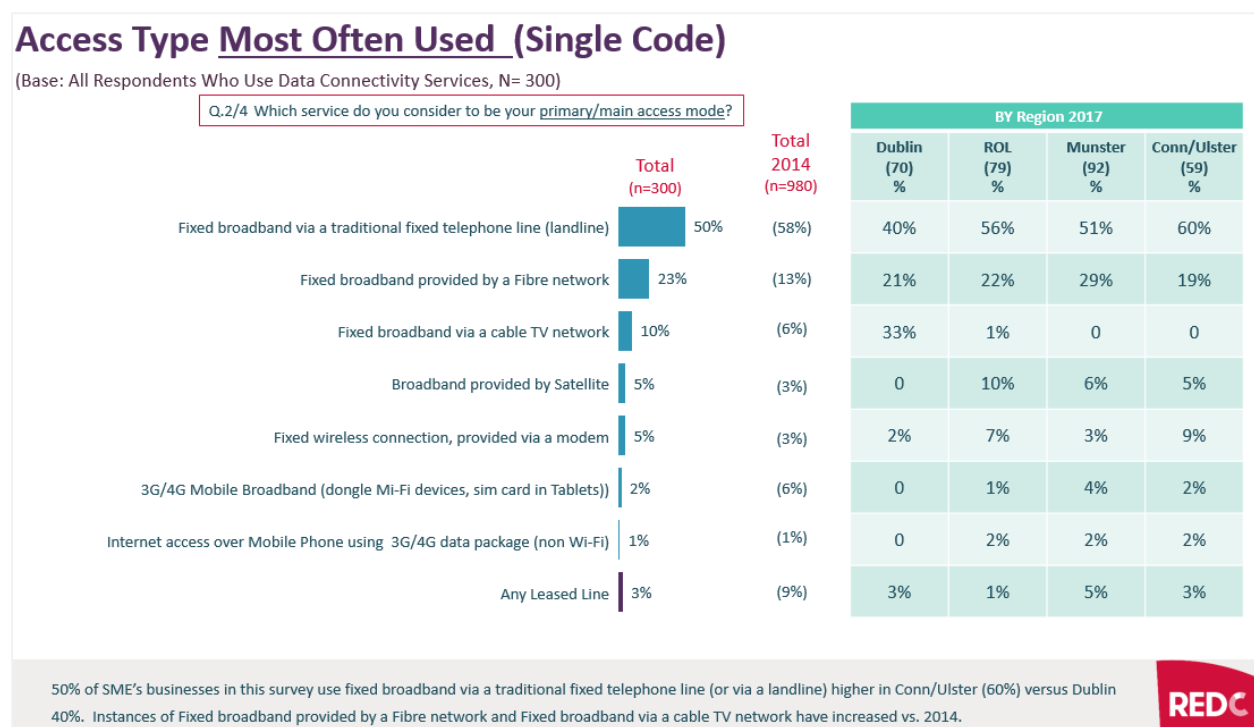
Figure A6.29: Access Type Most Often Used



A 6.49 Figure A6.30 overleaf outlines the access type used most often by region.²²⁰² The findings suggest that fixed broadband via a cable TV network is most prevalent in Dublin, while broadband via a traditional phone line is used most often by fewer businesses in Dublin than in any other region. Fibre broadband is most popular in Munster compared to all other regions.

²²⁰² Slide 12, 2017 WLA/WCA Business Market Research.

Figure A6.30: Broadband Access Type Most Often Used – By Region

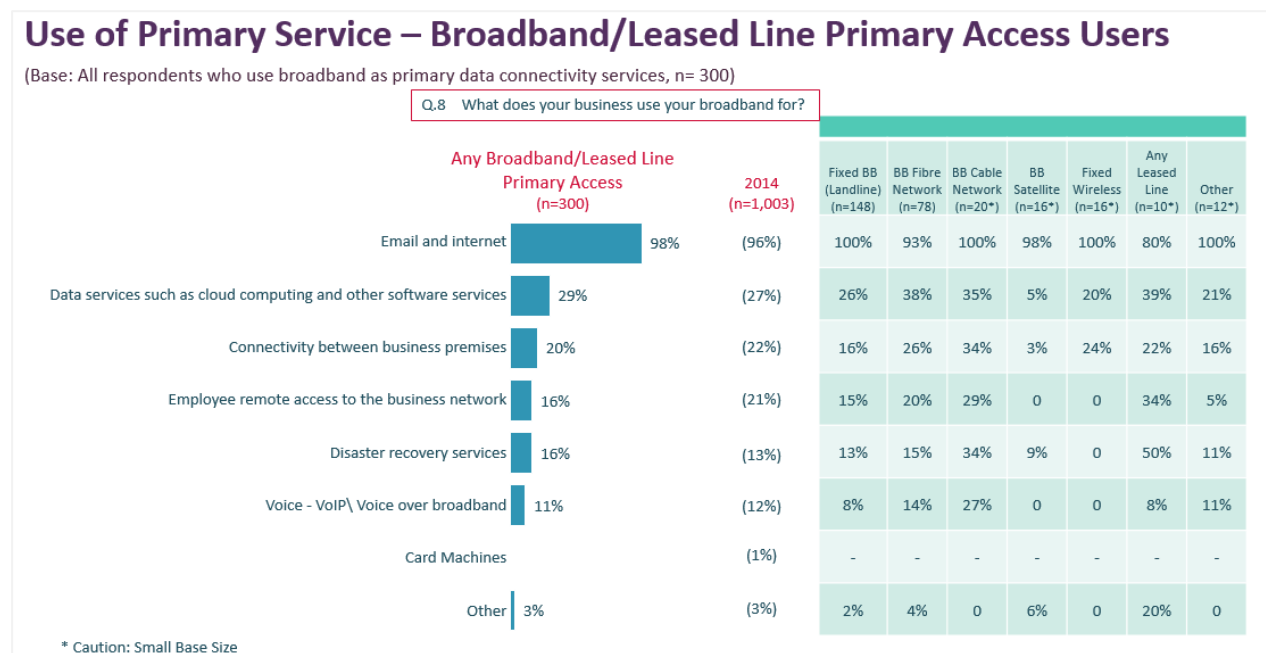


Usage Patterns

A 6.50 Businesses who use broadband as their primary connection were asked about the use of their primary service, as illustrated in Figure A6.31 below.²²⁰³ The vast majority of businesses use their broadband connection for email and internet (98%), with the next main use being data services such as cloud computing (29%). 20% use their connection for connectivity between business premises while 16% use their connection for employee remote access to the network.

²²⁰³ Slide 16, 2017 WLA/WCA Business Market Research.

Figure A6.31: Use of Primary Service – Broadband Primary Access Users



Speed of Connection

A 6.51 Businesses were asked about their knowledge of the claimed download speeds on their broadband connection. Figure A6.32 shows that overall 26% of respondents ‘definitely’ know their maximum download speed and users on a CATV network are most likely to know their maximum speed compared with those on a FTTC network.²²⁰⁴

A 6.52 When subsequently asked what the actual speed was, 48% were obtaining a maximum speed of up to 24 mbps, with 13% obtaining a maximum speed of more than 100 mbps (Figure A6.33).²²⁰⁵ Average maximum download speed rose to 47mbps from 36mbps in the 2014 WLA/WCA Business Market Research.

²²⁰⁴ Slide 18, 2017 WLA/WCA Business Market Research.

²²⁰⁵ Slide 19, 2017 WLA/WCA Business Market Research.

Figure A6.32: Knowledge of Claimed Maximum Download Speed

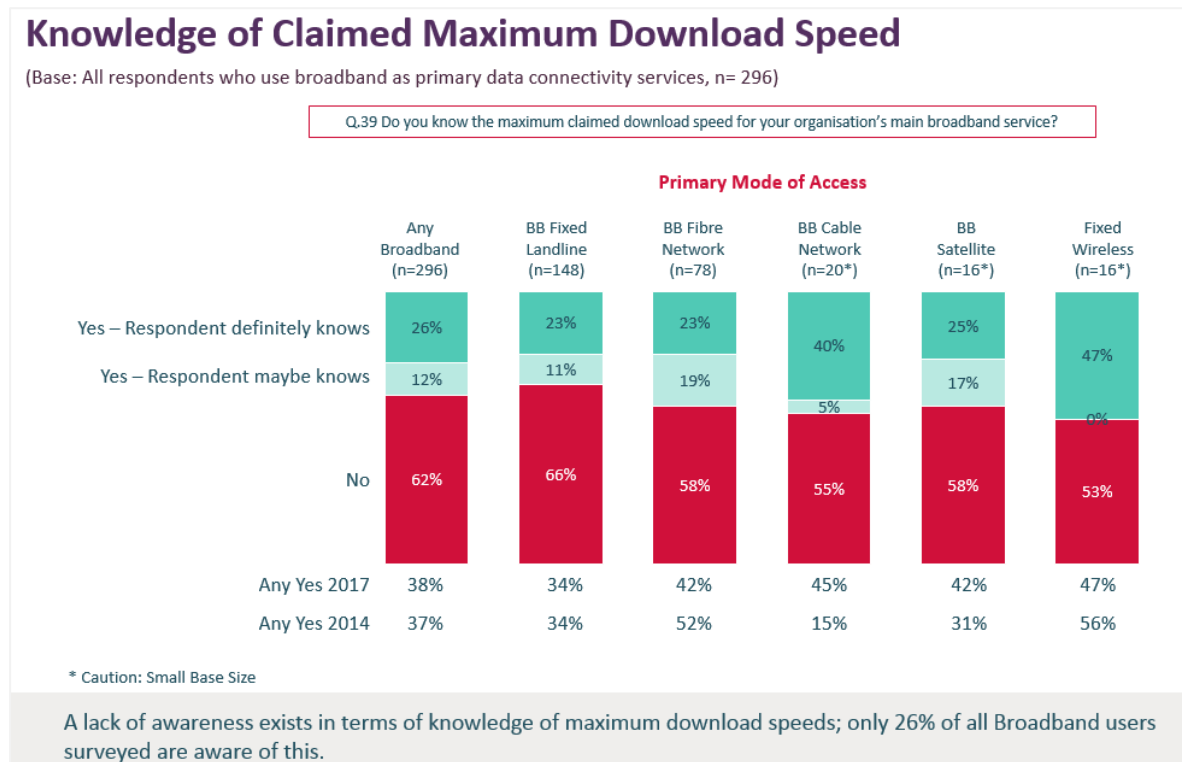
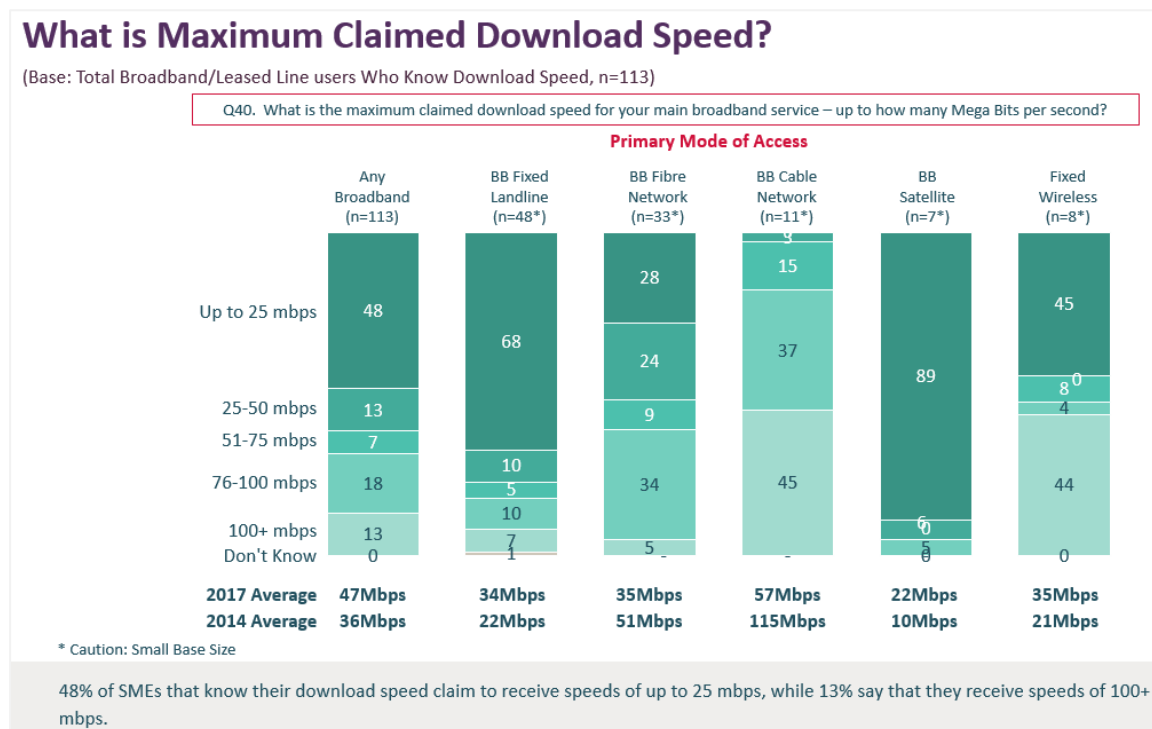


Figure A6.33: What is Maximum Claimed Download Speed?

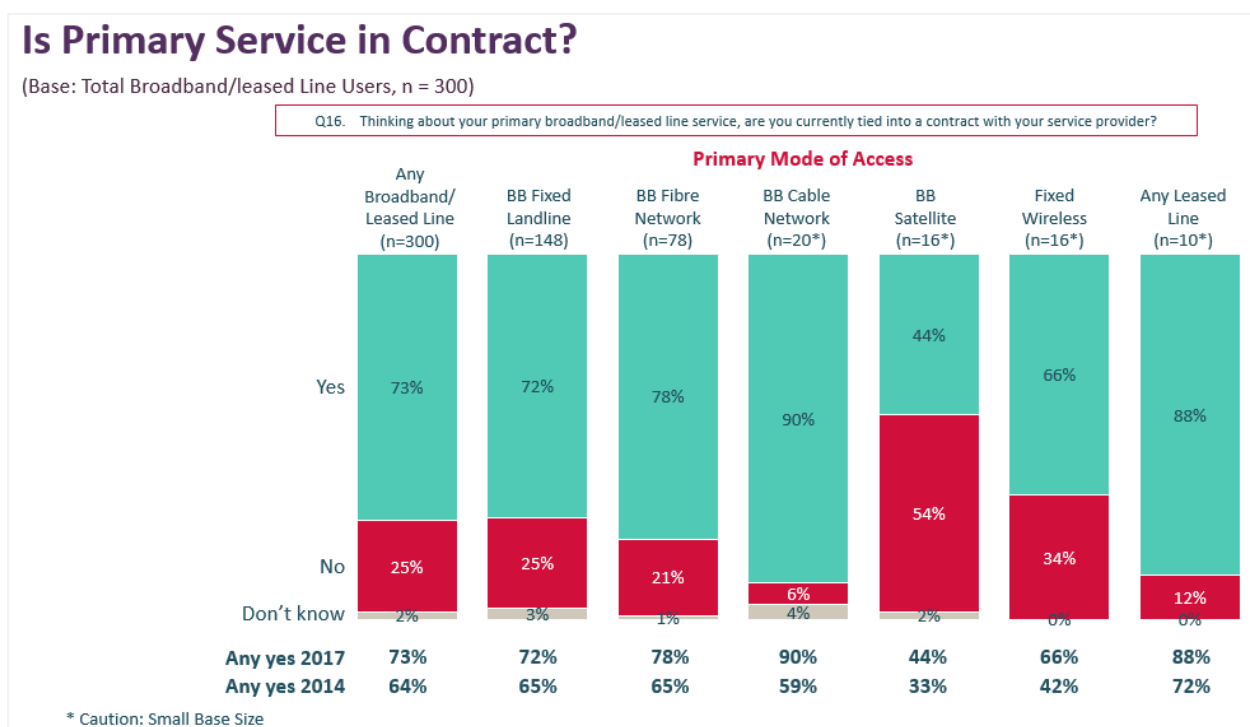


Contract Length

A 6.53 The survey research also asked businesses if they were part of a contract and 73% of all businesses reported that they are tied into a contract (Figure A6.34 overleaf).²²⁰⁶ In the 2014 WLA/WCA Business Market Research, just 64% of respondents were tied into contracts.

A 6.54 The highest proportion of businesses in a contract are on a CATV network (90%) followed by leased lines (88%), rising from 59% and 72% respectively in the 2014 WLA/WCA Business Market Research.

Figure A6.34: Is Primary Service in Contract?

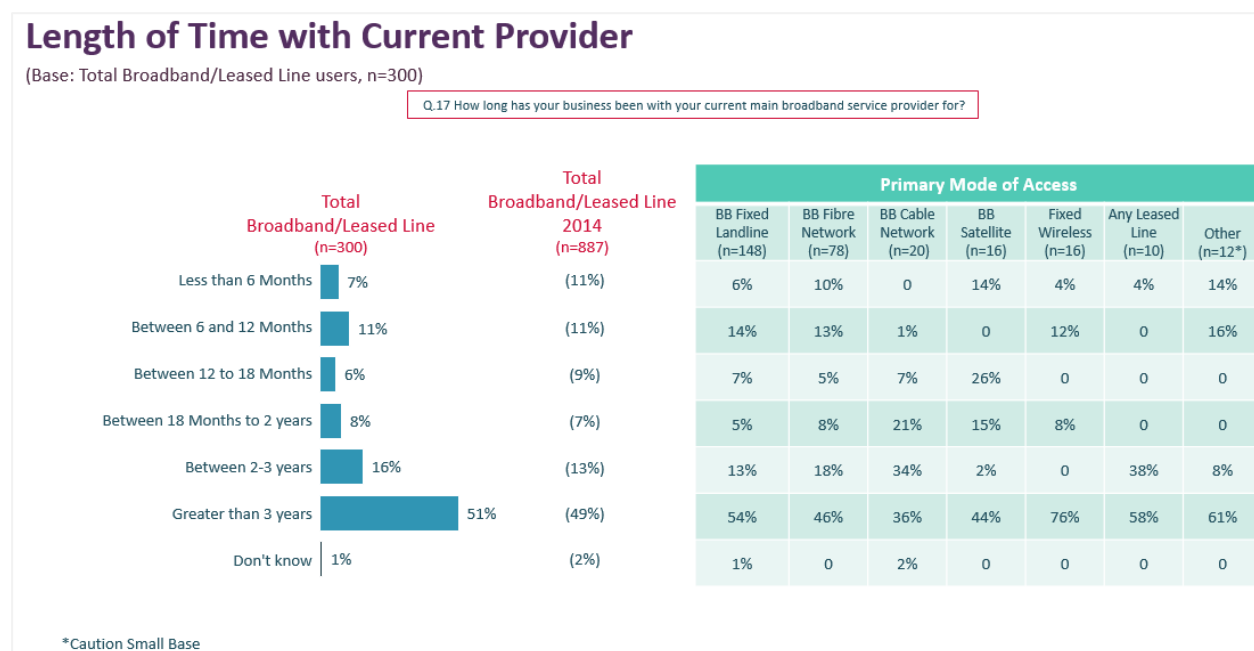


A 6.55 Figure A6.35 below gives an indication as to the length of time businesses on a broadband connection remain with their provider.²²⁰⁷ 51% of respondents have been with their provider for more than three years, with 16% being with their provider for two to three years. The remaining businesses are with their provider for less than two years.

²²⁰⁶ Slide 28, 2017 WLA/WCA Business Market Research.

²²⁰⁷ Slide 29, 2017 WLA/WCA Business Market Research.

Figure A6.35: Length of Time with Current Provider



Bundling

A 6.56 The survey research presented some important insights into the bundling of services by business consumers. Figure A6.36 overleaf outlines the incidence of bundling among business broadband users.²²⁰⁸ 65% of respondents receive a bill that includes services other than broadband, while 22% use different service providers for all other services. Bundling is highest among businesses with broadband on a fixed landline connection (78%) and on leased lines (74%).

A 6.57 Bundle users were next asked about their awareness of the cost of their bundle (Figure A6.37 overleaf).²²⁰⁹ 79% of respondents report that they ‘know’ the cost, with 46% stating that they ‘definitely’ know.

²²⁰⁸ Slide 21, 2017 WLA/WCA Business Market Research.

²²⁰⁹ Slide 23, 2017 WLA/WCA Business Market Research.

Figure A6.36: Incidence of Bundling Broadband

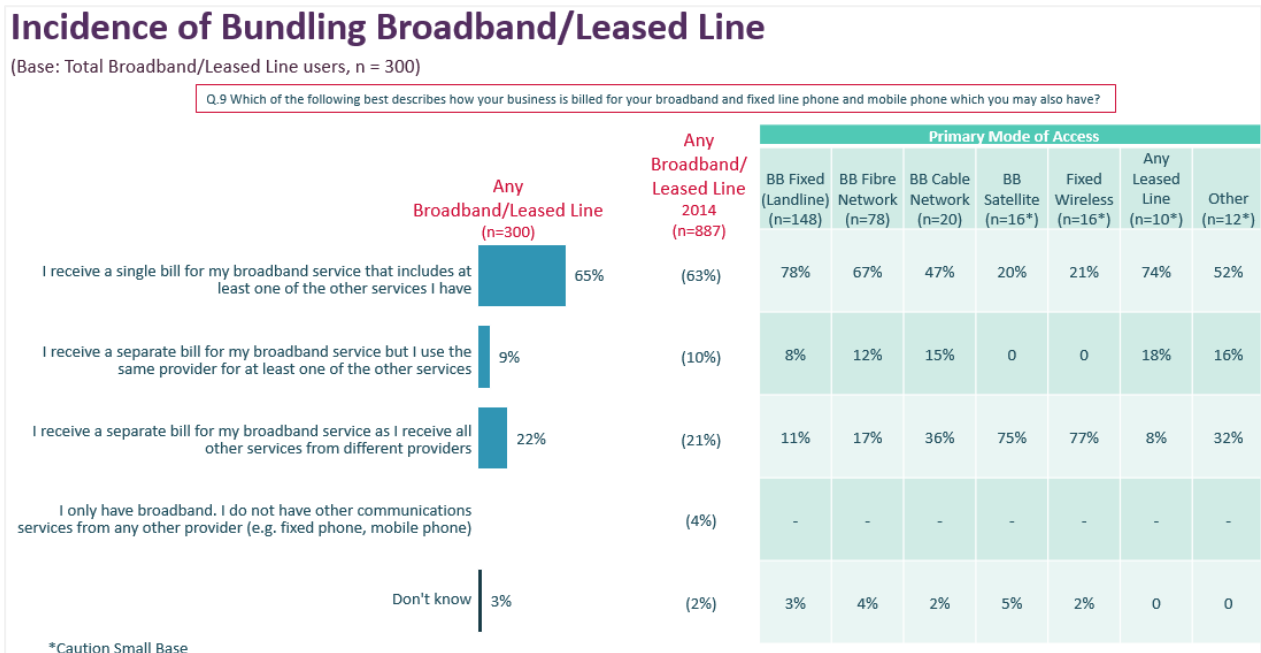
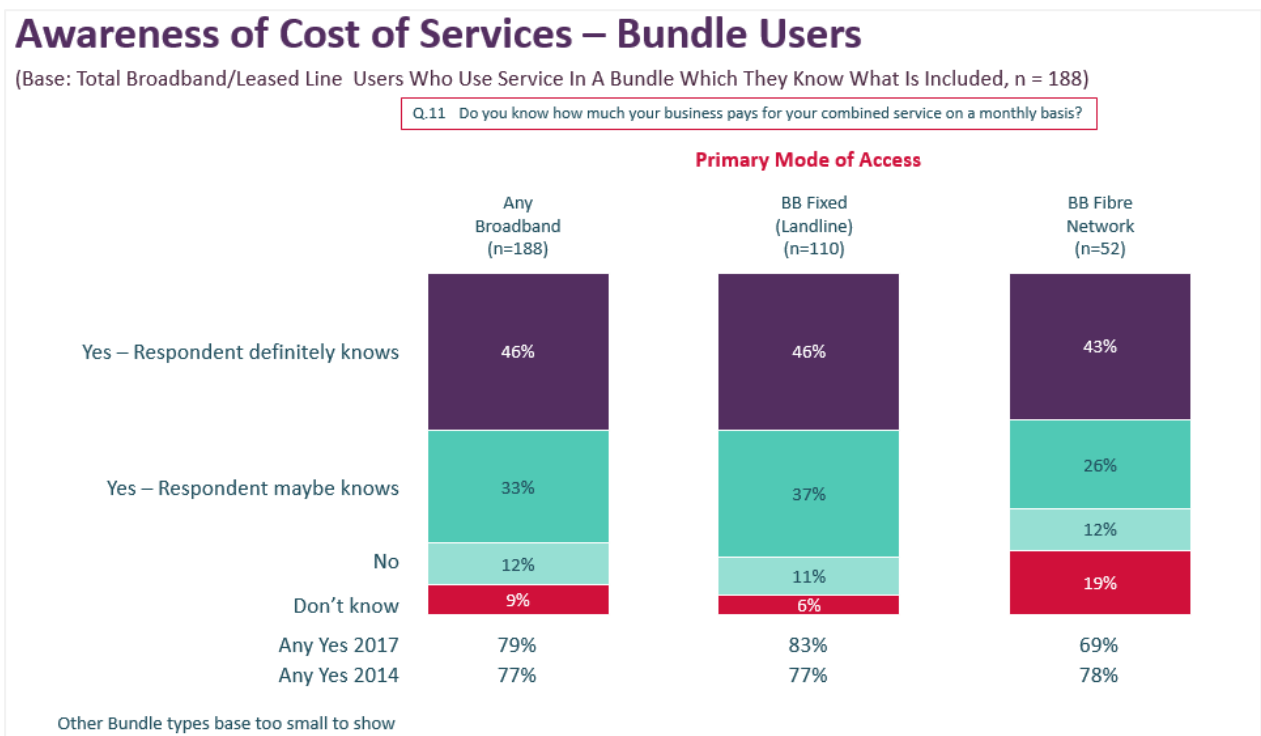
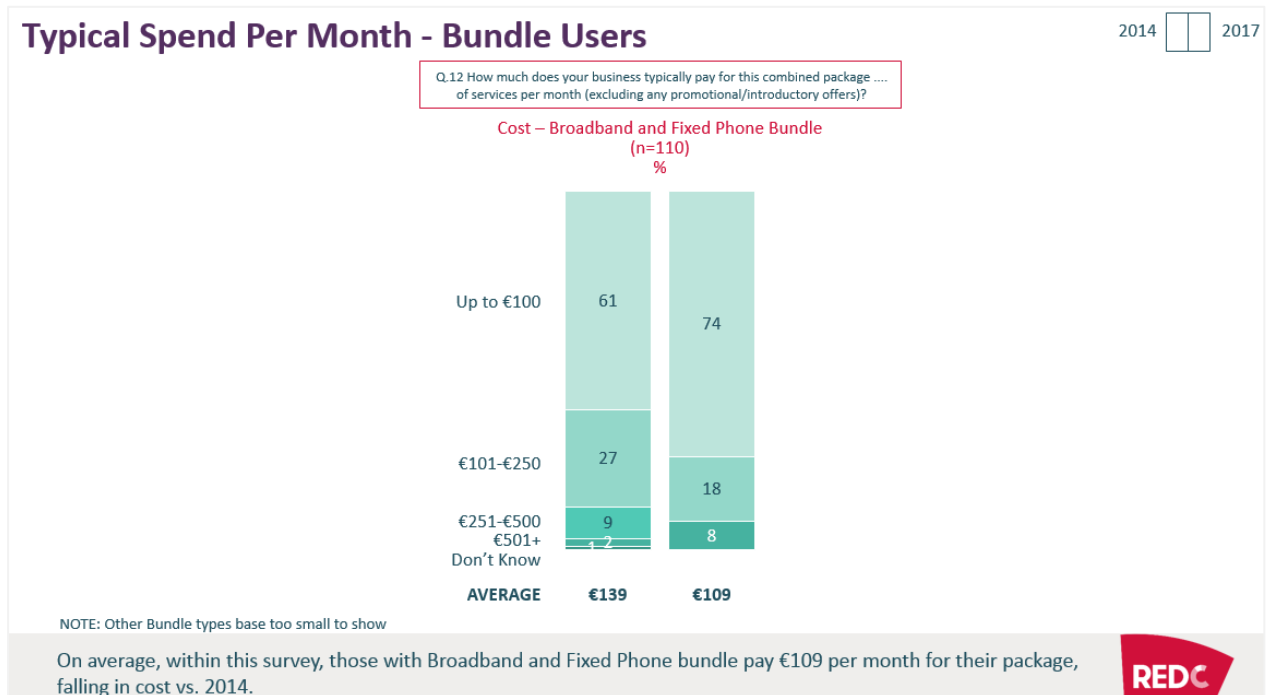


Figure A6.37: Awareness of Cost of Services – Bundle Users



A 6.58 Figure A6.38 below outlines the typical spend per month on a bundle by businesses who bundle their services.²²¹⁰ The most common bundle was found to be broadband and fixed phone.²²¹¹ For this bundle, the average cost is €109 per month, falling from €139 in the 2014 WLA/WCA Business Market Research.

Figure A6.38: Typical Spend Per Month - Bundle Users



A 6.59 Looking at users who are not billed as part of a bundle, Figure A6.39 overleaf summarises their awareness of cost.²²¹² 79% of non-bundle users are aware of the monthly cost, the same as bundle users.

A 6.60 Figure A6.40 below outlines the typical spend per month on broadband by non-bundle users.²²¹³ The average cost per month came in at €119, falling from €187 in the 2014 WLA/WCA Business Market Research. The average cost per month is higher than the average cost among bundle users (€109). 83% of non-bundle users are paying up to €100 a month while 8% are paying in excess of €500 per month.

²²¹⁰ Slide 24, 2017 WLA/WCA Business Market Research.

²²¹¹ Slide 22, 2017 WLA/WCA Business Market Research.

²²¹² Slide 25, 2017 WLA/WCA Business Market Research.

²²¹³ Slide 26, 2017 WLA/WCA Business Market Research.

Figure A6.39: Awareness of Cost of Services – Non-Bundle Users

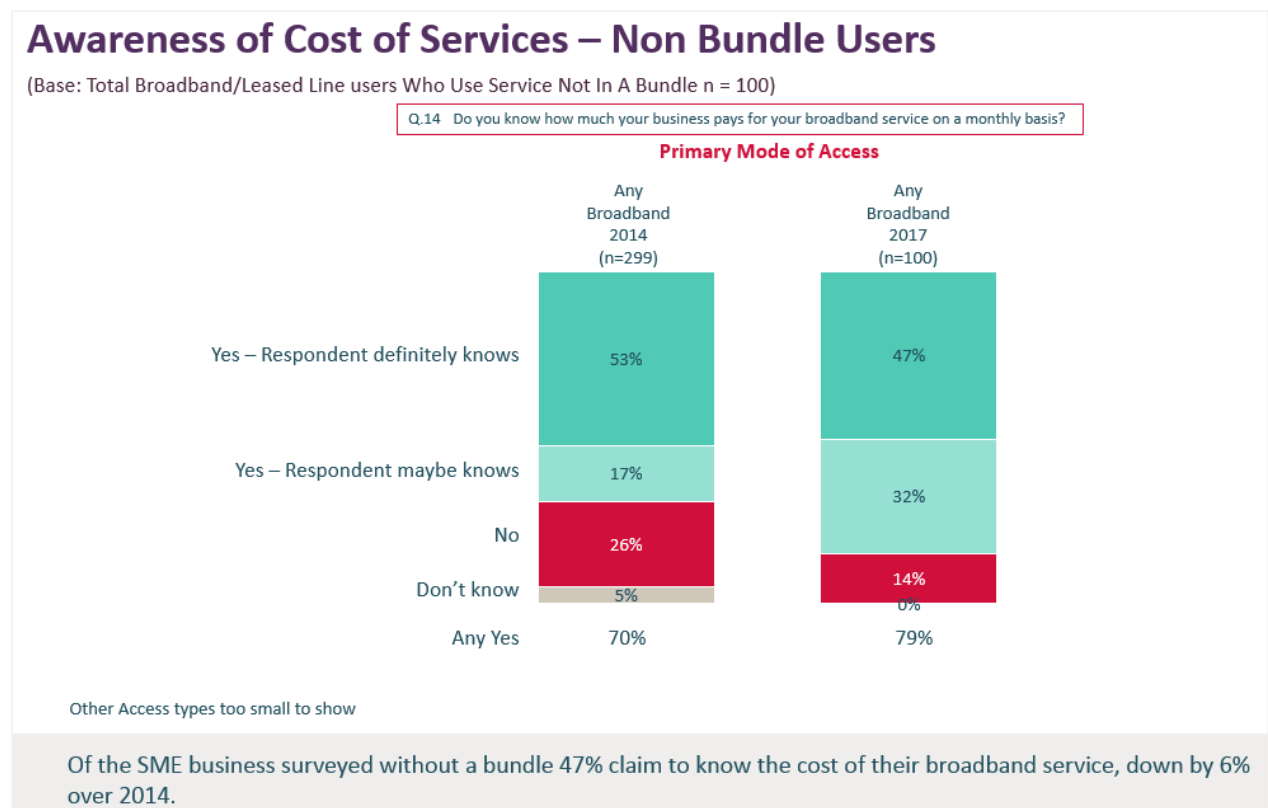
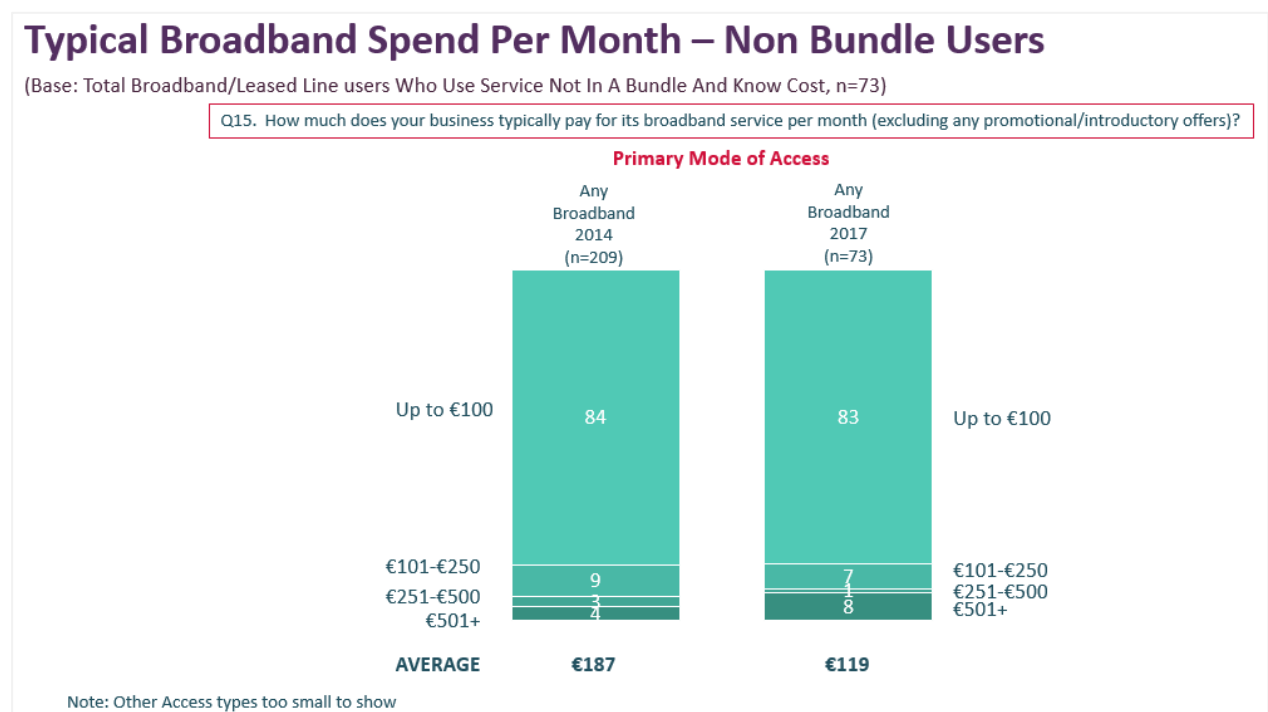


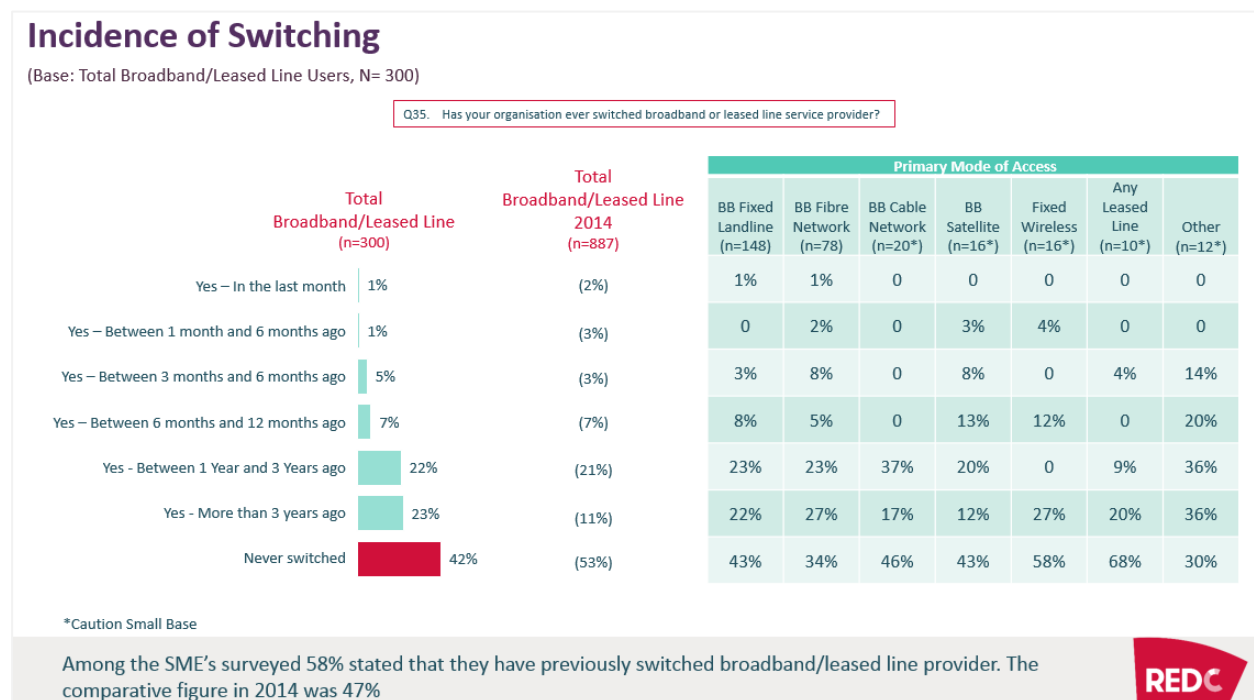
Figure A6.40: Typical Broadband Spend Per Month – Non-Bundle Users



Switching

A 6.61 The survey research considers businesses attitudes and behaviour around switching Service Providers. Figure A6.41 overleaf shows that 58% of businesses have switched in the past, with 22% having switched between one and three years ago.²²¹⁴ Previous incidences of switching are highest amongst users on a CATV network, fibre network and broadband via fixed phone line. The lowest incidences of switching are amongst leased line users.

Figure A6.41: Incidence of Switching

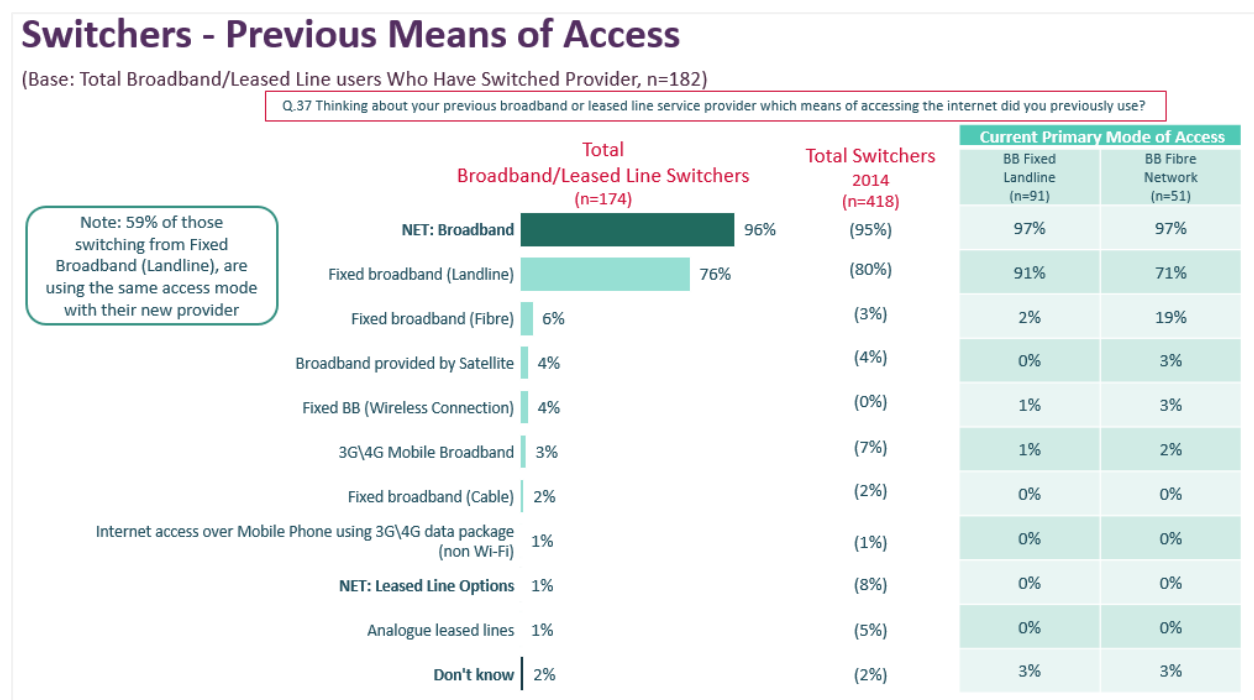


A 6.62 Figure A6.42 overleaf looks at the previous means of access among firms that have switched in the past.²²¹⁵ The majority (96%) of businesses that have switched provider have switched from broadband, as opposed to some other form of internet connection. Within this, 76% switched from a connection via traditional landline.

²²¹⁴ Slide 31, 2017 WLA/WCA Business Market Research.

²²¹⁵ Slide 33, 2017 WLA/WCA Business Market Research.

Figure A6.42: Switchers - Previous Means of Access

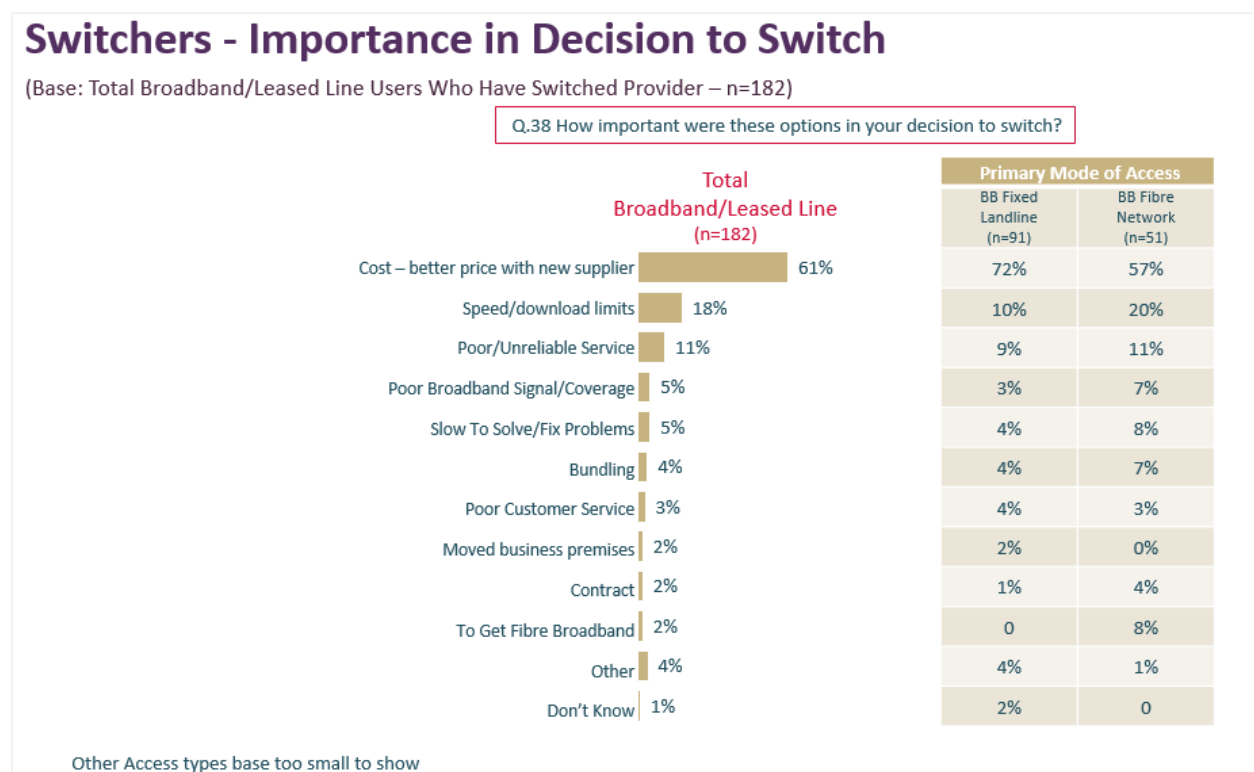


A 6.63 Figure A6.43 overleaf illustrates the considerations of businesses when deciding to switch.²²¹⁶ Cost is considered the most important factor in the decision to switch. Speed and reliability were also considered to be important factors in the decision to switch among respondents. By contrast, cost was not considered an important factor in switching behaviour in the 2014 WLA/WCA Business Market Research.²²¹⁷

²²¹⁶ Slide 34, 2017 WLA/WCA Business Market Research.

²²¹⁷ Slide 70, 2014 WLA/WCA Business Market Research.

Figure A6.43: Switchers - Importance in Decision to Switch



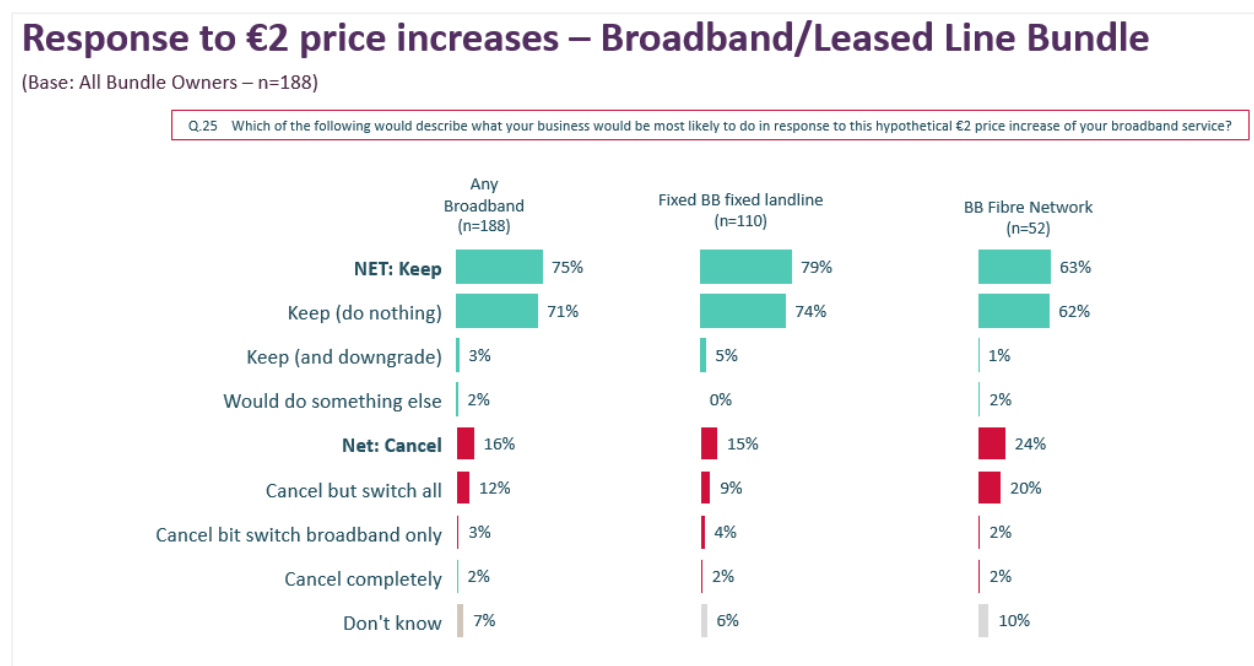
Responses to Hypothetical Price Increases: Customers in a Bundle

A 6.64 As noted previously, the small but significant non-transitory increase in price (SSNIP) test assists in determining the relevant market for products of a similar nature. Below, ComReg examines the outcomes of the SSNIP test for both bundle and non-bundle users.

A 6.65 Figure A6.44 outlines the change in behaviour in response to the hypothetical €2 increase in the broadband component of the bundle.²²¹⁸ Overall, 75% would keep the service, with 16% cancelling the service. Those users on a fibre network are more likely to cancel their service than those on broadband via a traditional phone line.

²²¹⁸ Slide 36, 2017 WLA/WCA Business Market Research.

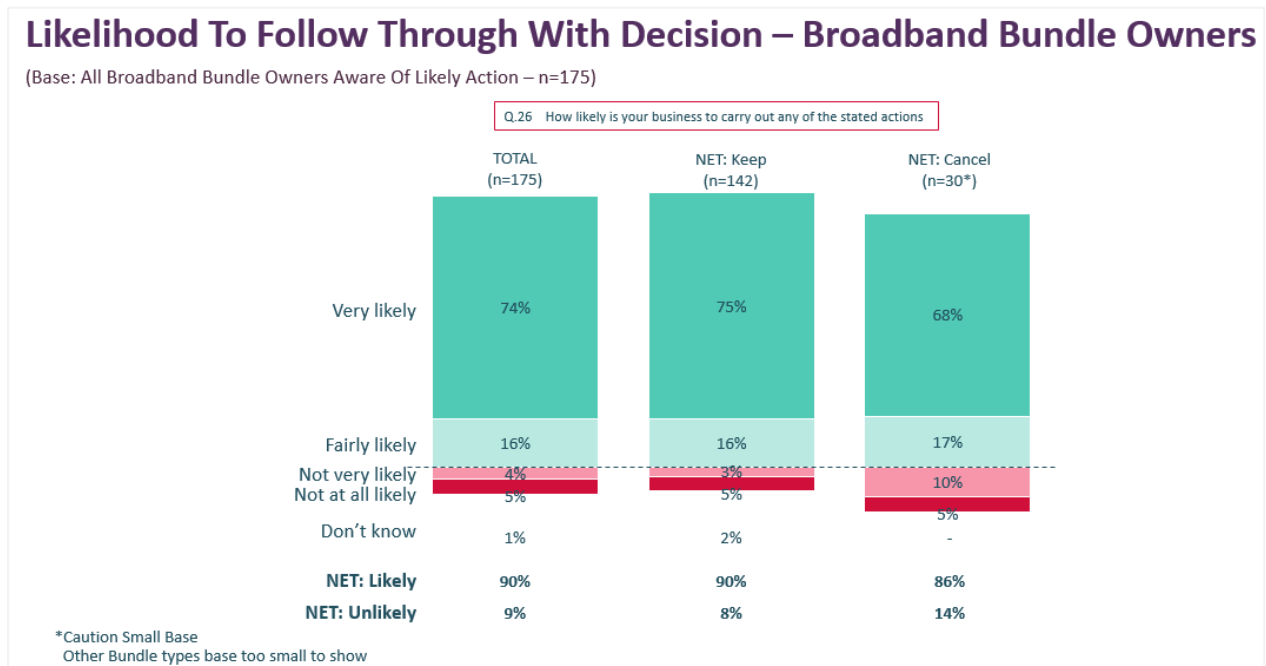
Figure A6.44: Response to €2 price increases – Broadband Bundle



A 6.66 Figure A6.45 outlines the responses of business when subsequently asked if they would follow through on their previously stated responses.²²¹⁹ 90% of broadband bundle users who stated that they would 'keep' their current service believe this action is likely. 15% of broadband users who stated that they would 'cancel' their service believe they are unlikely to follow through with this change in behaviour in response to a €2 increase in price.

²²¹⁹ Slide 37, 2017 WLA/WCA Business Market Research.

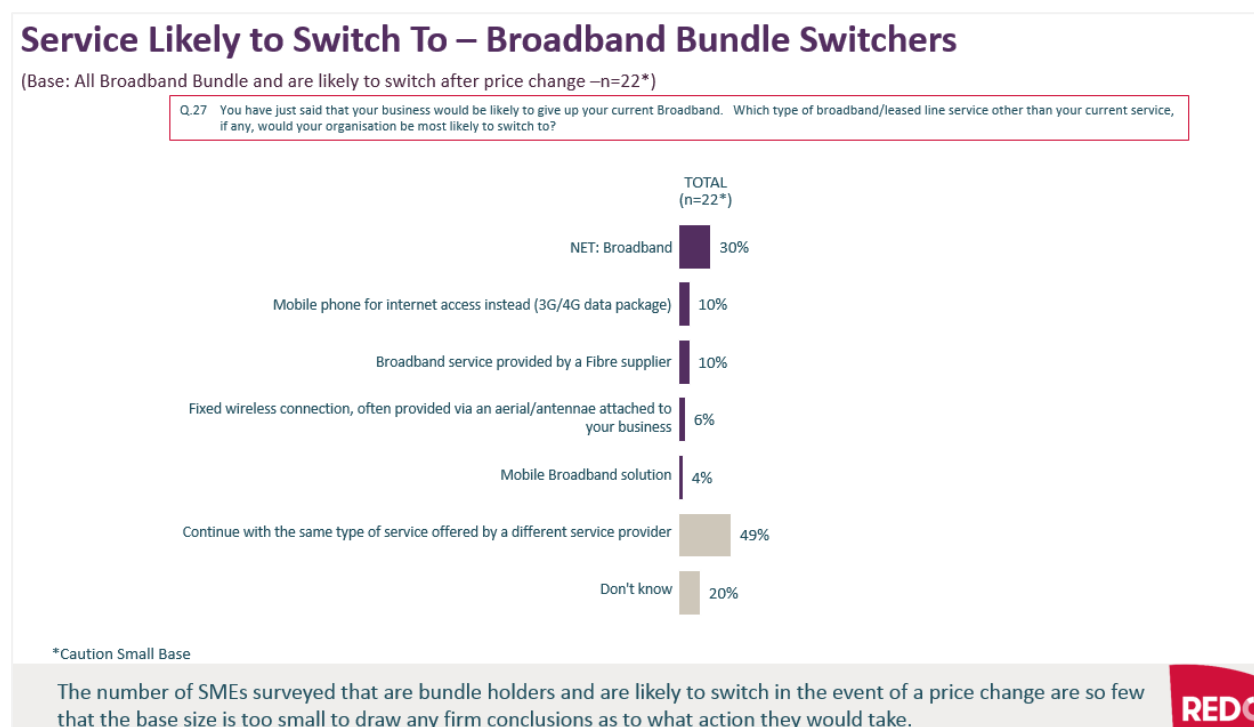
Figure A6.45: Likelihood to Follow Through With Any Change in Behaviour – Broadband Bundle Owners



A 6.67 Of those users that are likely to switch provider following the hypothetical price increase, Figure A6.46 shows that 49% would continue with the same type of service with a different provider.²²²⁰ However, the number of SMEs that are bundle holders and are likely to switch in the event of a €2 price change are so few that the base size is too small to draw any firm conclusions as to what action they would take.

²²²⁰ Slide 38, 2017 WLA/WCA Business Market Research.

Figure A6.46: Service Likely to Switch to – Broadband Bundle Switchers

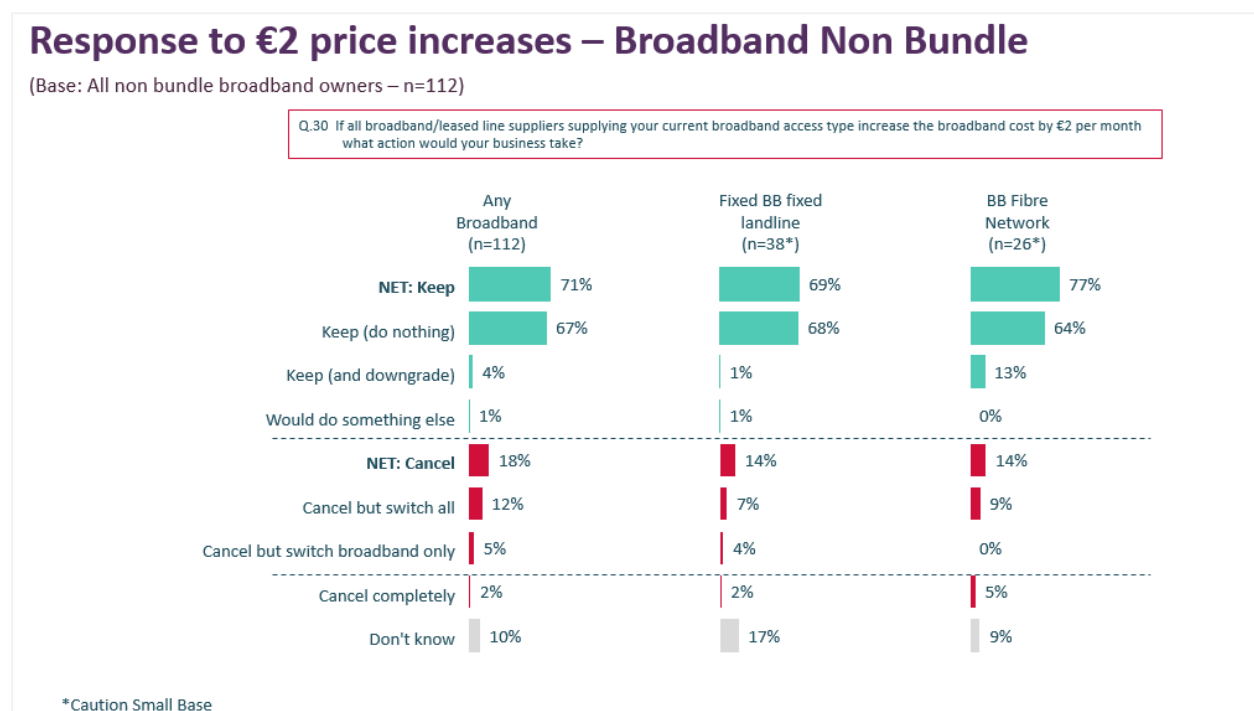


Responses to Hypothetical Price Increases: Customers not in a Bundle

A 6.68 Businesses whose broadband connection was not part of a bundle were also asked about their response to a hypothetical €2 price increase, the responses are illustrated in Figure A6.47 below.²²²¹ 71% of respondents (non-bundle businesses) state that they would ‘keep’ the service, with those on a fibre network more likely than those on broadband via a traditional phone line more to ‘keep’ their service. 18% of respondents claimed they would ‘cancel’ their current service.

²²²¹ Slide 40, 2017 WLA/WCA Business Market Research.

Figure A6.47: Response to €2 price increases – Broadband Non-Bundle



A 6.69 When asked about the likelihood that they would follow through on their previously stated responses, 98% of respondents who stated that they would ‘keep’ their current service believe this action is likely, while 14% of respondents who stated that they would ‘cancel’ their service believe they are unlikely to follow through with this change in behaviour in response to a €2 increase in price, as seen in Figure A6.48.²²²²

A 6.70 Figure A6.49 overleaf gives the breakdown of likely actions by those non-bundle users that are likely to change their behaviour.²²²³ 28% state that they would switch to a fibre powered broadband service, while 22% would switch to another provider of the same type of service. However, the numbers of SMEs surveyed that are non-bundle owners and are likely to switch in response to a €2 increase in price are so few that the base size is too small to draw any firm conclusions as to what action they would take.

²²²² Slide 41, 2017 WLA/WCA Business Market Research.

²²²³ Slide 42, 2017 WLA/WCA Business Market Research.

Figure A6.48: Likelihood to Follow Through With Any Change in Behaviour – Non-Bundle Users

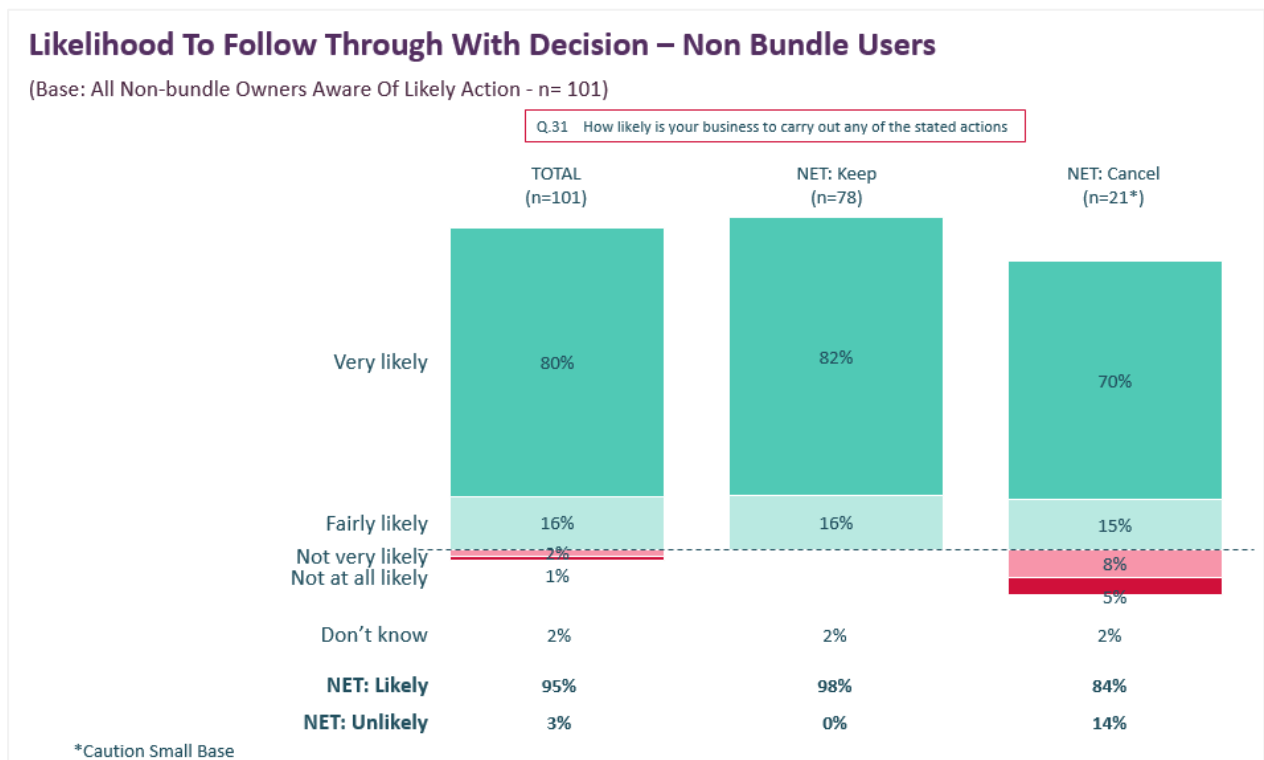
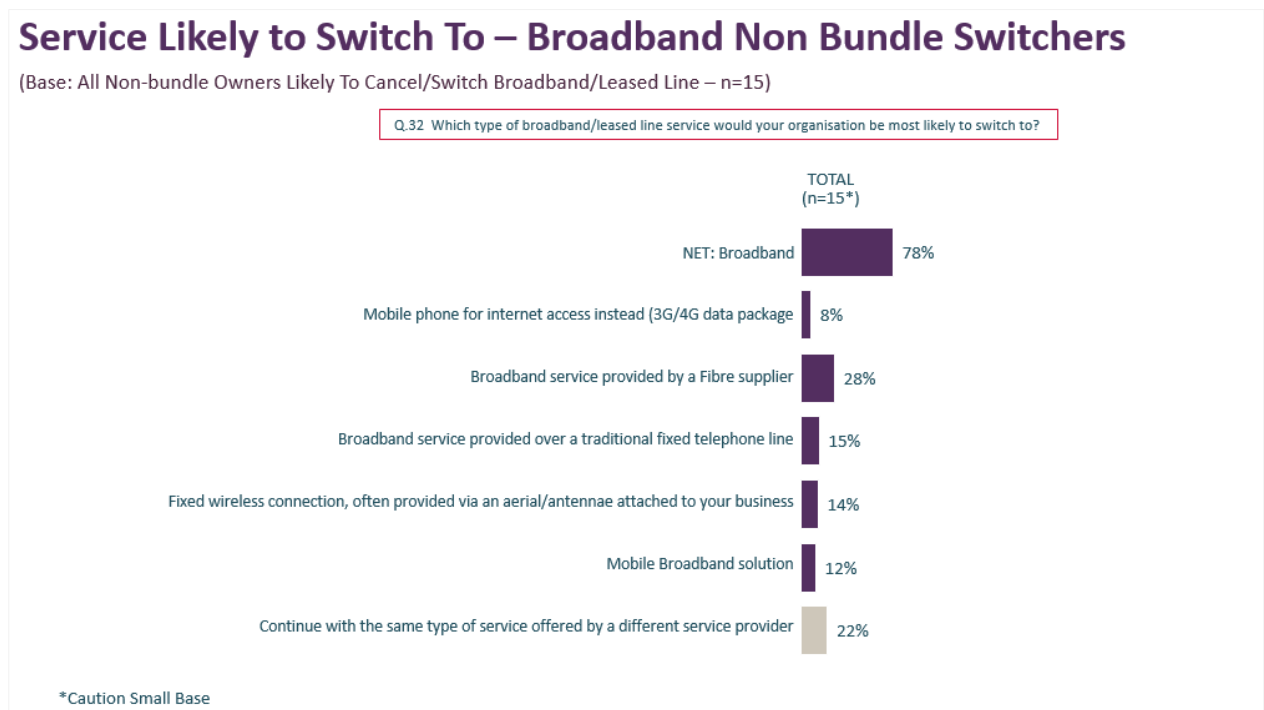


Figure A6.49: Service Likely to Switch to – Broadband Non-Bundle Switchers



The number of SMEs surveyed that are non-bundle owners and are likely to switch in the event of a price change are so few that the base size is too small to draw any firm conclusions as to what action they would take.

Appendix: 7 Fixed and Mobile Broadband Packages

Introduction

- A 7.1 In this Appendix, ComReg sets out the retail broadband packages (fixed and mobile) available on each platform.
- A 7.2 ComReg obtained information on broadband tariffs, speeds and prices offered by the main SPs (Digiweb, Eircom, Imagine, Magnet, Sky Ireland, Virgin Media, and Vodafone) during November/December 2017. Information was collected on tariffs aimed at both residential and non-residential broadband users. The analysis is undertaken separately for each group.

Fixed Broadband Packages Offered by Main SPs

Digiweb

- A 7.3 Digiweb provides retail broadband packages to both residential and business customers using DSL (via Eircom's Bitstream product and Digiweb's own supply via LLU), VDSL (FTTC), Fixed Wireless Access and Satellite. Digiweb offer a total of 30 residential packages and 7 business packages.

Residential Packages

- A 7.4 Digiweb offers two DSL broadband products to residential customers, varying each package by the download speed offered.

Table A7.1: Digiweb Residential DSL Tariffs²²²⁴

	DSL Personal & Calls	DSL Unlimited Broadband & Calls
Contract Length	12 months	
Price (incl. VAT) per month	€50.82	€59.95
Download Speed	3 Mb	24 Mb
Upload Speed	384 Kb	
Download Allowance	Unlimited	
Line Rental	Included	
Once-off Charges	None	
Other Services included	Equipment, installation, activation included in plan, Free internet security for 6 months, 1500 minutes to landlines in Ireland & UK and 30 minutes to mobiles in Ireland & UK.	Equipment, installation, activation included in plan, Free internet security for 6 months, Unlimited calls to landlines and mobile in Ireland and UK.

A 7.5 Digiweb's Fibre Broadband products are based on Eircom's FTTC network and can be found in the table below.

²²²⁴ <https://www.digiweb.ie/product/dsl-personal-broadband/>.

Table A7.2: Digiweb Residential Fibre Broadband Tariffs²²²⁵

	Home Fibre Broadband & Off Peak Call	Unlimited Fibre Broadband & Unlimited Calls	Ultrafast 150	Ultrafast 150 & Talk	Ultrafast 300	Ultrafast 300 & Talk	Ultrafast 1000	Ultrafast 1000 & Talk
Contract Length	12 months	12 months	12 months	12 months	12 months	12 months	12 months	12 months
Price (+VAT) per month	€42.95	€49.95	€54.95	€64.95	€64.95	€74.95	€74.95	€84.95
Download Speed	100 Mb	100 Mb	150Mb	150 Mb	350 Mb	350 Mb	1000 Mb	1000 Mb
Upload Speed	20 Mb	20 Mb	30 Mb	30 Mb	50 Mb	50 Mb	100 Mb	100 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Line Rental	Included	Included	Included	Included	Included	Included	Included	Included
Once-off Charges²²²⁶	€49.95 activation fee	€49.95 activation fee (Free with 18 month contract)	€199 Activation Fee	€199 Activation Fee	€199 Activation Fee	€199 Activation Fee	€199 Activation Fee	€199 Activation Fee
Other Services included	Off peak calls to Ireland and UK landline and mobile, free internet security for 6 months, equipment, parental controls.	Unlimited calls to Ireland and UK landline and mobile, free internet security for 6 months, equipment, parental controls.	Free internet security for 6 months, equipment, parental controls.	Unlimited calls to Ireland and UK landline and mobile, free internet security for 6 months, equipment, parental controls.	Free internet security for 6 months, equipment, parental controls.	Unlimited calls to Ireland and UK landline and mobile, free internet security for 6 months, equipment, parental controls.	Free internet security for 6 months, equipment, parental controls.	Unlimited calls to Ireland and UK landline and mobile, free internet security for 6 months, equipment, parental controls.

²²²⁵ <https://www.digiweb.ie/fibre-broadband/> and <https://www.digiweb.ie/ultrafast-ftth-broadband/>.

²²²⁶ For ultrafast packages, €199 activation fees only apply to residents who do not already have a FTTH connection set up.

A 7.6 Digiweb offers a number of NGA broadband packages, as outlined in the table below.

Table A7.3: Digiweb NGA Tariffs²²²⁷

	Home	Home with VOIP	Unlimited Home with VOIP
Contract Length	12 months		
Price (incl. VAT) per month	€39.95	€39.95	€49.95
Download Speed	24 Mbps		
Upload Speed	768 Kbps		
Download Allowance	Unlimited		
Line Rental		Included in plan	Included in plan
Once-off Charges	€49 connection fee	€49 connection fee	None
Other Services included	Free WiFi modem and internet security for 6 months.	Free WiFi modem, off peak calls to landlines and mobiles in Ireland/UK, and internet security for 6 months.	Free WiFi modem, unlimited calls to landlines and mobiles in Ireland/UK, and internet security for 6 months.

A 7.7 Digiweb also offers a number of satellite based broadband products, varying them by download speed, download allowance and price.

Table A7.4: Digiweb Residential Satellite Tariffs²²²⁸

	Tooway Surfer 20	Tooway Surfer 25	Tooway Surfer 35	Tooway Surfer 45	Tooway Surfer 60
Contract Length	12 months				
Price (incl. VAT) per month	€44.95	€54.95	€64.95	€74.95	€84.95
Download Speed	20 Mb				
Upload Speed	6 Mb				
Download Allowance	20 Gb	25 Gb	35 Gb	45 Gb	60 Gb
One-off Charge	€99 set up fee				
Other Services	Unlimited Night-time traffic and free internet security for 6 months				

²²²⁷ <https://www.digiweb.ie/product/nextgen-home-broadband/>.

²²²⁸ <https://www.digiweb.ie/product-category/satellite-broadband/>.

A 7.8 Digiweb currently offers broadband to residential consumers under the brand name 'metro broadband' which is Fixed Wireless Access (FWA) and does not require a phone line for access.

Table A7.5: Digiweb Other Residential Broadband packages²²²⁹

	30 GB Metro Starter	Unlimited Metro Freedom	Metro Home plus Broadband²²³⁰
Contract Length	12 months	12 months	12 months
Price (incl. VAT) per month	€29.95	€49.95	€39.95
Download Speed	Up to 5 Mb	Up to 30 Mb	Up to 10 Mb
Upload Speed	1 Mb	1 Mb	1 Mb
Download Allowance	30 Gb	Unlimited	60 Gb
Once-off Charges	€29.95 installation and set up	Free installation and setup.	€29.95 installation and set up
Other Services included	Off peak calls to Ireland and UK landlines, 40 off peak mobile minutes to Ireland and UK, free metro to metro calls and free internet security for 6 months.	Unlimited Ireland and UK landline and mobile calls, installation and free internet security for 6 months.	Off peak calls to Ireland and UK landlines, 40 off peak mobile minutes to Ireland and UK, free metro to metro calls and free internet security for 6 months.

A 7.9 Digiweb also offers a number of broadband products powered by SIRO, as well as a number of LLU packages.

²²²⁹ <https://www.digiweb.ie/metro-broadband/>.

²²³⁰ <https://www.digiweb.ie/product/metro-home-plus-broadband/#add-talk-anytime>.

Table A7.6: SIRO powered Broadband Packages²²³¹

	150 Electric Broadband	350 Electric Broadband	1000 Electric Broadband	150 Electric Broadband and Unlimited Talk	350 Electric Broadband and Unlimited Talk	1000 Electric Broadband and Unlimited Talk
Contract Length	12 months	12 months	12 months	12 months	12 months	12 months
Price (incl. VAT) per month	€45	€55	€85	€55	€65	€95
Download Speed	Up to 150 Mb	Up to 350 Mb	Up to 1000 Mb	Up to 150 Mb	Up to 350 Mb	Up to 1000 Mb
Upload Speed	30 Mb	70 Mb	150 Mb	30 Mb	70 Mb	150 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Once-Off Charges	€49 Connection fee	€49 Connection fee	Free	Free	Free	Free
Other Services included	Equipment, installation, activation, Parental Control and free internet security for 6 months.	Equipment, installation, activation, Parental Control and free internet security for 6 months.	Equipment, installation, activation, Parental Control and free internet security for 6 months.	Equipment, installation, activation, Parental Control and free internet security for 6 months.	Equipment, installation, activation, Parental Control and free internet security for 6 months.	Equipment, installation, activation, Parental Control and free internet security for 6 months.

²²³¹ <https://www.digiweb.ie/siro-powered-electric-broadband-with-talk-unlimited/>.

Table A7.7: Local Loop Unbundling (LLU) Packages²²³²

	350 Home	350 Home and Talk off peak	350 Home and Anytime Talk
Contract Length	6 months	12 months	12 months
Price (incl. VAT) per month	€29.95	€34.95	€39.95
Download Speed	Up to 24 Mb	Up to 24 Mb	Up to 24 Mb
Upload Speed	768 Kb	768 Kb	768 Kb
Download Allowance	350 Gb	350 Gb	350 Gb
Once-off Charges²²³³	None	None	None
Other Services included	Free internet security for 6 months.	1500 minutes Off-peak calls to Ireland & UK landlines, 30 minutes off-peak calls to Ireland and UK mobiles and free internet security for 6 months.	1500 minutes Anytime calls to Ireland & UK landlines, 30 minutes Anytime calls to Ireland and UK mobiles and free internet security for 6 months.

Business Packages

A 7.10 Digiweb's business offerings include broadband and phone services. Digiweb currently has seven offerings, two based on DSL and one FTTC product, as well as four satellite based plans.

Table A7.8: Digiweb Business Packages – DSL and Fibre²²³⁴

	Business 24²²³⁵	Business Pro	Business Fibre Plan
Contract Length	12 months	12 months	12 months
Price (incl. VAT) per month	€35.67	€47.97	€67.65
Download Speed	Up to 24 Mb	Up to 24 Mb	Up to 100 Mb
Upload Speed	768 Kb	768 Kb	10 Mb
Download Allowance	40 Gb	350 Gb	350 Gb
Line Rental	Included	Included	Included
Once-off Charges	€60.27 activation fee	€60.27 activation fee	€60.27 activation fee
Other Services included	Equipment, installation, free calls to local, national and mobile numbers, landline rental and free internet security for 6 months.		

²²³² <https://www.digiweb.ie/home-broadband/>.

²²³³ 6 month plan subject to €49 activation fee.

²²³⁴ <http://business.digiweb.ie/compare-plans/>.

²²³⁵ <http://business.digiweb.ie/product/business-24/>.

Table A7.9: Digiweb Business Packages - Satellite

	Business 25 ²²³⁶	Business 40 ²²³⁷	Business 100 ²²³⁸	Business 200 ²²³⁹
Contract Length	24 Months			
Price (incl. VAT) per month	€88.50	€122.94	€307.44	€487.02
Download Speed	Up to 22 Mb			
Upload Speed	Up to 6 Mb			
Download Allowance	25 Gb (optional night time unlimited traffic, 11pm and 7am)	40 Gb (optional night time unlimited traffic, 11pm and 7am)	100 Gb (optional night time unlimited traffic, 11pm and 7am)	200 Gb (optional night time unlimited traffic, 11pm and 7am)
Once-off Charges	€270.54 activation fee			
Other Services included	Free internet security for 6 months.			

Eircom

A 7.11 Eircom offers a range of packages catering for both residential and business broadband users. Broadband services are offered as part of a bundle and on a standalone basis.

Residential Packages

A 7.12 On the residential side, Eircom offers a number of standalone broadband packages, as outlined in the tables below.

²²³⁶ <http://business.digiweb.ie/product/tooway-business-25-satellite-plan/>.

²²³⁷ <http://business.digiweb.ie/product/tooway-business-40-satellite-plan/>.

²²³⁸ <http://business.digiweb.ie/product/tooway-business-100-satellite-plan/>.

²²³⁹ <http://business.digiweb.ie/product/tooway-business-200-satellite-plan/>.

Table A7.10: Eircom Standalone Fibre Broadband²²⁴⁰

	Just Broadband (Online)²²⁴¹	Fibre Unlimited²²⁴²	Fibre Extreme 150	Fibre Extreme 300	Fibre Extreme 1000
Contract Length	12 months	18 months	18 months	18 months	18 months
Price (incl. VAT) per month	€53.00	€53.00	€55.00	€63.00	€75.00
Download Speed	100 Mb	100 Mb	150 Mb	300 Mb	1000 Mb
Upload Speed	20 Mb	20 Mb	30 Mb	50 Mb	1000 Mb
Download Allowance	1024 Gb	unlimited	unlimited	unlimited	unlimited
Once-off Charges	None	€100 Installation	€250 Installation	€250 Installation	€250 Installation
Line Rental	Included	Included	Included	Included	Included

A 7.13 Eircom offers a range of standalone Next Generation Broadband packages.

²²⁴⁰ <https://www.eir.ie/broadband-only/> and <https://www.eir.ie/opencms/export/sites/default/.content/pdf/pricing/Part3.1.pdf>.

²²⁴¹ A similar plan (eir Fibre) is available from the Price List (offline). eir Fibre's monthly price is €25.40 (excluding line rental €25.78). However, the eir Fibre package has a download allowance of 30 Gb and includes a €100 installation fee.

²²⁴² Fibre Unlimited and the Fibre Extreme packages can also be purchased excluding line rental.

Table A7.11: Eircom Standalone Next Generation Broadband

	NGB Velocity	NGB Ultimate	Advanced	Advanced Unlimited	Solo Advanced	Solo Advanced Unlimited
Contract Length	18 months	18 months	18 months	18 months	18 months	18 months
Price (incl. VAT) per month	€35.57	€40.48	€25.40	€30.49	€48.00	€53.00
Download Speed	24 Mb	24 Mb	24 Mb	24 Mb	24 Mb	24 Mb
Upload Speed	768 Kb	768 Kb	768 Kb	768 Kb	768 Kb	768 Kb
Download Allowance	50 Gb	unlimited	30 Gb	unlimited	30 Gb	unlimited
Line Rental	€25.78	€25.78	€25.78	€25.78	Included	Included
Once-off Charges	€100 Installation	€100 Installation	€100 Installation	€100 Installation	€100 Installation	€100 Installation

A 7.14 Eircom offers a number of ADSL standalone broadband packages.

Table A7.12: Eircom Standalone ADSL Broadband

	Advanced	Advance Unlimited
Contract Length	18 Months	18 Months
Price (incl. VAT) per month	€27.86	€32.95
Download Speed	24 Mb	24 Mb
Upload Speed	768 Kb	768 Kb
Download Allowance	30 Gb	Unlimited
Line Rental	€25.78	€25.78
Once-off Charges	€100 Installation	€100 Installation

A 7.15 Eircom offers a number of FTTC phone and broadband bundles.

Table A7.13: Eircom Phone and Broadband Bundles²²⁴³

	Broadband, Unlimited Mobile & UK calls²²⁴⁴	Broadband & International calls
Contract Length	12 months	12 months
Introductory Price (Months)²²⁴⁵	€35 online (first 6 months), €40 (next 6 months) online	€40 online (6 months), €45 (next 6 months) online
Price (incl. VAT) per month	€76 online	€81 online
Download Speed	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited
Line Rental	Included in price	Included in price
Other Services included	Unlimited calls to Irish and UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation	Unlimited anytime home phone calls to Irish and UK landlines and mobiles and top international landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation,

A 7.16 Eircom offers three Phone, TV and Broadband packages.

²²⁴³ <https://www.eir.ie/all-bundles/>.

²²⁴⁴ Broadband, Unlimited Mobile & UK calls plans are also available with higher download speeds (150 Mb, 300 Mb and 1000 Mb). Introductory prices and monthly prices of packages increase with faster download speeds.

²²⁴⁵ Only applies to new to Eir customers.

Table A7.14: Eircom Phone, TV and Broadband Bundles²²⁴⁶

	Broadband, TV Essential	Broadband, TV Experience	Broadband, TV Experience
Contract Length	18 months	18 months	18 months
Introductory Price (Months)	€45 online (6 months), €50 (next 6 months)	€55 online (6 months), €60 (next 6 months)	€60 online (6 months), €65 (next 6 months)
Price (incl. VAT) per month	€91	€101	€106
Download Speed	100 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited
Line Rental	Included in price	Included in price	Included in price
Other Services included	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, Eir Vision+Box, 54 Channels	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, Eir Vision+Box, 83 Channels	Unlimited calls to Irish UK & International landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, Eir Vision+Box, 83 Channels

A 7.17 Eircom offers a number of Mobile, Broadband and Phone bundles.

²²⁴⁶ <https://www.eir.ie/all-bundles/>.

Table A7.15: Eircom Mobile, Broadband and Phone Bundles²²⁴⁷

	Broadband, Mobile 100+ 1Gb	Broadband, Mobile 400 + 10Gb	Broadband, Mobile Unlimited + 15Gb	Broadband, Sim Only Unlimited + 15Gb
Contract Length	24 months	24 months	24 months	18 months
Introductory Price (Months)	€35 online (6 months), €40 (next 6 months)	€50 online (6 months), €55 (next 6 months)	€60 online (6 months), €65 (next 6 months)	€50 online (6 months), €55 (next 6 months)
Price (incl. VAT) per month	€96	€111	€121	€101 online
Download Speed	100 Mb	100 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited
Line Rental	Included	Included	Included	Included
Other Services included	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 1Gb of data, Unlimited mobile calls to Irish landlines & Eir mobile, 100 any network minutes & unlimited texts.	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 10 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, 400 any network minutes & unlimited texts	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 15 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, unlimited any network minutes & unlimited texts	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 15 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, unlimited any network minutes & unlimited texts

²²⁴⁷ <https://www.eir.ie/all-bundles/>.

Table A7.16: Eircom Broadband, TV, Mobile and Phone Bundles²²⁴⁸

	Broadband, TV Essential, Mobile 100+ 1Gb	Broadband, Mobile 400 + 10Gb	Broadband, Mobile Unlimited + 15Gb	Broadband, Sim Only Unlimited + 15Gb
Contract Length	24 months	24 months	24 months	18 months
Introductory Price (Months)	€45 online (6 months), €50 (next 6 months)	€55 online (6 months), €60 (next 6 months)	€80 online (6 months), €85 (next 6 months)	€70 online (6 months), €75 (next 6 months)
Price (incl. VAT) per month	€106	€116	€141	€121
Download Speed	100 Mb	100 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited
Line Rental	Included	Included	Included	Included
Other Services included	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 1Gb of data, Unlimited mobile calls to Irish landlines & Eir mobile, 100 any network minutes & unlimited texts, 54 Channels	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 10 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, 400 any network minutes & unlimited texts, 83 Channels	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 15 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, unlimited any network minutes & unlimited texts, 83 Channels	Unlimited calls to Irish & UK landlines and mobiles, Eir Sport, Parental Controls, EirStudyhub, installation, 15 Gb data, unlimited social media, unlimited mobile calls to Irish landlines & Eir mobile, unlimited any network minutes & unlimited texts, 83 Channels

²²⁴⁸ <https://www.eir.ie/all-bundles/>.

Business Packages

A 7.18 On the business side, Eircom offers packages for small and medium sized businesses, large corporations and packages for the public sector. The tables below gives a brief overview of the packages offered to small and medium sized businesses.

A 7.19 Eircom offers a number of ADSL standalone broadband packages.

Table A7.17: Eircom Standalone ADSL Broadband²²⁴⁹

	Plus 12	Enhanced 12/2	Advanced
Contract Length	12 months	12 months	12 months
Price (incl. VAT) per month	€79.95	€121.77	€79.95
Download Speed	12 Mb	18 Mb	24 Mb
Upload Speed	1 Mb	2 Mb	1 Mb
Download Allowance	Unlimited	Unlimited	Unlimited
Line Rental	€25.78	€25.78	€25.78
Once-off Charges	€100.63 Installation	€100.63 Installation	€100.63 Installation

A 7.20 Eircom also offers a number of NGB broadband packages.

Table A7.18: Eircom Standalone Next Generation Broadband²²⁵⁰

	Business Lite	Business Lite Plus
Contract Length	12 months	12 months
Price (incl. VAT) per month	€25.40	€30.49
Download Speed	8 Mb	8 Mb
Upload Speed	512 Kb	512 Kb
Download Allowance	10 Gb	Unlimited
Line Rental	€25.78	€25.78
Once-off Charges	€100.63 Installation,	€100.63 Installation,

A 7.21 Eircom has a range of alternative broadband standalone packages.

²²⁴⁹ <https://www.eir.ie/opencms/export/sites/default/.content/pdf/pricing/Part3.1.pdf>.

²²⁵⁰ *Ibid.*

Table A7.19: Eircom Standalone Broadband²²⁵¹

	Advantage	Advantage Boost	Advantage Boost 1Gb	Advantage Boost 300Mb	Advantage Boost 150Mb	Broadband 40Gb	Unlimited
Contract Length	12 Months	12 Months	12 Months	12 Months	12 Months	12 Months	12 Months
Price (incl. VAT) per month	€30.49	€36.64	€73.54 ²²⁵²	€48.94 ²²⁵³	€42.79 ²²⁵⁴	€42.79	€48.94
Download Speed	100 Mb	100 Mb	1024 Mb	300 Mb	150 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	100 Mb	70 Mb	30 Mb	20 Mb	20 Mb
Download Allowance	50 Gb	Unlimited	Unlimited	Unlimited	Unlimited	40 Gb	Unlimited
Line Rental	€25.78	€25.78	€25.78	€25.78	€25.78	Included	Included
Once-off Charges	€100.63 Installation	€100.63 Installation	€270.92 Installation	€270.92 Installation	€270.92 Installation	€100.63 Installation	€100.63 Installation

A 7.22 Eircom also has a range of bundles. The table below give a brief overview of the packages available to small and medium sized businesses.

²²⁵¹ *Ibid.*

²²⁵² This package can also be purchased with line rental included at a price of €91.99.

²²⁵³ This package can also be purchased with line rental included at a price of €67.83.

²²⁵⁴ This package can also be purchased with line rental included at a price of €61.24.

Table A7.20: Eircom Broadband bundles²²⁵⁵²²⁵⁶

	Advantage Boost 1Gb + Talk Phone Line	Advantage Boost 300 Mb + Talk Phone Line	Advantage Boost 150 Mb + Talk Phone Line	Business Lite Plus (NGB) + Talk Phone Line	Advantage + Talk Phone Line	Value - 40Gb & 200 mins local and national	Boost - Unlimited Broadband & Unlimited local and national minutes	Unlimited Broadband & Unlimited minutes with International
Contract Length	24 Months	24 Months	24 Months	24 Months	24 Months	24 Months	24 Months	24 Months
Introductory Price (Months)								€56.58 (6 months)
Price (incl. VAT) per month	€94.67	€70.06	€63.91	€51.61	€51.61	€56.58	€67.65	€81.18
Download Speed	1024 Mb	300 Mb	150 Mb	8 Mb	100 Mb	100 Mb	100 Mb	100 Mb
Upload Speed	100 Mb	70 Mb	30 Mb	512 Kb	20 Mb	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited	50 Gb	40Gb	Unlimited	Unlimited
Once-off Charges	€270.92 Installation	€270.92 Installation	€270.92 Installation	€100.63 Installation,	€100.63 Installation	€100.63 Installation	€100.63 Installation	€100.63 Installation
Additional Services Included						200 local and national landline minutes, 30 any network mobile minutes & unlimited minutes to Eir mobile	Unlimited local and national landline calls, 60 minutes to mobile	Unlimited local, national and international landline calls, 60 minutes to mobile

²²⁵⁵ <https://business.eir.ie/shop/bundles/broadband-landline/>.

²²⁵⁶ <https://www.eir.ie/opencms/export/sites/default/.content/pdf/pricing/Pt4.1.1.pdf>.

Imagine

A 7.23 Imagine offers one residential broadband package.

Residential Packages

A 7.24 The table below outlines Imagine's available residential broadband package.

Table A7.21: Imagine Residential Broadband Package²²⁵⁷

	LTE Fibre Speed Broadband & Call Pack
Contract Length	18 months
Price (incl. VAT) per month	€59.99
Download Speed	70 Mb
Upload Speed	10 Mb
Download Allowance	20Gb per day
Line Rental	No
Once-off Charges	€50 activation fee, €100 engineer installation (if outdoor coverage)
Other Services included	Unlimited local and national calls

Magnet

A 7.25 Magnet offers a range of broadband packages that are tailored individually for residential and business consumers.

Residential Packages

A 7.26 The residential packages are split between FTTC and FTTH.

Table A7.22: Magnet Residential Broadband Packages (FTTC)

	Fatpipe Fibre 24 ²²⁵⁸	Fatpipe Fibre 100 ²²⁵⁹	Fatpipe Stream ²²⁶⁰
Contract Length	12 Months	18 month/ 12 Months	
Introductory Price (Months)	€20 (3 months)	€40 (3 months)/ €45 (3 months)	
Price (incl. VAT) per month	€30	€49.99/ €53.99	
No Contract Price	€41.99	€57.99	€49.99
Download Speed	24 Mb	100 Mb	24 Mb
Upload Speed	1 Mb	20 Mb	
Download Allowance	Unlimited	Unlimited	Unlimited
Once-off Charges	€58	€58	

²²⁵⁷ <https://www.imagine.ie/broadband/>.

²²⁵⁸ <https://www.magnet.ie/products/fatpipe-24/>.

²²⁵⁹ <http://www.magnet.ie/products/fatpipe-100/>.

²²⁶⁰ <https://www.magnet.ie/products/fatpipe-stream/>.

A 7.27 The table below outlines the FTTH packages that Magnet offers residential customers.

Table A7.23: Magnet Residential Broadband Packages (FTTH)²²⁶¹

	Fibre Broadband 60	Fibre Broadband 100	Choice 30	Choice 60	Choice 100
Contract Length			12 months	12 months	12 months
Price (incl. VAT) per month	€40	€50	€39.99	€53.99	€63.99
Download Speed	60 Mb	100 Mb	30 Mb	60 Mb	100 Mb
Upload Speed	8 Mb	10 Mb	5 Mb	8 Mb	10 Mb
Download Allowance			Unlimited	Unlimited	Unlimited
Line Rental			Included	Included	Included
Other Services included			Off peak local and national calls,	Off peak local and national calls, 100 minutes for international calls	Anytime local and national calls, 100 minutes for international calls, 30 minutes for mobile calls

Business Packages

A 7.28 For business consumers, Magnet offers packages tailored toward small, medium and large businesses, with packages for large businesses being custom designed based on specified requirements.

²²⁶¹ <http://www.magnet.ie/ftth/>.

Table A7.24: Magnet Broadband Packages for Small Businesses²²⁶²

	Small Office Fibre 100 ²²⁶³	Office in a Box ²²⁶⁴	Business Fibre 100 ²²⁶⁵	Cloud Link ²²⁶⁶
Introductory Price				
Price (incl. VAT) per month				
Download Speed	100 Mb	100 Mb	100 Mb	30 Mb
Upload Speed	20 Mb		20 Mb	30 Mb
Download Allowance	Unlimited			Unlimited
Line Rental	Yes	Yes		
Other Services included	Unlimited calls to Irish, UK, USA landlines and mobiles, and 18 other countries.			

Sky

A 7.29 Sky offers a number of packages for residential and business customers, both as standalone products and as bundles. Business broadband packages are offered on a customised basis.

Residential Packages

A 7.30 The packages for residential customers are detailed in the table below.

Table A7.25: Sky Residential Broadband Packages²²⁶⁷

	Fibre Unlimited	Broadband Unlimited	TV & Sky Fibre
Contract Length	12 months	12 months	12 months
Introductory Price	€75 (12 months)	€75 (12 months)	€74.50 (12 months)
Price (incl. VAT) per month	€85.00	€77.00	€94.50
Download Speed	100 Mb	24 Mb	100 Mb
Upload Speed	10 Mb	2 Mb	10 Mb
Download Allowance	Unlimited	Unlimited	Unlimited
Once off Charges	€50 connection service		

²²⁶² <http://www.magnet.ie/business/business-type/small-business/>.

²²⁶³ <https://www.magnet.ie/business/products/small-office-fibre-100/>.

²²⁶⁴ <https://www.magnet.ie/business/products/office-box/>.

²²⁶⁵ <https://www.magnet.ie/business/products/business-fibre-100/>.

²²⁶⁶ <https://www.magnet.ie/business/products/medium-large-business-broadband/>.

²²⁶⁷ <http://www.sky.com/ireland/broadband-talk/tv-and-fibre/>.

A 7.31 For business customers, Sky offers packages for certain types of businesses, e.g. pubs, bars, restaurants, hotels, offices.²²⁶⁸

Virgin Media

A 7.32 Virgin Media offers a range of broadband services both as part of a bundle and as a standalone product.

Residential Packages

A 7.33 The table below outlines the standalone broadband packages for residential customers which are provided over Virgin Media's DOCSIS 3.0 CATV network.

Table A7.26: Virgin Media Residential Standalone Broadband

	240Mb Naked Broadband²²⁶⁹
Contract	12 months
Introductory Price Months)	€44 (6 months)
Price (incl. VAT) / month	€54
Download Speed	240 Mb
Upload Speed	24 Mb
Allowance	Unlimited
Once-off Charges	€60 service connection

A 7.34 Virgin Media bundles broadband with TV, fixed phone line and mobile services. The table below outlines some of these basic bundles.

²²⁶⁸ <https://business.sky.com/>.

²²⁶⁹ <https://www.virginmedia.ie/broadband/buy-a-broadband-package/240-mb-anytime-world.html>.

Table A7.27: Virgin Media Residential Broadband Bundles

	240Mb and Anytime World²²⁷⁰	240MB Freedom Broadband Anytime Mobile²²⁷¹	360Mb Broadband and Home Phone²²⁷²	240Mb Anytime Mobile and Virgin Mix TV²²⁷³	240Mb Anytime Mobile and Virgin Full House TV²²⁷⁴	360 Mb Mobile World and Virgin Full House TV²²⁷⁵
Contract	12 months	1 months	12 months	12 months	12 months	12 months
Introductory Price Months)	€44 (6 months)		€49 (6 months)	€64 (6 months)	€69 (6 months)	€74 (6 months)
Price (incl. VAT) / month	€59	€59	€64	€89	€94	€99
Download Speed	240 Mb	240 Mb	360 Mb	240 Mb	240 Mb	360 Mb
Upload Speed	24 Mb	24 Mb	36 Mb	24 Mb	24 Mb	36 Mb
Allowance	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Once-off Charges	€20 service connection, €50 installation	€20 service connection, €50 installation	€20 service connection, €50 installation	€80 service connection, €50 installation	€80 service connection, €50 installation	€80 service connection, €50 installation
Other Services included	Unlimited calls to Irish landlines, 400 minutes to landlines in 22 international countries.	Unlimited calls to Irish landlines, 400 minutes to landlines 22 international countries.	Unlimited calls to landlines and mobiles in Ireland and 22 international countries.	Unlimited calls to Irish landlines and mobiles, 400 minutes to landlines in 22 international countries, 50+ channels.	Unlimited calls to Irish landlines and mobiles, 400 minutes to landlines in 22 countries, 100+ channels	Unlimited calls to mobiles and landlines in Ireland and 22 international countries, 100+ channels.

²²⁷⁰ <https://www.virginmedia.ie/broadband/buy-a-broadband-package/240-mb-anytime-world.html>.

²²⁷¹ <https://www.virginmedia.ie/broadband/buy-a-broadband-package/240-mb-freedom-broadband-anytime-world/>.

²²⁷² <https://www.virginmedia.ie/broadband/buy-a-broadband-package/360-mb-mobile-world/>.

²²⁷³ <https://www.virginmedia.ie/bundles/broadband-tv-phone/anytime-world-and-horizon-tv.html>.

²²⁷⁴ <https://www.virginmedia.ie/bundles/broadband-tv-phone/anytime-world-horizon-max-tv/>.

²²⁷⁵ <https://www.virginmedia.ie/bundles/broadband-tv-phone/mobile-world-and-horizon-max-tv/>.

Business Packages

A 7.35 Virgin Media also provides broadband packages to business customers, including standalone broadband services and office packages that also include phone services.²²⁷⁶

Table A7.28: Virgin Media Broadband for Businesses²²⁷⁷

	Business 100	Business 200	Business 300	Business 400
Contract Length	12 months	12 months	12 months	12 months
Price (incl. VAT) per month	€55.35	€67.55	€79.95	€92.25
Download Speed	100 Mb	200 Mb	300 Mb	400 Mb
Upload Speed	10 Mb	20 Mb	30 Mb	40 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited
Once-off Charges	€80 installation fee	€80 installation fee	€80 installation fee	€80 installation fee
Other Services included	2 Phone lines included, 1500 minutes for local, national and UK fixed lines plus 200 mobile minutes.	4 Phone lines included, 1500 minutes for local, national and UK fixed lines plus 200 mobile minutes.	4 Phone lines included, 1500 minutes for local, national and UK fixed lines plus 200 mobile minutes.	4 Phone lines included, 1500 minutes for local, national and UK fixed lines plus 200 mobile minutes.

²²⁷⁶ <https://www.virginmedia.ie/business/>.

²²⁷⁷ <https://www.virginmedia.ie/business/business-broadband-phone/>.

Vodafone

Residential Packages

A 7.36 Vodafone offers a number of residential as well as business broadband packages. Vodafone's standalone as well as broadband and phone packages are outlined in the table below.

Table A7.29: Vodafone Standalone/Phone Broadband Packages²²⁷⁸

	Simply Broadband	Home Essentials	Home Unlimited
Contract	18 months	18 months	18 months
Introductory Price	€40 (6 months)	€40 (6 months)	€40 (6 months)
Price (incl. VAT) / month	€45	€50	€60
Download Speed	100 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited
Line Rental		Included in price	Included in price
Once-off charges	€30 installation	€30 installation	€30 installation
Other Services included		Unlimited anytime calls to Irish landlines	Unlimited anytime calls to Irish landlines and mobiles

A 7.37 The table below details Vodafone's Fibre to the Home (FTTH) broadband packages, including standalone broadband and bundled packages.

²²⁷⁸ <https://www.vodafone.ie/home/broadband/>.

Table A7.30: Vodafone FTTH Broadband Packages²²⁷⁹

	150Mbps Gigabit	300Mbps Gigabit	1000Mbps Gigabit	LightSpeed Broadband 100Mbps + Vodafone TV 59	LightSpeed Broadband 100Mbps + Vodafone TV 88
Contract	18 months	18 months	18 months	18 months	18 months
Introductory Price	€40 (6 months)	€40 (6 months)	€40 (6 months)	€40 (6 months)	€40 (6 months)
Price (incl. VAT) / month	€45	€55	€90	€70	€80
Download Speed	150Mb	350 Mb	1000 Mb	100 Mb	100 Mb
Upload Speed	20 Mb	20 Mb	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Once-off charges	€30 installation	€30 installation	€30 installation	€30 installation	€30 installation
Other Services included				Includes over 59 TV channels	Includes over 88 TV channels

Business packages

A 7.38 On the business side, Vodafone caters for small, medium and large businesses, public sector organisations.²²⁸⁰

A 7.39 The table below details Vodafone's business broadband packages, including a standalone broadband package for businesses.

²²⁷⁹ <https://n.vodafone.ie/shop/broadband/gigabit-broadband.html>.

²²⁸⁰ <http://www.vodafone.ie/business/home/>.

Table A7.31: Vodafone Business Broadband Packages²²⁸¹

	Simply broadband for business	Office Essentials	Office Professional	Office Unlimited
Contract Length	18 months	18 month	18 month	18 month
Introductory Price (Months)	€49.20	€55.35	€61.50	€73.80
Download Speed	24 Mb	Max. that line permits (1000 Mb, 100 Mb, 24 Mb)	Max. that line permits (1000 Mb, 100 Mb, 24 Mb)	Max. that line permits (1000 Mb, 100 Mb, 24 Mb)
Upload Speed	20 Mb	20 Mb	20 Mb	20 Mb
Download Allowance	Unlimited	Unlimited	40 Gb	Unlimited
Line Rental		Included in price	Included in price	Included in price
Other Services included	1 TB cloud storage with OneDrive for Business	Unlimited calls to Irish landlines, 200 minutes to Vodafone mobiles.	Unlimited calls to Irish landlines and mobiles	Unlimited calls to Irish and UK landlines and mobiles, 1 TB of Cloud storage

²²⁸¹ <http://www.vodafone.ie/small-business/fixed/single-line/>.

Mobile Broadband Packages Offered by Main SPs

A 7.40 This section gives a brief outline of the mobile broadband packages on offer to retail consumers. Mobile broadband packages are offered by Three, eir Mobile, and Vodafone. As outlined in the table below, a total of 55 packages are available.

Table A7.32: Mobile Broadband Packages offered by SP²²⁸²

Provider	Number of Packages Offered
Three	30
eir Mobile	14
Vodafone	11
Total	55

Three

A 7.41 Three offers a total of 30 mobile broadband packages and these are outlined in the tables below.

Residential Packages

A 7.42 The table below outlines the pre pay packages offered by Three (Sim Only).

Table A7.33: Three Prepay Mobile Broadband Packages – SIM Only²²⁸³

	Pre Pay Broadband 1 day SIM-Only	Pre Pay Broadband 1 week SIM-Only	Pre Pay Broadband 1GB 28 days SIM-Only	Pre Pay Broadband 7.5GB 28 days SIM-Only	Pre Pay Broadband 20GB 28 days SIM-Only
Contract Length			28 days	28 days	28 days
Monthly Price	€5	€10	€20	€25	€35
Download Speed (MB)	7.2 Mbps	7.2 Mbps	7.2 Mbps	7.2 Mbps	7.2 Mbps
3G/4G	3G	3G	3G	3G	3G
Download Allowance (GB)	500Mb	2 Gb	1 Gb	7.5Gb	20Gb
Prepay/Billpay	Prepay	Prepay	Prepay	Prepay	Prepay
Once-off Charges	€5 Service Connection and SIM cost				

²²⁸² Latest data as at April 2018.

²²⁸³ <http://www.three.ie/eshop/broadband-plans/prepay-broadband/>.

A 7.43 The following table outlines the pre pay plans offered by Three above where there is an additional monthly rental charge for a 4G enabled broadband device.

Table A7.34: Three Mobile Prepay Broadband Packages²²⁸⁴

	Pre Pay Broadband 1 day	Pre Pay Broadband 1 week	Pre Pay Broadband 1GB 28 days	Pre Pay Broadband 7.5GB 28 days	Pre Pay Broadband 20GB 28 days
Contract Length			28 days	28 days	28 days
Price (incl. VAT) per month	€5	€10	€20	€25	€35
Download Speed (MB)	60 Mbps	60 Mbps	60 Mbps	60 Mbps	60 Mbps
Download Allowance (GB)	500Mb	2 Gb	1 Gb	7.5Gb	20Gb
3G/4G	4G	4G	4G	4G	4G
Prepay/Bill pay	Prepay	Prepay	Prepay	Prepay	Prepay
Once-off Charges	€59.99	€59.99	€59.99	€59.99	€59.99
Other Services included	Device included	Device included	Device included	Device included	Device included
Device	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573

A 7.44 The following tables outline the bill pay plans offered by Three.

²²⁸⁴ *Ibid.*

Table A7.35: Three Billpay Mobile Broadband Packages – SIM Only²²⁸⁵

	Broadband One SIM-Only	Broadband Two SIM-Only	Broadband Three SIM-Only	Broadband Four SIM-Only	Broadband Five SIM-Only
Contract Length	1 month	1 month	1 month	1 month	1 month
Price (incl. VAT) per month	€15.99	€29.99	€42.99	€54.99	€69.99
Download Speed (MB)	60 Mbps	60 Mbps	60 Mbps	60 Mbps	60 Mbps
Download Allowance (GB)	3 Gb	30 Gb	60 Gb	100 Gb	250 Gb
3G/4G	4G	4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Bill pay	Bill pay	Bill pay

Table A7.36: Three Billpay Mobile Broadband Packages²²⁸⁶

	Broadband One	Broadband Two	Broadband Three	Broadband Four	Broadband Five
Contract Length	18 months	18 months	18 months	18 months	18 months
Price (incl. VAT) per month	€15.99	€29.99	€42.99	€54.99	€69.99
Download Speed (MB)	60 Mbps	60 Mbps	60 Mbps	60 Mbps	60 Mbps
Download Allowance (GB)	3 Gb	30 Gb	60 Gb	100 Gb	250 Gb
3G/4G	4G	4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Bill pay	Bill pay	Bill pay
Once off charges	€9				
Other Services included	Device included	Device included	Device included	Device included	Device included
Device	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573

Business Packages

A 7.45 Three also offers mobile broadband packages for businesses as outlined in the tables below.

²²⁸⁵ <http://www.three.ie/eshop/broadband-plans/bill-pay-broadband/>.

²²⁸⁶ *Ibid.*

Table A7.37: Three Business 3G Mobile Broadband Packages – SIM Only²²⁸⁷

	Three Broadband 3GB	Three Broadband 20GB	Three Broadband 60GB	Three Broadband 100GB	Three Broadband 250GB
Contract Length	1 month	1 month	1 month	1 month	1 month
Price (incl. VAT) per month	€17.20	€30.74	€43.04	€54.11	€67.64
Download Speed (MB)	42 Mbps	42 Mbps	42 Mbps	42 Mbps	42 Mbps
Download Allowance (GB)	3 Gb	20 Gb	60 Gb	100 Gb	250 Gb
3G/4G	3G	3G	3G	3G	3G
Prepay/Billpay	Bill pay	Bill pay	Bill pay	Bill pay	Bill pay

Table A7.38: Three Business 4G Mobile Broadband Packages²²⁸⁸

	4G Three Broadband 3GB	4G Three Broadband 20GB	4G Three Broadband 60GB	4G Three Broadband 100GB	4G Three Broadband 250GB
Contract Length	18 months	18 months	18 months	18 months	18 months
Price (incl. VAT) per month	€17.20	€27.05	€40.58	€54.11	€67.64
Download Speed (MB)	225 Mbps	225 Mbps	225 Mbps	225 Mbps	225 Mbps
Download Allowance (GB)	3 Gb	20 Gb	60 Gb	100 Gb	250 Gb
3G/4G	4G	4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Bill pay	Bill pay	Bill pay
Once off charges	€9				
Other Services included	Device included	Device included	Device included	Device included	Device included
Device	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573	Huawei E5573

²²⁸⁷ <http://www.three.ie/business/solutions/mobile-plans/>.

²²⁸⁸ *Ibid.*

Eir Mobile

Residential Packages

A 7.46 eir Mobile offers a range of mobile broadband packages including pre pay and bill pay packages as described in the two tables below.

Table A7.39: eir Mobile Prepay Broadband Packages²²⁸⁹

	30 Day Pass – SIM Only	180 Day Pass – SIM Only	30 Day Pass	180 Day Pass
Contract Length	1 month	6 months	1 month	6 months
Price (incl. VAT) month	€19.99	€30	€19.99	€30
Download Speed (MB)	60 Mbps	60 Mbps	60 Mbps	60 Mbps
3G/4G	4G	4G	4G	4G
Once-off charges			€29	€29
Prepay/Billpay	Pre pay	Pre pay	Pre pay	Pre pay
Device Included			Huawei E3372 4G	Huawei E3372 4G

Table A7.40: eir Mobile Billpay Broadband Packages²²⁹⁰

	Mobile Broadband 15 Gb	Mobile Broadband 25 Gb	Mobile Broadband 50 Gb	Mobile Broadband 15 Gb – SIM Only	Mobile Broadband 25 Gb – SIM Only	Mobile Broadband 50 Gb – SIM Only
Contract Length	1 month	6 months	6 months	1 month	6 months	6 months
Monthly price	€15	€20	€30	€15	€20	€30
Download Speed (MB)	60 Mbps	60 Mbps	60 Mbps	60 Mbps	60 Mbps	60 Mbps
Download Allowance GB	15 Gb	25 Gb	50 Gb	15 Gb	25 Gb	50 Gb
3G/4G	4G	4G	4G	4G	4G	4G
Other Services	Device included					
Device	Huawei E3372 4G					
Once off charges	€29					

²²⁸⁹ <https://www.eir.ie/mobile/broadband/prepay/>.

²²⁹⁰ <https://www.eir.ie/mobile/broadband/bill-pay/>.

Business Packages

A 7.47 eir Mobile also offers two SIM Only mobile broadband business packages shown below.

Table A7.41: eir Mobile Broadband Packages²²⁹¹

	4G Mobile Data Professional 2Gb	4G Mobile Data Ultimate 10GB	4G Mobile Data Professional 2Gb – SIM Only	4G Mobile Data Ultimate 10GB – SIM Only
Contract Length	1,12 or 18 months	18 months	1,12 or 18 months	18months
Price (incl. VAT) per month	€9.22	€20.32	€9.22	€20.32
Download Speed (MB)	42 Mbps	42 Mbps	42 Mbps	42 Mbps
Download Allowance (GB)	2 Gb	10 Gb	2 Gb	10 Gb
3G/4G	4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Pre pay	Pre pay
Device Included	Huawei E5377	Huawei E5377		

Vodafone**Residential Packages**

A 7.48 Vodafone offers a number of Pre pay packages as seen in the table below.

Table A7.42: Vodafone Prepay Mobile Broadband Packages²²⁹²

	Pay As You Use Mobile Broadband Daily	Pay As You Use Mobile Broadband Weekly	Pay As You Use Mobile Broadband Monthly
Plan Length	1 Day	7 Days	1 month
Price (incl. VAT) per month	€3	€10	€20
Download Speed MB	7.2 Mbps	7.2 Mbps	7.2 Mbps
Download Allowance GB	500 Mb	2 Gb	7.5 Gb
3G/4G	3G	3G	3G
Prepay/Billpay	Prepay	Prepay	Prepay
Once-off Charges	€49.99	€49.99	€49.99
Other Services included	Device included	Device included	Device included
Device	Vodafone Mobile	Vodafone Mobile	Vodafone Mobile

²²⁹¹ <https://business.eir.ie/mobile-broadband>.

²²⁹² <https://n.vodafone.ie/shop/mobile-broadband.html>.

A 7.49 Vodafone also offers a range of Bill pay packages which can be seen in the table below.

Table A7.43: Vodafone Billpay Mobile Broadband Packages²²⁹³

	Red MBB Plus SIM-Only	Red MBB Super SIM-Only	Red MBB Plus	Red MBB Super	Vodafone 4G Home
Contract Length	12 months	12 months	18 months	18 months	24 months
Price (incl. VAT) per month	€22	€30	€22	€30	€45
Download Speed MB	65 Mbps	65 Mbps	65 Mbps	65 Mbps	150 Mbps
Download Allowance GB	15 Gb	30 Gb	15 Gb	30 Gb	150 Gb
3G/4G	4G	4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Bill pay	Bill pay	Bill pay
Other Services included			Device included	Device included	Device included
Device			Vodafone Mobile	Vodafone Mobile	Vodafone Router

Business Packages

A 7.50 Vodafone offers a variety of bill pay mobile broadband packages to businesses as shown below.

Table A7.44: Vodafone Billpay Mobile Broadband Packages²²⁹⁴

	Red MBB Plus	Red MBB Super	4G Broadband
Contract Length	12 months	18 months	24 months
Price (incl. VAT) per month	€22.14	€29.99	€44.99
Download Speed MB	65 Mbps	65 Mbps	225 Mbps
Download Allowance GB	15 Gb	30 Gb	150 Gb
3G/4G	4G	4G	4G
Prepay/Billpay	Bill pay	Bill pay	Bill pay
Other Services included	Device included	Device included	Device included
Device	Vodafone Mobile	Vodafone Mobile	Vodafone Mobile

²²⁹³ *ibid.*

²²⁹⁴ <http://www.vodafone.ie/small-business/mobile-broadband/wifi/>.

Appendix: 8 Chain of Substitution Analysis

- A 8.1 This Appendix presents an updated chain of substitution analysis, similar to Appendix 3 of the Consultation.
- A 8.2 A chain of substitution refers to the substitutability between a number of similar products, which could lead to each of these products being part of the same market. A chain of substitution implies that a product at one end of the chain can potentially exert an indirect constraint on a product at the other end of the chain.²²⁹⁵
- A 8.3 For example, if product B is a substitute for products A and C, while A and C may not be direct substitutes, they may be considered to be in the same Product Market since their respective pricing may be constrained by substitution to B.²²⁹⁶
- A 8.4 Broadband can be delivered over several platforms including a fixed phone line, CATV network, fibre network, fixed wireless connection, satellite broadband, mobile broadband (3G/4G), and broadband on a mobile phone. Platforms that are similar in nature are likely to be close substitutes, e.g. broadband delivered over a phone line versus CATV network, while products that are less similar in nature are considered to be weak substitutes, e.g. fibre broadband and mobile broadband (3G/4G).
- A 8.5 While each of these products may be substitutes (they each provide a broadband connection), it is not necessarily the case that the whole chain is the relevant market. However, it is possible that an increase in price of one of the products in the chain could lead to a rise in the demand for a product further up the chain, in which case the associated products would be considered part of the same market for the competitive assessment.

Chain of Substitution - Methodology

- A 8.6 This section gives an overview of the methodology used to inform ComReg's assessment of the retail broadband Product Market, as set out in Section 4 of the Consultation.
- A 8.7 The methodology applied in calculating the monthly cost of broadband (both residential and non-residential tariffs) is outlined below.

²²⁹⁵ Aproskie, J. and S. Lynch (2012). 'The Chain of Substitution in Market Definition: Pitfalls in Application' Available at: <http://www.compcom.co.za/wp-content/uploads/2014/09/Aproskie-and-Lynch-Chain-of-substitution-in-market-definition-Competition-Conference-2012.pdf>.

²²⁹⁶ Commission Notice on the definition of relevant market for the purposes of Community competition law 97/C 373/03.

- **Tariff Duration:** Use a tariff duration specified by SPs - typically 12 or 18 months.
- **Relevant Bundle:** Determine what the relevant bundle or product is. This could be broadband, broadband plus line rental etc. Isolate the broadband only component, or use a set fixed price to account for other items in a bundle (e.g. line rental, basic calls).
- **Installation/Connection Fees:** Only include standard installation/connection fees.
- **Promotions/Introductory Offers:** Only include discounted tariff costs and exclude other promotional offers.
- **Excess charges:** Assume the majority of broadband users will not exceed data allowances.

A 8.8 SPs typically offer broadband services with 12 or 18 month contracts. Of the tariffs analysed, there were 4 different contract lengths ranging from 0 to 24 months. To allow tariffs to be compared accurately, ComReg computed the average broadband cost on the basis of an 18 month contract length. Over the 18 months, a broadband consumer would typically incur installation/connection fees (if applicable), receive any promotional price for a set period (if offered), pay for line rental (if charged) and pay the standard tariff price for the remainder of the contract length.

A 8.9 As broadband services are typically packaged with a phone service or line rental charge, ComReg accounts for this in the pricing analysis. Where packages include other services such as TV or mobile telephony services, ComReg seeks to use the most basic bundle. As such, the cost of other services in the bundle are excluded to isolate the cost of the broadband service.

A 8.10 For installation and connection fees, ComReg assumes that the majority of customers will incur standard charges. Many SPs do not charge for standard installation or connection. ComReg therefore excludes any non-standard charges involving installing new cabling or where an engineer is required. Furthermore, ComReg assumes the majority of consumers will use the standard equipment offered by the SP, such as a wireless router.

A 8.11 To encourage customer switching, many SPs offer discounts and promotions to new customers. Typically these promotions are a discounted price for a number of months and/or a reduction in installation/connection fees. These promotional prices are accounted for in the assessment below. Other promotions or offers that do not relate to the headline broadband price are not accounted for. Examples of such promotions include access to over-the-top services or cashback offers.

A 8.12 ComReg notes that many broadband services are offered with unlimited download allowances or a fair-usage data allowance. However, SPs typically have charges for excess usage. ComReg assumes that the majority of customers do not exceed their download allowance and so excess charges are not considered within the methodology below.

Calculation of Monthly Cost

A 8.13 ComReg computes the cost of Broadband by adding the following:

- The recurring tariff cost for the first 18 months, accounting for:
 - Any promotional or introductory price offered; and
 - The recurring monthly cost after any promotional or introductory period;
- The recurring cost of Line rental (if applicable) for the first 18 months; and
- Any one-off or non-recurring charges relating to standard installation or connection.

A 8.14 The above figure is then divided by 18 to give an average cost of the broadband service.

A 8.15 Consider the following example: Operator X sells a Broadband service at €30 a month, with a minimum contract of 12 months. Operator X has a promotional offer whereby the first 3 months of service are offered for €10 a month. Operator X charges €20 a month for its standard line rental and has an installation fee of €79. The total cost of the broadband service over 18 months is as follows:

- Recurring Tariff Cost = $(3 \times €10) + (15 \times €30) = €480$
- Line Rental Charges = $(18 \times €20) = €360$
- Installation Charges = €79

A 8.16 The total cost of the broadband service for 18 months is €919, or an average cost of €51 per month.

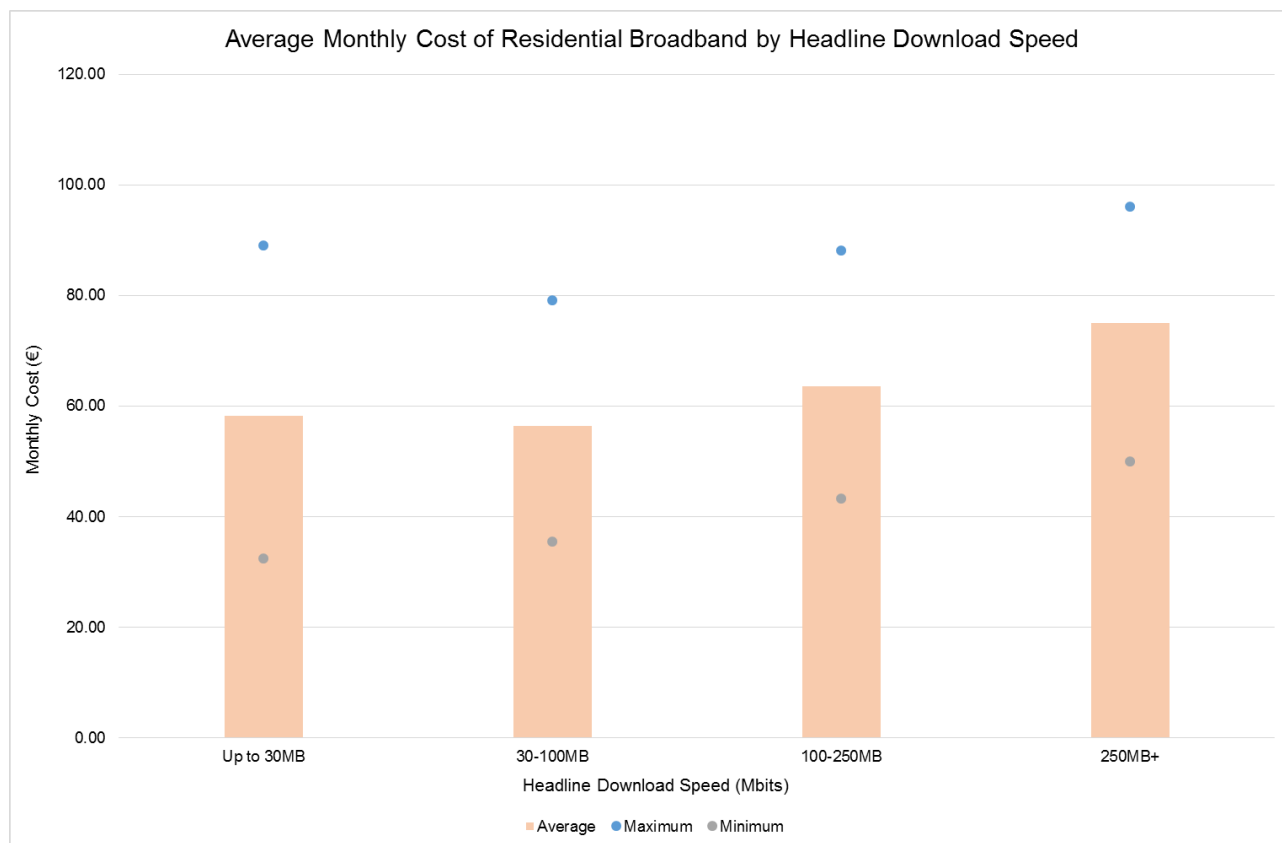
Residential broadband pricing

A 8.17 ComReg analysed the residential broadband tariffs offered by 6 SPs and identified 67 tariffs or bundles that included a broadband service aimed at residential broadband users. Of these 67 tariffs, 54 offered an unlimited download allowance.

A 8.18 As noted above, broadband services aimed at residential subscribers are typically sold with a 'headline' or 'up-to' speed, which varies depending on the package and the technology the service is based on. Of the 67 tariffs examined, the download speeds ranged from 3 Mb/s to 1000 Mb/s.

A 8.19 Figure A8.50 below shows the average monthly cost of broadband for these 67 tariffs by 'headline' download speed, using the methodology outlined above.

Figure A8.50: Average Monthly Cost of Residential Broadband by Headline Download Speed



Source: ComReg calculations based on data from SP websites. Accessed December 2017

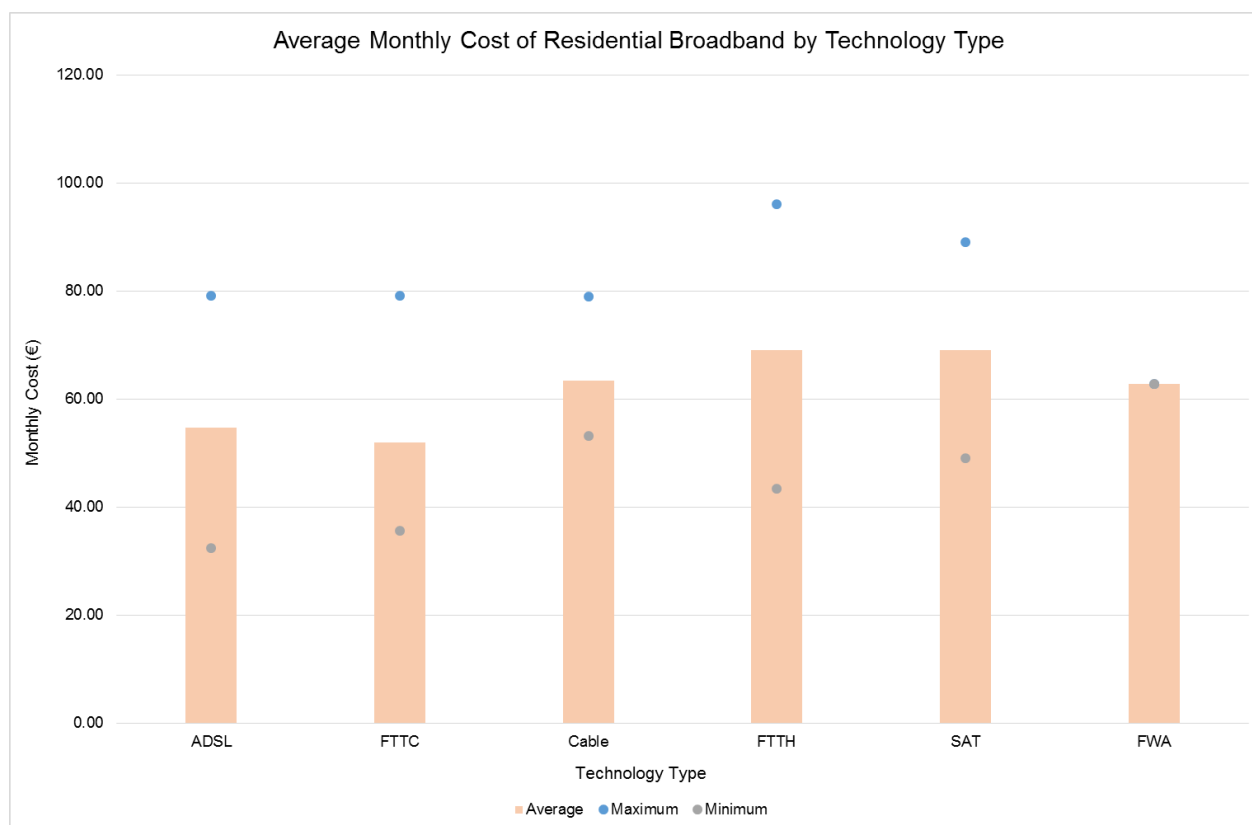
A 8.20 Figure A8.50 also shows the range of the monthly costs for residential broadband tariffs, for each headline speed.

A 8.21 Figure A8.50 shows that for each broadband speed, there is an overlap with the range of costs associated with other similar headline speeds. For example, the monthly cost of broadband offered at speed 'up to 30MB' falls within the range of the average cost of broadband offered at speeds 30-100MB and 100-250MB. This result indicates that it is possible for a subscriber to switch to a faster broadband service for a similar or cheaper price.²²⁹⁷ There is also a positive relationship between speed and price, meaning broadband services offering higher speeds have a higher average cost per month. These factors also indicate that if the price of a broadband product offered at one speed was to increase by a small but significant amount, customers would be able to switch to an alternative product to retain the original price, or to an alternative product to receive a higher broadband speed at the same (higher) price.

²²⁹⁷ While switching to a broadband service with a higher speed may be possible and affordable, consumers may be required to sign up to a new contract or may have to take up other services bundled with a new broadband service.

A 8.22 As well as price variation, ComReg also considers how prices vary by technology. Figure A8.51, below, shows the range of speeds offered over each technology (ADSL, FTTC, FTTH, Cable, Satellite, and Fixed Wireless Access). The analysis presented in Figure A8.51 shows that the monthly cost of broadband offered over each technologies overlaps, allowing End Users to move between these technologies to achieve faster download speeds, while maintaining the average monthly cost of their broadband service.

Figure A8.51: Average Monthly Cost of Residential Broadband by Technology



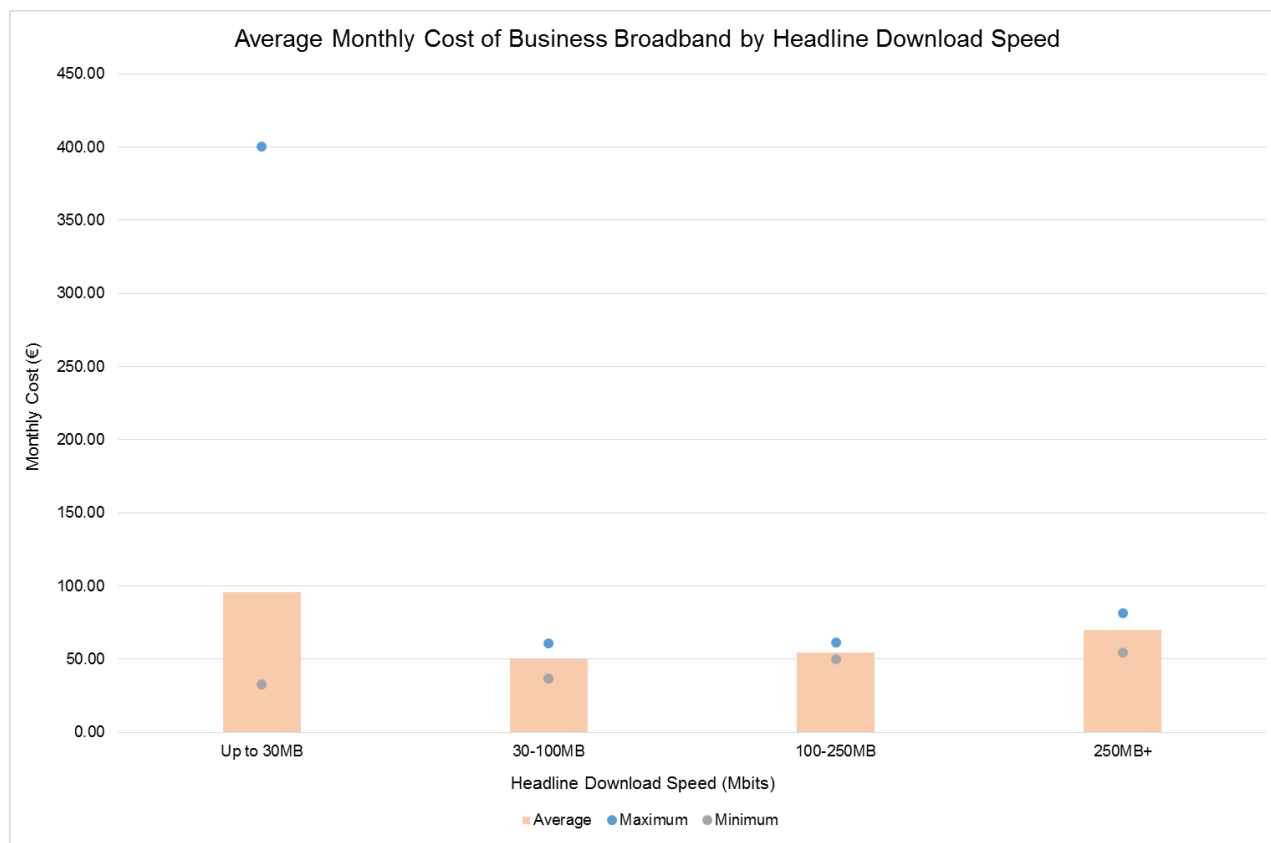
Source: ComReg calculations based on data from SP websites as of December 2017.

Business broadband pricing

A 8.23 ComReg analysed the broadband tariffs offered by 5 SPs and identified 41 tariffs or bundles that included a broadband service aimed at business broadband users. The 41 tariffs examined offered speeds ranging from 3 Mb/s to 1000 Mb/s, with 27 offering an unlimited download allowance.

A 8.24 Figure A8.52 below shows the average monthly cost of broadband for these 41 tariffs, by 'headline' download speed, using the methodology outlined above. Figure A8.52 also shows the range of the monthly costs for business broadband tariffs, for each headline speed.

Figure A8.52: Average Monthly Cost of Business Broadband by Headline Download Speed

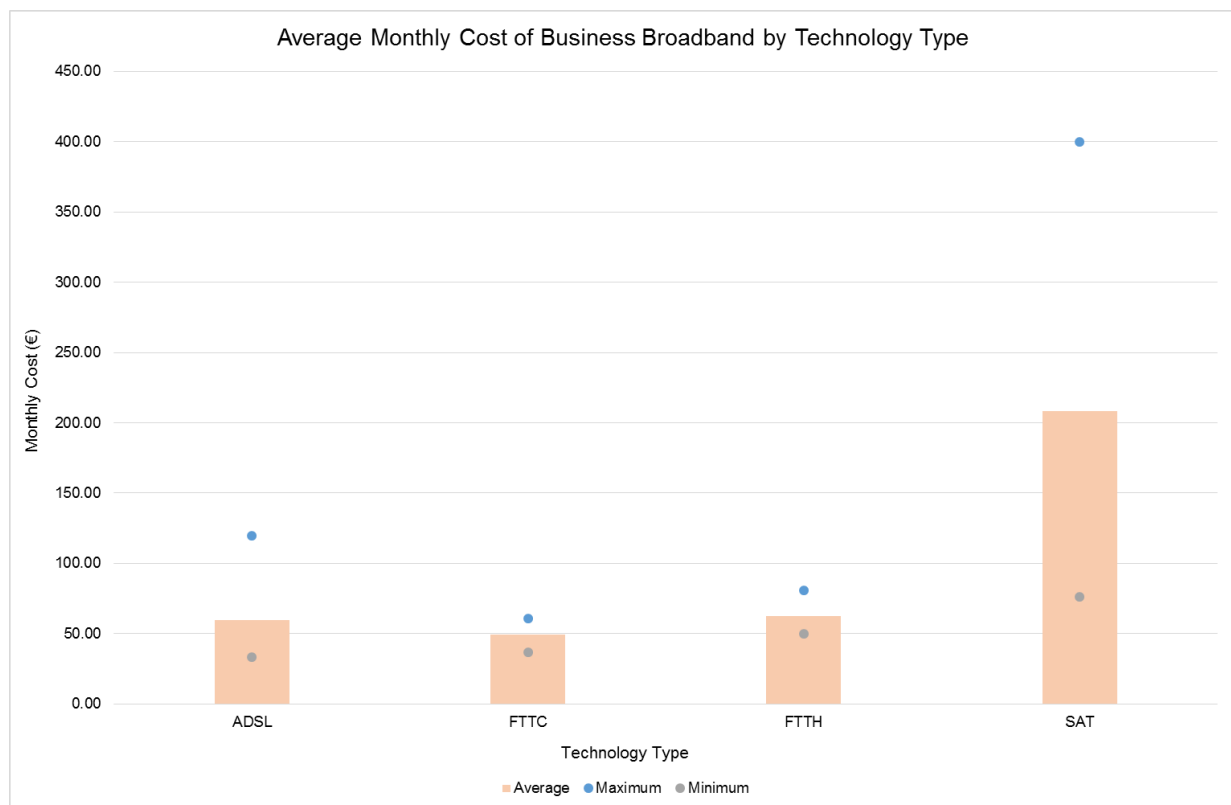


Source: ComReg calculations based on data from SP websites as of December 2017.

A 8.25 Figure A8.52 shows that for each broadband speed, there is an overlap with the range of costs associated with other similar headline speeds. For example, the monthly cost of broadband offered at speed 'up to 30MB' falls within the range of the average cost of broadband offered at speeds 30-100MB and 100-250MB. This result indicates that it is possible for a subscriber to switch to a faster broadband service for a similar or cheaper price.²²⁹⁸

A 8.26 As well as price variation, ComReg also considers how prices vary by technology. Figure A8.53, below, shows the range of speeds offered over each technology (ADSL, FTTC, FTTH, SAT). The analysis presented in Figure A8.53 shows that the monthly cost of broadband offered over each technologies overlaps, allowing businesses to move between these technologies to achieve faster download speeds, while maintaining the average monthly cost of their broadband service.

²²⁹⁸ While switching to a broadband service with a higher speed may be possible and affordable, businesses may be required to sign up to a new contract or may have to take up other services bundled with a new broadband service.

Figure A8.53: Average Monthly Cost of Business Broadband by Technology

Source: ComReg calculations based on data from SP websites, as of December 2017.

Conclusions

- A 8.27 In the above paragraphs, ComReg set out its analysis of whether there was a chain of substitution between retail broadband products provided at various speeds, and whether broadband products provided at speeds that were sufficiently similar, faced a common pricing constraint.
- A 8.28 ComReg's preliminary view is that there is a chain of substitution between retail broadband products, at all speeds, provided over copper, FTTC, FTTH and CATV networks.
- A 8.29 This conclusion is supported by the 2017 WLA/WCA Market Research, as set out in Appendix: 6.

Appendix: 9 Critical Loss Test

Introduction

- A 9.1 In this Appendix, ComReg outlines the computation of the Critical Loss Test (CLT) as set out in paragraphs 4.134 to 4.139 above. This analysis provides further evidence to inform the definition of the Relevant WLA Market and Relevant WCA Market(s).
- A 9.2 As noted in footnote 274, the CLT seeks to support a SSNIP analysis by providing an estimate of the percentage of customers that would have to divert away from the focal product in response to a SSNIP (in this case the pass-through of a wholesale SSNIP) to make the increase in price of the focal product unprofitable.
- A 9.3 The computation of the CLT utilises data on prices of retail broadband packages (as outlined in Appendix: 7), WLA/WCA prices and costs, and subscriber numbers.

Deriving the CLT

- A 9.4 The CLT measures the percentage reduction in demand due to a SSNIP that would leave profits unaffected. If the reduction in demand due to a SSNIP is greater than the critical loss value, then the SSNIP will be unprofitable and vice versa.
- A 9.5 The change in profits following a SSNIP is given by:

$$\pi_1 - \pi_0 = (p_1 q_1 - p_0 q_0) - c(q_1 - q_0) \quad (1)$$

where π is profit, c is marginal cost, p_0 is the price before the SSNIP, p_1 is the price after the SSNIP, q_0 is the original number of subscribers, and q_1 is the post SSNIP number of subscribers. The equation states that the change in profit equals the change in revenue less the change in costs (i.e. marginal costs), which are assumed to fall if the number of subscribers falls.

- A 9.6 If we specify $p_1 = p_0(1 + s)$, $q_1 = q_0(1 + L)$, $c = (\alpha p_0)$ and $\pi_1 - \pi_0 < 0$ the CLT can be expressed as a function of the SSNIP:

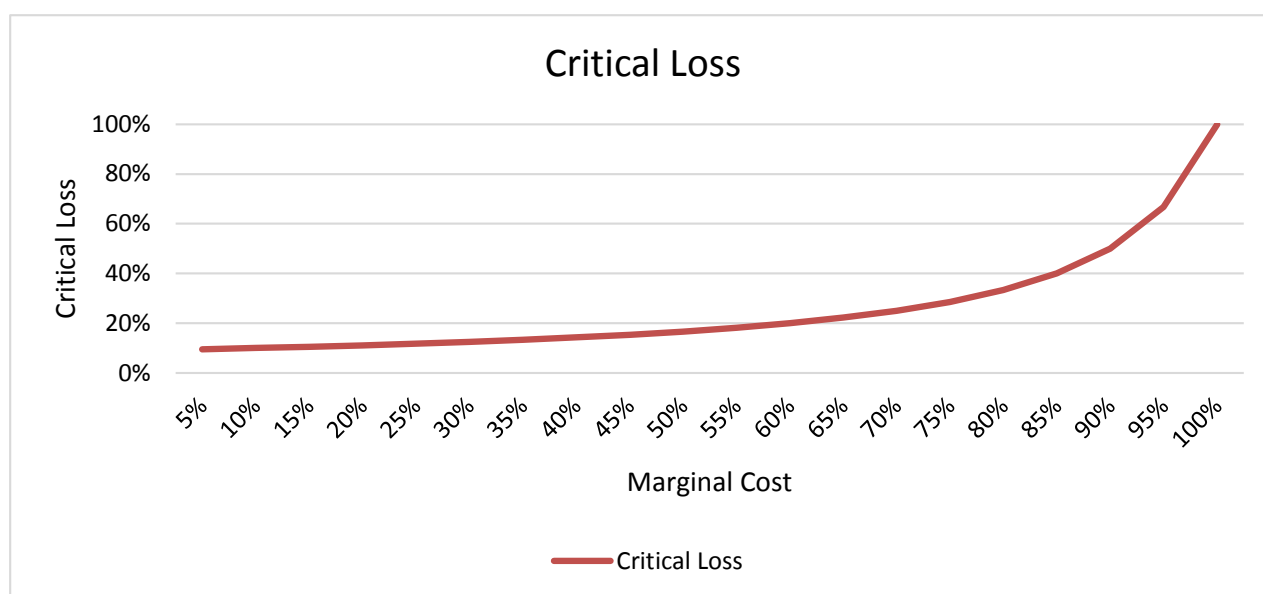
$$L < -\frac{s}{1 + (s - \alpha)} \quad (2)$$

where L is the critical loss, s is the SSNIP, and α is the ratio of marginal cost to the current retail price.

- A 9.7 Thus, to compute the critical loss, ComReg requires data on marginal costs and current retail prices.

- A 9.8 Figure A9.54 below plots the critical loss if a number of assumptions for α are made (i.e. that it is as low as 5% or as high as 100%). If α is 100% (i.e. it is equal to the retail price charged), the lost revenue from customers who switch provider in response to the SSNIP would be offset by the costs saved from not serving those customers. In this case, profits would be the increase in retail prices multiplied by the number of customers who do not switch.
- A 9.9 Conversely, if the marginal costs are as low as 5%, then the lost revenue would come from those who switch, with only a 5% associated cost saving. The lost revenue would be greater than the increase in revenue from customers who don't switch if demand falls by more than 10%.

Figure A9.54: Critical Loss with assumed values for α



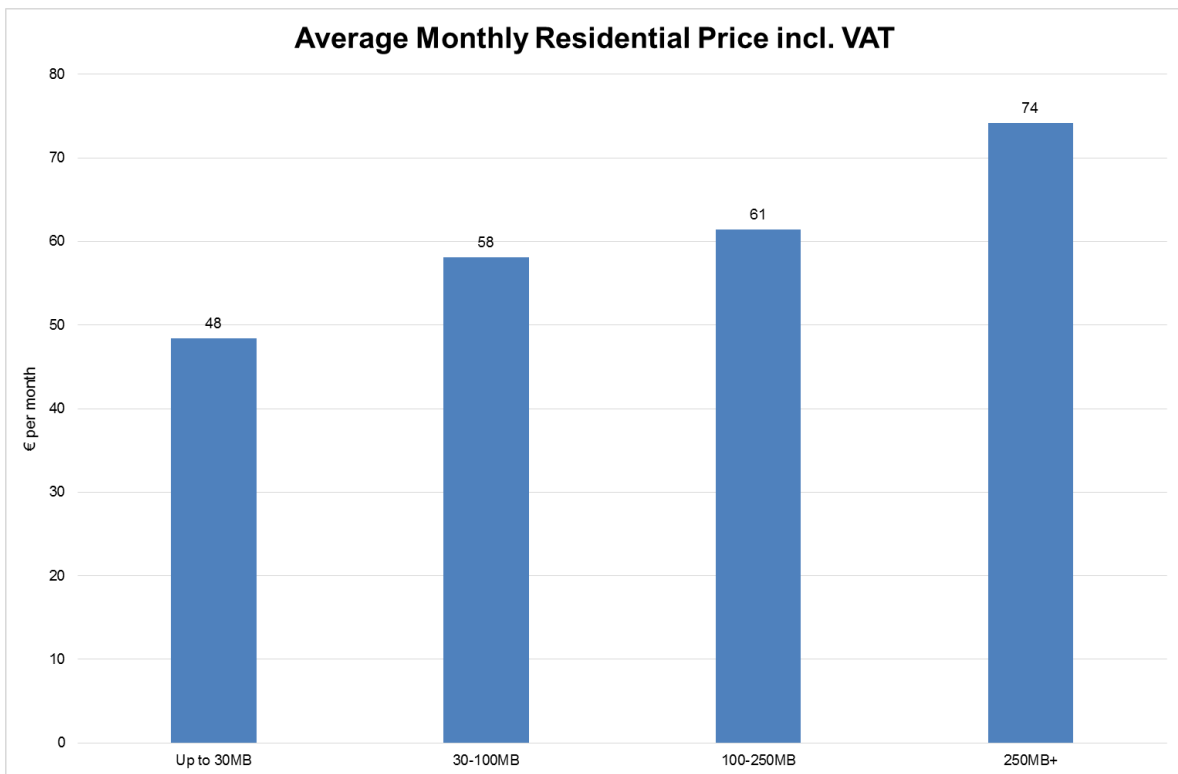
Price and cost data

- A 9.10 The retail broadband prices are outlined in detail in Appendix: 7 by SP and type of package. In Figure A9.55 and Figure A9.56 below, ComReg shows average residential prices across all SPs and offerings by speed and platform for fixed broadband.²²⁹⁹ The data relate to residential prices only and include VAT. Overall, the average price per month is €60 and this is consistent with the 2017 WLA/WCA Market Research among residential customers that showed the average price paid per month to be €74.²³⁰⁰

²²⁹⁹ This is based on data in Appendix: 7 which includes tariff data from SP websites.

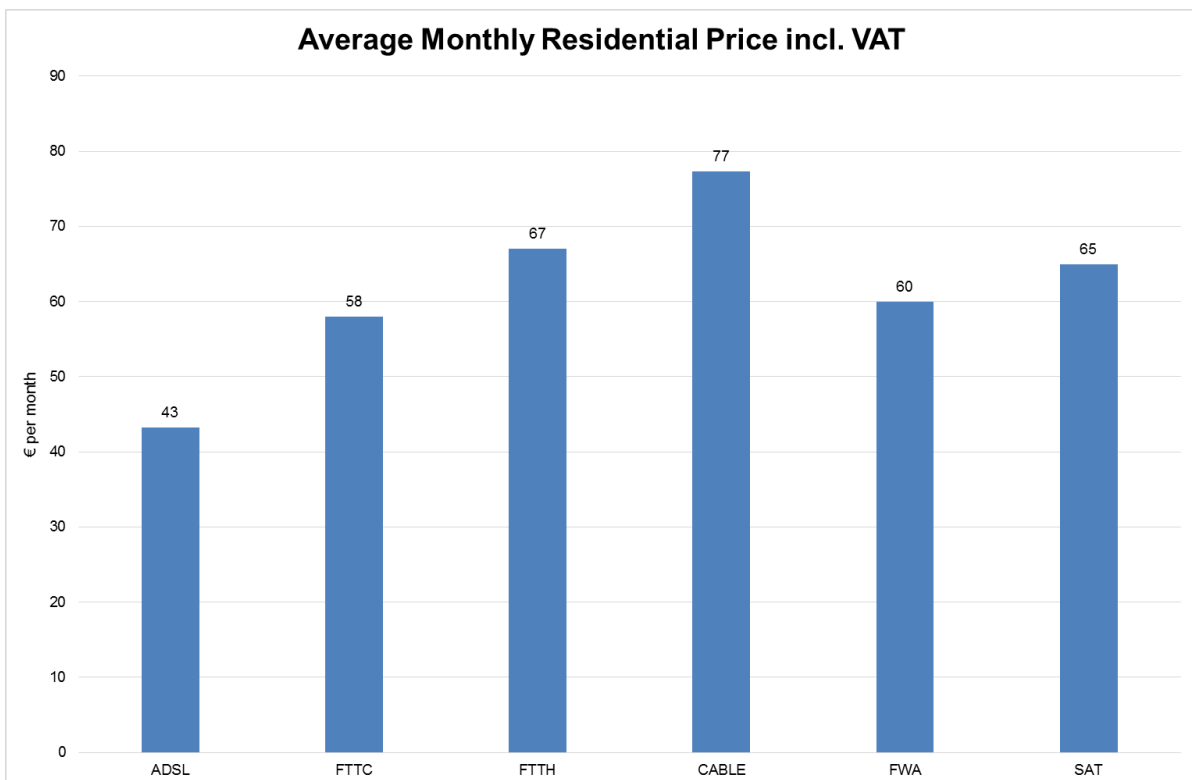
²³⁰⁰ See Figure A6.12 and Figure A6.14 in Appendix: 6.

Figure A9.55: Average Monthly Residential Prices by Speed



Source: ComReg calculations based on data from SP websites, as of December 2017.

Figure A9.56: Average Monthly Residential Prices by Platform



Source: ComReg calculations based on data from SP websites, as of December 2017.

A 9.11 ComReg obtained data on the costs of servicing a residential customer per month including the WLA and WCA prices, customer services costs, billing, equipment, and connection costs. These are outlined in Table A9.45.

Table A9.45: WLA/WCA Prices and Retail Costs

Product	Monthly rental price - €	Monthly usage price - €	Reference²³⁰¹	Retail costs (sales, billing, etc.)
Current Generation				
LLU	€9.34		ARO price list, page 22	n/a
Bitstream* i.e., Bitstream managed backhaul				€9.88
8MB	€4.90			
24MB	€5.90	Varies (see page 16 of Bitstream price list)		
Next Generation				
VUA	€23.00 (FTTC)		Bitstream price list, page 38	€9.50
NGA Bitstream	€23.00 (FTTC)	Varies (see page 32 of Bitstream price list)	Bitstream price list page 26	€9.50

²³⁰¹ Eircom wholesale prices available at: http://www.openeir.ie/Reference_Offers/.

WLA Market

A 9.12 Table A9.46 and Table A9.47 the critical loss for residential customers is estimated at 9.5% for a 5% SSNIP and 17.3% for a 10% SSNIP. This implies that if a Hypothetical Monopolist (HM) imposed a SSNIP of 10%, it will be unprofitable if demand falls by more than 15%. There is no significant difference between the critical loss for LLU and VULA products.

Table A9.46: Estimates of Critical Loss for 5% SSNIP of WLA - Residential

	LLU	VUA	Combined ²³⁰²
Retail prices (average)(residential incl. VAT)	€43.20	€62.51	€53.27
Marginal costs	€19.22	€32.50	€27.88
Ratio costs to prices (α)	44.5%	52.0%	52.3%
SSNIP (s)	5%	5%	5%
Critical loss	8.3%	9.4%	9.5%

Table A9.47: Estimates of Critical Loss for 10% SSNIP of WLA - Residential

	LLU	VUA	Combined
Retail prices (average)(residential incl. VAT)	€43.20	€62.51	€53.27
Marginal costs	€19.22	€32.50	€27.88
Ratio costs to prices (α)	44.5%	52.0%	52.3%
SSNIP (s)	10%	10%	10%
Critical loss	15.3%	17.2%	17.3%

A 9.13 Table A9.48 and Table A9.49 below present the critical loss for business customers, using the retail prices charged to businesses for LLU and VULA based broadband products. The critical loss for business customers is estimated at 8.3% for a 5% SSNIP and 15.3% for a 10% SSNIP. There is no significant difference between the critical loss for LLU and VULA products.

²³⁰² This is a weighted average of LLU and VUA-based on the numbers of subscribers on ADSL, FTTC and FTTH in Q4 2017.

Table A9.48: Estimates of Critical Loss for 5% SSNIP of WLA - Business

	LLU	VUA	Combined
Retail prices (average)(business incl. VAT)	€60.10	€62.06	€58.12
Marginal costs	€19.22	€32.50	€25.94
Ratio costs to prices (α)	32.0%	52.4%	44.6%
SSNIP (s)	5%	5%	5%
Critical loss	6.8%	9.5%	8.3%

Table A9.49: Estimates of Critical Loss for 10% SSNIP of WLA - Business

	LLU	VUA	Combined
Retail prices (average)(business incl. VAT)	€60.10	€62.06	€58.12
Marginal costs	€19.22	€32.50	€25.94
Ratio costs to prices (α)	32.0%	52.4%	44.6%
SSNIP (s)	10%	10%	10%
Critical loss	12.8%	17.4%	15.3%

WCA Market

A 9.14 As with the analysis above of the WLA Market, the following tables present the critical loss for the WCA market.

Table A9.50: Estimates of Critical Loss for 5% SSNIP of WCA - Residential

	CGA Bitstream	NGA Bitstream	Combined
Retail prices (average)(residential)	€43.20	€62.51	€53.27
Marginal costs	€15.28	€32.50	€26.51
Ratio costs to prices (α)	35.4%	52.0%	49.8%
SSNIP (s)	5%	5%	5%
Critical loss	7.2%	9.4%	9.1%

Table A9.51: Estimates of Critical Loss for 10% SSNIP of WCA - Residential

	CGA Bitstream	NGA Bitstream	Combined
Retail prices (average)(residential)	€43.20	€62.51	€53.27
Marginal costs	€15.28	€32.50	€26.51
Ratio costs to prices (α)	35.4%	52.0%	49.8%
SSNIP (s)	10%	10%	10%
Critical loss	13.4%	17.2%	16.6%

Table A9.52: Estimates of Critical Loss for 5% SSNIP of WCA - Business

	CGA Bitstream	NGA Bitstream	Combined
Retail prices (average)(business)	€60.10	€62.06	€58.12
Marginal costs	€15.28	€32.50	€24.00
Ratio costs to prices (α)	25.4%	52.4%	41.3%
SSNIP (s)	5%	5%	5%
Critical loss	6.3%	9.5%	7.8%

Table A9.53: Estimates of Critical Loss for 10% SSNIP of WCA - Business

	CGA Bitstream	NGA Bitstream	Combined
Retail prices (average)(business)	€60.10	€62.06	€58.12
Marginal costs	€15.28	€32.50	€24.00
Ratio costs to prices (α)	25.4%	52.4%	41.3%
SSNIP (s)	10%	10%	10%
Critical loss	11.8%	17.4%	14.6%

Appendix: 10 WCA Geographic Market Assessment

Introduction

A 10.1 In Appendix 5 of the Consultation, ComReg outlined its approach to the market definition process in respect of the Relevant WCA Geographic Markets, applying a set of five quantitative geographic Criteria (the '**Criteria**'), using data obtained from Service Providers ('**Service Providers**', or '**SPs**'), as set out below:

Table A10.54: Cumulative Criteria for Assessing Competitive Conditions in Exchange Areas

Absent regulation in the WCA Market:
Criterion 1: An Exchange Area in which at least three Primary Operators would be capable, within a sufficiently short period, of providing WCA, WLA, or broadband services at the retail level to End Users; AND
Criterion 2: An Exchange Area in which Eircom would provide broadband services at the retail level to less than 50% of End Users; AND
Criterion 3: An Exchange Area where any Primary Operator(s) using third-party WLA inputs, if present, collectively provide(s) ²³⁰³ retail broadband services to at least 10% of End Users; AND
Criterion 4A: An Exchange Area in which an Alternative Network Operator, if present provides, ²³⁰⁴ or could provide, within a sufficiently short period, retail broadband services to End Users to at least 30% of the premises in that particular Exchange Area; AND

²³⁰³ In this instance, 'collectively provides' means the provision of retail broadband services by one or more Primary Operators using WLA inputs, directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. The 10% market share figure is satisfied by a single Primary Operator using WLA inputs, or by the sum of the market shares of all Primary Operators using WLA inputs.

²³⁰⁴ In this instance, 'provides' means the provision of retail broadband services directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. Thus, the 30% coverage figure is satisfied by a single ANO, even if two ANOs are present, but is not satisfied by the two ANOs having coverage which sums to at least 30%, where each individual ANO's coverage is less than 30%.

Criterion 4B: An Exchange Area in which any Alternative Network Operator(s), if present, collectively provide(s) ²³⁰⁵ retail broadband services to at least 10% of End Users; AND
Criterion 5: Exceptionally, on a case-by-case basis, where an Exchange Area:
(i) fails no more than one of Criteria (2) to (4B) above, and fails the Criterion by a small margin (i.e. less than 10% of the percentage specified); ²³⁰⁶ OR
(ii) fails no more than one of Criteria (2) to (4B) above, and where an Alternative Network Operator provides broadband services, either at the wholesale level or at the retail level, which equates to at least 60% of End Users, that Exchange Area will be deemed to have satisfied the relevant Criterion.

A 10.2 In the Consultation, ComReg identified two separate geographic markets, namely the Regional WCA Market and the Urban WCA Market, having assessed the following factors:

- (a) Geographic differences in entry conditions over time (see paragraphs A5.14 to A5.15 of the Consultation);
- (b) Variation in the number and size of potential competitors (see paragraphs A5.16 to A5.25 of the Consultation);
- (c) Distribution of market shares (see paragraphs A5.26 to A5.27 of the Consultation); and
- (d) Evidence of differentiated pricing strategies or marketing (see paragraphs A5.28 to A5.30 of the Consultation).

A 10.3 This Appendix updates ComReg's Relevant WCA Geographic Market assessment using the geographic Criteria set out in the Consultation, and refined and/or clarified in this Decision following consideration of Respondents' Submissions, and applying the latest data available being that as at 30 November 2017. This Appendix is structured as follows:

- (a) Framework for Relevant WCA Geographic Market Assessment (paragraphs A 10.5 to A 10.75);

²³⁰⁵ In this instance, 'collectively provides' means the provision of retail broadband services by one or more Alternative Network Operators, directly to End Users and/or indirectly to End Users via WCA service that is sold to other retail SPs. Thus, the 10% market share figure may be satisfied by a single Alternative Network Operator, or by the sum of the market shares of all Alternative Network Operators.

²³⁰⁶ For example, the requirement for Eircom's market share to be less than 50% (Criterion 2) could be amended to 55% under Criterion 5 (i.e. 110% of the requirement set out in Criterion 2).

- (b) Assessment of differences in competitive conditions in the Relevant WCA Geographic Markets (paragraphs A 10.76 to A 10.93); and
- (c) Overall Conclusion on Relevant WCA Geographic Market Assessment (paragraphs A 10.94 to A 10.95).

A 10.4 This Appendix should be read in conjunction with the analysis set out in Section 10 of the Consultation and Section 9 of this Decision.

Framework for Relevant WCA Geographic Market Assessment

A 10.5 This section sets out the framework according to which ComReg defines the geographic boundaries of the Relevant WCA Market(s). ComReg's framework for assessing the boundaries of these markets follows these steps:

- (a) **Establishing the relevant geographic unit:** ComReg considers the appropriate geographic unit, taking into account the range of services offered by Eircom, by other SPs using upstream inputs from the WLA Market, and by Alternative Network Operators ('**Alternative Network Operators**' or '**ANOs**', such as Virgin Media and SIRO)²³⁰⁷ in the provision of downstream WCA and/or retail services (discussed in paragraphs A 10.7 to A 10.29 below).
- (b) **Establishing Criteria for assessing competitive conditions:** ComReg sets out a number of Criteria for assessing competitive conditions in the appropriate geographic areas (see paragraphs A 10.30 to A 10.69 below).
- (c) **Analysis of Criteria:** ComReg examines factors inputting to the Criteria, which assist in distinguishing geographic areas marked by different conditions of competition (see paragraphs A 10.70 to A 10.75 below).

A 10.6 The rationale for the selection of this assessment framework is discussed below.

The Relevant Geographic Unit for assessment of competitive conditions in the WCA Market

A 10.7 In the Consultation ComReg considered the appropriate geographic unit to be employed in undertaking the Relevant WCA Geographic Market assessment.

²³⁰⁷ Virgin Media and SIRO are the only two POs classed as Alternative Network Operators, being those POs that have a network that exists independent of WLA and WCA regulation. However, as noted elsewhere in this Decision, ComReg intends to keep this under review as part of the Mid-term Assessment.

A 10.8 In forming its preliminary view, ComReg took utmost account of the 2014 Recommendation and the BEREC Common Position on Geographic Market Analysis as well as having regard to from EC Comments letters on other NRAs' market analyses. The Explanatory Note to the 2014 Recommendation²³⁰⁸ indicates that, when NRAs are examining the geographic scope of a market, they should ensure that geographic units are:

- (a) of an appropriate size;
- (b) able to reflect the network structure of all relevant Service Providers; and
- (c) have clear and stable boundaries over time.

A 10.9 The BEREC Common Position on Geographic Market Analysis adds that geographic units should satisfy, namely:

- (a) They are mutually exclusive and less than national;
- (b) The network structure of all relevant SPs and the services sold on the market can be mapped onto the geographical units;
- (c) They have clear and stable boundaries; and
- (d) They are small enough for competitive conditions to be unlikely to vary significantly within the unit but at the same time large enough that the burden on SPs and NRAs with regard to data delivery and analysis is reasonable.

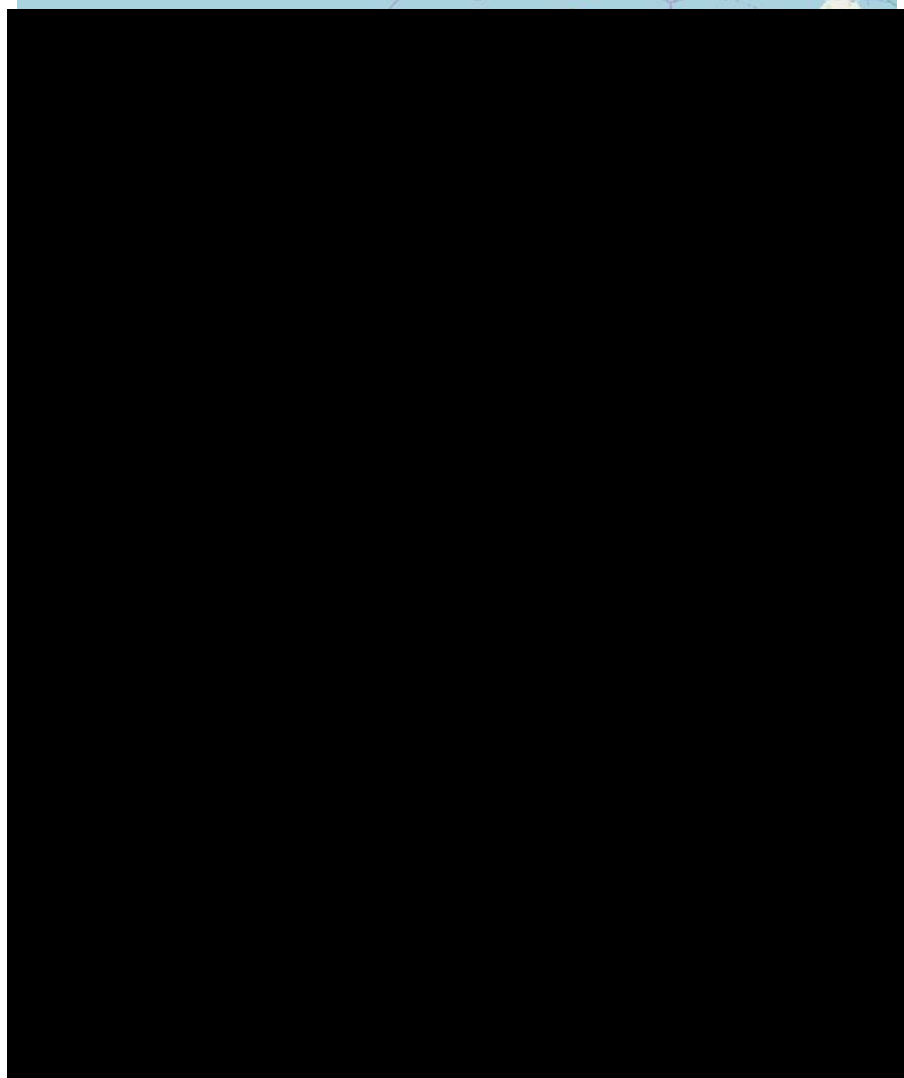
A 10.10 Having regard to the above, ComReg's preliminary view, as set out in the Consultation, was that geographic units should be small enough to avoid significant variations in competitive conditions within each chosen unit, but also large enough to avoid a resource intensive and burdensome micro-analysis that could lead to an unwarranted fragmentation of a market(s) which did not reflect the reality of differing competitive conditions.

A 10.11 The boundaries of any geographic unit should also be relatively stable and easily understood by SPs. When using a network structure that is not used by or familiar to all Service Providers, it is necessary to ensure that sufficient information is available to all parties who may use the information when considering any future changes to network structure or rollout.

²³⁰⁸ See page 14 of the Explanatory Note to the 2014 Recommendation.

A 10.12 The network structures of SPs vary. Eircom, as the former state-owned monopoly, operates a legacy network with ubiquitous coverage. Access Seekers using Eircom WLA inputs accordingly have access to coverage which approximates Eircom's coverage (in those areas where they purchase WLA products, services and facilities). However, the presence of Alternative Network Operators complicates the mapping of differing network structures onto one geographical unit (e.g. Eircom Exchange Area ('**Exchange Area**') boundaries). This is because ANOs typically have their own – sometimes organically grown – and flatter network topology that can vary significantly from the (historic) network layout of Eircom. Similarly, SPs rolling out FTTH networks tend to develop rollout plans to optimise network coverage and minimise the amount of fibre rollout required. Eircom Exchange Area boundaries are illustrated in Figure A9.54 below.

Figure A10.57: Eircom Exchange Area boundaries [REDACTED]



A 10.13 When assessing geographic market boundaries, ComReg noted in the Consultation that some NRAs have chosen to use administrative units (such as county boundaries), rather than network-based geographic units used by SPs.²³⁰⁹ While administrative boundaries are relatively stable over time, in the context of this market review, they do not accurately or sufficiently reflect the network structure of SPs in the Irish market. Accordingly, ComReg's position is that the use of administrative units in this context would lead to an unnecessary administrative burden on SPs and ComReg would not sufficiently meet the objectives set out at paragraphs A 10.8 and A 10.9 above.

Accounting for Coverage of Alternative Network Operators

A 10.14 In this section, ComReg explains how it accounts for the presence and competitive impact of Alternative Network Operators in its geographic market assessment. The ANOs considered in this analysis are Virgin Media's DOCSIS 3.0 CATV network and the SIRO FTTH network. Both networks are independent of Eircom's network. ComReg also considered whether enet should be designated as a Primary Operator. As noted in Section 10, paragraphs 10.90 to 10.93, enet has a FTTH network covering [§< ██████████] premises and offers a WCA Bitstream service. ComReg is, however, of the view that enet will not act as a competitive constraint (where it is present) in the Relevant WCA Market over the period of the current market review, as its coverage and expected coverage is limited, and its impact on the WCA market analysis is therefore likely to be limited. However, ComReg notes that, following completion of the NBP and/or any subsequent rollout on the part of enet, it is possible that enet (or any other SP meeting the relevant conditions) may be considered a Primary Operator.

A 10.15 Virgin Media's CATV network does not necessarily align with Eircom's network in terms either of network topology or precise coverage. Virgin Media's network covers [§< ██████████] premises²³¹⁰ (approximately 38.4% of total premises nationally), largely homes, with approximately [§< ██████████ ██████████] active broadband subscribers on its network as at Q4 2017.

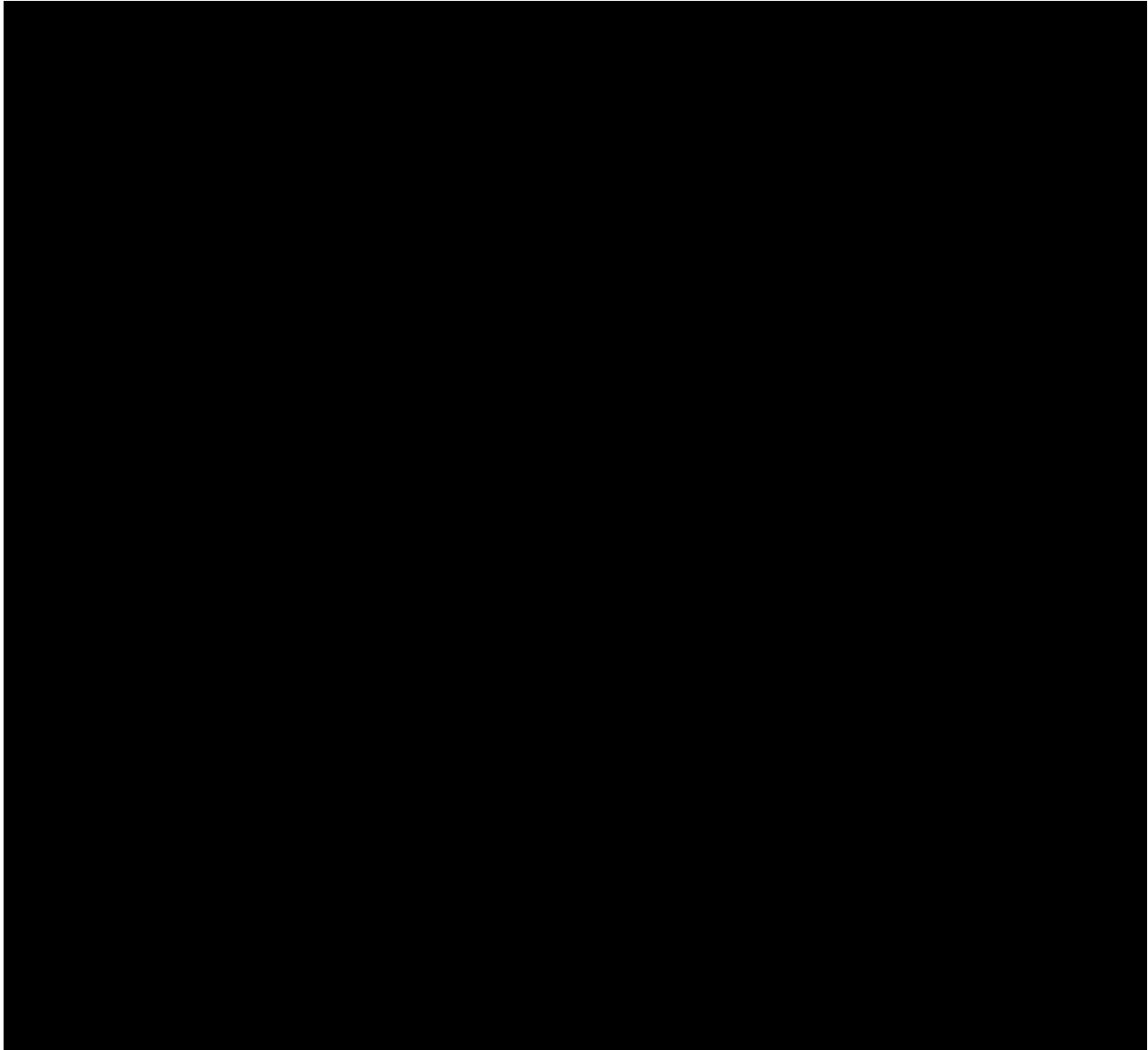
A 10.16 In terms of network expansion plans, in response to Statutory Information Requirements, Virgin Media has indicated to ComReg that [§< ██████████ ██████████]. ComReg accordingly considers that Virgin Media's network coverage is unlikely to change significantly during this market review period.

²³⁰⁹ For example, FICORA, the Finnish NRA, has used administrative units as (incumbent) networks match these areas well. Similarly, ANACOM, the Portuguese NRA uses parishes as the geographic unit.

²³¹⁰ Based on information obtained in response to a SIR issued to Virgin Media in November 2017.

A 10.17 As shown in Figure A10.58, the Virgin Media network footprint is concentrated in urban areas, in particular, around Dublin, Galway, Limerick and Cork.

Figure A10.58: Virgin Media's Network Coverage [REDACTED]



- A 10.18 The Virgin Media network has approximately [§< ██████████] nodes, with each node capable of serving approximately [§< ██████████]²³¹¹ premises, on average. By comparison, an average Eircom Exchange Area within the Virgin Media network footprint contains approximately [§< ██████████ ██████████] connected lines and therefore has a significantly higher density of premises per node/Exchange Area.²³¹²
- A 10.19 As set out in Section 9 of this Decision, SIRO is in the process of rolling out a FTTH network in certain locations in the State. SIRO's rollout has faced some delays relative to its initial plans. At the end of 2017, the SIRO network had passed 120,000 premises (approximately 5.5% of total premises nationally) in 25 towns – Dundalk, Carrigaline, Sligo, Letterkenny, Tralee, Cavan, Wexford, Skibbereen, Drogheda, Mullingar, Portlaoise, Ennis, Castlebar, Westport, Limerick, Newbridge, Carlow, Swords, Balbriggan, Bray, Greystones, Athlone, Killarney, Shannon and Mallow.²³¹³ Based on information obtained by means of a SIR,²³¹⁴ SIRO's network rollout plan to the end of 2018 is expected to pass [§< ██████████ ██████████] premises.²³¹⁵
- A 10.20 While SIRO only operates at the wholesale level supplying a WLA-based VULA service, Vodafone is one of its retail partners (as well as being part-owner of SIRO), while other Access Seekers, including enet, BT, Digiweb and Sky have signed agreements for services to be provided by SIRO.²³¹⁶ Vodafone has interconnected with SIRO at [§< ██████████] of SIRO's [§< ██████████] point of handover locations. This gives Vodafone additional coverage of approximately [§< ██████████] premises on top of the [§< ██████████ ██████████] coverage Vodafone has based on Eircom VUA.

²³¹¹ Fewer than 500 premises.

²³¹² These connected lines provide a range of services, including fixed telephony and broadband.

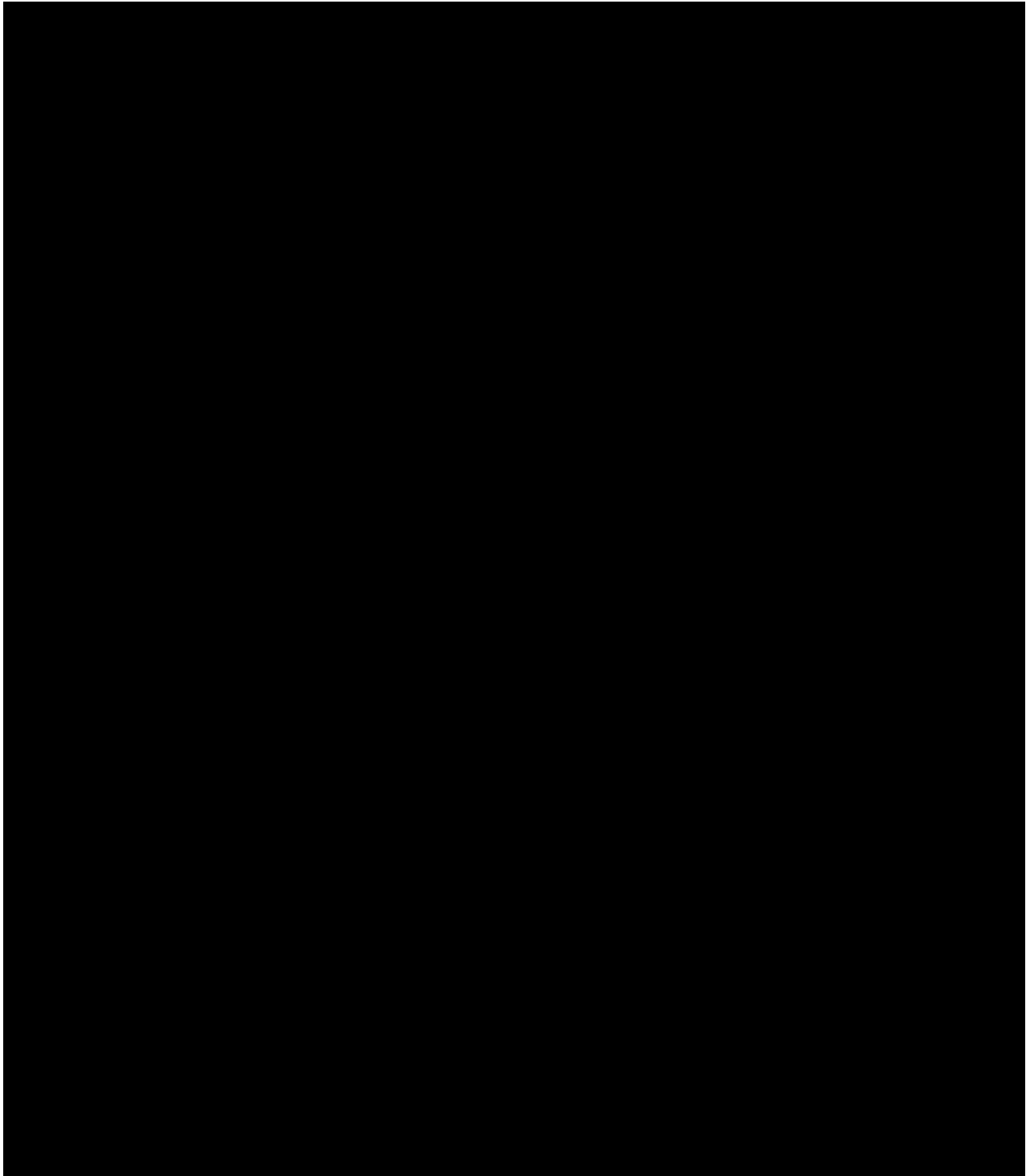
²³¹³ <https://siro.ie/newbridge-town-hall/>.

²³¹⁴ SIR issued to SIRO in November 2017.

²³¹⁵ The SIRO network is expected to pass fewer than 300,000 premises by the end of 2018.

²³¹⁶ <https://siro.ie/siro-broadband-partners/>.

Figure A10.59: SIRO's Network Coverage [REDACTED]



A 10.21 In analysing the SIRO and Virgin Media networks, ComReg obtained maps of the network assets of each such network, as well as figures on active and inactive subscriptions for each local network node.

A 10.22 On the basis of its analysis, ComReg therefore concluded that it was not reasonable to define relevant geographic units on the basis of ANO network assets because these networks do not have ubiquitous national coverage and they do not sufficiently relate to the network structures of other networks. For example, to define the relevant geographic unit on the basis of Virgin Media's network would mean considerable areas of the country may be excluded from the analysis or some means of accounting for areas of the country where Virgin Media is not present would have to be developed. In addition, Primary Operators that utilise WLA and WCA services from Eircom also follow the Eircom Exchange Area topology, which therefore suggests that it is appropriate to use Exchange Areas as the relevant geographic unit.

Accounting for coverage of Primary Operators using WLA Inputs

- A 10.23 ComReg has identified certain Primary Operators ('**PO(s)**') as being participants in the Relevant WCA Market(s) on the basis of their use of upstream WLA inputs, either in selling WCA to other SPs (in the case of BT), or in only selling retail broadband to End Users (in the case of Vodafone, which purchases WLA from both Eircom and SIRO). ComReg applies the Modified Greenfield Approach ('**MGA**') when carrying out the geographic market definition exercise. The Relevant WCA Geographic Market definition exercise is conducted in relation to a hypothetical scenario in which regulation is not present in either the Relevant WCA Market(s), or in downstream retail broadband access (and related) markets. Upstream regulation in the Relevant WLA Market is, however, taken into account.
- A 10.24 As noted in Section 5 above, ComReg has designated Eircom with SMP in the Relevant WLA Market and therefore requires Eircom to fulfil the regulatory obligations set out in Section 7 and more particularly described in the WLA Decision Instrument set out in Appendix: 20. These obligations include, *inter alia*, requirements to provide access to a range of WLA products, services and associated facilities. In this context and, having regard to the MGA, SPs using WLA inputs to operate in the downstream Relevant WCA Market(s) and retail markets would likely exist, absent regulation of the Relevant WCA Market.

- A 10.25 POs making use of Eircom WLA inputs have unbundled (both in the context of LLU or VUA) access to a number of Eircom's Exchange Areas (typically the larger ones). These Exchange Areas cover approximately 1.5 million of the 2.2 million premises in the State.²³¹⁷ As of Q4 2017, Eircom supplies approximately 5,089 Full Unbundled lines, 38,702 Line Share services and 190,936 VUA lines to a number of Access Seekers.²³¹⁸
- A 10.26 ComReg also notes that SIRO provides a small, but growing, number of WLA inputs to third parties on a commercial and unregulated basis. As of Q4 2017, SIRO provided [redacted] ²³¹⁹ VULA subscriptions, of which approximately [redacted] (the significant majority) were provided to Vodafone (as noted above Vodafone is one party to the JV that owns SIRO).
- A 10.27 Access Seekers use WLA inputs to provide a range of downstream wholesale and/or retail products, including (but not limited to) retail broadband and fixed telephony. CG LLU-based WLA products appear to be in decline, with Access Seekers now more likely to utilise NG VUA products offered by Eircom or (where available) SIRO (particularly in those Exchange Areas where Access Seekers do not already have an LLU presence).
- A 10.28 Having considered Respondents' Submissions at Section 9, ComReg's position is that Primary Operators purchasing WLA inputs are well accustomed to, and understand, the network topology of the relevant WLA provider. Eircom is obliged to provide Access Seekers with information pursuant to various obligations imposed on it by ComReg, such as via its Access Reference Offer documents,²³²⁰ and its Unified Gateway.

²³¹⁷ As of Q4 2017, BT Ireland had unbundled exchanges capable of serving up to [redacted] premises. In addition, in August 2016, Vodafone began to avail of VUA at a number of exchanges, allowing it to reach customers for FTTC and FTTH-based services. Vodafone has a local or remote presence at [redacted] premises.

²³¹⁸ ComReg QKDR Q4 2017, page 38. Magnet, Smart Telecom (Digiweb), Colt and 3PlayPlus also purchase LLU or VUA, but have unbundled a small number of exchanges and do not purchase significant volumes of LLU or VUA from Eircom. These SPs are excluded from this analysis due to their limited network footprint and consequential minimal impact on competitive conditions.

²³¹⁹ Less than 15,000.

²³²⁰ Such Reference Offers are required in markets where ComReg has designated Eircom with SMP and imposed related transparency obligations. Section 7 and Section 12 of this Decision contain obligations regarding the publication and maintenance by Eircom of Reference Offers in both the Relevant WLA Market and Regional WCA Market.

Conclusion on Relevant Unit for Geographic Assessment

A 10.29 Having considered the above factors and having regard to the consideration of Respondents' views in Section 9, including the prevalence of ANOs and SPs' use of upstream WLA inputs, ComReg's position is that Exchange Areas are the most appropriate relevant unit for geographic market assessment on the Relevant WCA Market(s).

Establishing Criteria for assessing competitive conditions

A 10.30 In the Consultation,²³²¹ ComReg set out a range of cumulative Criteria which it used to determine the competitive conditions which characterised Exchange Areas. The Criteria were based around the following conditions:

- (a) A minimum number of POs capable of providing services within an Exchange Area;
- (b) PO market shares within an Exchange Area;
- (c) ANO network coverage within an Exchange Area; and
- (d) Forward-looking, reasonable additions.

Minimum Number of POs

A 10.31 As noted above, SPs have unbundled a number of Eircom Exchange Areas to provide retail and/or wholesale services by means of LLU, Line Share, and VUA. A number of these SPs are relatively small in terms of their subscriber base, coverage and do not supply wholesale access products.²³²²

A 10.32 In some cases, these smaller SPs only provide services in limited geographic areas. Such SPs are unlikely to cause an appreciable impact on competitive conditions between Exchange Areas.

²³²¹ At paragraph A5.58.

²³²² Colt, Digiweb, Magnet and 3PlayPlus purchase LLU and/or Line Share from Eircom in the Relevant WLA Market. Each of these SPs has unbundled a small number of exchanges and does not supply wholesale broadband (or other) access products.

- A 10.33 In carrying out this assessment of the WCA geographic markets, ComReg intends to only include those SPs that have a sufficiently significant presence on the Relevant WCA Market (either directly as a demand or supply-side substitute, or in posing an effective indirect constraint). ComReg's position is that only SPs having a reasonably-sized national (or regional) market share are capable of causing an appreciable impact on competitive conditions between Exchange Areas. ComReg designates such SPs as '**Primary Operators**', or '**POs**'. ComReg's assessment is forward-looking, and it has also taken into consideration the planned network presence and rollout plans of POs. For example, BT indicated to ComReg that it plans to rollout to a further [§< █████] Eircom exchanges in 2018.²³²³ Accordingly, ComReg limits its assessment of competition in Exchange Areas to those POs that can operate in the Relevant WCA Market absent regulation, and that have a sizable national (or regional) presence.
- A 10.34 Having regard to the consideration of the above criteria, ComReg designates the following SPs as Primary Operators:
- (a) BT Ireland;
 - (b) Eircom;
 - (c) SIRO;
 - (d) Virgin Media; and
 - (e) Vodafone.
- A 10.35 Each of these POs is present on a network that is capable (or that ComReg considers is prospectively capable within a reasonable timeframe and without incurring significant sunk costs) of providing WCA and/or retail broadband services using its own network inputs, or inputs procured via the Relevant WLA Market.
- A 10.36 ComReg recognise that, over the period of the current market review, additional SPs could fulfil the conditions for being designated as a Primary Operator as set out above at paragraphs A 10.31 to A 10.35. To this end, ComReg intends to keep Primary Operators under review as part of its Mid-term Assessment, as discussed in paragraphs 9.257 to 9.259.

²³²³ Information obtained via SIR issued to BT in November 2017.

Primary Operator Presence

A 10.37 Table A10.55 below outlines the national market shares, network coverage and Exchange Area presence of each of the Primary Operators at a national level.

Table A10.55: Primary Operator Presence, Q4 2017 [REDACTED]

	Market Share ²³²⁴	Premises Coverage as % of Total National Premises ²³²⁵	Exchange Areas where SP is present or planning presence ²³²⁶
BT Ireland	█	█	█
Eircom	█	█	█
SIRO	█	█	█
Virgin Media	█	█	█
Vodafone	█	█	█

Note: Market Share data is calculated nationally, based on SP subscription figures, and absent regulation in the Relevant WCA Markets. These figures assume that subscribers of Eircom's wholesale purchasers revert to being Eircom customers, absent regulation in the Relevant WCA Market. This assumes Eircom will withdraw its wholesale supply of WCA.

A 10.38 It is ComReg's position that, absent regulation in the Relevant WCA Market, only those Primary Operators providing services in an Exchange Area are likely to impose an effective constraint on Eircom within that Exchange Area. Accordingly, a minimum number of POs must be present (or have a planned presence) in an Exchange Area, to act as an effective competitive constraint such that conditions of competition might be impacted.

²³²⁴ BT Ireland's Market Share is 5-10%, Eircom Share is 50-60%, SIRO share is less than 1%, Virgin Media share is 25-30%, Vodafone share is 10-15%.

²³²⁵ Measured as a percentage of premises passed by the relevant network. BT Ireland's premises coverage is 60-70%, Eircom coverage is greater than 95%, SIRO coverage is less than 10%, Virgin Media coverage is 35-40%, Vodafone planned coverage is 70-80%.

²³²⁶ BT Ireland has a presence at 600-700 Exchange Areas. Eircom has a presence at all Exchange Areas, SIRO has a presence in less than 60 Exchange Areas, Virgin Media has a presence in 150-180 Exchange Areas, Vodafone has a presence in 800-900 Exchange Areas. Planned presence includes those Exchange Areas where a SP plans to invest in backhaul facilities.

- A 10.39 BEREC notes²³²⁷ that imposing a criterion based on the number of POs present in an area has the advantage of being easily observable. ComReg also notes that competitive conditions in an Exchange Area may vary not only with respect to the number of POs present, but also with respect to the relative size of each PO. ComReg has taken account of this in its approach by setting out its position on the market share and coverage requirements to be satisfied by POs, as appropriate, as set out at Appendix 5 of the Consultation, and paragraphs 9.327 to 9.328 above of the Decision.
- A 10.40 ComReg's position is that a minimum of three Primary Operators should provide services, or be capable of providing services at an Exchange Area, for it to be considered as potentially having sufficiently different competitive conditions.

Conclusion on Primary Operators

- A 10.41 Having regard to the above analysis, ComReg's position is that the following criteria should be included in the assessment of geographic markets:
- (a) Only those SPs who are likely to have a reasonably sized market share are capable of exerting an effective competitive constraint on other competitors. Such SPs, described as Primary Operators, are:
 - (i) BT Ireland;
 - (ii) Eircom;
 - (iii) SIRO;
 - (iv) Virgin Media; and
 - (v) Vodafone.
 - (b) A minimum of three (3) Primary Operators must be present (or plan to be present) at an Exchange Area.²³²⁸

Primary Operator Market Shares

- A 10.42 One measure of whether Exchange Areas have sufficiently different competitive conditions is whether a single PO has a sizable market share within that Exchange Area that would give it the ability and incentive to act independently of rival POs. ComReg's position is that market shares in an Exchange Area can, accordingly, be a good proxy for differing competitive conditions, particularly when considered alongside other factors such as presence/coverage.

²³²⁷ Page 25 of the BEREC *Common Position on Geographic Aspects of Market Analysis*.

²³²⁸ As set out at paragraphs 9.257 to 9.259, ComReg intends to carry out a Mid-term Assessment and, as part of that assessment, reserves the right, if appropriate, to designate further Primary Operators.

- A 10.43 However, an examination of the market share of a single PO, in the absence of an analysis of the size and scale of other POs is not likely to be sufficient. Any set of criteria must also consider the size of competitors within an Exchange Area. For a Primary Operator to act as an effective constraint on another PO (and contribute to differing competitive conditions), it must have a minimum presence in an area, which can best be measured by means of market share.
- A 10.44 In setting a maximum market share for the incumbent (i.e. Eircom) and a minimum market share for other POs, ComReg is seeking to identify market characteristics within an Exchange Area which are suggestive of differing competitive conditions.
- A 10.45 ComReg's market definition exercise is required to be forward-looking. Therefore, it is necessary to consider how market shares might evolve over the period of the market review, and any observed variations in current or historic market shares. In this regard, ComReg must consider whether each PO's market share at an Exchange Area might change sufficiently over the review period, such that it could acquire or lose the ability to act as a sufficient constraint on another PO. This obviously involves an element of judgement.

Conclusion on Primary Operator Market Shares

- A 10.46 Having regard to the above analysis, and having considered Respondents' Submissions at Section 9, ComReg's position is that the following cumulative Criteria should be included in the Relevant WCA Geographic Market assessment:
- (a) An Exchange Area in which, absent regulation in the Relevant WCA Market,²³²⁹ Eircom would provide broadband services at the retail level to less than 50% of End Users within that particular Exchange Area.
 - (b) An Exchange Area where, absent regulation in the Relevant WCA Market, any Primary Operator(s) (if present) using WLA inputs collectively provide(s)²³³⁰ retail broadband services to at least 10% of End Users within that Exchange Area.²³³¹

²³²⁹ Absent regulation, ComReg assumes that customers currently served by an Access Seeker using WCA inputs revert back to Eircom (which, absent regulation is not required to provide WCA products).

²³³⁰ In this instance, 'collectively provides' means the provision of retail broadband services by one or more Primary Operators using WLA inputs, directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. The 10% market share figure is satisfied by a single Primary Operator using WLA inputs, or by the sum of the market shares of all Primary Operators using WLA inputs.

²³³¹ POs using inputs from the WLA Market (LLU and/or VUA) include BT and Vodafone.

- (c) An Exchange Area in which, absent regulation in the Relevant WCA Market, any Alternative Network Operator (if present) collectively provides²³³² retail broadband services to at least 10% of End Users within that Exchange Area.

Network Coverage

- A 10.47 For a PO using an Alternative Network Operator to provide WCA (or retail) services to act as an effective competitive constraint on another SP (in the context of potentially driving differing competitive conditions) in an Exchange Area, that ANO's network must have a minimum coverage level within the Exchange Area.
- A 10.48 ComReg's assessment of network coverage is undertaken on a forward-looking basis, based on information supplied by SPs and assessed against the timelines provided. BT Ireland, Eircom, SIRO, Virgin Media and Vodafone have supplied information to ComReg indicating whether or not they plan to extend their network coverage. However, it should be noted that until such network coverage actually materialises it will not consequently impact on market shares in the relevant area (as there will be no subscribers). ComReg has not required a network coverage threshold in respect of POs making use of Eircom WLA inputs, on the grounds that such POs make use of the Eircom network, and therefore by design have access to very high levels of coverage (connectivity by an Access Seeker at an Exchange Area typically gives it access to the full coverage of that area).
- A 10.49 This not necessarily the case, however, in respect of ANOs, which do not have ubiquitous national coverage.

Conclusion on Network Coverage

- A 10.50 Having regard to the above analysis, and having considered Respondents' Submissions at Section 9, ComReg's position is that the following criterion should be included in the geographic market assessment:
- (a) An Exchange Area in which, absent regulation in the Relevant WCA Market, any Alternative Network Operator(s), if present provide(s),²³³³ or could provide, within a sufficiently short period, retail broadband services to End Users to at least 30% of the premises in that particular Exchange Area.

²³³² In this instance, 'collectively provides' means the provision of retail broadband services by one or more Alternative Network Operators, directly to End Users and/or indirectly to End Users via WCA service that is sold to other retail SPs. Thus, the 10% market share figure may be satisfied by a single Alternative Network Operator, or by the sum of the market shares of all Alternative Network Operators.

²³³³ In this instance, 'provides' means the provision of retail broadband services directly to End Users and/or indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs.

Exceptional Additions

- A 10.51 The above Criteria should, generally, suffice to assess whether or not conditions of competition vary sufficiently between Exchange Areas.
- A 10.52 However, in order to ensure that the boundaries of the Relevant WCA Geographic Market(s) remains sufficiently stable over time and to be forward-looking, ComReg includes a number of Exchange Areas that fail to meet one of the cumulative Criteria set out above, but where the competitive conditions appear to be such that the Exchange Area could reasonably and foreseeably be expected to meet the outstanding Criteria during the lifetime of the market review. This is on the basis of meeting the exceptional criteria below.

Conclusion on Exceptional Additions

- A 10.53 Having regard to the above analysis and the consideration of Respondents' views in Section 9 of this Decision, ComReg's position is that the following exceptional Criteria should be included in assessing whether or not the conditions of competition are sufficiently different as between Exchange Areas:
- (a) Exceptionally, on a case-by-case basis, where an Exchange Area:
 - (i) As of Q4 2017: fails no more than one of Criteria set out from Criterion 2 to Criterion 4B above and fails the Criterion by a small margin (i.e. less than 10% percent of the percentage specified);²³³⁴ OR
 - (ii) As of Q4 2017: fails no more than one of Criteria set out from (2) to (4B) above and where an Alternative Network Operator provides services either at the wholesale level or at the retail level which equates to more than 60% of End Users within that particular Exchange Area; that Exchange Area will be deemed to have satisfied the relevant Criterion.
- A 10.54 ComReg has applied these exceptions with a view to ensuring that the assessment takes accounts of small sensitivities and allows for cases where a Primary Operator may fail a criterion on the margins with the current data but may pass the criteria comfortably in future. This ensures that a forward-looking approach is considered in the assessment. The exceptions also ensure that Exchange Areas that very nearly meet the criteria are captured, as opposed to penalised on the basis of failing at the margins. This allows for a greater degree of stability in respect of the boundaries of the Relevant WCA Geographic Markets.

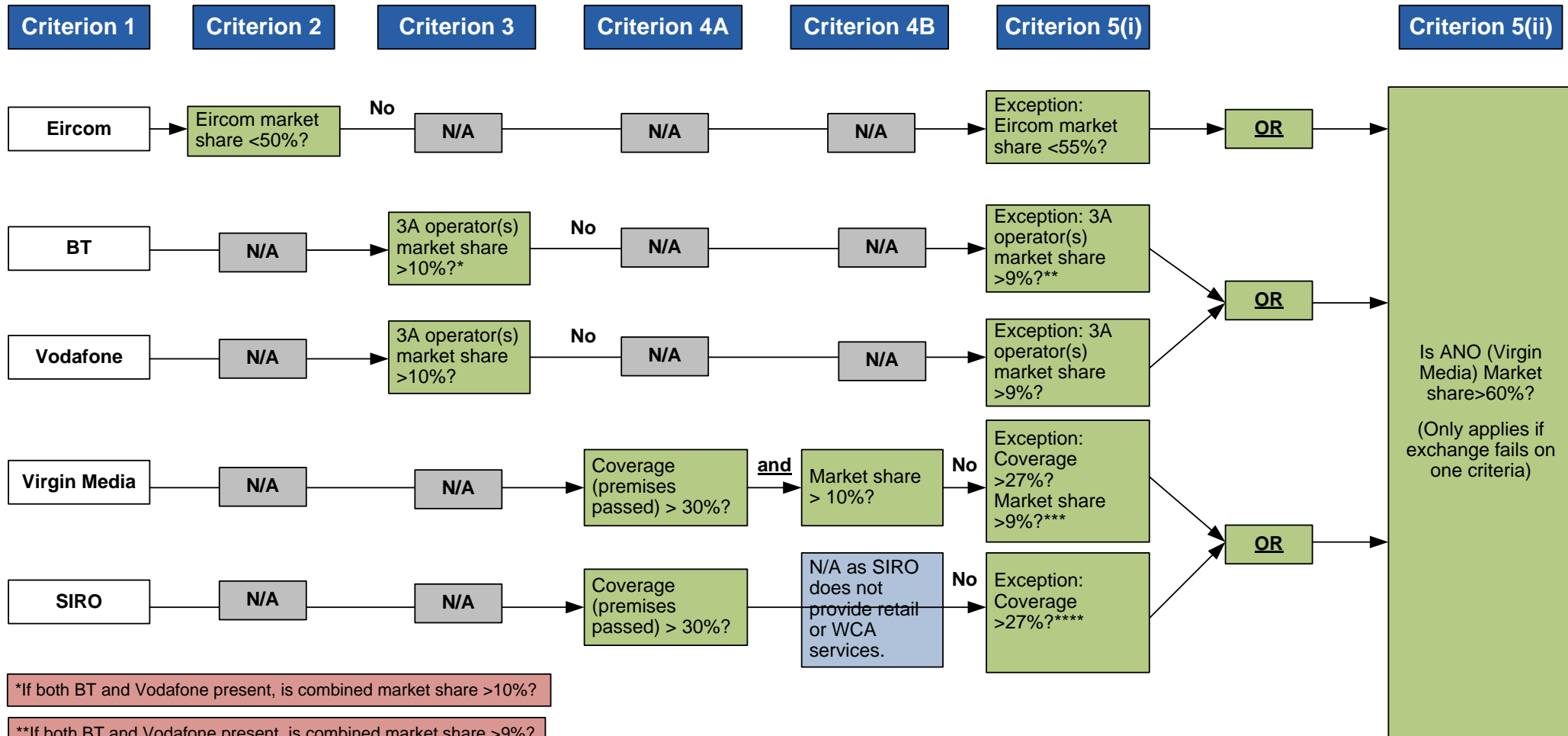
²³³⁴ For example, the requirement for Eircom's market share to be less than 50% (Criterion 2) could be altered to 55% under Criterion 5 (i.e. 110% of the requirement set out in Criterion 2).

Interpreting the Cumulative Criteria

- A 10.55 It is important to note that Criteria 4A and 4B are only to be applied where an ANO is present. Where no ANO is present, the analysis proceeds on the basis of Criteria 1, 2, 3 and 5(i). Similarly, Criterion 3 is only to be applied where a PO making use of WLA inputs is present. Where no such PO is present, the analysis proceeds on the basis of Criteria 1, 2, 4A, 4B, and 5.
- A 10.56 Thus, all five (1 to 4B) cumulative Criteria only apply in circumstances where at least one ANO and at least one PO making use of WLA inputs are present at the Exchange Area.
- A 10.57 Figure A10.60 below gives an overview of how the cumulative Criteria are applied.
- A 10.58 As ComReg has identified five Primary Operators, the Criteria to be applied at an Exchange Area will vary depending on whether a PO making use of WLA inputs is present (BT or Vodafone, in which case Criterion 3 is applied) or whether they are Alternative Network Operators (Virgin Media and SIRO, in which Criteria 4A and 4B,²³³⁵ and – if necessary – 5(ii) are applied).

²³³⁵ As set out at paragraph A 10.66 below, Criterion 4B currently only applies to Virgin Media, although this could alter if another ANO commenced provision of retail broadband, or of WCA services.

Figure A10.60: Application of Cumulative Criteria



*If both BT and Vodafone present, is combined market share >10%?

**If both BT and Vodafone present, is combined market share >9%?

***If both Virgin Media and SIRO present, at least one must meet >10% market share and >30% coverage.

****If more than 3 Primary Operators present at Exchange Area, a subset of them must meet the criteria above.

- A 10.59 Criterion 1 establishes the number of POs present at any given Exchange Area (noting that to meet the Criterion, there must be a minimum of three POs present).
- A 10.60 As Eircom is present at all 1,203 Exchange Areas, Criterion 2 (and the exception to Criterion 2 under Criterion 5(i)) applies only to Eircom. Criterion 2 is met if Eircom's market share at the Exchange Area is less than 50%, (or where the Exchange Area has passed all other relevant Criteria, an exception is made Eircom's market share at the Exchange Area is between 50% and 55%).
- A 10.61 Criterion 3 applies to POs using (LLU or VUA) inputs purchased in the Relevant WLA Market. If one of BT or Vodafone is present at an Exchange Area, ComReg examines whether its market share is greater than 10%; if both BT and Vodafone are present at the Exchange Area, ComReg assesses whether their combined market share is greater than 10%. If either of these conditions are met, the Exchange Area is considered to meet Criterion 3.
- A 10.62 Criterion 3 applies to a PO providing retail broadband services to End Users using inputs from the WLA Market. For the avoidance of doubt, this definition includes POs which (i) provide retail broadband services directly to End Users and/or (ii) provide retail broadband services indirectly to End Users via a WLA-based WCA service that is sold to other retail SPs. This implies that BT Ireland, which sell a WCA based Bitstream service to Sky and Vodafone using WLA inputs falls to be assessed under Criterion 3.
- A 10.63 ComReg notes that in calculating market shares (absent regulation), the total market comprises all Eircom self-supply (i.e. Eircom retail subscribers), Eircom Wholesale (WLA and WCA), Vodafone's total subscriptions, BT's total subscriptions, Virgin Media total subscriptions and SIRO subscriptions.
- (i) Eircom market share (absent regulation) – total Eircom self-supply (i.e. Eircom retail subscribers) plus Eircom Wholesale (excluding WLA to BT and Vodafone, and WCA that BT/Vodafone can be converted to WLA where applicable);
 - (ii) BT market share – total BT purchases of WLA plus purchases of WCA that can be converted to WLA where BT has a WLA presence at an exchange area (i.e. LLU for CGA Bitstream or VUA for NGA Bitstream);
 - (iii) Vodafone market share - total Vodafone purchases of WLA plus purchases of WCA that can be converted to WLA where Vodafone has a WLA presence at an exchange area (i.e. VUA for NGA Bitstream);
 - (iv) Virgin Media market share – total active subscriptions provided over Virgin Media's network;
 - (v) SIRO market share – total active subscriptions provided over SIRO's network.

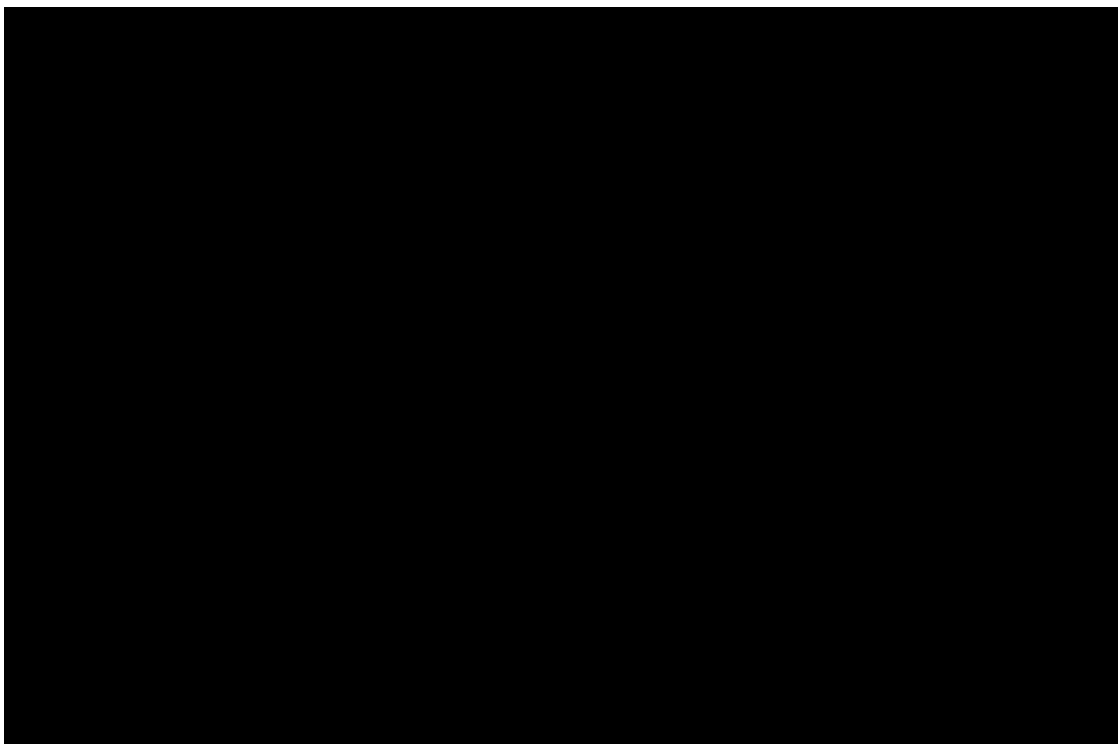
- A 10.64 ComReg notes that, in calculating market shares, it must take care to avoid instances of double-counting, and therefore applies the designation principles set out at Section 9, paragraphs 9.327 to 9.329 above. Thus, since SIRO is included on the Relevant WCA Market by virtue of its position as a credible hypothetical supply-side substitute, its WLA sales to Vodafone are assigned to Vodafone, which is included on the Relevant WCA Market by virtue of the indirect constraint Vodafone generates from the retail level. Should SIRO actually commence offering a WCA service, then such services would be assigned to SIRO for market share calculation purposes.
- A 10.65 Criteria 4A and 4B apply only to ANOs (Virgin Media and SIRO). Criterion 4A considers whether, at a given Exchange Area, Virgin Media or SIRO have total coverage (in terms of premises passed) of more than 30%. This is computed by taking the total number of premises passed by such networks in that Exchange Area as a proportion of the total number of premises (residential and business) in that Exchange Area. Where both Virgin Media and SIRO are present at an Exchange Area, it will suffice if just one of their individual network coverages exceeds 30%.
- A 10.66 Criterion 4B considers whether the ANO has a market share of more than 10% in that Exchange Area. Currently, this criterion only applies to Virgin Media, which offers a retail broadband service. It does not apply to SIRO, which is active on the Relevant WLA Market, but does not offer WCA or retail broadband services. However, were SIRO to commence providing either a WCA or a retail broadband service, where both Virgin Media and SIRO are present at an Exchange Area, it would suffice if the sum of their individual market shares exceeds 10%.
- A 10.67 For an ANO to be considered a sufficient competitive constraint at the Exchange Area, it must meet both Criteria 4A and 4B (in the case of Virgin Media) or Criterion 4A (in the case of SIRO).
- A 10.68 Criterion 5 includes a number of exceptions which are considered only if an Exchange Area fails one of Criteria 2 to 4B. For example, if an Exchange Area fails Criterion 2, the Exchange Area may nevertheless pass, if it is eligible for exemption under either of the stipulations set out at Criterion 5.
- A 10.69 As noted above, if under Criterion 2, Eircom's market share is greater than 50% at the Exchange Area, but Criteria 1 and 3 have been met, then an exception is made under Criterion 5i if Eircom's market share is less than 55%, or under Criterion 5ii if an ANO has coverage at that Exchange Area of at least 60%.

Analysis of Geographic Criteria

A 10.70 Figure A10.61 below presents Eircom's average market share (absent regulation in the Relevant WCA Market) for each Exchange Area, having regard to differences in the number of Primary Operators providing services at the Exchange Area. Eircom is the only PO present at all Exchange Areas, and has a market share of 100% in Exchange Areas where other POs have neither unbundled the Exchange Area, nor built an alternative network. As can be seen, Eircom's market share falls as the number of competitors present increases – thus suggesting differences in competitive conditions across different Exchange Areas, having regard to increases in the number of POs present.

Figure A10.61: Average Eircom Market Share and Number of POs Q4 2017

[REDACTED]



A 10.71 Table A10.56 below provides a breakdown of the number of Exchange Areas by the number of Primary Operators present. This information indicates that there are a number of Exchange Areas where Eircom likely faces greater competition in terms of the number of POs, either directly in the Relevant WCA Market, or indirectly, arising from the retail broadband market (and is thus suggestive of differing competitive conditions).

Table A10.56: Number of POs by Number of Exchange Areas and Premises Covered

Number of POs	No. of Exchange Areas (N=1203)	Premises Coverage
1	298	281,127
2	296	392,722
3	474	629,525
4	108	685,652
5	27	216,862

A 10.72 In terms of ANO coverage, ComReg has sought to establish the extent of the Virgin Media and SIRO network coverage. The Virgin Media network is present (at any coverage level > 0%) in [§< ██████████] Exchange Areas, with a total network coverage of [§< ██████████] in these Exchange Areas.²³³⁶

A 10.73 Table A10.57 below shows the relationship between Virgin Media’s network coverage and its market share. Virgin Media’s market share increases with network coverage. For example, there are [§< ██████████]²³³⁷ Exchange Areas where Virgin Media’s coverage is between 50% and 75% and in these Exchange Areas, its market share averages [§< ██████████]²³³⁸.

Table A10.57: Virgin Media Network Coverage by Exchange Area Q4 2017

[§<REDACTED]

Virgin Media Network Coverage	< 25%	25-50%	50-75%	>75%
Number of Exchange Areas	[§< █████] ²³³⁹	[§< █████] ²³⁴⁰	[§< █████] ²³⁴¹	[§< █████] ²³⁴²
Market Share (%)	[§< █████] ²³⁴³	[§< █████] ²³⁴⁴	[§< █████] ²³⁴⁵	[§< █████] ²³⁴⁶

²³³⁶ Network coverage is defined as the total number of premises passed by the Virgin Media network divided by the total number of premises in the Exchange Areas.

²³³⁷ Less than 50.

²³³⁸ Less than 40%.

²³³⁹ Less than 25.

²³⁴⁰ Less than 30.

²³⁴¹ Less than 50.

²³⁴² Less than 80.

²³⁴³ Less than 5%.

²³⁴⁴ Less than 20%.

²³⁴⁵ Less than 40%.

²³⁴⁶ Less than 65%.

A 10.74 As noted above, the SIRO network has a limited footprint, as outlined in Table A10.58 below. Similarly, SIRO’s market share rises with network coverage. While ComReg has included the SIRO network in its analysis (on the basis of supply-side substitution), it is not active on the Relevant WCA Market, and therefore has no market share. ComReg will continue to seek information from SIRO (and other SPs) regarding network footprint and subscriber figures. The SIRO network, at the end of November 2017, has passed [§< ██████████] premises,²³⁴⁷ and was available in 20 towns.²³⁴⁸ SIRO’s rollout plan to the end of 2018 is expected to pass [§< ██████████] premises.²³⁴⁹ The SIRO network is present in [§< ██████████] Exchange Areas, with a total network coverage of [§< ██████████] in these Exchange Areas.

Table A10.58: SIRO Network Coverage by Exchange Area Q4 2017 [§<REDACTED]

SIRO Network Coverage	< 25%	25-50%	50-75%	>75%
Number of Exchange Areas	[§< █████] ²³⁵⁰	[§< █████] ²³⁵¹	[§< █████] ²³⁵²	[§< █████] ²³⁵³
Market Share	[§< █████] ²³⁵⁴	[§< █████] ²³⁵⁵	[█████] ²³⁵⁶	[§< █████] ²³⁵⁷

Conclusion on Analysis of Geographic Criteria

A 10.75 Having regard to the above analysis, ComReg implements a set of requirements and cumulative Criteria that an Exchange Area must meet, for consideration as to whether there are differences in competitive conditions between Exchange Areas, which are set out at Table A10.54 above.

²³⁴⁷ The SIRO network has passed less than 120,000 premises at the end of November 2017.

²³⁴⁸ <https://siro.ie/roll-out/>.

²³⁴⁹ The SIRO network is expected to pass less than 300,000 premises by the end of 2018.

²³⁵⁰ Less than 30.

²³⁵¹ Less than 15.

²³⁵² Less than 20.

²³⁵³ Less than 10.

²³⁵⁴ Less than 5%.

²³⁵⁵ Less than 10%.

²³⁵⁶ Less than 15%.

²³⁵⁷ Less than 30%.

Assessment of Differences in Competitive Conditions in the WCA Market using the Geographic Criteria

- A 10.76 Since the issue of the Consultation in November 2016, ComReg has, where available, obtained further data from the Primary Operators on three occasions (November 2016, June 2017 and November 2017) relating to:
- (a) Network Maps;
 - (b) Coverage and Rollout Plans; and
 - (c) Wholesale and retail broadband subscriber figures at Exchange Area level.
- A 10.77 ComReg engaged the consultancy firms TERA and Geocible to map Virgin Media and SIRO networks onto Eircom's Exchange Area topology, such that, in each Exchange Area, both the coverage and market shares of Virgin Media and SIRO are accounted for (and assessed as appropriate under Criterion 4).²³⁵⁸ For the avoidance of doubt, and following the principles set out at paragraph 9.331, SIRO is not currently active on either the Relevant WCA Market, or on the retail broadband market. Accordingly, SIRO services are assigned for assessment purposes to Vodafone, which purchases WLA from SIRO in order to provide retail broadband services. These services are capable of generating indirect competitive constraints on the Relevant WCA Market(s).
- A 10.78 As Primary Operators that both purchase WCA Bitstream services and WLA (LLU and VUA) services from Eircom essentially follow the same Eircom Exchange Area topology as Eircom itself, there is limited explanatory or additional benefit in mapping these PO' shares and coverage.
- A 10.79 Using the inputs described above, ComReg applied the Criteria in paragraph A 10.75 above to each Exchange Area in the State. ComReg has mapped the Virgin Media and SIRO footprints onto an Exchange Area map to allow subscriber and market share figures be compared to other Primary Operators' subscriber and market share figures. The result of this overall analysis is outlined below.

²³⁵⁸ For further information, please refer to the Geocible Report at Appendix: 13 of this Decision.

Table A10.59: Application of Criteria for Assessing Competitive Conditions by Exchange Area

	Urban WCA Market: Exchange Areas meeting relevant Criteria	Regional WCA Market: Exchange Areas <i>not</i> meeting relevant Criteria	Number of Subscriptions within Urban WCA Market	Number of Premises within Urban WCA Market
Model 1: Consultation (February 2016)	96	1,121	607,271	794,151
Model 2: November 2016	123	1,079	727,699	809,102
Model 3: June 2017	141	1,072	764,295	1,012,159
Model 4: November 2017	154	1,049	809,006	1,061,911

A 10.80 The most recent modelled data (November 2017) showed that 154 Exchange Areas met all applicable Criteria, and therefore exhibit competitive conditions which are appreciably different from the remaining 1,049 Exchange Areas.

A 10.81 Overall, there has been an increase in the number of Exchange Areas falling into the Urban WCA Market since the issue of the Consultation in 2016.²³⁵⁹ At each iteration of the model, the number of Exchange Areas falling into the Urban WCA Market has increased. This has largely been driven by uptake of VUA services by Primary Operators making use of WLA inputs (i.e. investment in backhaul facilities at Eircom Aggregation Nodes).²³⁶⁰ By investing in backhaul facilities, WLA Primary Operators have been able to also grow market share, and consequently increasing the number of Exchange Areas passing Criterion 3. Some of the growth in Exchange Areas in the Urban WCA Market is also attributable to expansion in Virgin Media’s network coverage, which has increased by [§< ██████████] premises since Q1 2016.

A 10.82 Between the model used for the Consultation (data as at Q1 2016) and the model as at November 2016, 30 Exchange Areas were added to the Urban WCA Market, while 6 dropped from the Urban WCA Market into the Regional WCA Market. For those 6 falling out, this was due to failure of Criterion 1 (minimum 3 Primary Operators present) in two instances and some growth in Eircom’s market share (above 55%, i.e. failing Criterion 2 and an exception).

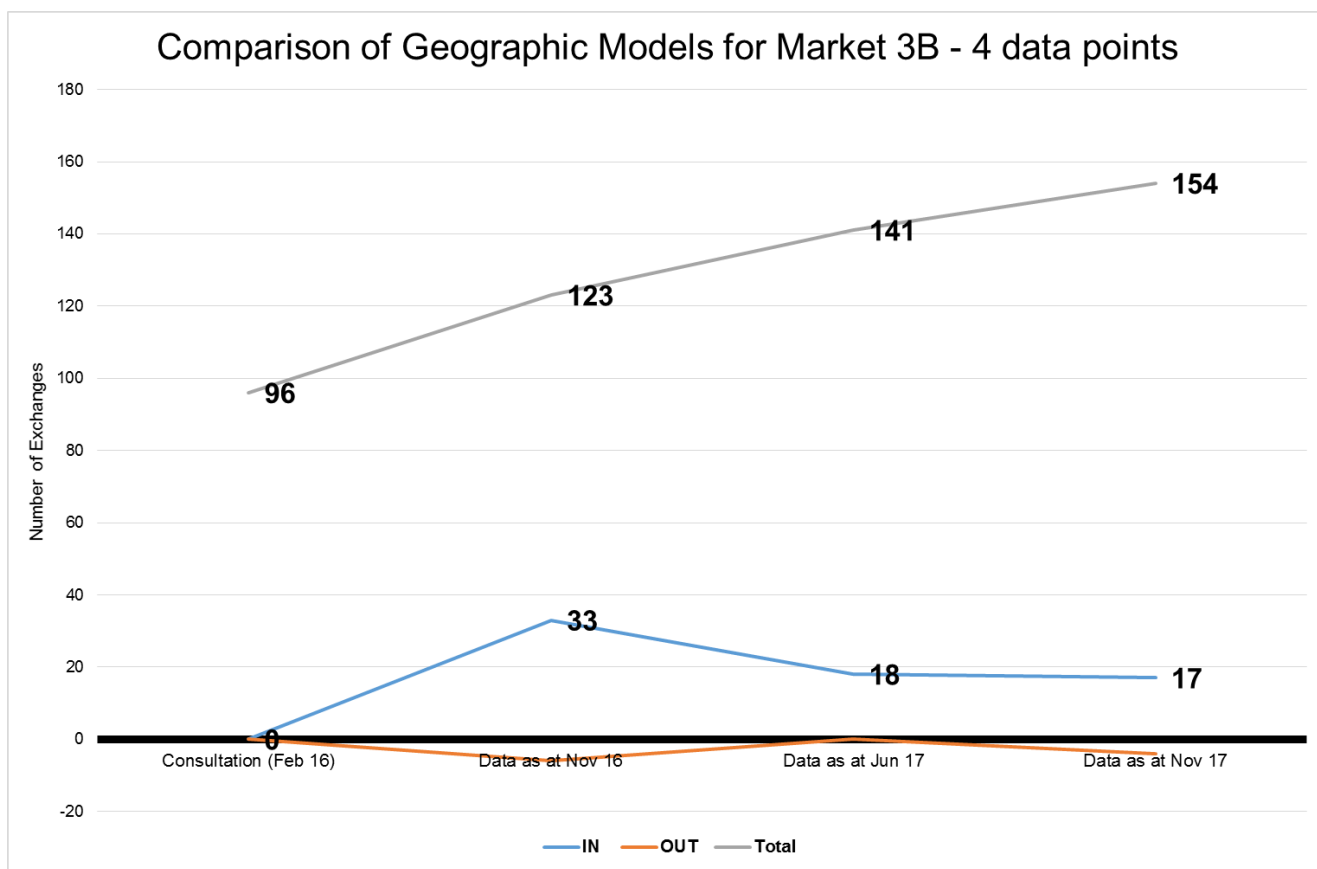
A 10.83 Between the November 2016 model and the June 2017 model, no exchanges dropped out of the Urban WCA Market while 15 fell into the Urban WCA Market, with 4 dropping out.

²³⁵⁹ ComReg notes that, in the Consultation, 88 Exchange Areas were deemed as falling into the Urban WCA Market and 1,129 Exchange Areas falling into the Regional WCA Market. A small change was made to this assessment in light of data clarifications from Eircom and a small number of calculation errors identified by ComReg in applying the five criteria.

²³⁶⁰ Figure 103 in the Consultation. An ‘**Aggregation Node**’ or ‘**AGG node**’ means a network concentration point for Access Paths.

A 10.84 It is important to note that there were small differences in the total number of Exchange Areas passing or failing all relevant Criteria (as applicable) between each iteration of the model (Figure A10.62). This is due to some Exchange Areas being moved by Eircom to a different Aggregation Node. This has the effect of reducing WLA Primary Operator presence at an Exchange Area, hence potentially impacting Criteria 1, 2 and 3. Comparing the model used for the Consultation in 2016 with the November 2017 model, two Exchange Areas previously deemed competitive in 2016 are no longer competitive, and this was due to those Exchange Areas failing the Criteria on the margins, despite applying exceptions.

Figure A10.62: Outputs of Assessments at four time periods



A 10.85 Table A10.60 below presents figures for market shares for each of the Primary Operators. Eircom’s national market share in the retail market (in the presence of regulation) was 31.4% in Q4 2017.²³⁶¹ Absent regulation in the Relevant WCA Market, this share is estimated to increase to [3< [REDACTED]]²³⁶² as retail broadband customers who are served by SPs using WCA inputs are, in ComReg’s view, likely to switch back to Eircom to retain services, as noted in paragraph A 10.63.

²³⁶¹ ComReg QKDR Q4 2017.

²³⁶² Greater than 50%.

Table A10.60: Retail Market Shares (Absent regulation in the WCA Market) for Primary Operators (Q4 2017) [REDACTED]

Market share	Eircom	Virgin Media	BT Ireland	Vodafone	Total Active Subs.	% of Total Active Subscriptions
National ²³⁶³	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	1,338,775	100.0%
Urban WCA Market ²³⁶⁴	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	809,006	60.4%
Regional WCA Market ²³⁶⁵	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	529,769	39.6%

A 10.86 Table A10.63 below suggest that there are likely to be differing competitive conditions across two separate geographic areas – those that meet all relevant Criteria and those that do not.

A 10.87 Based on ComReg’s assessment, ComReg therefore groups Exchange Areas into two areas:

- (a) The **Urban WCA Market**: The 154 Exchange Areas where relevant Criteria have, as applicable, been met; and
- (b) The **Regional WCA Market**: The 1,049 Exchange Areas where relevant Criteria have, as applicable, not been met.

A 10.88 The Exchange Areas that fall into the Urban WCA Market and Regional WCA Market are set out in Appendix: 11 of this Decision.

A 10.89 As set out below, Table A10.61 gives an overview of the breakdown of Exchange Areas in the Urban WCA Market based on Criteria met.

²³⁶³ Market Shares: Eircom (<60%), Virgin Media (<30%), BT Ireland (<10%), Vodafone (<15%).

²³⁶⁴ Market Shares (n=154): Eircom (<40%), Virgin Media (<45%), BT Ireland (<20%), Vodafone (<20%).

²³⁶⁵ Market Shares (n=1,049): Eircom (>75%), Virgin Media (<10%), BT Ireland (<10%), Vodafone (<20%).

Table A10.61: Exchange Areas meeting relevant Criteria

Scenario	Number of Primary Operators present		Total
	3	4 or 5	
<i>No ANO present</i>			
Meets all Criteria directly	5	N/A	5
Fails one of Criteria 2-4, but meets Criterion 5(i) exemption	9	N/A	9
<i>ANO and WLA PO present</i>			
Meets all Criteria directly	8	77	85
Fails one of Criteria 2-4, but meets Criterion 5(i) exemption	0	3	3
Fails one of Criteria 2-4, but meets Criterion 5(ii) exemption	11	9	20
<i>Fails on one of 3/4A/4B, AND fails 5i and 5ii exemptions, BUT passes on subset of (n-1)</i>	N/A	32	32
Total	33	121	154

A 10.90 It should be noted that there are no Exchange Areas in the Urban WCA Market which have no PO making use of WLA inputs present. The table above indicates that 64% of Exchange Areas within the Urban WCA Market meet all relevant Criteria directly, 15% meet the relevant Criteria on the basis of an exemption under Criterion 5, and the remaining 21% meet the Criteria on the basis of a subset of POs present.

Sensitivities

A 10.91 ComReg has varying some of the thresholds outlined in the Criteria purely as a sensitivity test. These sensitivity tests and the associated impact on the number of Exchange Areas that would move between the Urban WCA Market and the Regional WCA market are outlined in Table A10.62 below.

A 10.92 When the market share threshold for Primary Operator(s) using upstream WLA inputs under Criterion 3 is increased from 10% to 15% (and accordingly the exception for Criterion 3 is increased from 9% to 13.5%), this has the effect of causing 3 Exchange Areas to move from the Urban WCA Market to the Regional WCA Market.

Table A10.62: Sensitivities applied to WCA Geographic Market Assessment

Sensitivity applied	Exchange Areas move from Urban to Regional WCA Market	Revised Urban WCA Market
Criterion 3: increase market share threshold to 15%	3	151
Criterion 4A: increase coverage threshold to 40%	No impact	No impact
Criterion 4B: increase market share threshold to 15%	No impact	No impact
Criteria 4A and 4B: increase both thresholds to 40% and 15% respectively (+ exception for ANO to 100%)	No impact	No impact
Apply all of the above together	3	151

Updating the Assessment over the period of the Market Review

A 10.93 Given the need for market reviews to be forward-looking (where possible), and the potential dynamic nature of the Regional WCA Market, given the ongoing rollout of the SIRO and Virgin Media networks and the potential for Access Seekers to increase their WLA based footprints, ComReg intends to reapply Criteria 1 to 5 during the lifetime of the market review (and to consult within 24 months of the publication of this Decision) in order to examine the appropriateness of the continued imposition of regulatory obligations (the '**Mid-term Assessment**'). This could lead to, for example, the maintenance of existing regulation or its lessening or removal, as appropriate, in those Exchange Areas falling within the Regional WCA Markets. Where regulation is to be lessened or removed, the sunset period discussed in Section 13 of this Decision would be applied.

Overall Conclusion on WCA Geographic Market Assessment

A 10.94 Having regard to the analysis above, ComReg's overall conclusion is that there are likely to be two separate Relevant WCA Geographic Markets, namely:

- the **Urban WCA Geographic Market**, being those 154 Exchange Areas where all relevant Criteria have been met;²³⁶⁶ and
- the **Regional WCA Geographic Market**, being those 1,049 Exchange Areas where all relevant Criteria have not been met.

A 10.95 Table A10.63 below presents the outcome of applying the Criteria for assessing competitive conditions by geographic area.

Table A10.63: Application of Criteria for Assessing Competitive Conditions by Geographic Area – Model 4: November 2017

WCA Market	No. of Exchange Areas	Premises in Exchange Areas	Subscriptions in Exchange Areas
Urban	154	1,061,911	809,006
Regional	1,049	1,143,977	529,769

²³⁶⁶ ComReg notes that, while there are 145 Exchange Areas in the Urban WCA Market, an additional 9 exchanges/nodes are entirely contained within the 145 Exchange Areas, and it is appropriate to indicate that these 9 exchanges/nodes are part of the Urban WCA Market footprint. In some cases these exchanges/nodes do not have any active lines being served. These exchanges/nodes are: KSH, BOM, SBK, KMO, LPT, MNS, CWJ, CWD, MMT. For example, exchange BOM is contained in the AUV Exchange Area. Hence, the total number of Exchange Areas/exchanges in the Urban WCA Market footprint is 154. The status of these exchanges/nodes (plus further similar exchanges/nodes in the Regional WCA Market) was clarified by email from Eircom on 21 July 2017.

Appendix: 11 Boundaries of the Urban WCA Market and Regional WCA Market

A 11.1 In Appendix: 10 ComReg set out its approach to geographic market definition in the WCA market. Based on ComReg's assessment in Appendix: 10, it groups Exchanges into two areas:

- The **Urban WCA Market**: Exchange Areas where all applicable Criteria have been met; and
- The **Regional WCA Market**: Exchange Areas where all applicable Criteria have not been met.

A 11.2 The following Exchange Areas are contained within the Urban WCA Market:²³⁶⁷

ABE, ADW, AGN, AKW, ASG, ASM, ASQ, ATH, ATP, AUV, BAR, BAX, BBH, BDT, BEE, BFF, BLA, BLB, BLI, BLP, BNC, BNN, BRI, BRN, CAB, CCE, CEE, CEL, CGA, CGI, CHD, CHF, CKC, CKH, CLD, CLK, CLM, CLT, CLX, CRA, CRL, CRT, CRW, CSA, CSW, CTY, CUS, DAH, DBC, DBN, DBT, DDK, DDM, DGS, DLA, DNU, DOM, DYX, EFD, ENS, EPT, ETY, FLH, FNG, FOX, GAL, GMR, GRS, GRY, HPD, HSQ, HYD, KBK, KIC, KIH, KIK, KIL, KLM, KLN, KMC, KNY, LCN, LKD, LMK, LND, LOD, MAH, MBT, MDV, MFR, MGR, MHZ, MLW, MNK, MTK, MVN, MVW, NAS, NEP, NIN, NMN, NUT, NWL, PAL, PGS, PLT, PMK, PRP, QKR, QVE, RCR, RMS, ROC, ROM, RSL, RTD, RUS, SAN, SAP, SGO, SHN, SHP, SKL, SKS, SLA, SLS, SND, SNH, SRD, SRL, STN, THS, TLH, TLM, TLT, TOG, TRE, TWV, TYC, UGM, WHI, WLW, WPK, WRD, WTD, KSH, BOM, SBK, KMO, LPT, MNS, CWJ, CWD, MMT.

A 11.3 The following Exchange Areas are contained within the Regional WCA Market:²³⁶⁸

²³⁶⁷ ComReg notes that, based on Eircom's data, there are 1,203 exchanges nationally, consisting of 1,189 Exchange Areas, plus an additional 14 small exchanges/nodes, each of which are contained entirely within the boundaries of one of the 1,189 Exchange Areas. 9 of these small exchanges/nodes are entirely contained within the 145 Exchange Areas which constitute the Urban WCA Market, and it is appropriate to indicate that these 9 exchanges/nodes are part of the Urban WCA Market footprint. In some cases these exchanges/nodes do not have any active lines being served. These exchanges/nodes are: KSH, BOM, SBK, KMO, LPT, MNS, CWJ, CWD, MMT. For example, exchange BOM is contained in the AUV Exchange Area. Hence, the total number of Exchange Areas/exchanges in the Urban WCA Market footprint is 154. The status of these exchanges/nodes (plus 10 others that are in the Regional WCA Market) was clarified by an email from Eircom on 21 July 2017.

²³⁶⁸ Similar to the Urban WCA Market, ComReg identifies 1,049 exchanges as falling within the Regional WCA Market, comprising 1,039 Exchange Areas and 10 smaller exchanges/nodes each contained entirely within the boundaries of one of the 1,049 Exchange Areas.

AUG, MON, ABK, ABP, ABX, ABY, ACE, ACF, ACL, ACY, ADA, ADE, ADG, ADH, ADM, ADN, ADR, ADT, ADY, AFD, AFE, AFN, AGA, AGH, AGL, AGY, AHA, AHC, AHH, AHM, AHO, AHS, ALD, ALE, ALS, ALW, AME, ANA, ANN, ANR, ANY, ARA, ARC, ARD, ARL, ARN, ART, ARW, ASD, ASN, ATD, ATE, ATL, ATN, ATS, ATY, AVA, AVO, AYL, BAA, BAD, BAE, BAH, BAI, BAK, BAL, BAM, BAN, BAO, BAS, BAY, BBA, BBE, BBN, BBO, BBS, BBT, BBY, BCA, BCE, BCG, BCH, BCK, BCL, BCN, BCR, BCS, BCY, BDA, BDB, BDN, BDY, BEG, BEN, BER, BES, BEY, BFD, BFN, BFO, BFR, BFT, BGA, BGE, BGH, BGL, BGN, BGR, BGS, BGT, BGV, BGW, BGY, BHE, BHG, BHH, BHL, BHM, BHN, BHR, BHS, BHT, BHY, BIB, BIG, BIN, BIR, BIT, BIY, BJD, BKA, BKD, BKG, BKN, BKR, BKS, BKT, BLC, BLD, BLE, BLF, BLG, BLH, BLL, BLN, BLO, BLR, BLS, BLT, BLV, BLX, BLY, BMA, BMD, BME, BMH, BML, BMN, BMO, BMT, BMY, BNA, BND, BNE, BNG, BNR, BNS, BNY, BNZ, BOF, BOH, BOK, BOL, BON, BOY, BPC, BPN, BPO, BRA, BRD, BRE, BRF, BRH, BRM, BRS, BRT, BRU, BRY, BSA, BSB, BSE, BSH, BSN, BSO, BSP, BSZ, BTA, BTB, BTE, BTH, BTM, BTN, BTR, BTS, BTT, BTW, BTY, BUA, BUB, BUD, BUN, BUO, BUT, BUY, BVN, BVR, BVT, BWG, BWM, BWN, BWR, BXG, BYA, BYB, BYC, BYD, BYE, BYF, BYG, BYH, BYM, BYN, BYO, BYR, BYS, BYV, BYW, BYX, CAA, CAE, CAG, CAH, CAL, CAM, CAN, CAR, CAS, CAT, CAV, CAW, CAY, CBA, CBE, CBM, CBN, CBO, CBR, CBT, CBY, CCG, CCH, CCI, CCL, CCM, CCR, CCS, CDA, CDF, CDH, CDN, CDT, CDU, CDW, CEA, CEN, CER, CFA, CFD, CFG, CFL, CFN, CFO, CFY, CGB, CGE, CGG, CGH, CGL, CGM, CGN, CGS, CGY, CHA, CHE, CHG, CHH, CHL, CHR, CHT, CHW, CHX, CID, CIG, CIL, CIM, CIN, CIS, CJN, CKA, CKE, CKN, CKO, CKS, CKW, CKY, CLA, CLB, CLC, CLE, CLG, CLH, CLL, CLN, CLO, CLR, CLS, CLU, CLW, CLY, CMA, CMK, CML, CMN, CMO, CMP, CMR, CMS, CMY, CNA, CNB, CNE, CNG, CNN, CNP, CNR, CNS, CNV, CNW, CNX, CNY, COG, COL, CON, COO, COS, COT, COU, COV, COY, CPH, CPL, CPM, CPN, CPO, CPT, CPW, CRC, CRD, CRE, CRF, CRI, CRK, CRM, CRN, CRO, CRR, CRV, CRX, CRY, CSB, CSE, CSH, CSJ, CSK, CSL, CSO, CSP, CSR, CSS, CSY, CTB, CTD, CTE, CTH, CTL, CTN, CTW, CUA, CUB, CUE, CUR, CUX, CVN, CVW, CWL, CWN, CWT, CYA, CYE, CYG, CYW, DAP, DBG, DBR, DCE, DCK, DCL, DCN, DDA, DDT, DDY, DEZ, DFY, DGE, DGH, DGL, DGN, DGY, DHA, DHL, DHR, DKE, DKN, DLE, DLG, DLK, DLO, DLR, DMD, DME, DMO, DMR, DMW, DNA, DND, DNM, DNN, DNR, DNV, DNX, DON, DPF, DRA, DRB, DRH, DRI, DRL, DRM, DRS, DRW, DSN, DUK, DUN, DUR, DUW, DVA, DVN, DWT, ECT, EDY, EFI, EFN, EKK, EKY, EMJ, EMN, EMV, EMY, ERL, ERS, ESK, ETN, ETW, FBD, FBK, FBO, FCA, FDR, FEH, FES, FET, FFD, FFO, FGE, FGH, FHD, FHN, FHX, FIN, FKE, FMH, FML, FMT, FMX, FMY, FNA, FNS, FNT, FPK, FRB, FRS, FVA, FWN, FXD, FXH, FYB, GAR, GBE, GBH, GBY, GCE, GCF, GCK, GCR, GDH, GDN, GEY, GGF, GHL, GIL, GLA, GLC, GLF, GLI, GLN, GLO, GLS, GME, GMH, GMI, GMY, GNA, GNE, GNG, GNH, GNK, GNO, GNY, GRD, GRE, GRT, GSL, GSN, GSX, GTA, GTN, GTS, GUE, GUN, GVE, GWH, GWN, HBN, HCS, HCX, HDD, HFD, HFT, HKN, HLP, HMT, HOB, HOD, HPL,

HRD, IBF, IBM, IGE, IGH, IHR, INC, INE, ING, INH, INL, INM, INR, INV, INY, ISK, ISL, ISN, JKN, JNN, JSN, JTN, JWJ, KAE, KAP, KAS, KBD, KBE, KBN, KBS, KBY, KCE, KCH, KCK, KCL, KCN, KCO, KCR, KCW, KCY, KDH, KDK, KDN, KDO, KDT, KDY, KEH, KEK, KEL, KEN, KEY, KFA, KFE, KGD, KGL, KGN, KGT, KGV, KGX, KHA, KHE, KHN, KIA, KIM, KIN, KIR, KKE, KKL, KKY, KLA, KLB, KLC, KLE, KLG, KLH, KLK, KLL, KLO, KLR, KLS, KLU, KLY, KMA, KMD, KME, KMG, KMK, KML, KMN, KMS, KMT, KMU, KMW, KMY, KNA, KNC, KND, KNE, KNF, KNG, KNK, KNL, KNM, KNT, KOK, KON, KOR, KQY, KRA, KRG, KRH, KRM, KRN, KRR, KRY, KSA, KSL, KSN, KSV, KTA, KTH, KTK, KTM, KTN, KTR, KTX, KUC, KVA, KVN, KWH, KYG, KYK, LAG, LAN, LAY, LBN, LBO, LBU, LCY, LDA, LDN, LED, LEG, LEP, LET, LEX, LGA, LGB, LGN, LGW, LHA, LHY, LIF, LIS, LKR, LKY, LMB, LME, LMW, LNE, LNF, LNH, LNW, LNY, LOS, LPN, LRH, LRN, LSL, LSN, LSR, LTH, LTM, LTN, LTW, LVA, LVH, LVN, LWD, LWN, LYR, MAL, MAM, MAN, MBC, MBG, MBS, MBW, MBY, MCH, MCM, MCN, MDN, MEE, MEN, MER, MEX, MFD, MFM, MGE, MGL, MGN, MHL, MHW, MIK, MIL, MLA, MLD, MLE, MLF, MLH, MLN, MMK, MNB, MNE, MNH, MNT, MNU, MOT, MOY, MPT, MRM, MRN, MRO, MRW, MRY, MSK, MSN, MST, MTH, MTN, MTP, MUC, MUF, MUG, MUK, MUN, MUS, MVA, MVE, MVT, MWY, MYL, MYN, MYV, NAL, NAN, NAR, NBE, NBS, NCE, NCM, NCN, NCV, NGO, NHL, NMK, NMT, NNH, NOF, NOR, NPT, NRS, NRT, NRY, NSM, NTC, NTF, NTW, NWB, NWN, NWT, OBB, OGO, OGT, OLA, OLD, OLE, OLT, OME, OMH, ORM, OWN, OYG, PAN, PGN, PGO, PHB, PKW, PKY, PLL, PME, PML, PNE, PNT, PRE, PRK, PRS, PRT, PSG, PSX, PTN, PTW, PUA, PWC, PWL, PWN, QPT, QUN, RAN, RAY, RBE, RBK, RBT, RCH, RCL, RCM, RCN, RCS, RCY, RDE, RDM, RDS, RFN, RFO, RGN, RHS, RIP, RIS, RIV, RKE, RKY, RLC, RLE, RLH, RME, RMK, RMN, RMO, RMT, RNG, RNL, RNV, ROK, ROT, RPT, RPY, RRN, RRX, RSA, RSC, RSK, RSM, RSN, RSP, RST, RSY, RTH, RTN, RTO, RUN, RUY, RVD, RVK, RVN, RVY, RWD, RWH, RWN, RWR, RYN, RYX, SBE, SBH, SBR, SBY, SCF, SCK, SCL, SCN, SCT, SFN, SGH, SGN, SHE, SHL, SHR, SHY, SIL, SKB, SKN, SLE, SML, SNB, SNM, SNO, SON, SPL, STD, STH, STJ, STM, STY, SUF, SWD, TAA, TAN, TBD, TBL, TBT, TCN, TCY, TDY, TEY, TFA, TFN, TGN, TGR, THY, TLA, TLE, TLN, TLP, TLR, TLW, TMD, TME, TML, TMN, TMO, TMR, TMY, TNE, TNH, TOE, TOO, TOR, TOW, TPN, TPR, TPY, TRM, TRR, TSK, TST, TSW, TTH, TTN, TUM, TUR, TUX, TVN, URL, VGA, VIS, VMT, VTY, WAL, WAP, WFA, WFD, WGL, WGT, WIS, WKW, WLN, WMN, WOL, WST, WTB, WTG, WVE, WXA, WXD, YHL.

A 11.4 In Table A10.64 below, ComReg provides a reconciliation of differences in the number of exchanges provided by Eircom in data submissions. In particular, there are exchanges/nodes provided by Eircom that do not have their own Exchange Area coverage and hence ComReg has had to account for these (19) exchanges by allocating them, as advised by Eircom, into relevant Exchange Areas. This accounts for additional exchanges falling within the boundaries of the Urban and Regional WCA Markets respectively. Such adjustments were made to previous versions of the model accordingly.

Table A10.64: Reconciliation of differences in Number of Exchange Areas and Exchanges – data as at November 2017

Details regarding Eircom map and Eircom list of exchanges		
Total Exchanges submitted by Eircom on spreadsheet	1,203	
Total Exchange Areas on Eircom map	1,189	
<i>Difference between map and spreadsheet</i>	<i>14</i>	
Exchanges in spreadsheet not on map	19	
Exchange Areas on map not in spreadsheet	5	
<i>Exchanges on map no longer operational</i>	1	<i>ADL</i>
<i>Exchange Areas on map to be allocated into appropriate Exchange Area in spreadsheet</i>	4	<i>ADI, ADP, PPR, SJR (allocated as advised by Eircom on 14 June and 22 August 2017)</i>
<i>Exchanges/nodes in spreadsheet not on map</i>	19	<i>Allocated to relevant Exchange Areas as advised by Eircom (21 July 2017)</i>
Non-Exchange Area nodes in Urban WCA Market	9	
Non-Exchange Area nodes in Regional WCA Market	10	
Urban WCA Market	154	
Regional WCA Market	1,049	

Appendix: 12 Geocible Report

A 12.1 The Report “**Overview of Methodology for Estimating SIRO and Virgin Media market shares and network coverage within Eircom Exchange Area boundaries Tranche 3: January 2018**” conducted on behalf of ComReg by Geocible is published alongside this Decision in ComReg Document 18/94b.

Appendix: 13 Additional Cartesian Reports

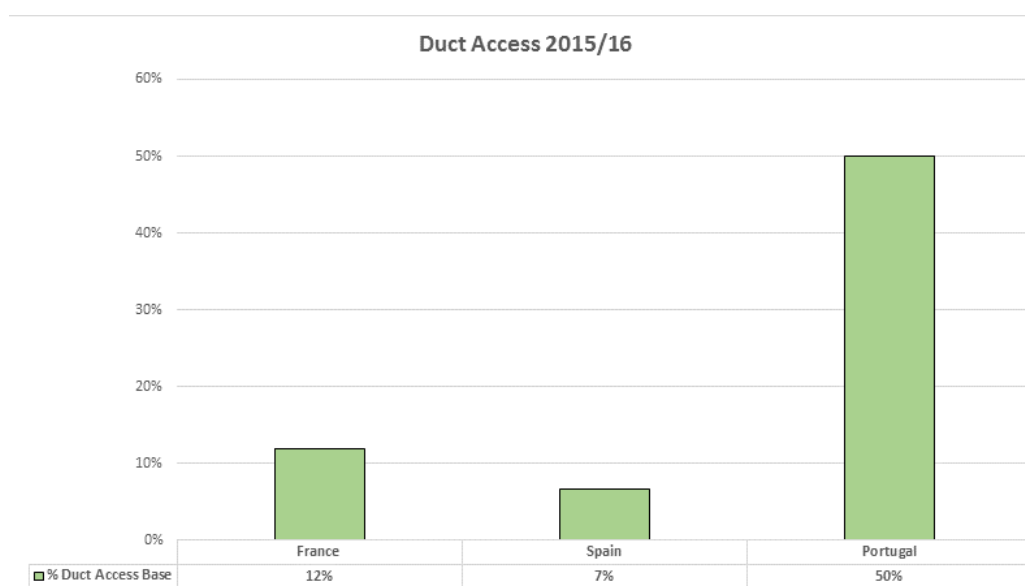
A 13.1 The Reports “**CEI Service Delivery Process Equivalence Options - Review of additional information provided by Eircom**” and “**CEI Service Delivery Process Equivalence Options Accelerated MARTIS Provisioning – Data Services Tool (‘AMP DST’)**” conducted on behalf of ComReg by Cartesian are published alongside this Decision in ComReg Document 18/94c.

Appendix: 14 Uptake of Duct Access in France, Spain and Portugal

A 14.1 Figure A14.63²³⁶⁹ illustrates the take-up of Duct Access in France, Spain and Portugal in 2015/16.

A 14.2 In France, over 41,000km of Duct has been leased representing ~ 12% of incumbent Duct network. In Spain, ~20,000km of Duct has been leased representing ~ 7% of incumbent Duct network. While in Portugal, ~12,000km of Duct has been leased representing ~ 50% of incumbent Duct network. The incumbent network operator in Portugal does not have an obligation to provide active wholesale products.

Figure A14.63: Duct Access base as a % of Incumbent Duct Network (2015/16)

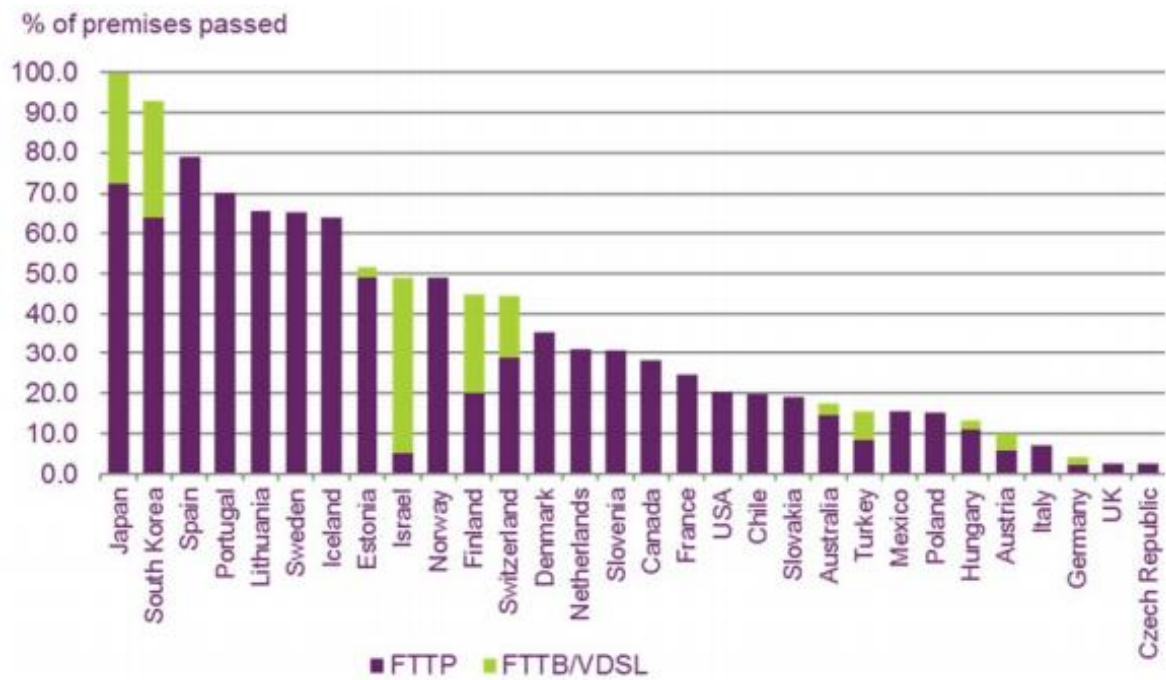


A 14.3 Figure A14.64 illustrates the fibre coverage to premises in OECD nations as of Nov 2016. In France, ~ 25% of premises are passed with FTTx network. In Spain and Portugal, ~77% and 70% of premises are passed with FTTx network respectively.

²³⁶⁹ Best practice for passive infrastructure access, WIK-Consult (Report for Vodafone), 19 April 2017.

<http://www.vodafone.com/content/dam/vodafone-images/public-policy/reports/pdf/best-practice-passive-infrastructure-access-050517.pdf>.

Figure A14.64: Fibre coverage to premises in OECD nations, end-2016 (source Analysys Mason)



Appendix: 15 Differences between Eircom Duct and Pole Product and Eircom internal self-supply of CEI²³⁷⁰

Duct Pre-Ordering:

Table A15.65: Duct Pre-Ordering: Desktop Survey

	open eir Duct Offer Issue	Eircom own use of duct
D.1	Access Seekers do not have 'Read Access' to GIS/ANRM system.	Access to GIS/ANRM system provided to internal staff.
D.2	Access Seekers unable to conduct the desktop survey.	Eircom staff undertake desktop surveys.

²³⁷⁰ Information sources:

- (1) open eir published Duct and Pole Products https://www.openeir.ie/Products/Data/Pole_and_Duct_Access/.
- (2) open eir published NGN Ethernet https://www.openeir.ie/Products/Data/Next_Generation_Ethernet/.
- (3) Eircom's Response to Feb 2016 SIR, dated 3 March 2016.
- (4) Eircom's Response to April 2016 SIR, dated 20 May 2016.
- (5) Eircom's Response to March 2017 SIR, dated 10 April 2017.
- (6) Eircom's Response to April 2017 SIR, dated 26 May 2017.
- (7) Eircom's Response to May 2017 SIR, dated 23 June 2017.

Table A15.66: Duct Pre-Ordering: Field Survey

	open eir Duct Offer Issue	Eircom own use of duct
D.3	Access Seeker not permitted to conduct the field survey activity (using approved contractors).	Eircom carry out field survey activity (using approved contractors).
D.4	Lack of documentation on procedure to be followed during field survey.	Internal staff trained to undertake field surveys.

Sub-Duct Design

Table A15.67: Sub-Duct Design

	open eir Duct Offer Issue	Eircom own use of duct
D.5	Access Seeker not permitted to conduct Rod Rope and Test (RRT) activity.	Eircom undertake Rod Rope and Test activity.

Duct Ordering

Table A15.68: Duct Ordering

	open eir Duct Offer Issue	Eircom own use of duct
D.6	Access Seeker not given option to install the sub-duct and the fibre cable at the same time.	Eircom has option to install the sub-duct and the fibre cable at the same time.
D.7	"The Operator is responsible for installation of the final lead-in to their customer premises". The product description is unclear if the Access Seeker will be given access to open eir lead-in duct on the customer's property.	Eircom has access to the lead-in to customers premises.
D.8	Access Seeker does not have access to chambers to install cable/joints.	Eircom has access to chambers to install cable/joints.
D.9	Access Seeker is restricted to limited ingress/egress points.	Eircom is not restricted to certain ingress/egress points.
D.10	Access Seeker not permitted to install own sub-duct in Eircom ducts. If Access Seeker owned the sub-duct then it has greater flexibility to break-in and break-out of eircom chambers.	Eircom install own sub-duct into its ducts and has flexibility to break-in and break-out of chambers.
D.11	Access Seeker cannot install fibre directly in duct where there is no room for sub-duct	Eircom can install fibre directly in duct where there is no room for sub-duct.
D.12	No SLA defined for Major Project Orders	Eircom FTTH/FTTC programmes executed on time with sufficient resources.
D.13	Product limitation of accessing one micro-duct of a cluster of micro-ducts not valid as the micro-ducts are designed to be accessed e.g. clear numbering and external markings on the micro-ducts.	Eircom has flexibility in installing micro-ducts at design stage with overall FTTH/FTTC design.
D.14	No SLA for emergency Clerk of Work (CoW) requests from Access Seeker.	Eircom do not use CoW.

Duct Assurance

Table A15.69: Duct Assurance

	open eir Duct Offer Issue	Eircom own use of duct
D.15	No in situ repair of damaged cables by Access Seeker.	Eircom repair cables in situ.
D.16	Omission of maximum permitted time for fault repair (by eircom).	Max repair time of data circuits is 8 working hours.
D.17	Max. permitted time of 1 working day to respond after receipt of fault ticket.	Max repair time of data circuits is 8 working hours.
D.18	Minimum notice period of 3 working days for planned/unplanned maintenance requests too long.	Eircom can access network at any time.
D.19	The Access Seekers should be permitted to carry out in situ repair of damaged cables by permitting Access Seekers access to intermediate chambers and installation of Access Seeker joints in open eir chambers (subject to survey).	Eircom is permitted to carry out in situ repair of damaged cables.
D.20	Open eir will supervise any works carried out by the Access Seeker in open eir duct/sub-duct/chambers. This requirement place additional cost on Access Seekers. Authorised contractors should be able to work unsupervised open eir duct/sub-duct/chambers.	Eircom work unsupervised in its access network.
D.21	Fault reporting should be directed to a dedicated technical team and not via the wholesale account manager (minor faults or unplanned maintenance requests).	Fault reporting directed to dedicated technical team and not via the wholesale account manager.

Pole Pre-Ordering**Table A15.70: Pole Pre-Ordering**

	open eir Pole Offer Issue	Eircom own use of Poles
P.1	No definition of the Access Seeker survey format in the published documentation.	Eircom staff has knowledge of survey format.

Pole Design**Table A15.71: Pole Design**

	open eir Pole Offer Issue	Eircom own use of Poles
P.2	Max. permitted time of 30 working day for pole route design too long.	Design for data orders undertaken in 5 working days.

Pole Ordering

Table A15.72: Pole Ordering

	open eir Pole Offer Issue	Eircom own use of Poles
P.3	Max. permitted time of 40 working days for route preparation too long.	FTTH works orders completed within [3<] weeks on average (13D Response 24 April 2017).
P.4	Access Seeker is restricted to limited ingress/egress points.	Eircom is not restricted to certain ingress/egress points.
P.5	No SLA for emergency Clerk of Work (CoW) requests from Access Seeker.	Eircom do not use CoW.
P.6	"Where an open eir pole is on private property, The Operator must request and get consent from the land owner".	Eircom has no such condition imposed on its self-supply function.
P.7	"Pole availability will be managed by open eir in accordance with open eir's network engineering rules, regardless of which Operator requests it". Open eir's network engineering rules are not published.	Eircom staff has knowledge of network engineering rules.
P.8	Open eir will supervise any works carried out by the Access Seeker in open eir duct/sub-duct/chambers. This requirement place additional cost on Access Seekers. Authorised contractors should be able to work unsupervised open eir duct/sub-duct/chambers (to interface with the Pole Connection).	Eircom has unrestricted access to the pole network.
P.9	No SLA defined for Major Project Orders.	Eircom FTTH/FTTC programmes executed on time with sufficient resources.
P.10	Max. permitted time of 10 working days for pole reservation too long.	Eircom does not reserve capacity on poles.

Pole Assurance**Table A15.73: Pole Assurance**

	open eir Pole Offer Issue	Eircom own use of Poles
P.11	Max. permitted time of 1 working day to respond after receipt of fault ticket.	Max repair time of data circuits is 8 working hours.
P.12	Minimum notice period of 3 working days for planned/unplanned maintenance requests too long.	Eircom can access network at any time.
P.13	Omission of maximum permitted time for fault repair (by Eircom).	Max repair time of data circuits is 8 working hours.
P.14	Fault reporting should be directed to a dedicated technical team and not via the wholesale account manager (minor faults or unplanned maintenance requests).	Fault reporting directed to dedicated technical team and not via the wholesale account manager.

Appendix: 16 Comparison between Eircom Duct Access Provision and NGN Ethernet Provision

A 16.1 In this Appendix ComReg summarises the differences in SLAs between Eircom Duct Access provision and the CEI components of Eircom NGN Ethernet provision for all scenarios:

- (a) Where a Sub-Duct exists and a Desk top survey is required.
- (b) Where a Sub-Duct exists and a field survey is required.
- (c) Where a new Sub-Duct is required.

A 16.2 Table A16.74 below summarises the maximum time provided for in the Eircom Duct Access SLA in the scenario where the **Access Seeker requests a desktop survey where the Sub-Duct exists**. The maximum time quoted is 27 workings days, compared to 19 working days for the comparable steps during Eircom NGN Ethernet provision.

Table A16.74: Comparison between Eircom Duct Access provision and Eircom NGN Ethernet provision, in the scenario where existing Sub-Duct is available and desktop survey is requested

Process Activity		SLA (Working Days)		
		Existing Sub-duct + Desktop Survey Open eir Duct Offer	Existing Sub-duct + Desktop Survey Open eir NGN Ethernet	Difference between Internal & External Supply
Pre-Ordering	Acknowledgement	2	2	-
	Desktop Survey	13	5	8*
	Field Survey	-	-	-
	Sub-duct Design	-	-	-
Ordering	Acknowledgement	2	2	-
	Sub-duct Connection	10	10	-
	Sub-duct Installation	-	-	-
Maximum Time within SLA		27	19	8

* Access Seekers experience longer lead-time for Eircom Duct Product

A 16.3 Table A16.75 summarises the maximum time with the Eircom Duct Access SLA in the scenario where Sub-Duct exist and the Access Seeker requests a field survey. The maximum time quoted is 40 workings days, compared to 29 working days for Eircom NGN Ethernet provision.

Table A16.75: Comparison between Eircom Duct Access provision and Eircom NGN Ethernet provision, in the scenario where Sub-Duct is available and field survey is requested

Process Activity		SLA (Working Days)		
		Existing Sub-duct + Field Survey open eir Duct Offer	Existing Sub-duct + Field Survey open eir NGN Ethernet	Difference between Internal & External Supply
Pre-Ordering	Acknowledgement	2	2	-
	Desktop Survey	13	5	8*
	Field Survey	13	10	3*
	Sub-duct Design	-	-	-
Ordering	Acknowledgement	2	2	-
	Sub-duct Connection	10	10	-
	Sub-duct Installation	-	-	-
Maximum Time within SLA		40	29	11

* Access Seekers experience longer lead-time for Eircom Duct Product

A 16.4 Table A16.76 summarises the maximum time with the Eircom Duct Access SLA in the scenario where Sub-Duct is not available and the Access Seeker requests a field survey. The maximum time quoted is 100 working days, compared to 44 working days for Eircom NGN Ethernet provision - 56 working days ahead of the Eircom Duct offer maximum SLA timeline.

Table A16.76: Comparison between Eircom Duct Access provision and Eircom NGN Ethernet provision, in the scenario where Sub-Duct is not available and field survey is requested

Process Activity		SLA (Working Days)		
		New Sub-duct + Field Survey Open eir Duct Offer	New Sub-duct + Field Survey Open eir NGN Ethernet	Difference between Internal & External Supply
Pre-Ordering	Acknowledgement	2	2	-
	Desktop Survey	13	5	8*
	Field Survey	13	10	3*
	Sub-duct Design	30	5	25*
Ordering	Acknowledgement	2	2	-
	Sub-duct Connection	-	-	-
	Sub-duct Installation	40	20	20*
Maximum Time within SLA		100	44	56

* Access Seekers experience longer lead-time for Eircom Duct Product

A 16.5 ComReg considers that these data demonstrate that Eircom provides a superior SLA for Eircom NGN Ethernet provision, which relies on the Eircom Duct Access product, than the SLA provided for Duct Access.

A 16.6 ComReg notes that Eircom stated that

“Open eir has defined metrics for CEI access products however in the absence of any demand and use of the products it has not been possible to calculate such metrics or monitor product performance”²³⁷¹

A 16.7 ComReg does not agree with Eircom statement that in the absence of any demand and use of the CEI products it has not been possible to calculate such metrics or monitor product performance. ComReg notes that Eircom self-supply CEI e.g. FTTC, FTTH, Data Orders, hence it is possible for Eircom to calculate such metrics and monitor performance. Furthermore, these metrics and performance should be used in defining the provision and assurance SLAs for the CEI products.

²³⁷¹ Eircom Submission, page 43.

Appendix: 17 Colt Network Investment Plans based on CEI access

Extract from correspondence between Colt and ComReg

Introduction

A 17.1 Colt Technology Services Limited ('Colt') has an urgent need for Wholesale Physical Network Infrastructure Access (WPNIA) to facilitate the provision of modern high-speed communications services. Colt intends to use WPNIA for the following applications:

- (a) Access to premises where customers are located;
- (b) Network expansion;
- (c) Options for redundancy with physically separated paths to connect critical business sites.

A 17.2 Colt maintains that by restricting the nature of access to Eircom's own nominated Ingress and Egress points, Eircom is assuming the right to manage and control the deployment of competitive infrastructure. In particular, by so doing, Eircom is severely limiting the effectiveness of the product for serving business customers.

A 17.3 Colt's experience in working with passive infrastructure access remedies across Europe has afforded Colt considerable experience of the factors that most affect the success of passive infrastructure access remedies.

A 17.4 Below, Colt set out some examples of how Colt intends to use WPNIA. The types of use illustrated below are based on examples of how Colt has deployed fibre in several EU cities.

Network expansion in the Dublin greater area

A 17.5 [REDACTED]

A 17.6 [REDACTED]

Figure A17.65: Colt's Dublin metropolitan network focusing on data centres and business parks. [REDACTED]

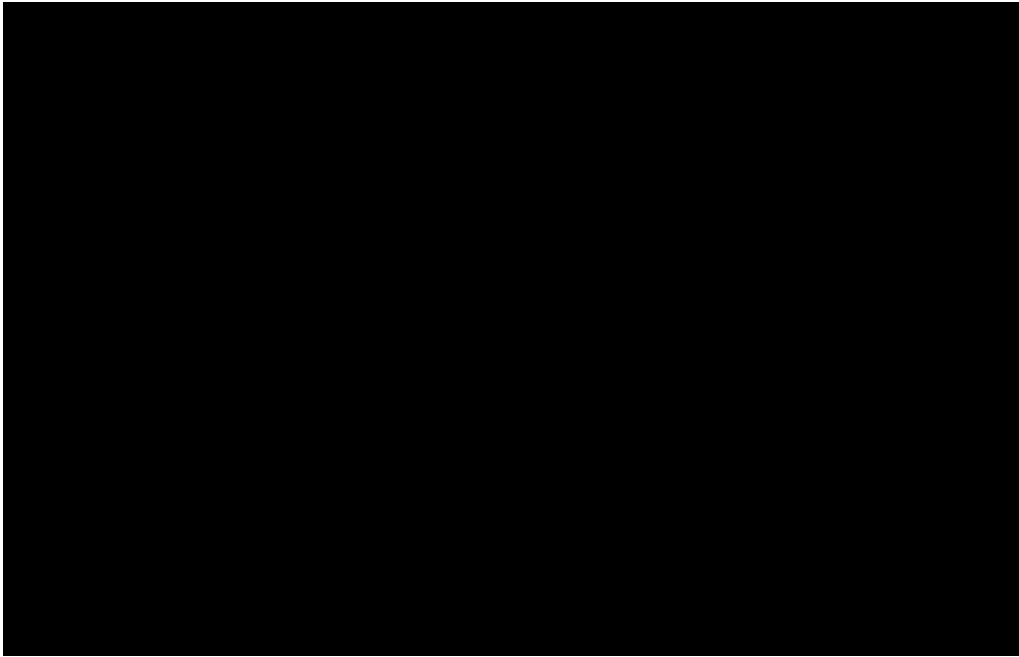
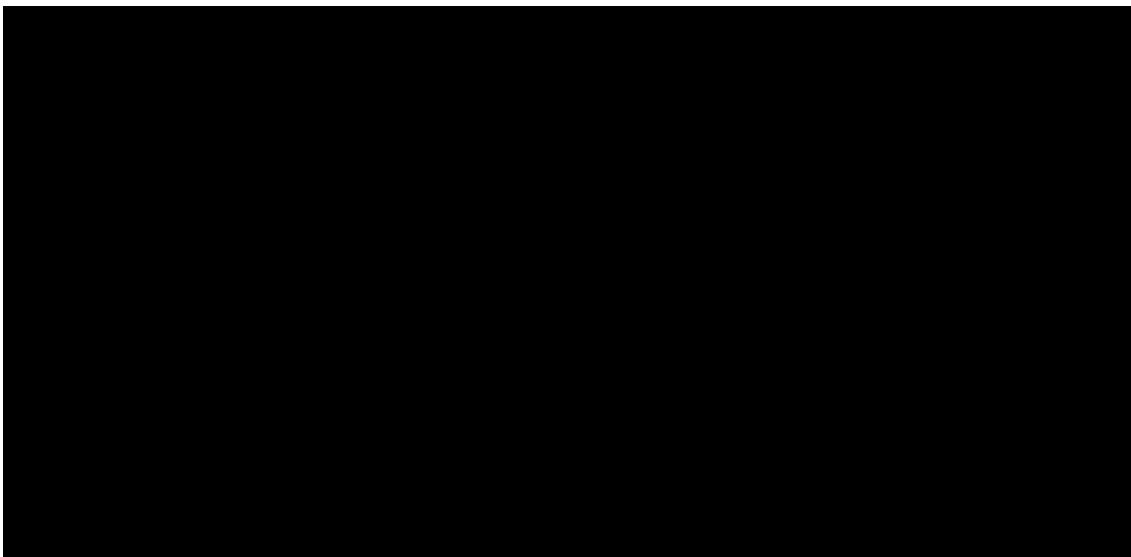


Figure A17.66: Colt's plan to links several business parks to its existing Dublin metropolitan network. [REDACTED]



A 17.7 [REDACTED]
[REDACTED]

A 17.8 In this context, a shared Duct offer will permit Colt to effectively deploy, from a number of new sub-nodes, fibre cable rings to connect multiple customers. A full fibre cable is the preferred option vs a single fibre pair lease, as multiple drops and multiple fibre pairs are normally necessary.

Market trends

- A 17.9 An ever-increasing need for bandwidth has provoked a shift from copper to fibre based transmission capacity. Deployment of fibre optic cable typically requires installation in ducts, therefore Duct Access is a prerequisite for high-speed data services.
- A 17.10 For the past 10-15 years, most Access Seekers conducted their own civil works (at considerable expense). Yet, with high-quality connectivity at affordable prices fast becoming a basic requirement (and no longer a differentiator), alternative operators are no longer able to justify undertaking their own civil works in all circumstances. Consequently, the trend across Europe is to move away from self-provided civil infrastructure and towards the efficient usage of existing infrastructure, allowing the sunk costs of construction to be defrayed among multiple parties.
- A 17.11 Colt has excellent experience of sharing Ducts with SMP operators in European countries where Duct Access is offered both under regulated and commercial terms. Colt’s experience shows that deployment of fibre cable in Duct represents a small fraction of the corresponding digging cost. The average typical dig cost (trench, cable, chambers) is about €150/m. By using Duct sharing instead, this cost can be reduced by about 80%. [§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]
- A 17.12 The final result will be that Irish customers – both business and residential – will be able to choose between a wider number of service providers, leading to an overall improvement in service quality, performance and price.

Appendix: 18 Selected Eircom views on PAR

A 18.1 In this Appendix, selected points made by Eircom with respect to access to PAR are summarised and assessed by ComReg. In addition, ComReg comments on specific PAR issues raised in selected SIRs (paragraphs A 18.17 to A 18.28).

Eircom's Views

A 18.2 Selected points made by Eircom with respect to access to PAR are grouped into the following categories which will be detailed in paragraphs A 18.3 to A 18.7 and assessed in paragraphs A 18.8 to A 18.16.

- (a) Reservations and Reservation System
- (b) Definition of PAR
- (c) Pre-Qualification File

Reservations and Reservation System

A 18.3 With respect to Reservations, Eircom noted that:

- (a) Eircom has a manual Pole and Duct reservation process available.
- (b) No inventory system exists with regard to reservation of Duct or dates of reservation or reservation expiry dates.
- (c) CEI Inventory is posted during high level design and appears on the inventory system at detailed design stage.

A 18.4 With respect to Reservation System, Eircom noted that:

- (a) As there is no reservation system there is also no reserved capacity marked beyond the proposed inventory posted during high level design.

Definition of PAR

A 18.5 With respect to the definition of PAR, Eircom noted the following:

- (a) Eircom noted that as per the consultation, PAR means all available physical records for passive access.²³⁷²

²³⁷² Eircom Submission, page 42 states:

“inter alia information relating to (i) physical location of Ducts, Sub-Ducts, Poles, Chambers, cabinets, and distribution points, including their technical and physical characteristics; (ii) the installed fibre and metallic cable capacity in Ducts and in Sub-Duct and on Poles, including their used capacity (iii) the reserved Duct, Pole and Chamber capacity (reservation information includes x-y co-ordinates of start and the end of the route, requested date of reservation, reservation lapse date); and (iv) the reserved capacity by internal or external Undertakings, per route.”

- (b) Eircom stated that PAR appears to be limited to available information, so it would appear there is no obligation to provide information on existing utilisation that it does not currently have.

Pre-Qualification File

A 18.6 With respect to the Pre-Qualification File,²³⁷³ Eircom stated that details of new network deployment²³⁷⁴ are made available to operators availing of NGA services, 6 months in advance of their recording in the Advance Pre-Qualification File.

A 18.7 Eircom also raised a number of other points which ComReg is of the view are not related to PAR. These points are listed as followed:

- (a) competition problems referred to by ComReg are discussed in paragraphs 7.35 to 7.40 of the Consultation; and
- (a) defined metrics for CEI access products: Eircom stated that in the absence of any demand for the products it has not been possible to calculate such metrics or monitor product performance²³⁷⁵

ComReg's Assessment of Eircom's Views

Reservations and Reservation System

A 18.8 ComReg has considered Eircom's views summarised in paragraphs A 18.3 to A 18.4 concerning reservations and reservation system.

A 18.9 ComReg view is that the existing manual reservation process can be improved to include dates of reservation or reservation expiry dates.

A 18.10 ComReg's position is that Eircom should make available the existing reservation information to Access Seekers.

A 18.11 ComReg expects that the reservation process may evolve over time and that a system may be put in place to cater for Access Seekers and Eircom self-supply (own use). In this event, ComReg's position is that Eircom must provide Access Seekers with access to the available reservation system.

Definition of PAR

A 18.12 ComReg has considered Eircom's views summarised in paragraph A 18.5 above concerning definition of PAR.

²³⁷³ The Advance Pre-Qualification File, published by Eircom wholesale division (open eir), contains the addresses of all FTTC/FTTH NGA lines that are expected to pass on pre-qualification for that Operator and is provided 28 calendar days in advance of the first date for access Orders. All premises (residential and business) included in the file are served from a technically ready NGA cabinet and the Cabinet RFO (Ready For Order) date in the file is the first date from which an Operator can submit an end-user Order via the UG.

²³⁷⁴ Monthly NGA Deployment Plan.

²³⁷⁵ For further information, please refer to paragraph A 16.6.

A 18.13 As defined in the Consultation, ComReg's definition of 'Passive Access Records' means all **available** physical records for passive access, including *inter alia* information relating to (i) physical location of Ducts, Sub-Ducts, Poles, Chambers, cabinets, and distribution points, including their technical and physical characteristics; (ii) the installed fibre and metallic cable capacity in Ducts and in Sub-Duct and on Poles, including their used capacity (iii) the reserved Duct, Pole and Chamber capacity (reservation information includes x.y. co-ordinates of start and the end of the route, requested date of reservation, reservation lapse date); and (iv) the reserved capacity by internal or external undertakings, per route;

A 18.14 ComReg's assessment outlined in paragraphs 7.476 to 7.510 of this Decision, describes what constitutes available PAR. ComReg does not agree with Eircom's suggestion to replace the word 'available' in the definition of PAR with the word 'existing'.²³⁷⁶

Pre-Qualification File

A 18.15 ComReg has considered Eircom's views summarised in paragraph A 18.6 above concerning pre-qualification file.

A 18.16 ComReg notes that the Pre-Qualification File is not relevant to the obligations governing access to CEI or PAR as the Pre-Qualification File, published by Eircom wholesale division (Eircom), contains the addresses of all FTTC/FTTH NGA lines that are expected to pass on pre-qualification for that Operator and is provided 28 calendar days in advance of the first date for access Orders.

PAR Issues raised in selected SIRs

A 18.17 ComReg notes that Eircom had an opportunity to record Duct space and Pole utilisation from January 2013 when the CEI remedy was imposed initially (Remedies for Next Generation Access Markets, ComReg Document 13/11, ComReg Decision D03/13, 31 January 2013), and failed to do so. ComReg expects an efficient SMP operator to update its CEI records during the rollout of major programmes (e.g. FTTC, FTTH) and business as usual activities (e.g. survey for data orders).

²³⁷⁶ Eircom Submission, page 73.

A 18.22 If Eircom has records of ‘as built’²³⁸¹ CEI drawings attached to work orders on its SAP²³⁸² systems, and these are not recorded on its GIS system. It is ComReg’s position that Eircom must make these records available to Access Seekers either by updating the ‘as built’ record on its GIS system²³⁸³ or by providing access to Access Seekers to the ‘as built’ CEI drawings attached to work orders.

A 18.23 Eircom is not providing access to Access Seekers to all the information Eircom makes available to itself (e.g. recorded occupancy and fibre sheath information).

A 18.24 In its Submission, Eircom stated that

“The capability to manage a duct space record that shows utilisation only became available to eir with the introduction of Smallworld. While open eir is currently geo-locating new cables in ducts and sub-ducts, inventory relating to pre-existing cable placement within ducts does not exist... there is no obligation to provide information we do not currently have on existing utilisation.”²³⁸⁴

A 18.25 In its Response to a SIR,²³⁸⁵ Eircom confirmed that some 3-way and 7-way Sub-Duct occupancy information was recorded on their GIS as of May 2017. However, Eircom did not make this information available to Access Seekers.

A 18.26 Eircom confirmed that [§< ██████████] kilometres of its fibre sheath length was recorded on their GIS as of May 2017. However, Eircom did not make this information available to Access Seekers.

A 18.27 According to Eircom, the capability to manage a Duct space utilisation record became available to Eircom with the introduction of Smallworld, which Eircom implemented in [§< ██████████]. Based on best international practice, ComReg expects Eircom to have utilisation data for cables in Ducts and Sub-Ducts installed since [§< ██████████], along with all business as usual surveys or ‘Rod and Rope’ activities relating to its CEI.

A 18.28 In ComReg’s opinion when a physical survey is being undertaken, it takes a small effort to record Duct capacity. Similarly since [§< ██████████], Pole capacity could be captured via business as usual physical surveys.

A 18.29 Table A16.77 even though Eircom has the capability to record Duct utilisation on Smallworld, it has not made any significant effort to capture the information through its business as usual activities.

²³⁸¹ ‘As Built’ is the term used to describe the state of a work order drawing returned by the build resource to the Eircom designer as a record of what was actually built. The ‘As Built’ drawing may differ from the original proposal drawing.

²³⁸² SAP is enterprise software used to manage business operations and the production of work orders.

²³⁸³ ComReg considers this to be a straightforward administrative task.

²³⁸⁴ Eircom Submission, page 42.

²³⁸⁵ Eircom’s Response to April 2017 SIR, dated 26 May 2017, page 3.

Table A16.77: Comparison between PAR available to Eircom and Access Seekers

(Note 1: Unable to determine if all 'As Built' drawings are updated onto Smallworld in a timely manner)

Passive Access Records ('PAR')	Eircom				Access Seeker			
	GIS (Physical)	ANRM (logical)	'Proposal' Drawing	'As-Built' Drawing	GIS (Physical)	ANRM (logical)	'Proposal' Drawing	'As-Built' Drawing
Physical location of Ducts, chambers, cabinets and Distribution points	Yes	N/A	Yes	Yes	Limited by CBYD	N/A	No	(Note 1)
Physical location of Sub-ducts (1-way, 3-way, 7-way)	Yes	N/A	Yes	Yes	Limited by CBYD	N/A	No	(Note 1)
Sub-duct (3-way, 7-way) Capacity	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A
Duct Capacity	No	No	N/A	No	No	No	N/A	No
The installed fibre and metallic cable capacity in Ducts and in Sub-duct and on Poles, including their used capacity	Yes	Yes	N/A	N/A	No	No	N/A	N/A
The reserved Duct, Pole and Chamber capacity	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A
The reserved Duct, Pole and Chamber capacity (reservation information includes x.y. co-ordinates of start and the end of the route, requested date of reservation, reservation lapse date);	No	No	N/A	N/A	No	No	N/A	N/A
The reserved capacity by internal or external Undertakings, per route;	Yes	N/A	N/A	N/A	No	N/A	N/A	N/A

Appendix: 19 Regulatory Impact Assessment

- A 19.1 The Regulatory Impact Assessment ('**RIA**') is an analysis of the likely effect of proposed new regulation or regulatory change. The purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. The RIA should help identify regulatory options, and should establish whether proposed regulation is likely to have the desired impact. It is a structured approach to the development of policy, and analyses the impact of regulatory options on different stakeholders. Appropriate use of the RIA should ensure that the most effective approach to regulation is adopted.
- A 19.2 ComReg's approach to RIA follows ComReg's own RIA Guidelines²³⁸⁶ and takes into account both the 'Better Regulation' programme²³⁸⁷ and international best practice (for example, considering developments involving RIA published by the European Commission and the OECD).
- A 19.3 Section 13(1) of the Communications Regulation Act 2002 (as amended) requires ComReg to comply with Ministerial Policy Directions. In this regard, Ministerial Policy Direction 6 of February 2003²³⁸⁸ requires that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and international best practice, and otherwise in accordance with measures that may be adopted under the 'Better Regulation' programme.

²³⁸⁶ ComReg Document 07/56a, ComReg, 'Guidelines on ComReg's Approach to Regulatory Impact Assessment', 10 August 2007 (the '**RIA Guidelines**').

²³⁸⁷ Department of the Taoiseach, 'Regulating Better', January 2004. See also 'Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis', June 2009, (the '**Department of An Taoiseach's Revised RIA Guidelines**'), available from: https://govacc.per.gov.ie/wp-content/uploads/Revised_RIA_Guidelines_June_2009.pdf.

²³⁸⁸ Ministerial Policy Direction made by the Minister of Communications, Marine and Natural Resources on 21 February 2003.

A 19.4 In conducting the RIA, ComReg has regard to its RIA Guidelines, while recognising that regulation by way of issuing decisions, e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation. ComReg's ultimate aim in conducting a RIA is to ensure that all measures are appropriate, proportionate and justified. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken. As decisions are likely to vary in terms of their impact, if, after initial investigation, a decision appears to have relatively low impact ComReg may carry out a lighter RIA in respect of those decisions.

A 19.5 ComReg's approach to carrying out a RIA follows five steps:

Step 1: Describe the policy issue and identify the objectives;

Step 2: Identify and describe the regulatory options;

Step 3: Determine the impacts on stakeholders;

Step 4: Determine the impacts on competition; and

Step 5: Assess the impacts and choose the best option.

A 19.6 Given that the policy issues and objectives (Step 1) are largely similar for the Relevant WLA Market and the Regional WCA Market, they are considered together. However, Steps 2 to 5 are considered separately in respect of the Relevant WLA Market and the Regional WCA Market.

A 19.7 The purpose of carrying out a RIA is to aid decision-making through identifying regulatory options and analysing the impact of those options in a structured manner. The Department of An Taoiseach's Revised RIA Guidelines state that

*"RIA should be conducted at an early stage and before a decision to regulate has been taken".*²³⁸⁹

A 19.8 The EC, in reviewing its own use of impact assessments ('IAs'), also notes that:

*"The IA should set out what EU policy should achieve. The objectives of policy action should be clearly identified, including the level of policy ambition and the criteria against which alternative policy options would be compared and the success of any initiative assessed."*²³⁹⁰

A 19.9 In determining the impacts of the various regulatory options, current best practice recognises that full cost-benefit analysis would only arise where it would be proportionate or - in exceptional cases - where robust, detailed and independently verifiable data are available. Such comprehensive reviews may be undertaken by ComReg when necessary and appropriate.

²³⁸⁹ See paragraph 2.1.

²³⁹⁰ Commission Staff Working Document, 'Better Regulation Guidelines', SWD (2017) 350, p. 20.

- A 19.10 Having regard to the various sets of guidelines, it is clear that the RIA should be introduced as early as possible in the assessment of potential regulatory options, where appropriate and feasible. The consideration of regulatory impact provides a discussion of options, and the RIA should therefore be integrated within the overall preliminary and final analyses. This is the approach which ComReg has followed in this market review. This RIA has taken into account all the responses made in Submissions to the Consultation, as well as any relevant comments received from the European Commission and the CCPC.
- A 19.11 ComReg now conducts its RIA having regard to its approach to impose (or not to impose) regulatory remedies identified in the Consultation and in this Decision, along with consideration of other options. The following sections, in conjunction with the rest of the analysis and discussion set out elsewhere in this Decision, as well as in the Consultation, represent a RIA. It sets out an assessment of the potential impact of regulatory obligations for the Relevant WLA Market and the Regional WCA Market on Eircom, and the removal of regulatory obligations in the Urban WCA Market as set out in Sections 7, 12 and 13.

Principles in Selecting Remedies

- A 19.12 In Sections 7 and 12 ComReg set out the legislative basis upon which it must consider the imposition of remedies. In choosing remedies ComReg is obliged, pursuant to Regulation 8(6) of the Access Regulations, to ensure that they are:
- (a) Based on the nature of the problem identified;
 - (b) Proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended), and Regulation 16 of the Framework Regulations; and
 - (c) Only imposed following consultation in accordance with Regulations 12 and 13 of the Framework Regulations.
- A 19.13 Section 12(1)(a) of the Communications Regulation Act 2002 (as amended) sets out the objectives of ComReg in exercising its functions in relation to the provision of electronic communications networks, electronic communications services and associated facilities, namely to:
- (a) Promote competition;
 - (b) Contribute to the development of the internal market; and
 - (c) Promote the interests of users within the European Union.

Describe the Policy Issue and Identify the Objectives

- A 19.14 In general, the European Commission acknowledges that, once SMP is identified in markets which are defined as susceptible to *ex ante* regulation, then the regulatory framework foresees that at least one regulatory obligation should be imposed to mitigate against the exercise of SMP and to ensure the development of effective competition within and across communications markets. ComReg has noted at Section 2 above that the European Commission has established that the WLA and WCA markets are susceptible to *ex ante* regulation and, on this basis ComReg has carried out the preceding analysis in this Decision.
- A 19.15 Having regard to the competition problems identified in Sections 6 and 11, ComReg's ultimate objectives are to enhance the development of effective competition in relevant downstream markets and to ensure that consumers can reap maximum benefits in terms of price, choice and quality of service. In so doing, ComReg is seeking to prevent exploitative behaviour and/or restrictions or distortions in competition amongst SPs. ComReg is also seeking to provide regulatory certainty to all SPs through the development of an effective and efficient forward-looking regulatory regime that serves to promote competition.
- A 19.16 In pursuing these objectives, ComReg has considered the impact of specific forms of regulation in the Relevant WLA Market and the Regional WCA Market. As a result, ComReg is of the view that the remedies specified are both appropriate and justified in light of the market analysis and the identified competition problems. The regulatory options are further considered below.
- A 19.17 ComReg also considers it appropriate to remove regulation in the Urban WCA Market, given that no SP is likely to have SMP.
- A 19.18 ComReg recognises that regulatory measures should be kept to the minimum necessary to address the identified market failure in an effective, efficient and proportionate manner. A range of potential regulatory options are available to ComReg to address the potential competition problems in the Relevant WLA Market and the Regional WCA Market.

- A 19.19 In this regard, regulation can be considered to be incremental, such that only those obligations are imposed which are necessary and proportionate to remedy the competition problems which have been identified. The lightest measure that can be imposed is the obligation of transparency.²³⁹¹ Should this be insufficient to address competition problems on its own, ComReg may apply a non-discrimination obligation.²³⁹² If this is still not sufficient, ComReg may next consider the imposition of an access obligation,²³⁹³ or accounting separation obligations.²³⁹⁴ The final measure to be considered is the imposition of a price control and cost accounting remedy.²³⁹⁵
- A 19.20 In conducting the RIA, ComReg follows the structure set out in this Decision by first considering the Relevant WLA Market (and then considering the need for regulation or de-regulation of the Relevant WCA Markets, in light of upstream WLA regulation).
- A 19.21 Given that ComReg has identified in Section 10 that the Urban WCA Market is considered to be tending towards effective competition, ComReg cannot, as a matter of law impose any regulatory obligations in such circumstances. However, as noted in Section 13, ComReg has imposed a sunset period of six months for the withdrawal of certain obligations imposed upon Eircom in the Urban WCA Market.

Relevant WLA Market

- A 19.22 In Section 4 of this Decision, ComReg set out its view on the definition of the Relevant WLA Market, followed by an assessment of competition within the Relevant WLA Market in Section 5. ComReg consequently designated Eircom with SMP in the Relevant WLA Market, on the basis of its assessment. In Section 6, ComReg considered, on the basis of its finding of SMP, the potential for competition problems to arise in the Relevant WLA Market over the review period in question.

Identify and Describe the Regulatory Options

- A 19.23 In order to address the identified competition problems in the Relevant WLA Market, ComReg is required to impose on Eircom one or more (as appropriate) of the obligations (or remedies) set out below:
- (a) Access;
 - (b) Transparency;

²³⁹¹ Regulation 9 of the Access Regulations.

²³⁹² Regulation 10 of the Access Regulations.

²³⁹³ Regulation 12 of the Access Regulations.

²³⁹⁴ Regulation 11 of the Access Regulations.

²³⁹⁵ Regulation 13 of the Access Regulations.

- (c) Non-Discrimination;
- (d) Price Control and Cost Accounting; and
- (e) Accounting Separation.

A 19.24 First, ComReg must consider the question of regulatory forbearance, and then incremental imposition of one or more of the obligations outlined in paragraph A 19.9 above.

Forbearance

A 19.25 In the case of the current analysis of the Relevant WLA Market, ComReg is required²³⁹⁶ to impose at least some level of regulation on Eircom, having designated Eircom as having SMP. Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated as having SMP. In Section 5, ComReg set out its view that the Relevant WLA Market is not effectively competitive (or likely to become effectively competitive within the timeframe covered by this market review).

A 19.26 In Section 6 ComReg identified a range of competition problems that could occur in the Relevant WLA Market, absent regulation. Eircom has the ability and incentive to engage in exploitative and/or exclusionary behaviour in the Relevant WLA Market. In view of this, absent the imposition of any remedies within the Relevant WLA Market, it is ComReg's view that this market (and related markets) would not likely function effectively. For example, access could be effectively refused or materially delayed (resulting in certain consumers not being able to use broadband (or other) services, or having to incur additional costs in accessing such services).

A 19.27 In addition, the price for WLA products could be set above the level that would pertain under a competitive outcome and/or Eircom may be in a position to distort competition in other horizontally or vertically-related markets, for instance by obstructing effective broadband access. As highlighted in Section 7, the option of regulatory forbearance in the Relevant WLA Market is not, therefore, appropriate or justified. By failing to impose any regulatory obligations on Eircom, ComReg would be in dereliction of its own regulatory obligations. Per Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations, once SMP has been identified ComReg is obliged to impose at least one regulatory remedy.

²³⁹⁶ Per Regulation 8(1) of the Access Regulations.

Transparency Obligations

- A 19.28 As noted in Section 7, Eircom has previously been designated with SMP pursuant to the 2010 WPNIA Decision, and remains subject to transparency obligations in that market. ComReg has set out in Section 7 that Eircom must comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate effective access to WLA products, services and facilities and promote effective competition in downstream markets.
- A 19.29 In Section 6 ComReg identified competition problems which, absent regulation, could potentially arise in the Relevant WLA Market. The potential competition problems identified included *inter alia* excessive and/or discriminatory pricing, as well as outright or constructive (e.g. through protracted negotiations on terms and conditions) refusal to supply with a view to extracting prices above efficient cost and/or distorting competition in related markets. In this regard, as part of a general transparency obligation pursuant to Regulation 9 of the Access Regulations, Eircom shall be required to publish an Access Reference Offer (ARO) setting out the contractual terms and conditions and technical basis upon which SPs can obtain access to WLA products, services and associated facilities. Eircom will continue to be required to publish wholesale prices and to provide advance notice of price and non-price changes to ComReg and to other SPs. A change management process for the ARO is also implemented.
- A 19.30 Eircom is already subject to an obligation to publish a ARO by virtue of the 2010 WPNIA Decision, the 2011 WBA Decision²³⁹⁷ and the 2013 NGA Decision, and it thus faces a relatively moderate level of incremental burden arising from the transparency obligations.
- A 19.31 ComReg also requires Eircom to publish Key Performance Indicators (KPIs) on its publicly available website, with such obligations largely a continuation of existing obligations already imposed upon Eircom.
- A 19.32 ComReg also requires Eircom to continue to provide information to SPs regarding its NGA rollout plans, as well as information relating to wholesale products, services, and facilities, such as the expected time for service availability. While ComReg has given some further specificity to the details, such obligations largely mirror existing obligations. In any event, ComReg considered that such enhanced obligations are necessary and justified.

²³⁹⁷ At the time of the 2011 WBA Decision, as, at that time, VULA products were identified as falling within the WBA Market. VULA products are now considered to fall within the Relevant WLA Market.

- A 19.33 Overall, ComReg recognises that some obligations will require some greater level of implementation than, for instance, general pricing publication obligations. However, the incremental level of implementation associated with such obligations should be contained.
- A 19.34 ComReg has considered whether transparency obligations alone would be sufficient to address the competition problems identified in Section 6 and does not consider this to be the case. For example, problems associated *inter alia* with excessive pricing, discriminatory behaviour (on price or non-price grounds) and/or impeded or delayed access would not be adequately addressed through transparency obligations alone.

Non-Discrimination Obligations

- A 19.35 The principle of non-discrimination is designed to ensure that SPs with SMP do not distort competition, in particular, where they are vertically-integrated and supply services to Access Seekers with whom they compete on downstream markets. As discussed in Section 6, a potential competition problem arises when an integrated SP has SMP in one market which has links with other adjacent markets either at a similar (horizontal) or different (vertical) level in the production or distribution chain. In such circumstances the SMP SP may attempt to transfer (leverage) its market power to such horizontally or vertically related markets. This could enable the SMP SP to strengthen its position in those related markets and potentially also reinforce its existing SMP in the market in question.
- A 19.36 As noted in Section 7, Eircom currently has an obligation of non-discrimination with respect to the provision of WLA products, services and associated facilities.
- A 19.37 In Section 6 ComReg identified that Eircom has the ability and incentive to engage in various discriminatory behaviours which can impact upon downstream competition and consumers. For example, Eircom could offer different access products or service quality to different Access Seekers. As a consequence, ComReg requires that Eircom apply equivalent conditions, including in respect of WLA prices or other charges, and ensure that access and information are provided to all other SPs under the same conditions as Eircom provides to itself or to its downstream retail arm.

- A 19.38 Regarding standards to be applied to the non-discrimination obligation, as noted in Section 7, save for certain exceptions, ComReg requires Eircom to provide all products, services and facilities, on Equivalence of Output ('**EoO**') basis. The exception to this is where Eircom is required to provide pre-ordering, ordering, provisioning fault reporting and repair for VUA, Migrations and CEI on an Equivalence of Inputs ('**EoI**') basis. In Section 7 ComReg has already considered the appropriateness of applying these different standards. ComReg has considered, in particular, reasonableness and proportionality with respect to the consequential IT and systems developments to be made by Eircom.
- A 19.39 ComReg has considered whether non-discrimination obligations alone would be sufficient to address the competition problems identified in Section 6 and does not consider this to be the case. For example, *inter alia* excessive/discriminatory pricing, outright or constructive denial of access problems, delaying tactics or poor service quality issues could still remain in the presence of a transparency obligation. Therefore, the imposition of non-discrimination obligations is both proportionate and justified, having regard to the competition problems identified.

Access Obligations

- A 19.40 An access obligation gives SPs the right to request access to WLA and associated facilities and establishes the principles on which the relevant products and services should be made available. As noted in Section 7, Eircom has a range of access obligations currently imposed upon it by virtue of its existing designation with SMP in the 2010 WPNIA Decision, the 2011 WBA Decision and 2013 NGA Decision. These include obligations to negotiate in good faith with Access Seekers; not withdraw access to facilities already granted and continue to provide such facilities in accordance with existing terms and conditions and specifications; and meet reasonable requests for access to specified network elements, facilities or both such elements and facilities.
- A 19.41 ComReg's view is that obligations to provide access to WLA and associated facilities (including civil engineering infrastructure, e.g. ducts and poles access) are both proportionate and justified. ComReg has given further specificity to the CEI obligations to allow more effective and efficient access by Access Seekers to this bottleneck asset, thereby enabling them to potentially install their own infrastructure at a deeper network level. This, in turn, facilitates the development of more independent infrastructure-based competition to the benefit of consumers.

- A 19.42 ComReg has given more detailed specification to the timeframes within which Eircom must consider and respond to an Access Seeker's request for access in order to more effectively ensure that such requests are responded to in a timely and effective manner. While this will increase the burden on Eircom, ComReg considers that it is what would be expected in the context of the normal management of such requests in a competitive market outcome.
- A 19.43 ComReg's view is that obligations to provide access to WLA and to associated facilities are both proportionate and justified in view of the competition problems identified. ComReg has considered whether obligations other than those relating to access would in themselves resolve the competition problems identified and does not consider this to be the case. Similarly the imposition of access obligations on their own also would not likely prevent all possible forms of exploitative/exclusionary behaviour in the Relevant WLA Market such as excessive pricing, discrimination (on price or quality grounds) or ensure transparency of terms and conditions of access.

Price Control and Cost Accounting Obligations

- A 19.44 The purpose of price control and cost accounting obligations is to ensure that prices charged are not set above efficient cost (or cause a margin squeeze), and to promote efficiency and sustainable retail competition while maximising consumer benefits. As noted in Section 7, Eircom has been subject to a price control obligation of cost orientation and cost accounting pursuant to the 2010 WPNIA Decision, the 2013 NGA Decision and the 2016 Access Pricing Decision (amongst others). The cost orientation obligation imposed in previous decisions applied to LLU, SLU, LS, CEI (duct and pole access), Dark Fibre, backhaul, unbundled access to the fibre loop, co-location and interconnection as well as ancillary services. In addition, Eircom has also been subject to a margin squeeze obligation, such that it should not cause a margin/price squeeze, pursuant to the 2010 WPNIA Market Decision and 2013 NGA Decision.
- A 19.45 In the review of WLA competition problems in Section 6, ComReg considered on a forward-looking basis the scope for competition problems to arise absent price control and cost accounting obligations. Furthermore, Sections 6 and 7 identify a number of important competition, efficiency and, ultimately, consumer impacts arising from WLA prices that are set above efficient cost.

A 19.46 As set out in this Decision, Eircom is now subject to a cost orientation obligation with respect to access to WLA products, services (with the exception of FTTH-based VUA) and associated facilities. ComReg's analysis, set out in Section 7, indicates that Eircom has the ability and incentive to engage in excessive pricing in the Relevant WLA Market, absent regulation. In Section 7, ComReg has assessed the impact on Eircom, other SPs and, ultimately, End Users of imposing a cost orientation obligation on FTTC-based VUA and exchange launched VUA. The imposition of a cost orientation obligation on Eircom for FTTC-based WLA, in conjunction with previous cost orientation for copper network and FTTC-based WLA also promotes harmonisation and regulatory certainty.

A 19.47 As set out in this Decision, Eircom is now subject to obligations not to cause a margin squeeze between products and services in the WLA Market and products and services in the downstream WCA Markets, and between WLA products and services in the retail market that are delivered by means of WLA. ComReg's analysis, set out in Section 7, indicates that Eircom has the ability and incentive, absent regulation, to engage in pricing behaviour in the WLA Market which would prevent efficient market entry and/or expansion by squeezing the available margin. In particular, Eircom is obliged not to cause a margin squeeze between:

- FTTH-based VUA and FTTH-based Bitstream
- FTTH-based VUA and retail services delivered by FTTH-based VUA and sold singly, within the footprint corresponding to the Urban WCA Market
- Next Generation WLA services and retail services delivered by Next Generation WLA services, whether sold singly or as part of a bundle.

A 19.48 In Section 7, ComReg has assessed the impact on Eircom, other SPs and, ultimately, End Users of imposing obligations not to cause a margin squeeze.

A 19.49 If specific price control obligations are to be meaningful, it may be necessary to have a clear and comprehensive understanding of the costs associated with the provision of WLA by Eircom. ComReg continues to impose a cost accounting obligation on Eircom, having regard to its integrated position across several markets (and noting its SMP designations in a number of these markets). In the discussion of competition problems (Section 6), Eircom was identified as having particular ability and incentives to leverage its position from WLA into related markets. There is thus still a need to ensure sufficient visibility of how costs are allocated across WLA and other horizontally and vertically-related inputs. As Eircom is already subject to a cost accounting obligation across a number of regulated markets, including WPNIA, ComReg considers any incremental burden to be lessened.

A 19.50 ComReg has considered whether price control obligations alone would be sufficient to address the competition problems identified in Section 6 and does not consider this to be the case. For example, discriminatory behaviour (on price or non-price grounds) or denial of access problems would not be adequately addressed through such obligations alone.

Accounting Separation Obligations

A 19.51 In general, the purpose²³⁹⁸ of an accounting separation obligation is to provide a higher level of detail and information than that which can be derived from the statutory financial statements of SPs designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the SP's business were it to operate on a standalone basis. In the case of vertically-integrated SPs, it can support non-discrimination obligations and prevent unfair cross-subsidies to other services.

A 19.52 Eircom is currently obliged to maintain separated accounts in the 2010 WPNIA Decision, the 2011 WBA Decision and the 2010 Accounting Separation Decision. In Section 6, ComReg has identified potential competition problems associated with possible price-related leveraging to be particularly pertinent in the case of Eircom (absent regulation), which highlights the importance of continuing to ensure a transparent and effective accounting separation mechanism.

A 19.53 Having regard to Eircom's integrated position across several related markets (in particular, noting its SMP designations in a number of these markets), separated accounts help disclose such possible competition problems and make visible the wholesale and internal transfer prices of a SMP SP's services, thereby facilitating transparency as regards any potential misallocation of costs across different services. The main objective of accounting separation is to make the practical implementation of non-discrimination and cost orientation transparent by showing cross-subsidisation between products. Requiring separated accounts for the main products and services creates more transparency on internal transfer pricing and repartition of common and joint costs. It is therefore considered proportionate and justified to continue to impose an obligation on Eircom to maintain separated accounts.

Determine the Impacts on Stakeholders

A 19.54 Given that ComReg has designated Eircom with SMP in the Relevant WLA Market, as outlined at paragraph A 19.22 above, the option of regulatory forbearance is not justified and can be discounted when considering impacts on stakeholders.

²³⁹⁸ See Article 1 of the 2005 Accounting Separation and Cost Accounting Recommendation.

- A 19.55 Having regard to the SMP designation in Section 5 (which requires ComReg to impose at least some level of regulation)²³⁹⁹ as well as the review of competition problems and remedies in Sections 6 and 7 respectively, ComReg has, on an incremental basis, identified why a range of appropriate remedies are necessary, proportionate and justified, while also discounting other remedies, where appropriate.
- A 19.56 Having regard to the analysis and assessment of the Relevant WLA Market, ComReg has grouped remedies into four options for the purpose of considering the incremental impact of each option on stakeholders:
- (a) **Option 1:** Impose Access obligation only
 - (b) **Option 2:** Impose Access, Transparency and Non-Discrimination obligations
 - (c) **Option 3:** Impose Access, Transparency, Non-Discrimination and Price Control and Cost Accounting obligations
 - (d) **Option 4:** Impose Access, Transparency, Non-Discrimination, Price Control and Cost Accounting and Accounting Separation obligations.

²³⁹⁹ Pursuant to Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations.

Option 1: Impose Access Obligation only		
Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Eircom would benefit from reduced regulatory burden relative to 2010 WNPIA Decision, 2011 WBA Decision and related decisions.</p> <p>Eircom would have increased flexibility to use its SMP at wholesale level to engage in exploitative behaviour and/or influence market developments in downstream markets, including at the retail level. This could facilitate extraction of excessive rents from WLA and related markets.</p> <p>Eircom's incentives to innovate and increase efficiency may be reduced where prices set above efficient cost are paid for by competitors and, in turn, by their customers.</p>	<p>High risk that, though access mandated in principle, there would be significant scope for it to be effectively undermined through practices such as high or discriminatory pricing, unreasonable terms and conditions, delaying tactics, poor service quality, etc.</p> <p>Where access is provided to downstream competitors on exploitative or discriminatory terms (relative to that provided to Eircom's own retail arm) this could significantly disadvantage existing rivals and distort existing competition in downstream markets.</p> <p>Ineffective access to WLA could also raise barriers to entry and expansion for new entrants in downstream markets due to inability to guarantee end-to-end connectivity to Eircom's established customer base.</p>	<p>There would be a risk that, even though WLA is mandated in principle, there would be significant scope for it to be effectively undermined through such practices as high or discriminatory pricing, unreasonable terms and conditions, delaying tactics, poor service quality, etc.</p> <p>If downstream competition is distorted or investments discouraged due to ineffective WLA access, consumers would potentially have reduced service choice, quality and innovation.</p> <p>Above-cost WLA could put upward pressure (or slow the rate of any decline) on retail prices. Above-cost WLA would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed data (and other) services.</p>

Option 1: Impose Access Obligation only

Increased risk of disputes and legal challenges involving Eircom's WLA services arising from ineffective transparency, price control and other preventative measures to protect against non-discrimination. Disputes could increase legal and regulatory costs faced by Eircom and Access Seekers.

WLA prices set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail and wholesale markets. Such financial barriers to entry resulting from WLA prices set above efficient cost are considered further in Section 6 and also fall to be considered in the 2018 Pricing Decision. Where WLA prices are set above efficient cost, this could limit scope for downstream pricing innovations by Eircom's downstream rivals.

Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of WLA vis-à-vis other wholesale and retail services.

Regulatory certainty is reduced given wholesale access and pricing uncertainty. An increased incidence of disputes could also raise legal and regulatory costs for Eircom's rivals.

Option 1: Impose Access Obligation only

Differences in regulatory approach between Ireland and other EU countries (broader sets of obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could also generate legal uncertainty for pan-European operators considering investments in Ireland.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations		
Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Eircom would benefit from a reduced regulatory burden relative to the 2010 WNPIA Decision, 2011 WBA Decision and related decisions.</p> <p>Eircom would still have increased flexibility to use its SMP at wholesale level to engage in exploitative and exclusionary behaviour in respect of WLA pricing. Could facilitate extraction of excessive rents from WLA and related markets.</p> <p>Eircom's incentives to innovate and increase efficiency may be reduced where WLA prices set above efficient cost are paid for by competitors and, in turn, by their customers.</p>	<p>While the risk of impeding access to WLA may be moderated somewhat relative to Option 1, effective WLA access may still be undermined through above cost WLA pricing.</p> <p>Where access is provided to downstream competitors on exploitative or exclusionary terms, this could significantly disadvantage existing rivals and distort existing competition in downstream markets.</p> <p>Ineffective access to WLA (through exploitative or exclusionary pricing) could also raise barriers to entry and expansion for new entrants in downstream markets.</p>	<p>There would be a risk that, even though WLA is mandated in principle, there would be significant scope for it to be effectively undermined through such practices as excessive pricing and/or margin squeeze.</p> <p>If downstream competition is distorted or investments discouraged due to ineffective WLA access, consumers would potentially have reduced service choice, quality and innovation.</p> <p>Above-cost WLA could put upward pressure (or slow the rate of any decline) on downstream wholesale and/or retail prices. Above-cost WLA would also limit scope for wholesale and retail pricing innovations ultimately potentially depriving consumers of new and innovative bundles/packages involving fixed data (and other) services.</p>

Option 2: Impose Access, Transparency and Non-Discrimination Obligations

While risk of disputes and legal challenges involving Eircom's WLA services might be eased somewhat relative to Option 1 due to enhanced transparency, risk of disputes would persist due to lack of direct regulatory oversight in respect of Eircom's WLA prices. Disputes could increase the legal and regulatory costs faced by Eircom and Access Seekers and lead to untimely delays ultimately impacting on competition and consumers through reduced service choice, quality and innovation.

WLA prices set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail markets. Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of WLA vis-à-vis other wholesale (e.g. WCA and Leased Lines) and retail services. Where WLA prices are set above efficient cost, this could limit scope for retail pricing innovations by Eircom's downstream rivals.

Regulatory certainty is reduced given wholesale access and pricing uncertainty. An increased incidence of disputes could also raise legal and regulatory costs for Eircom's rivals.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations

Differences in regulatory approach between Ireland and other EU countries (broader sets of obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could also generate legal uncertainty for pan-European operators considering investments in Ireland.

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control ²⁴⁰⁰ & Cost Accounting Obligations		
Impact on Eircom	Impact on Competition	Impact on Consumers
<p>As Eircom is currently subject to price control and cost accounting obligations pursuant to the 2010 WPNIA Decision, the 2016 Access Pricing Decision and related decisions, the incremental burden of most obligations is not likely to be significant. As set out in Section 7, Eircom's FTTC-based VUA products will now be subject to a cost orientation obligation. FTTH-based VUA services will continue to be subject to an obligation not to cause a margin squeeze.</p> <p>Eircom's regulatory burden under Option 3 would not be significantly less than under Option 4 (below) as Eircom is already subject to accounting separation obligations in other SMP markets.</p>	<p>Regulating WLA prices at efficient cost would reinforce the effectiveness of the access, transparency and non-discrimination obligations thus reducing risk of competitive distortions in downstream retail markets and potentially lowering barriers to entry/expansion for smaller SPs.</p> <p>Regulating WLA prices at efficient cost would potentially provide greater scope for wholesale and/or retail pricing innovations by Eircom's downstream rivals.</p>	<p>Reduced risk of competitive distortions and more level playing field in downstream markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered).</p> <p>Reduced risk of above efficient cost WLA prices being passed through to End Users in form of higher prices relative to Options 1 and 2 above.</p> <p>Potential for discriminatory behaviour due to lack of accounting separation may impact on downstream competition and investment with consequent negative implications in terms of price and service choice over time.</p>

²⁴⁰⁰ A further detailed RIA on the price control obligations falls to be considered in the 2018 Pricing Decision and is not further elaborated here. Options 3 and 4 in this Decision thus assess the merits of imposing a price control obligation which would regulate WLA prices according to the concept of efficient cost (with the exception of FTTH-based VUA). The impacts of the precise efficient costing methodology are further set out in the 2018 Pricing Decision.

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control²⁴⁰⁰ & Cost Accounting Obligations

Under Option 3 there would be increased flexibility for Eircom to obscure internal transfer prices and the real costs of WLA if no accounting separation obligation is imposed. There would thus be an increased opportunity for Eircom’s non-discrimination and/or price control obligations to be undermined.

Risk of disputes and legal challenges involving Eircom’s WLA prices may be eased relative to Options 1 and 2 due to price control obligation. However, lack of accounting separation may generate uncertainty regarding Eircom’s compliance with non-discrimination and price control obligations, thus also contributing to risk of disputes.

Any other impacts associated with the price control obligation fall to be considered in the 2018 Pricing Decision.

Greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors although lack of accounting separation obligation may render monitoring of potential exclusionary behaviour less transparent, further impacting on investment incentives for new entrants.

While greater certainty that WLA prices would be set at efficient cost potentially moderates risk of disputes relative to Options 1 and 2, the lack of transparency of Eircom’s internal transfer prices due to absence of an accounting separation obligation may still contribute to scope for discrimination (relative to its own retail arm) and consequent risk of disputes.

Option 4: Impose Access, Transparency, Non-Discrimination, Price Control & Cost Accounting and Accounting Separation Obligations		
Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Existing regulatory burden on Eircom as per the 2010 WPNIA Decision, the 2016 Access Pricing Decision and related decisions would remain.</p> <p>Risk of disputes and legal challenges involving Eircom's WLA prices would be eased relative to Options 1, 2 and 3.</p> <p>Any other impacts associated with the price control obligations fall to be considered in the 2018 Pricing Decision.</p>	<p>As set out for Option 3 above, greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors.</p> <p>Greater certainty that WLA prices would be set at efficient cost, complemented by greater visibility of internal transfers to support non-discrimination obligation, moderates risk of disputes relative to Options 1, 2 and 3.</p>	<p>Reduced risk of competitive distortions and more level playing field in downstream markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered).</p> <p>Reduced risk of above efficient cost WLA pricing being passed through to End Users in form of higher prices relative to Options 1 and 2 above.</p> <p>Dynamic competition from alternative SPs (facilitated by effective price control and appropriate preventative measures for discriminatory behaviour in respect of Eircom's WLA) should help facilitate ongoing delivery of price and service innovations and choice to End Users over time.</p>

Assess the Likely Impacts and Choose the Best Option

- A 19.57 In the discussion on the approach to remedies set out in Section 7 relating to the Relevant WLA Market, ComReg has taken full account of its obligations under Regulation 8(6) of the Access Regulations (including that any remedies are to be based on the nature of the problem identified), as well as its relevant objectives as set out under Section 12 of the Communications Regulation Act 2002 (as amended).
- A 19.58 ComReg's view is that, absent regulation, Eircom has the potential and incentive, as the SMP SP in the Relevant WLA Market, to engage in exploitative and exclusionary behaviours which would impact on competition and consumers. In Section 6 ComReg provided examples of such potential competition problems and their impact. ComReg's objectives in regulating the Relevant WLA Market are preventing restrictions or distortions of competition in affected downstream retail and wholesale markets and helping to ensure that consumers can achieve maximum benefits in terms of price, choice and quality of service.
- A 19.59 The imposition of appropriate *ex ante* remedies to address such competition problems was discussed and justified in Section 7 and each of the specific remedies is designed to promote the development of effective competition and to protect End Users. Given that a full suite of remedies is to be applied to Eircom, ComReg is satisfied that the risk of competition problems and associated impacts should be minimised. This will ultimately be to the benefit of Access Seekers and End Users of downstream retail and wholesale services.
- A 19.60 The maintenance of regulation on Eircom in the Relevant WLA Market (i.e. **Option 4**) is considered justifiable in that it is required to ensure that Eircom does not exploit its SMP at the wholesale level to the detriment of competition in both related markets, and to the ultimate detriment of consumers. In Section 6, a broad range of potential competition problems was identified in the case of Eircom, which has the ability and incentive to engage in exploitative and exclusionary practices, given its significant presence in upstream and downstream markets.

A 19.61 In particular, Eircom's strong position on downstream retail markets (see Sections 3 and 4 and of this Decision, and also Sections 3 and 4 of the Consultation) implies that Eircom's ability and incentive to engage in vertical leveraging/foreclosure would seem particularly strong. In view of its control over a number of key input markets, Eircom has the ability and incentive to impede downstream competitors through price (e.g. excessive / discriminatory pricing) and/or non-price means (e.g. not facilitating access to essential services in the Relevant WLA Market). The regulatory obligations are specifically designed to address the competition problems identified and are proportionate in that they are the least burdensome means of achieving this objective.

Regional WCA Market

A 19.62 In Section 9 of this Decision, ComReg defined the Regional WCA Market, followed in Section 10 by a competition analysis, following which ComReg designated Eircom with SMP in the Regional WCA Market. In Section 11 ComReg considered the potential for competition problems to arise in the Regional WCA Market over the review period in question, given Eircom's SMP designation.

A 19.63 Given that ComReg has identified in Section 10 that the Urban WCA Market is tending towards effective competition, ComReg cannot, as a matter of law impose any regulatory obligations in such circumstances. However, as noted in Section 13, ComReg maintains certain existing obligations during a six month sunset period in the Urban WCA Market.

A 19.64 In conducting the RIA for the Regional WCA Market, ComReg assumes the presence of upstream regulation in the Relevant WLA Market.

Identify and Describe the Regulatory Options

A 19.65 As noted earlier, to address the identified competition problems in the Regional WCA Market, ComReg is required to impose on Eircom one or more (as appropriate) of the obligations (or remedies) set out below:

- (a) Access;
- (b) Transparency;
- (c) Non-Discrimination;
- (d) Price Control and Cost Accounting; and
- (e) Accounting Separation.

A 19.66 First, ComReg must consider the question of regulatory forbearance, and then incremental imposition of one or more of the obligations outlined in Section 12 at paragraph 12.6 above.

Forbearance

- A 19.67 In the case of the Regional WCA Market, ComReg is required²⁴⁰¹ to impose at least some level of regulation on Eircom, having regard to ComReg's designation of Eircom as having SMP. In Section 10, ComReg set out its view that the Regional WCA Market was not effectively competitive (or likely to become effectively competitive within the timeframe covered by this review). In Section 11, ComReg identified a range of competition problems that could occur in the Regional WCA Market, absent regulation.
- A 19.68 ComReg set out its view that, absent regulation, Eircom has the potential and incentive to engage in exploitative and/or exclusionary behaviour in the Regional WCA Market. In view of this, absent the imposition of remedies within the Regional WCA Market, it is ComReg's view that the market would not likely function effectively. The option of regulatory forbearance in the Regional WCA Market is not, therefore, appropriate or justified.

Transparency Obligations

- A 19.69 As noted in Section 12, pursuant to the 2011 WBA Decision and the 2013 NGA Decision, Eircom is currently subject to a range of transparency obligations. As also noted in Section 12, Eircom must comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate effective access to WCA and promote effective competition in downstream markets.
- A 19.70 In Section 11, ComReg identified a range of competition problems which, absent regulation, could potentially arise in the Regional WCA Market. The competition problems identified included *inter alia* excessive and/or discriminatory pricing, as well as the potential for outright or constructive (e.g. through protracted negotiations on terms and conditions) refusal to supply with a view to extracting prices above efficient cost and/or distorting competition in related markets.
- A 19.71 As part of a general transparency obligation, pursuant to Regulation 9 of the Access Regulations, Eircom is required to publish a reference offer setting out the contractual terms and conditions and technical basis upon which Access Seekers can obtain access to WCA products, services and associated facilities. Eircom is further required to publish wholesale prices and to provide advance notice of price changes to ComReg and to Access Seekers.
- A 19.72 Eircom is already subject to an obligation to publish a reference offer by virtue of the 2011 WBA Decision and 2013 NGA Decision, and thus faces a relatively moderate level of incremental burden arising from the transparency obligations.

²⁴⁰¹ Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated with SMP.

- A 19.73 ComReg has also required Eircom to publish KPIs on its publicly available website, with such obligations largely a continuation of existing obligations already imposed upon Eircom.
- A 19.74 ComReg recognises that the transparency obligations will require some greater level of implementation. However, as the reference offer and the associated publication obligations effectively relate to the standard offer of contract for WCA services and associated facilities in the Regional WCA Market, ComReg is of the view that the incremental level of implementation associated with publishing such standard contracts should be contained.
- A 19.75 ComReg has considered whether transparency obligations alone would be sufficient to address the competition problems identified in Section 11 and does not consider this to be the case. For example, problems associated *inter alia* with excessive pricing, discriminatory behaviour (on price or non-price grounds), and impeded or delayed access would not be adequately addressed through transparency obligations alone.

Non-Discrimination Obligations

- A 19.76 The principle of non-discrimination is designed to ensure that SMP SPs do not distort competition, in particular, where they are vertically-integrated and supply services to Access Seekers with whom they compete on downstream markets.
- A 19.77 As noted in Section 12, Eircom currently has an obligation of non-discrimination with respect to the provision of WCA products, services and associated facilities. In Section 11 ComReg identified that Eircom has the ability and incentive to engage in such behaviour, which can impact upon downstream competition and consumers.
- A 19.78 As a consequence, ComReg requires that Eircom apply equivalent conditions, including in respect of WCA prices or other charges, and ensure that access and information are provided to all other Access Seekers under the same conditions as Eircom provides to itself or to its downstream retail arm. In terms of the standards to be applied to the non-discrimination obligation, as noted in Section 12, ComReg, having regard to the specific circumstances outlined, requires Eircom to provide WCA products, services and facilities, on an EoI and an EoO basis. In Section 12 ComReg has considered the appropriateness of applying these different standards. In particular, reasonableness and proportionality have been considered with respect to the consequential IT and systems developments to be made by Eircom.

A 19.79 ComReg has considered whether non-discrimination obligations alone would be sufficient to address the competition problems identified in Section 11 and does not consider this to be the case. For example, excessive/discriminatory pricing, outright or constructive denial of access problems, delaying tactics or poor service quality issues could *inter alia* still remain in the presence of a transparency obligation. Therefore, the imposition of non-discrimination obligations is both proportionate and justified having regard to the competition problems identified.

Access Obligations

A 19.80 An access obligation gives SPs the right to request access to WCA products, services and facilities, and establishes the principles on which the relevant products and services should be made available. As noted in Section 12, a range of access obligations are currently imposed on Eircom by virtue of its existing SMP designation in the 2011 WBA Decision and 2013 NGA Decision.

A 19.81 ComReg has given more detailed specification to the timeframes within which Eircom must consider and respond to an Access Seeker's request for access in order to more effectively ensure that such requests are responded to in a timely and effective manner. While this will increase the burden on Eircom, ComReg considers that it is what would be expected in the context of the normal management of such requests in a competitive market outcome.

A 19.82 ComReg's view is that obligations to provide access to WCA products, services and facilities is both proportionate and justified in view of the competition problems identified in Section 11. ComReg has considered whether obligations other than those relating to access would in themselves resolve the competition problems identified and does not consider this to be the case. Similarly the imposition of access obligations on their own also would not likely prevent all possible forms of exploitative/exclusionary behaviour in the Regional WCA Market such as excessive pricing, discrimination (on price or quality grounds) or ensure transparency of terms and conditions of access.

Price Control and Cost Accounting Obligations

- A 19.83 The purpose of price control and cost accounting obligations is to ensure that prices charged are not set above efficient cost (or cause a margin squeeze) and to promote efficiency and sustainable retail competition while maximising consumer benefits. As noted in Section 12, Eircom's CG copper-based WCA services (Bitstream and Bitstream Managed Backhaul ('**BMB**')) has been subject to a cost orientation price control obligation, a margin squeeze obligation and a price floor as set out in the 2011 WBA Decision. These obligations have been further specified in the 2012 WBA Price Floors Decision,²⁴⁰² the 2014 WBA Pricing Decision, and the 2016 Access Pricing Decision. CG and NG WCA ancillary services have also been subject to the obligation of cost orientation based on the 2013 NGA Decision.
- A 19.84 In addition, Eircom has been subject to an obligation not to cause a margin squeeze between its Next Generation Bitstream services and retail services delivered by Next Generation Bitstream pursuant to the 2013 NGA Decision and subsequent decisions. Eircom has also been obliged not to cause a margin squeeze between CG WCA services and retail services, based on the 2014 WBA Pricing Decision.
- A 19.85 In the review of competition problems in Section 11, ComReg considered on a forward-looking basis the scope for competition problems to arise absent price control and cost accounting obligations. Furthermore, Section 11 identifies a number of important competition, efficiency and, ultimately, consumer impacts arising from WCA prices that are set above efficient cost.
- A 19.86 As set out in this Decision, Eircom is now subject to a cost orientation obligation with respect to access to WCA products, services (with the exception of FTTH-based Bitstream) and associated facilities. ComReg's analysis, set out in Section 11, indicates that Eircom has the ability and incentive to engage in excessive pricing in the Regional WCA Market, absent regulation. In Section 12, ComReg has assessed the impact on Eircom, OAOs and, ultimately, End Users of imposing a cost orientation obligation on FTTC-based Bitstream and exchange launched Bitstream

²⁴⁰² ComReg Document No 12/32: Wholesale Broadband Access: Further specification to the price control obligation and an amendment to the transparency obligation; dated 5 April 2012 ('**2012 WBA Price Floors Decision**').

- A 19.87 As set out in this Decision, Eircom is subject to an obligation not to cause a margin squeeze between WCA products and retail services delivered by WCA products in retail markets downstream from the Regional WCA Market. ComReg's analysis, set out in Section 12, indicates that Eircom has the ability and incentive, absent regulation, to engage in pricing behaviour in the Regional WCA Market which would prevent efficient market entry and/or expansion by squeezing the available margin. In particular, Eircom is obliged not to cause a margin squeeze between CG Bitstream and retail services delivered by CG Bitstream, whether sold singly or as part of a bundle. Eircom is obliged not to cause a margin squeeze between FTTH-based Bitstream and retail services sold singly and delivered by FTTH-based Bitstream.
- A 19.88 In general, if specific price control obligations are to be meaningful, it may be necessary to have a clear and comprehensive understanding of the costs associated with the provision of WCA by Eircom. ComReg continues to impose a cost accounting obligation on Eircom, having regard to its integrated position across several markets (in particular noting its SMP designations in a number of these markets). In the discussion of competition problems (Section 11), Eircom was identified as having the ability and incentive to leverage its position from the Regional WCA Market into related markets. There is thus still a need to ensure sufficient visibility of how costs are allocated across WCA and other horizontally and vertically-related inputs. As Eircom is already subject to a cost accounting obligation across a number of regulated markets, including WCA, ComReg considers any incremental burden is substantially lessened.
- A 19.89 ComReg has considered whether price control obligations alone would be sufficient to address the competition problems identified in Section 11 and does not consider this to be the case. For example, discriminatory behaviour (on price or non-price grounds) or denial of access problems would not be adequately addressed through such obligations alone.

Accounting Separation Obligations

- A 19.90 In general, the purpose²⁴⁰³ of an accounting separation obligation is to provide a higher level of detail and information than that which can be derived from the statutory financial statements of SPs designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the SP's business were it to operate on a standalone basis. In the case of vertically-integrated SPs, it can support non-discrimination obligations and prevent unfair cross-subsidies to other services.

²⁴⁰³ See Article 1 of the 2005 Accounting Separation and Cost Accounting Recommendation.

A 19.91 Eircom currently has an obligation to maintain separate accounts in the 2011 WBA Decision and 2013 NGA Decision. In Section 11, ComReg has identified potential competition problems associated with possible price-related leveraging to be particularly pertinent in the case of Eircom (absent regulation) which highlights the importance of continuing to ensure a transparent and effective mechanism of accounting separation. As noted above with respect to the Relevant WLA Market, the main objective of accounting separation is to make the practical implementation of non-discrimination and cost orientation transparent by showing cross-subsidisation between products. It is therefore considered proportionate and justified to continue to impose an obligation on Eircom to maintain separated accounts.

Determine the Impacts on Stakeholders

A 19.92 Given that ComReg has designated Eircom with SMP in the Regional WCA Market, as outlined at paragraph 10.125 above, the option of regulatory forbearance is not appropriate or justified, and can be discounted when considering the impact on stakeholders.

A 19.93 Having regard to Eircom's SMP designation in the Regional WCA Market in Section 10 (which requires ComReg to impose at least some level of regulation)²⁴⁰⁴ as well as the review of competition problems and remedies in Sections 11 and 12 respectively, ComReg has, on an incremental basis, identified why a range of appropriate remedies are necessary, proportionate and justified, while at the same time discounting other remedies where appropriate.

A 19.94 Having regard to the analysis and assessment of the Regional WCA Market, ComReg has now grouped remedies into four options for the purpose of considering the incremental impact of each option on stakeholders:

- (a) **Option 1:** Impose Access obligation only.
- (b) **Option 2:** Impose Access, Transparency and Non-Discrimination obligations.
- (c) **Option 3:** Impose Access, Transparency, Non-Discrimination and Price Control and Cost Accounting obligations.
- (d) **Option 4:** Impose Access, Transparency, Non-Discrimination, Price Control and Cost Accounting and Accounting Separation obligations.

²⁴⁰⁴ Pursuant to Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations.

Option 1: Impose Access Obligation only

Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Eircom would benefit from reduced regulatory burden relative to 2011 WBA Decision and 2013 NGA Decision.</p> <p>Eircom would have increased flexibility to use its SMP at wholesale level to engage in exploitative behaviour and/or influence market developments downstream, including at the retail level. This could facilitate extraction of excessive rents from WCA and related markets.</p> <p>Eircom's incentives to innovate and increase efficiency may be reduced where prices are set above efficient cost paid for by competitors and, in turn, by their customers.</p>	<p>High risk that, though access mandated in principle, there would be significant scope for it to be effectively undermined through practices such as high or discriminatory pricing, unreasonable terms and conditions, delaying tactics, poor service quality, etc.</p> <p>Where access is provided to downstream competitors on exploitative or discriminatory terms (relative to that provided to Eircom's own wholesale and/or retail arm) this could significantly disadvantage existing rivals and distort existing competition in downstream markets.</p> <p>Ineffective access to WCA could also raise barriers to entry and expansion for new entrants in downstream markets due to inability to guarantee end-to-end connectivity to Eircom's established customer base.</p>	<p>There would be a risk that, even though WCA is mandated in principle, there would be significant scope for it to be effectively undermined through such practices as high or discriminatory pricing, unreasonable terms and conditions, delaying tactics, poor service quality, etc.</p> <p>If downstream competition is distorted or investments discouraged due to ineffective WCA access, consumers would potentially have reduced service choice, quality and innovation.</p> <p>Above-cost WCA could put upward pressure (or slow the rate of any decline) on retail prices. Above-cost WCA would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed data (and other) services.</p>

Option 1: Impose Access Obligation only

Increased risk of disputes and legal challenges involving Eircom's WCA service arising from ineffective transparency and other preventative measures to protect against non-discrimination. Disputes could increase legal and regulatory costs faced by Eircom and Access Seekers.

WCA prices set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail and wholesale markets. Such financial barriers to entry resulting from WCA prices set above efficient cost are considered further in Section 11, and also fall to be considered in the 2018 Pricing Decision. Where WCA prices are set above efficient cost, this could limit scope for downstream pricing innovations by Eircom's downstream rivals.

Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of WCA vis-à-vis other wholesale and retail services.

Regulatory certainty is reduced given wholesale access and pricing uncertainty. An increased incidence of disputes could also raise legal and regulatory costs for Eircom's rivals.

Option 1: Impose Access Obligation only

Differences in regulatory approach between Ireland and other EU countries (broader sets of obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could also generate legal uncertainty for pan-European operators considering investments in Ireland.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations

Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Eircom would benefit from a reduced regulatory burden, relative to the 2011 WBA Decision and 2013 NGA Decision.</p> <p>Eircom would still have increased flexibility to use its SMP at wholesale level to engage in exploitative and exclusionary behaviour in respect of WCA pricing. Could facilitate extraction of excessive rents from WCA and related markets.</p> <p>Eircom's incentives to innovate and increase efficiency may be reduced where WCA prices set above efficient cost are paid for by competitors and, in turn, by their customers.</p>	<p>While risk of impeding access to WCA may be moderated somewhat relative to Option 1, effective WCA access may still be undermined through above cost WCA pricing.</p> <p>Where access is provided to downstream competitors on exploitative or exclusionary terms, this could significantly disadvantage existing rivals and distort existing competition in downstream markets.</p> <p>Ineffective access to WCA (through exploitative or exclusionary pricing) could also raise barriers to entry and expansion for new entrants in downstream markets.</p>	<p>There would be a risk that, even though WCA is mandated in principle, there would be significant scope for it to be effectively undermined through such practices as excessive pricing and/or margin squeeze.</p> <p>If downstream competition is distorted or investments discouraged due to ineffective WCA access, consumers would potentially have reduced service choice, quality and innovation.</p> <p>Above-cost WCA could put upward pressure (or slow the rate of any decline) on retail prices. Above-cost WCA would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed data (and other) services.</p>

Option 2: Impose Access, Transparency and Non-Discrimination Obligations

While risk of disputes and legal challenges involving Eircom's WCA services might be eased somewhat relative to Option 1 due to enhanced transparency, risk of disputes would persist due to lack of direct regulatory oversight in respect of Eircom's WCA prices. Disputes could increase the legal and regulatory costs faced by Eircom and Access Seekers and lead to untimely delays ultimately impacting on competition and consumers through reduced service choice, quality and innovation.

Below cost WCA pricing could also undermine access to the upstream Relevant WLA Market inputs, such that an Access Seeker might not be in a position to profitably invest in availing of WLA products. This could undermine more independent infrastructure based competition.

WCA prices set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail markets. Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of WCA vis-à-vis other wholesale (e.g. WLA) and retail services.

Regulatory certainty is reduced given wholesale access and pricing uncertainty. An increased incidence of disputes could also raise legal and regulatory costs for Eircom's rivals.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations

Differences in regulatory approach between Ireland and other EU countries (broader sets of obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could also generate legal uncertainty for pan-European operators considering investments in Ireland.

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control²⁴⁰⁵ & Cost Accounting Obligations

Impact on Eircom	Impact on Competition	Impact on Consumers
<p>As Eircom is currently subject to price control and cost accounting obligations pursuant to the 2011 WBA Decision, the 2013 NGA Decision, the 2016 Access Pricing Decision and related decisions, the incremental burden of such obligations is limited to those new or amended obligations. As set out in Section 12, Eircom's FTTC-based Bitstream products will now be subject to a cost orientation obligation. FTTH-based Bitstream services will continue to be subject to an obligation not to cause a margin squeeze.</p> <p>Eircom's regulatory burden under Option 3 would not be significantly less than under Option 4 as Eircom is already subject to accounting separation obligations in other SMP markets.</p>	<p>Regulating WCA prices at efficient cost would reinforce the effectiveness of the access, transparency and non-discrimination obligations thus reducing risk of competitive distortions in upstream and downstream markets and potentially lowering barriers to entry/expansion for smaller SPs.</p> <p>Regulating WCA prices at efficient cost would potentially provide greater scope for retail pricing innovations by Eircom's downstream rivals.</p>	<p>Availability of WCA access would facilitate interoperability of services by enabling subscribers of other networks to call Eircom's subscribers.</p> <p>Reduced risk of competitive distortions and more level playing field in downstream markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered).</p> <p>Reduced risk of high WCA prices being passed through to End Users in form of higher prices relative to Options 1 and 2.</p>

²⁴⁰⁵ A further detailed RIA on the price control obligations falls to be considered in the 2018 Pricing Decision and is not further elaborated here. Options 3 and 4 in this Decision thus assess the merits of imposing a price control obligation which would regulate WCA prices according to the concept of efficient cost (with the exception of FTTH-based Bitstream) The impacts of the precise efficient costing methodology are further set out in the 2018 Pricing Decision.

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control²⁴⁰⁵ & Cost Accounting Obligations

<p>Under Option 3 there would be increased flexibility for Eircom to obscure internal transfer prices and the real costs of WCA if no accounting separation obligation is imposed. There would thus be an increased opportunity for Eircom's non-discrimination and/or price control obligations to be undermined.</p> <p>Risk of disputes and legal challenges involving Eircom's WCA prices may be eased relative to Options 1 and 2 due to price control obligation. However, lack of accounting separation may generate uncertainty regarding Eircom's compliance with non-discrimination and price control obligations, thus also contributing to risk of disputes.</p> <p>Any other impacts associated with the price control obligations fall to be considered in the 2018 Pricing Decision.</p>	<p>Greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors although lack of accounting separation obligation may render monitoring of potential exclusionary behaviour less transparent, further impacting on investment incentives for new entrants.</p> <p>While greater certainty that WCA prices would be set at efficient cost potentially moderates risk of disputes relative to Options 1 and 2, the lack of transparency of Eircom's internal transfer prices due to absence of an accounting separation obligation may still contribute to scope for discrimination (relative to its own retail arm) and consequent risk of disputes.</p>	<p>Potential for discriminatory behaviour due to lack of accounting separation may impact on downstream competition and investment with consequent negative implications in terms of price and service choice over time.</p>
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Option 4: Impose Access, Transparency, Non-Discrimination, Price Control & Cost Accounting and Accounting Separation Obligations

Impact on Eircom	Impact on Competition	Impact on Consumers
<p>Eircom is currently subject to Accounting Separation obligations pursuant to the 2011 WBA Decision, the 2013 NGA Decision, the 2016 Access Pricing Decision and related decisions (including the 2010 Accounting Separation Decision).</p> <p>Risk of disputes and legal challenges involving Eircom’s WCA prices would be eased relative to Options 1, 2 and 3.</p> <p>Any other impacts associated with the price control obligations fall to be considered in the 2018 Pricing Decision.</p>	<p>As set out for Option 3 above, greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors.</p> <p>Greater certainty that WCA prices would be set at efficient cost, complemented by greater visibility of internal transfers to support non-discrimination obligation, moderates risk of disputes relative to Options 1, 2 and 3.</p>	<p>Reduced risk of competitive distortions and more level playing field in downstream markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered).</p> <p>Reduced risk of above-cost WCA prices being passed through to End Users in form of higher prices relative to Options 1 and 2 above.</p> <p>Dynamic competition from alternative SPs (facilitated by effective price control and appropriate preventative measures for discriminatory behaviour in respect of Eircom’s WCA) should facilitate ongoing delivery of price and service innovations and choice to End Users over time.</p>

Assess the Likely Impacts and Choose the Best Option

- A 19.95 In the discussion on the approach to remedies set out in Section 12 relating to the Regional WCA Market, ComReg has taken full account of its obligations under Regulation 8(6) of the Access Regulations (including that any remedies are to be based on the nature of the problem identified), as well as its relevant objectives as set out under Section 12 of the Communications Regulation Act 2002 (as amended).
- A 19.96 ComReg's view is that, absent regulation, there is the potential and incentive for Eircom, as the SP designated with SMP in the Regional WCA Market, to engage in exploitative and exclusionary behaviours, which would impact on competition and consumers. In Section 11 ComReg provided examples of potential competition problems and the impact of these on competition and consumers. ComReg's objectives in regulating the Regional WCA Market are, in particular, preventing restrictions or distortions of competition in horizontally and vertically related markets and helping to ensure that consumers can achieve maximum benefits in terms of price, choice and quality of service.
- A 19.97 The imposition of appropriate *ex ante* remedies to address such competition problems was discussed and justified in Section 12 and each of the specific remedies is designed to promote the development of effective competition, and efficient investment to the benefit of End Users. Given that a full suite of remedies is to be applied on Eircom in the Regional WCA Market, it is ComReg's view that the risk of competition problems and associated impacts should be minimised. This will ultimately be to the benefit of Access Seekers and End Users of downstream retail services and related wholesale services.
- A 19.98 The maintenance of regulation on Eircom in the Regional WCA Market (i.e. **Option 4**) is considered justifiable in that it is required to ensure that Eircom does not exploit its market power at the wholesale level to the detriment of competition in related markets, and to the ultimate detriment of consumers. In Section 11 a broad range of potential competition problems were identified for Eircom, which has the ability and incentives to engage in both exploitative and exclusionary practices, given its continuing significant presence in upstream and downstream markets.
- A 19.99 In view of its control over a number of key input markets, Eircom has the ability and incentives to impede downstream competitors through price (e.g. excessive/discriminatory pricing) and/or non-price means (e.g. by not facilitating access to essential services in the Regional WCA Market). The regulatory obligations are designed to specifically address the competition problems identified and are proportionate in that they are the least burdensome means of achieving this objective.

Urban WCA Market

- A 19.100 As set out in Section 10, ComReg set out its view that no SP has SMP in the Urban WCA Market. As a result, ComReg does not impose regulatory obligations on any SP in this market.
- A 19.101 At present, Eircom is regulated in the Urban WCA Market area by virtue of the 2011 WBA Decision, 2013 NGA Decision and related decisions. As a result of the analysis contained in this Decision, existing regulatory obligations imposed on Eircom are withdrawn in the Urban WCA Market.
- A 19.102 On that basis, the removal of regulation from the Urban WCA Market will occur. Therefore, ComReg's imposition of regulatory options in the Urban WCA Market is limited to the timing of the withdrawal of existing regulation. As noted in Section 13, ComReg maintains certain existing obligations during a sunset period of six months in the Urban WCA Market.
- A 19.103 ComReg will also continue to monitor the effectiveness of competition within the Urban WCA Market, notwithstanding the removal of regulation. In this respect, ComReg reserves its right to re-examine competitive conditions within the Urban WCA Market and, if appropriate, to intervene accordingly.
- A 19.104 Given regulatory obligations cannot be imposed in the Urban WCA Market (aside from the limited obligations regarding the sunset period), this RIA does not further consider regulatory options with respect to the Urban WCA Market.

Overall Conclusions

- A 19.105 ComReg has set out RIAs for the Relevant WLA Market and the Regional WCA Market above.

Appendix: 20 Wholesale Local Access: Decision Instrument

1 STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1 This Decision Instrument (“Decision Instrument”) is made by the Commission for Communications Regulation (“ComReg”) and relates to the market for wholesale local access provided at a fixed location as identified by the European Commission in the 2014 Recommendation and analysed by ComReg in ComReg Decision D10/18.

1.2 This Decision Instrument is made:

- (i) Pursuant to and having had regard to Sections 10 and 12 of the Communications Regulation Act 2002 (as amended); Regulation 6(1) of the Access Regulations and Regulation 16 of the Framework Regulations;
- (ii) Having taken the utmost account of the 2014 Recommendation, the Explanatory Note and the SMP Guidelines;
- (iii) Having, where applicable, pursuant to Section 13 of the Communications Regulation Act 2002 (as amended) complied with Ministerial Policy Directions;
- (iv) Having had regard to the analysis and reasoning set out in ComReg Document No. 16/96 and having taken account of the submissions received from interested parties in response thereto following a public consultation pursuant to Regulation 12 of the Framework Regulations;
- (v) Having consulted with the Competition and Consumer Protection Commission, further to Regulation 27 of the Framework Regulations;
- (vi) Having notified the draft measure and the reasoning on which the measure is based to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Regulation 13 and Regulation 14 of the Framework Regulations and having taken utmost account of any comments made by these parties;
- (vii) Pursuant to Regulations 25, 26 and 27 of the Framework Regulations and Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations; and
- (viii) Having regard to the analysis and reasoning set out in ComReg Decision D10/18.

- 1.3 The provisions of ComReg Document No. 16/96 and ComReg Decision D10/18, as well as ComReg Document No. 17/26 and ComReg Decision D11/18, together with ComReg Document No. 17/51 and ComReg Decision D12/18 shall, where appropriate, be construed consistently with this Decision Instrument. For the avoidance of doubt, however, to the extent that there is any conflict between a decision instrument dated prior to the Effective Date (as defined in Section 2.1 of this Decision Instrument) and this Decision Instrument, this Decision Instrument shall prevail.

PART I - GENERAL PROVISIONS (SECTIONS 2 TO 5 OF THE DECISION INSTRUMENT)

2 DEFINITIONS

- 2.1 In this Decision Instrument, unless the context otherwise suggests:

“Access” shall have the same meaning as under Regulation 2 of the Access Regulations;

“Access Path” means the connection from the NTU/ONT in the End User’s premises to the Point of Handover. The Points of Handover for physical unbundling are the MDF (for metallic) and the ODF (for fibre) in the Exchange, and the Point of Handover for non-physical unbundling (virtual access) is the WEIL at the serving Aggregation Node for the End User, i.e., at the MPoP;

“Access Reference Offer” or **“ARO”** means the offer of contract by Eircom to Undertakings in relation to WLA, as may be amended from time-to-time. For the avoidance of doubt the ARO includes the documents which are expressly referred to as being part of the ARO, and any associated or subordinate documents relied upon to meet Eircom’s Access obligations as set out in this Decision Instrument, including but not limited to the Industry Process Manual and the Product Descriptions. To the extent that there is any conflict between the ARO and Eircom’s obligations now set out herein, it is the latter which shall prevail;

“Access Regulations” means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), as may be amended from time to time or replaced with equivalent effect;

“Additional Financial Information” means the information, as determined by ComReg, that shall be provided by Eircom on an annual basis in accordance with the Decision Instrument annexed to ComReg Decision D08/10 and has the same meaning as set out in Section 2.1 of that decision instrument;

“Aggregation Node” means a network concentration point for Access Paths;

“Ancillary Services” are a subset of Associated Facilities and shall include services such as Migrations, fault repair and access connections, Co-Location, In-Building Handover, In-Span Handover and Customer-Sited Handover;

“Ancillary Services Cost Model” means the model, as amended from time-to-time (subject to approval by ComReg), used by ComReg and Eircom to assess Eircom’s compliance with the obligations contained in Section 12 of this Decision Instrument. The model calculates costs based on no more than the actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of Ancillary Services. The operation and details of the Ancillary Services Cost Model are more particularly described in Section 11 of ComReg Decision D03/16;

“ARO Change Matrix” means the table of information collated by Eircom which specifies the non-price related amendments made to its ARO, including the date(s) on which such amendments come into effect;

“ARO Price List Change Matrix” means the table of information collated by Eircom which specifies the amendments made to the ARO Price List(s) which are contained in its ARO, including the date(s) on which such amendments come into effect;

“ARO Price List(s)” means the list of charges collated by Eircom for products, services and facilities which are to be provided and specified in its ARO in accordance with the requirements of this Decision Instrument;

“Associated Facilities” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Authorisation Regulations” means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011), as may be amended from time to time or replaced with equivalent effect;

“BAFO” means the best and final offer made by Eircom to Undertakings in respect of a new or amended SLA;

“BEREC” means the Body of European Regulators for Electronic Communications, as established pursuant to Regulation (EC) No. 1211/2009 of the European Parliament and of the Council of 25 November 2009;

“Bitstream” means a wholesale product which consists of an Access Path to the End User premises and a transmission service to a defined set of Points of Handover;

“Bitstream Plus” is a specific implementation of the Bitstream Wholesale product. The Bitstream Plus product is described in detail in Eircom’s product description “NGA Product Description Bitstream Plus” V3.0 dated 16 June 2017;

“Bottom Up Long Run Average Incremental Cost plus” or **“BU-LRAIC+”** means the methodology used to estimate the “LRAIC plus” of an efficient operator which is derived from an economic and/or engineering model of an efficient network. The LRAIC plus costs are the average efficiently incurred directly attributable variable and fixed costs, including an appropriate apportionment of joint and common costs;

“Bulk Migration” means the facility whereby an Undertaking can have multiple Migrations facilitated via a single request;

“Bundle” means, for the purposes of this Decision Instrument, a package of retail products or retail services, consisting of more than one service, which is on offer or on sale by Eircom;

“Civil Engineering Infrastructure” or **“CEI”** also known as passive access infrastructure means the physical access path facilities deployed by Eircom to host cables such as copper wires, optical fibre and co-axial cables. It includes, but is not limited to, subterranean or above-ground assets such as Sub-Ducts, Ducts, Chambers and Poles;

“CEI Co-Location” means the Co-Location services and facilities that are necessary to support Access to CEI;

“CEI Tie Connection Service” means the fibre connection, offered or provided by Eircom, between an Undertaking’s co-located equipment in its equipment rack or from an Undertaking’s co-located ODF to a Chamber or Pole on an Eircom CEI route usually in close proximity to the Exchange building site;

“Chamber” means any underground construction which is built to facilitate access to cables within Eircom’s Duct network for the purposes of splicing, jointing, distribution, fault localisation and repairs;

“Class of Service” means a network traffic management technique which involves the autonomous treatment of traffic at a single router, switch, or equivalent equipment using classes to group and manage traffic that have common forwarding characteristics;

“Co-Location” shall have the same meaning and description as under Part B “Co-Location services” of the Schedule to the Access Regulations, save that it includes for the purposes of this Decision Instrument, access to the MDF and/or to the ODF, floor space, Alternating Current (A.C.) power, Direct Current (D.C.) power, air conditioning, mast access, roof access, cable trays and trunking as applicable, at an Eircom Exchange;

“Co-Location Rack Interconnection” means Interconnection between two or more Undertakings’ co-location equipment racks in the same Exchange;

“Co-Location Resource Sharing” means the accommodation of network access and/or transmission equipment of an OAO in the co-located rack of another OAO for the purposes of sharing resources such as power supplies (A.C. or D.C.) and/or backhaul;

“Communications Regulation Act 2002 (as amended)” means the Communications Regulation Act 2002 (No. 20 of 2002), as amended;

“Competition and Consumer Protection Commission” means the body established under section 9 of the Competition and Consumer Protection Act 2014 and formerly the Competition Authority and the National Consumer Agency;

“ComReg” means the Commission for Communications Regulation, established under Section 6 of the Communications Regulation Act 2002 (as amended);

“ComReg Decision D05/10” means ComReg Document No. 10/39, entitled “Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4) Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision (the “Decision Document”)”, dated 20 May 2010;

“ComReg Decision D08/10” means ComReg Document No. 10/67, entitled “Response to Consultation Document and Final Direction and Decision, Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited”, dated 31 August 2010;

“ComReg Decision D05/11” means ComReg Document No. 11/45, entitled “Response to Consultation and Decision on the Introduction of Key Performance Indicators for Regulated Markets”, dated 29 June 2011;

“ComReg Decision D06/11” means ComReg Document No. 11/49, entitled “Response to Consultation and Decision Market Review: Wholesale Broadband Access (Market 5)”, dated 8 July 2011;

“ComReg Decision D03/13” means ComReg Document No. 13/11, entitled “Next Generation Access (‘NGA’): Remedies for Next Generation Access Markets”, dated 31 January 2013;

“ComReg Decision D04/13” means ComReg Document No. 13/14, entitled “Price Regulation of Bundled Offers Further specification of certain price control obligations in Market 1 and Market 4”, dated 8 February 2013;

“ComReg Decision D03/16” means ComReg Document No.16/39, entitled “Pricing of Eir’s Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision”, dated 18 May 2016. For the avoidance of doubt, the withdrawal of Annex 1 of ComReg Decision D03/16 pursuant to Section 16.1 (iv) of this Decision Instrument is without prejudice to the remainder of ComReg Decision D03/16 which shall remain in force unless and until otherwise amended, revoked or replaced;

“ComReg Decision D10/18” means ComReg Document No. 18/94, entitled “Market Review - Wholesale Local Access (WLA) provided at a Fixed Location & Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products: Response to Consultation and Decision”, dated 19 November 2018;

“ComReg Document No. 05/24” means ComReg Document No. 05/24, entitled “Response to Consultation, Guidelines on the treatment of confidential information, Final text of Guidelines”, dated 22 March 2005;

“ComReg Document No. 16/96” means ComReg Document No. 16/96, entitled “Market Reviews: Wholesale Local Access (WLA) provided at a Fixed Location; Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products: Consultation and Draft Decision”, dated 11 November 2016;

“ComReg Document No. 17/26” means ComReg Document No. 17/26, entitled “Pricing of wholesale services in the Wholesale Local Access (WLA) market and in the Wholesale Central Access (WCA) markets: Further specification of price control obligations in Market 3a (WLA) and Market 3b (WCA)”, dated 7 April 2017;

“ComReg Document No. 17/51” means ComReg Document No. 17/51, entitled “Consultation on Price control: obligations relating to Bundles - Further specification of the price control obligation not to cause a margin squeeze: FACO and WLA (Market 3a) and WCA (Market 3b): Consultation and Draft Decision”, dated 9 June 2017;

“Copper loop frequency management plan” or **“CLFMP”** means the Eircom document that defines the spectral rules that all Undertakings’ equipment must comply with if such equipment is to be deployed on Eircom’s copper access network;

“Current Generation Wholesale Local Access” or **“Current Generation WLA”** means Wholesale Local Access offered or provided exclusively over Eircom’s copper access network infrastructure and its Associated Facilities;

“Customer-Sited Handover” or **“CSH”** means the connection from the Eircom network to an OAO’s equipment in the OAO’s premises, which includes the installation of an Eircom NTU at the OAO’s premises;

“Dark Fibre” is optical fibre that is currently installed in the Local Access network but is not in use. For the purposes of this Decision Instrument, Dark Fibre shall mean unlit Eircom fibre in Eircom’s access network;

“Decision Instrument” means this decision instrument which is made pursuant to *inter alia* Regulations 8, 9, 10,11,12, 13 and 18 of the Access Regulations;

“Direct Duct Access” means direct access to Eircom’s Ducts for the installation of cables without the use of a Sub-Duct;

“Director” shall have the same meaning as under Section 2 of the Companies Act 2014;

“Discount” means an offer or sale of a product, service or facility at less than its standard price, for example, a price reduction, including a volume related price reduction, a rebate, a reimbursement, a refund, a set-off and any other similar words or expressions;

“Downstream Wholesale Service” means a wholesale service which is on offer or on sale by Eircom to Undertakings downstream from the WLA Market and contains a WLA component (examples of such Downstream Wholesale Services include, for example, telephony services and broadband services);

“Duct” means an underground pipe or conduit that carries or is capable of carrying cables that are in turn used to deliver electronic communication services to End Users;

“Duct Access” means Access to Eircom’s Duct;

“Edge Node Handover” or **“ENH”** means the connection from the Eircom network through a dedicated Aggregation Node interface to the OAO’s equipment;

“Effective Date” means the date set out in Section 17 of this Decision Instrument;

“Egress” means the point on Eircom’s CEI where, in the case of Direct Duct Access, Duct Access and Sub-Duct Access, an Undertaking’s cable or Sub-Duct exits an Eircom Duct, Sub-Duct or Chamber. In the case of Pole Access, Egress is the last Eircom Pole used by an Undertaking on a particular route;

“Eircom” means Eircom Limited, and its subsidiaries and any related companies, and any Undertaking which it owns or controls, and any Undertaking which owns or controls Eircom Limited, and its successors and assigns. For the purpose of this Decision Instrument, the terms “subsidiary” and “related company” shall have the meaning ascribed to them in the Companies Act 2014;

“Electronic Communications Network(s)” or **“ECN(s)”** shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Electronic Communications Service(s)” or **“ECS(s)”** shall have the same meaning as under Regulation 2 of the Framework Regulations;

“End User(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations. For the avoidance of doubt, End User(s) shall be deemed to include any natural or legal person who facilitates or intends to facilitate the provision of public communications networks or publicly available electronic communications services to other End Users and who is not acting as an Undertaking;

“Engineering Planning and Design Rules” means the engineering and design rules that relate to the management of Duct, Chamber and Pole space;

“Equivalence of Inputs” means the provision of products, services, facilities, and information by the SMP Undertaking to OAOs such that such products, services, facilities and information are offered and/or provided to OAOs within the same timescales, at the same price, functionality, service and quality levels and on the same terms and conditions and by means of the same systems and processes as the SMP Undertaking provides to itself. The systems and processes shall operate in the same way and with the same degree of reliability and performance as between OAOs and the SMP Undertaking’s provision to itself;

“Equivalence of Outputs” means the provision of products, services, facilities, and information by the SMP Undertaking to OAOs such that such products, services, facilities, and information are offered and/or provided to OAOs in a manner which achieves the same standards in terms of functionality, price, terms and conditions, service and quality levels as the SMP Undertaking provides to itself, albeit potentially using different systems and processes;

“Ethernet” means a technology that supports data transfer between network Nodes at Layer 2 of the OSI reference model;

“Exchange” means an Eircom network premises or equivalent facility used to house network and associated equipment and may include a Remote Subscriber Unit (RSU). The Exchange sometimes, but not always, houses the MPoP;

“Exchange launched VUA” means that the active equipment that is required to provide VUA is housed in an Eircom Exchange building or equivalent;

“(the) Explanatory Note” means the Commission Staff Working Document: Explanatory Note accompanying the 2014 Recommendation (9 October 2014, SWD (2014) 298);

“Fibre Loop” means the section of Eircom's access network that provides access into the End User premises (whether residential, commercial or other premises). It runs between the ODF and the relevant End User premises;

“Fibre Loop Unbundling” or **“FLU”** means where an Undertaking rents access to the Fibre Loop and uses it to supply services to its customers either on a wholesale or retail basis. FLU includes both physical and virtual access, such as but not limited to WDM;

“Fibre to the Cabinet” or **“FTTC”** means fibre to the cabinet which is a variant of the FTTN access network architecture where the Node used to house active equipment is the street cabinet;

“Fibre to the Home” or **“FTTH”** means an access network architecture where fibre optic cable is used to connect the End User premises to the ODF in an Exchange;

“Fibre to the Node” or **“FTTN”** means an access network architecture where fibre optic cable is used to connect a Node in the local access network to the ODF in an Exchange;

“Framework Regulations” means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), as may be amended from time to time or replaced with equivalent effect;

“FTTH-based Bitstream” means Bitstream that is based on FTTH;

“FTTC-based VUA” means VUA that is based on FTTC;

“FTTH-based VUA” means VUA that is based on FTTH;

“Full Unbundled Access to the Local Loop” shall have the same meaning as in the Schedule to the Access Regulations;

“Geographic Number Portability” or **“GNP”** means a facility that allows an End User to retain his/her telephone number when changing or switching service provider and describes the process used for this when the number concerned is a geographic number;

“GLUMP” means the synchronised delivery of ULMP and GNP;

“Historical Cost Accounts” or **“HCA”** means the historical cost accounts which Eircom is required to publish in accordance with ComReg Decision D08/10;

“Industry Process Manual” means the industry process manual to be made available by Eircom which sets out operational processes concerning WLA products, services and facilities and includes, but is not limited to, the LLU IPM V28 1 May 2018 and the NGA IPM V12 24 April 2018 (as may be amended from time-to-time);

“In-Building Handover” means the connection from the Eircom network to the Undertaking’s equipment within the Exchange, or equivalent facility;

“In-Span Handover” means the connection between the Exchange and the Undertaking’s nominated Point of Handover;

“Ingress” means the point on Eircom’s CEI where, in the case of Direct Duct Access, Duct Access and Sub-Duct Access, an Undertaking’s cable enters the Eircom owned Sub-Duct, Duct or Chamber. In the case of Pole Access, the ingress point is the first Pole used or to be used by the Undertaking on an Eircom aerial route;

“Interconnection” shall have the same meaning as under Regulation 2 of the Access Regulations, and for the purposes of this Decision Instrument includes, but is not limited to, the Eircom WEIL service;

“Key Performance Indicator(s)” or **“KPI(s)”** means a measure(s) of the standard(s) of product, service or facility provided by Eircom to OAOs and by Eircom to itself;

“Line Share” see “Shared Access to the Local Loop” below;

“Local Access” means the physical infrastructure between the End User’s premises and the relevant MPoP;

“Local Loop” shall have the same meaning as under Regulation 2 of the Access Regulations;

“Local Loop Unbundling” or **“LLU”** is where an OAO rents access to the Local Loop and uses it to supply services to its customers either on a wholesale or retail basis;

“MDF” means main distribution frame;

“Migration(s)” means where the upstream wholesale input used to supply a retail service is changed whilst maintaining services to the End User, irrespective of whether or not the supplier at the retail level changes. For the avoidance of doubt, Migrations include but are not limited to migrations:-(i) between all Next or Current Generation WLA services in any direction; (ii) between Next or Current Generation WLA and Next or Current Generation WCA in any direction; (iii) VUA Soft Migrations; and (iv) Bulk Migration;

“Milestones” means the key points in Eircom’s product development process that would be reasonably relied upon by Undertakings to track the progress of an Access request in that process, including, *inter alia*, Product Development Decision Points and points of transition associated with analysis, design, development and launch stages for meeting the Access request and the date on which the product, service or facility will be made available to Undertakings;

“Ministerial Policy Directions” for the purposes of this Decision Instrument means the policy directions made by Dermot Ahern TD, then Minister for Communications, Marine and Natural Resources, dated 21 February 2003 and 26 March 2004;

“Metropolitan Point of Presence” or **“MPoP”** means the point of inter-connection between the access and core networks of an Undertaking;

“Modified Larger Exchange Area” or **“Modified LEA”** means those exchanges listed in Annex 14 of ComReg Decision D03/16;

“Multicast” means a service that accepts a single copy of designated data streams from the Undertaking and distributes these data streams within the Eircom network to multiple End Users;

“Network Termination Unit” or **“NTU”** means the physical interface which provides the service demarcation or Point of Handover of the wholesale service within the customer premises;

“Next Generation Access” or **“NGA”** means wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband and other access services with enhanced characteristics (such as higher throughput) as compared to those provided over exclusively copper access networks;

“Next Generation Wholesale Local Access” or **“Next Generation WLA”** means Wholesale Local Access provided over NGA and its Associated Facilities;

“Node” means any location or concentration point in the access network (excluding termination points at End Users’ premises) which houses equipment for the purpose of providing services to End Users;

“Non-Disclosure Agreement” means the non-disclosure agreement contained within the ARO;

“ODF” means optical distribution frame;

“ONT” or **“Optical Network Terminal”** means the device that terminates the fibre Access Path at the End User’s premises;

“OSI” means open systems interconnection;

“OSS” means operational support systems;

“Other Authorised Operator(s)” or **“OAO(s)”** means an Undertaking that is not Eircom, providing or intending to provide an ECN or an ECS, and that is deemed to be authorised under Regulation 4 of the Authorisation Regulations;

“Passive Access Records” means all available physical records for passive access, *inter alia* information relating to: (i) physical location of Ducts, Sub-Ducts, Poles, Chambers, cabinets, and distribution points, including their technical and physical characteristics; (ii) the installed fibre and metallic cable capacity in Ducts and in Sub-Duct and on Poles, including the used and available capacity; (iii) the reserved Duct, Pole and Chamber capacity (reservation information includes x.y. co-ordinates of the start and the end of the route, requested date of reservation, reservation lapse date); and (iv) the reserved capacity by internal or external Undertakings, per route;

“Point of Handover” means the physical point at which two networks are interconnected to allow traffic to pass between these networks;

“Pole(s)” means an Eircom pole which can be used to support copper or fibre cables in order to provide Electronic Communications Services;

“Pole Access” means Access to Eircom’s Poles;

“Pre-Qualification Value” means the maximum data-rate attainable for an Access Path based on its electrical characteristics;

“Product Description” means the product descriptions to be made available by Eircom concerning WLA products, services and facilities and includes, but is not limited to, the Product Description Unbundled Local Metallic Path (ULMP) V2 07 June 2017, the Product Description Line Sharing V5 07 June 2017, the LLU Soft Migrations Product Description V2 07 June 2017 and the NGA Product Description Virtual Unbundled Access V3 16 June 2017 (as may be amended from time-to-time);

“Product Development Decision Point” means a point during the development process at which Eircom takes or is due to take a decision to advance, retard or terminate the development of a product, service or facility;

“Product Development Roadmap” means a document containing a list of all proposed, planned and in progress developments for regulated products, services and facilities, and related information, as required of Eircom in accordance with Section 10.30 of this Decision Instrument;

“Promotion” means an offer in respect of a product, service or facility which is available for a finite period of time and which offers a price reduction;

“Ready for Order Date” means the date by which a particular Access product, service or facility is available for order from Eircom by an Undertaking;

“Reasonably Efficient Operator” means a reasonably efficient operator which has a different basic cost function to Eircom and does not yet enjoy the same economies of scale and scope as Eircom;

“Regional WCA Market” means the market as defined in Section 4.2(ii) of the Decision Instrument contained in Appendix 21 of ComReg Decision D10/18;

“(the) Relevant Market” means the market described in Section 4 of this Decision Instrument;

“Revised Copper Access Model” means the model, as amended from time-to-time (subject to approval by ComReg), used by ComReg and Eircom to assess Eircom’s compliance with the obligations contained in Section 12 of this Decision Instrument. The model calculates costs based on both Top Down HCA and BU-LRAIC+ costing methodologies. The operation and details of the Revised Copper Access Model are more particularly described in Section 5 of ComReg Decision D03/16;

“Revision History” means a documented list of changes to the Statement of Compliance as required under Section 13 of this Decision Instrument. The list, which contains the changes from the previous version of the Statement of Compliance, should be maintained and printed in a dedicated and indexed Section of each Statement of Compliance;

“RSU” means remote subscriber unit;

“SB-WLR” means single billing wholesale line rental;

“Service Credit(s)” means a financial credit which is provided by Eircom to an OAO in circumstances where Eircom has failed to meet the service levels which Eircom commits to from time-to-time in its SLA, or on the occurrence of events or the application of criteria specified in the SLA;

“Service Level Agreement(s)” or **“SLA(s)”** mean legally binding contracts between Eircom and OAOs in relation to the service levels which Eircom commits to from time-to-time, as more particularly set out in the ARO. For the avoidance of doubt, however, these service levels must comply with the principles set out in this Decision Instrument and to the extent that there is any conflict between the SLAs and Eircom’s obligations set out in this Decision Instrument, it is the latter which shall prevail;

“Shared Co-Location” means the facility whereby more than one OAO can share Co-Location facilities;

“Shared Access to the Local Loop” (also known as Line Share) means the product whereby the high frequency capacity of a line is provided to OAOs, described in Annex C, Service Schedule 103 Appendix 1 to Eircom’s ARO, as may be amended from time-to-time;

“Shared Sub-Loop Unbundling” means the provision to a beneficiary of access to the local Sub-Loops on Eircom’s network, authorising the use of the non-voice band frequency spectrum of the twisted metallic pair; the local Sub-Loops continue to be used by Eircom to provide the telephone service to the public. It includes the provision of access to a tie cable or other connection and appropriate handover for the purposes of making use of Eircom’s Sub-Loops from an adjacent cabinet;

“Significant Market Power obligation(s)” or **“SMP obligation(s)”** are those obligations as more particularly described in Part II below;

“Significant Market Power Undertaking” or **“SMP Undertaking”** means the Undertaking designated in Section 5 of this Decision Instrument as having Significant Market Power;

“SLA Negotiation Period” means the duration of time required by Eircom to close negotiations between it and OAOs and make a BAFO in respect of an amended or new SLA;

“(the) SMP Guidelines” means the European Commission guidelines of 11 July 2002 on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03) (OJ C 165, 11.7.2002, p.6), as replaced by the European Commission guidelines of 7 May 2018 on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (OJ C 159, 7.5.2018, p.1);

“Statement of Compliance” means the written statement prepared by Eircom in accordance with Section 13 of this Decision Instrument;

“Structured Information” means information that is documented and managed through an established business process in a formal manner and includes memos, email messages, letters, order forms, invoices, agendas and reports;

“Sub-Duct” means the tube or tubes inserted in a Duct through which a cable is installed;

“Sub-Duct Access” means Access to Eircom’s Sub-Duct;

“Sub-Loop” means the portion of the Local Loop which runs from a street cabinet to the End User’s premises;

“Sub-Loop Unbundling” also known as **“SLU”** is an implementation of unbundled access to the Sub-Loop. It excludes the portion of the Local Loop between the Exchange and street cabinet. It includes the provision of access to a tie cable or other connection and appropriate handover for the purposes of making use of the Sub-Loop from an adjacent cabinet;

“Subscriber(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Top-Down HCA” means the methodology in which the HCA and network information of the regulated firm are used as the starting point for calculating the costs of relevant services. These inputs may subsequently be adjusted to reflect efficiencies;

“ULMP” or **“Unbundled Local Metallic Path”** is the implementation of Full Unbundled Access to the Local Loop;

“ULMP Cost Stack” means the appropriate monthly cost of the ULMP component, as calculated by ComReg having regard to the ULMP Price Control Model;

“ULMP Price Control Model” means the model referred to in ComReg Decision D03/16 which is used by ComReg to calculate the monthly rental price of ULMP;

“Undertaking(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Unified Gateway” is an interface to Eircom’s OSS used by Undertakings to avail of regulated products, services and facilities;

“Unstructured Information” means information that is documented and managed in a less formal manner than Structured Information and includes information passed between individuals or business units through informal communications;

“Urban WCA Market” means the market as defined in Section 4.2(i) of the Decision Instrument contained in Appendix 21 of ComReg Decision D10/18;

“VDSL” means a very-high-bit-rate digital subscriber line;

“Vectoring” is a technology that is used to reduce interference arising from crosstalk between copper pairs in a cable binder. It is normally deployed at an Exchange or cabinet in order to increase the download and upload speeds attainable on the copper loops serving End Users;

“Vectoring Protocol” means the protocol for enabling vectoring on Exchange launched VDSL (EVDSL) as detailed at ANNEX E (Protocol for enabling vectoring on Exchange launched VDSL (EVDSL)) of the ARO Version 9 dated 22 June 2017, as may be amended from time-to-time;

“Version Control” means a standardised regime for the management of changes to documents as it relates to Section 13 of this Decision Instrument. Different versions of the Statement of Compliance should be identified by a number, letter or code, associated with a date and timestamp. Revision History is included as part of the Version Control regime;

“Virtual Unbundled Access” or **“VUA”** means the wholesale active access product provided by Eircom. It is an enhanced Layer 2 product which allows the handover or interconnection of aggregate End Users’ connections at the MPoP. It allows the Undertaking a level of control similar to that afforded to the Undertaking connecting their own equipment to an unbundled Local Loop. VUA includes VUA provided on a stand-alone basis or VUA provided with SB-WLR;

“VUA Soft Migrations” means the facility whereby an End User can be migrated from SB-WLR with VUA to standalone VUA without the need for physical network intervention at the time of provisioning and must include the porting of the End User’s telephone number from the current service provider, if required;

“**WDM**” or “**Wavelength Division Multiplexing**” is a technology which multiplexes multiple optical carrier signals on to a single optical fibre by using different wavelengths;

“**WCA Markets**” means the Urban WCA Market and the Regional WCA Market;

“**Wholesale Central Access**” or “**WCA**” means wholesale central access provided at a fixed location for mass market products as defined in Section 9 of ComReg Decision D10/18;

“**Wholesale Ethernet Interconnection Link**” or “**WEIL**” is the interconnection service provided by Eircom which enables the handover of End User traffic for various wholesale product types including but not limited to Bitstream Plus, VUA and Next Generation Access wholesale products;

“**Wholesale Local Access**” or “**WLA**” means wholesale local access provided at a fixed location as defined in Section 4 of ComReg Decision D10/18;

“(the) **2014 Recommendation**” means the European Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 295, 11.10.2014, p. 79).

3 SCOPE AND APPLICATION

- 3.1 This Decision Instrument is binding upon Eircom and Eircom shall comply with it in all respects.
- 3.2 This Decision Instrument applies to Eircom in respect of activities falling within the scope of the Relevant Market defined in Section 4 of this Decision Instrument.
- 3.3 This Decision Instrument, pursuant to Regulation 8 of the Access Regulations, withdraws certain obligations previously imposed upon Eircom, as more particularly set out in Section 16 of this Decision Instrument.

4 MARKET DEFINITION

- 4.1 This Decision Instrument relates to the wholesale market for Wholesale Local Access provided at a fixed location as identified by the European Commission in the 2014 Recommendation and analysed by ComReg in ComReg Decision D10/18. For the purposes of this Decision Instrument, ComReg identifies one geographic market as more particularly defined in Section 4.2 below (referred to in this Decision Instrument as the Relevant Market).

4.2 Pursuant to Regulation 26 of the Framework Regulations and in accordance with the 2014 Recommendation, the Explanatory Note and taking the utmost account of the SMP Guidelines, in accordance with the principles of competition law, the Relevant Market defined in this Decision Instrument is the:- national market for Wholesale Local Access provided at a fixed location. The Relevant Market is more particularly described in Section 4 of ComReg Decision D10/18.

4.3 It is hereby decided that the Relevant Market is susceptible to *ex ante* regulation.

5 DESIGNATION OF UNDERTAKING WITH SIGNIFICANT MARKET POWER (“SMP”)

5.1 Pursuant to Regulation 25 and Regulation 27 of the Framework Regulations and taking the utmost account of the SMP Guidelines, having determined that the Relevant Market is not effectively competitive, Eircom is designated as having SMP in the Relevant Market in which it operates.

PART II - SMP OBLIGATIONS (SECTIONS 6 TO 13 OF THE DECISION INSTRUMENT) IN RELATION TO WHOLESALE LOCAL ACCESS

6 SMP OBLIGATIONS IN RELATION TO WHOLESALE LOCAL ACCESS PRODUCTS, SERVICES AND FACILITIES

6.1 ComReg is imposing certain SMP obligations on Eircom in accordance with and pursuant to Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations, as detailed further in Sections 7 to 13 below in respect of Wholesale Local Access.

7 OBLIGATIONS TO PROVIDE ACCESS

7.1 Pursuant to Regulation 12(1) of the Access Regulations, Eircom shall meet all reasonable requests from Undertakings for the provision of Access to Wholesale Local Access including Associated Facilities.

7.2 Without prejudice to the generality of Section 7.1 of this Decision Instrument and pursuant to Regulation 12(2) of the Access Regulations, Eircom shall provide and grant Access to Undertakings for the following particular products, services and Associated Facilities:-

- (i) VUA, which includes the following:
 - a. FTTC-based VUA;
 - b. FTTH-based VUA; and
 - c. Exchange launched VUA.
- (ii) VUA, combined with GNP where required;
- (iii) Interconnection services, to include the following:

- a. In-Building Handover;
 - b. In-Span Handover;
 - c. Customer-Sited Handover; and
 - d. Edge Node Handover.
- (iv) Associated Facilities related to VUA such as:
- a. Multicast; and
 - b. Class of Service.
- (v) ULMP;
- (vi) GLUMP;
- (vii) Shared Access to the Local Loop;
- (viii) Sub-Loop Unbundling, combined with GNP where required, and Shared Sub-Loop Unbundling in areas which have been identified as susceptible to form part of a State subsidy scheme;
- (ix) Co-Location generally and in particular for the following:
- a. Co-Location for Interconnection services;
 - b. Co-Location Resource Sharing;
 - c. Co-Location Rack Interconnection; and
 - d. CEI Co-Location.
- (x) Migration(s);
- (xi) Rules and technical standards for the deployment of Access network equipment approvals and in particular CLFMP;
- (xii) Vectoring Protocol;
- (xiii) Civil Engineering Infrastructure and in particular the following:
- a. Duct Access and Pole Access;
 - b. Direct Duct Access, Sub-Duct Access;
 - c. Passive Access Records; and
 - d. To the extent utilised in combination with (a) or (b) above:
 - I. Ingress and Egress points;
 - II. CEI Tie Connection Service; and
 - III. Chambers.

- (xiv) Where Access to Civil Engineering Infrastructure is not available, Access to Dark Fibre where Dark Fibre is reasonably available.
- 7.3 Without prejudice to the generality of Sections 7.1 and 7.2 of this Decision Instrument, Eircom shall offer and continue to offer and provide Access to the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument in accordance with the product descriptions and terms and conditions of supply or use, as specified in the current version of the ARO (i.e. [Version 9, dated 22 June 2017], as published on Eircom's publicly available wholesale website) as may be amended from time-to-time, and, in addition, in accordance with Eircom's obligations under this Decision Instrument.
- 7.4 Without prejudice to the generality of Sections 7.1 and 7.2 of this Decision Instrument and further to Section 7.2(xiii) above, Eircom shall not impose unreasonable restrictions on Access to its Civil Engineering Infrastructure where such Access is required for the purpose of the provision by Undertakings of services in the Relevant Market or in other downstream markets.
- 7.5 Without prejudice to the generality of Section 7.1 and pursuant to Regulation 12(1) of the Access Regulations, Eircom shall meet all reasonable requests from Undertakings for the provision of Fibre Loop Unbundling.
- 7.6 The access obligations set out in this Section 7 shall apply irrespective of the electronic communications service that the requested access product, service or facility shall be used to provide. For the avoidance of doubt, the purpose for which the access request is made is not limited to the provision by the Undertaking of services to End Users.
- 7.7 Without prejudice to the general obligations set out in Sections 7.1 to 7.4 of this Decision Instrument, Eircom shall:
- (i) pursuant to Regulation 12(2)(b) of the Access Regulations, negotiate in good faith with Undertakings requesting Access;
 - (ii) pursuant to Regulation 12(2)(c) of the Access Regulations, not withdraw Access to facilities already granted without the prior approval of ComReg and in accordance with terms and conditions as may be determined by ComReg;
 - (iii) pursuant to Regulation 12(2)(e) of the Access Regulations, grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products, services or facilities; and
 - (iv) pursuant to Regulation 12(2)(h) of the Access Regulations, provide Access to OSS or similar software systems necessary to ensure fair competition in the provision of services (including those products, services and facilities described in this Section 7).

8 CONDITIONS ATTACHED TO THE ACCESS OBLIGATION

- 8.1 Pursuant to Regulation 12(3) of the Access Regulations, Eircom shall, in relation to the obligations set out in Section 7 above, grant Undertakings Access in a fair, reasonable and timely manner.
- 8.2 Without prejudice to the generality of Section 8.1 above, pursuant to Regulation 12(3) of the Access Regulations, Eircom shall in relation to the obligations set out in Section 7 above and in the provision of Access to the Unified Gateway:
- (i) conclude, maintain and update, as appropriate, legally binding and fit-for-purpose SLAs which shall encourage an efficient level of performance;
 - (ii) negotiate in good faith with Undertakings in relation to the conclusion of legally binding and fit-for-purpose SLAs (either in the case of a new SLA or an amendment to an existing SLA);
 - (iii) provide Undertakings, at the end of the SLA Negotiation Period, with Eircom's best and final offer (BAFO) in respect of the relevant SLA which, for the avoidance of doubt, shall: be fit-for-purpose; include all relevant information that is required under this Section 8.2; and accord with the principles set out in this Section 8.2. The SLA Negotiation Period ends with the closing of negotiations and the making of a BAFO by Eircom to Undertakings with respect to the SLA. When Eircom makes its BAFO, the SLA is deemed by ComReg to be concluded;
 - (iv) ensure that the SLA Negotiation Period includes a discussion on the process for suspension of an SLA and the associated terms and conditions, as described in Section 8.2(x) below;
 - (v) ensure that SLAs include provision for Service Credits which shall comply with the requirements of this Decision Instrument;
 - (vi) ensure that the SLA specifies the circumstances upon which Service Credits must be paid by Eircom to Undertakings, such as a failure by Eircom to achieve the committed service levels contained in the SLA, the occurrence of specified events or other appropriate criteria;
 - (vii) ensure that SLAs specify the methodologies for calculating Service Credits and include an example of how each methodology will be applied in the calculation of Service Credits;

- (viii) ensure that circumstances upon which Service Credits must be paid by Eircom to Undertakings and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable and in particular that they adequately incentivise Eircom to deliver an efficient level of service quality and allow Undertakings to recoup, at a minimum, the direct costs and any other reasonable loss of value that the Undertakings incur as a result of the circumstances that had triggered the payment of Service Credits;
- (ix) ensure that Service Credits, where payable, are applied automatically and in a timely manner;
- (x) ensure that SLAs include, where appropriate, the comprehensive set of terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA. Such terms and conditions should be based on objectively defined and measurable parameters; and
- (xi) on a quarterly basis, furnish an individual report to each Undertaking setting out the actual performance achieved in each of the three (3) previous months in respect of that Undertaking compared to the committed service levels contained in the relevant SLA for the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument. Eircom shall include in the report the methodology and a description of the source data used to determine the actual performance achieved. The report shall also describe how the source data was processed by Eircom and include worked examples as to how the processed source data relates to the actual performance achieved.

8.3 In relation to an existing product, service or facility, following a request from an Undertaking for an amendment to an SLA, Eircom shall within one (1) month of the receipt of such a request inform the Undertaking in writing whether the request for an amendment is accepted or rejected and, if accepted, include details of the SLA Negotiation Period and the associated start date. Negotiations in respect of the amended SLA shall close, unless otherwise agreed with ComReg, within six (6) months of the date the Undertaking makes such a request. Within one (1) month of the date the Undertaking makes such a request Eircom may seek an extension to the six (6) month period from ComReg.

- 8.4 In relation to (a) an amendment to an existing product, service or facility, or (b) the development of a new product, service or facility, in each case where Eircom itself initiates the amendment or the development of a new product, service or facility, Eircom shall within one (1) month of the commencement of the product development seek Undertakings' views as to whether the proposed new or amended product, service or facility should result in an amendment to the relevant SLA or a new SLA.
- 8.5 Eircom shall ensure that, unless otherwise agreed with ComReg, its obligations set out in Sections 8.2 to 8.4 above have been complied with prior to notifying ComReg of non-pricing amendments or changes to the ARO resulting from the offer of a new product, service or facility or an amendment to an existing product, service or facility which falls within the scope of the Relevant Market.
- 8.6 Eircom shall ensure that an amended or new SLA is implemented and is made available to Undertakings by the date on which:
- (i) any amendment or change to an existing product, service or facility; or
 - (ii) the offer of a new product, service or facility
- comes into effect in accordance with Section 10 below.
- 8.7 Where an SLA is amended resulting in minimal changes to existing products, services or facilities, or where there is no development of a new product, service or facility, Eircom shall ensure that the amended SLA is implemented and is made available to Undertakings within three (3) months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg).
- 8.8 Within six (6) months (unless otherwise agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update its SLAs to include all relevant information and accord with the principles set out in Sections 8.2 to 8.4 above.
- 8.9 Where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument), or a request by an Undertaking for provision of information, is refused or met only in part (including any refusal or partial grant arising under Sections 8.10(ii)/8.10(iv) below), Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking and to ComReg each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.
- 8.10 Following a written request from an Undertaking (including a written request from Eircom itself) for Access to a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall, from the date of receipt of such a written request (unless otherwise agreed with ComReg) within:

- (i) three (3) working days confirm in writing to the Undertaking that has made the written request that the request has been received;
- (ii) fifteen (15) working days confirm in writing to the Undertaking that has made the written request whether or not the request falls within the scope of Eircom's obligations contained in this Decision Instrument and provide a unique reference to identify the request;
- (iii) thirty (30) working days confirm in writing to the Undertaking that has made the written request whether or not the Undertaking has provided it with sufficient information to process the request including the Undertaking's view on the priority of the request relative to other written requests pertaining to the Relevant Market that have already been submitted by that Undertaking. During the thirty (30) working day period Eircom may seek clarification from the Undertaking;
- (iv) eighty five (85) working days:
 - a. confirm in writing to the Undertaking that has made the written request whether it agrees to provide the requested product, service or facility or amendment thereto;
 - b. where the product, service or facility or amendment thereto proposed by Eircom differs from the original request, provide the Undertaking that has made the written request with a written description of such differences, in sufficient detail to allow the Undertaking to be reasonably aware of differences in the key features, functionality and geographic scope of the product, service, facility or amendment thereto, any limitations of the product, service or facility or amendment, together with the objective reasons for such differences.

8.11 Without prejudice to the generality of Section 8.9 Eircom shall comply with the requirements of Section 8.9 where Eircom concludes, on the basis of additional analysis conducted during the process of development of a product, service or facility or amendment thereto that it has agreed to provide in accordance with Section 8.10(iv), that the Access request is no longer reasonable and, therefore, that the product, service, facility or amendment thereof requires amendment or cannot progress to completion.

8.12 For the avoidance of doubt the obligations set out in Sections 8.9 to 8.11 are separate to and independent of Eircom's transparency obligations in respect of notification and publication as set out in Section 10.9 and 10.10 of this Decision Instrument.

8.13 Eircom shall not amend the rules or technical standards for the deployment of equipment in the Access Network including the CLFMP or equivalent without the prior written approval of ComReg and in accordance with terms and conditions as may be determined by ComReg.

9 OBLIGATION OF NON-DISCRIMINATION

9.1 Pursuant to Regulation 10 of the Access Regulations, Eircom shall have an obligation of non-discrimination in respect of the provision of Access, including Access as regards those services, products and facilities described in Sections 7 and 8 of this Decision Instrument. Without prejudice to the generality of the foregoing, Eircom shall:

- (i) apply equivalent conditions in equivalent circumstances to other Undertakings requesting, or being provided with Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) or requesting or being provided with information in relation to such Access; and
- (ii) provide Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) and information in relation to such Access to all other Undertakings under the same conditions and of the same quality as Eircom provides to itself or to its subsidiaries, affiliates or partners.

9.2 Without prejudice to the generality of Section 9.1, Eircom shall (unless otherwise specified in this Decision Instrument) offer and provide Access, including Associated Facilities, to those products, services and facilities required in accordance with Sections 7 and 8 of this Decision Instrument on, at least, an Equivalence of Outputs basis.

9.3 Without prejudice to the generality of Section 9.1, Eircom shall offer and provide pre-ordering, ordering, provisioning, fault reporting and repair for VUA and the Associated Facilities to VUA on an Equivalence of Inputs basis.

9.4 Without prejudice to the generality of Section 9.1, Eircom shall offer and provide Migrations on at least an Equivalence of Outputs basis. Where the standard of equivalence applicable to the destination product, service or facility is Equivalence of Inputs, Eircom shall provide the Migration on an Equivalence of Inputs basis.

9.5 Without prejudice to the generality of Section 9.1, Eircom shall, within ten (10) months of the Effective Date or as otherwise agreed with ComReg, offer and provide pre-ordering, ordering, provisioning, fault reporting and repair for CEI on an Equivalence of Inputs basis.

9.6 For the avoidance of doubt, the obligations set out in this Section 9 apply irrespective of whether or not a specific request for products, services, facilities or information has been made by an Undertaking to Eircom.

10 OBLIGATION OF TRANSPARENCY

10.1 Pursuant to Regulation 9 of the Access Regulations, Eircom shall be subject to an obligation of transparency in relation to Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument).

10.2 Without prejudice to the generality of Section 10.1 of this Decision Instrument, pursuant to Regulation 9(2) of the Access Regulations, Eircom shall make publicly available and keep updated on its publicly available wholesale website, an ARO. Within six (6) months (unless otherwise specified in this Decision Instrument or as agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update the ARO to include information relating to any amendment to an existing obligation or new obligation imposed in this Decision Instrument. Eircom shall, within ten (10) months of the Effective Date (or as otherwise agreed with ComReg), update the ARO to reflect the obligation contained in Section 9.5 above.

10.3 Without prejudice to the generality of Section 10.2 above, Eircom shall ensure that, within three months of the Effective Date, the ARO is updated to provide Access to Ingress and Egress points.

10.4 The ARO shall be sufficiently unbundled so as to ensure that Undertakings availing of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) are not required to pay for products, services or facilities which are not necessary for the Access requested. Eircom shall ensure that the ARO and related contracts only relate to products, services and facilities which fall within the scope of the Relevant Market.

10.5 Without prejudice to the generality of Section 10.2 of this Decision Instrument, and in accordance with the obligations specified elsewhere in this Decision Instrument, Eircom shall ensure that its ARO includes at least the following:

- (i) a description of the offer of contract for Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) broken down into components according to market needs;
- (ii) a description of any associated contractual or other terms and conditions for supply of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) and use, including prices;

- (iii) a description of the technical specifications, processes and network characteristics of the Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) being offered, including, without prejudice to the generality of the foregoing, the Vectoring Protocol; and
 - (iv) at least the elements set out in the Schedule to the Access Regulations.
- 10.6 In the event of any conflict between the ARO and associated documentation such as the ARO Price List (including where represented as updated for the purposes of this Decision Instrument), and Eircom's obligations as set out under this Decision Instrument, it is the latter which shall prevail.
- 10.7 Without prejudice to the generality of Sections 10.1 and 10.2 above and pursuant to Regulation 9 of the Access Regulations Eircom shall:
- (i) continue to publish and keep updated on its publicly available wholesale website its ARO in the same form and format as version 9 dated 22 June 2017, including a searchable version, as may be amended from time-to-time, insofar as those products, services or facilities contained therein relate to the obligations set out in this Decision Instrument;
 - (ii) publish and keep updated on its publicly available wholesale website both clean (or unmarked) and tracked change (or marked) versions of its ARO (insofar as it relates to the products, services and facilities to be provided in accordance with the requirements of this Decision Instrument). The tracked change version of the ARO shall be sufficiently clear to allow Undertakings to clearly identify all actual and proposed amendments from the preceding version of its ARO;
 - (iii) publish and keep updated on its publicly available wholesale website an accompanying ARO Change Matrix which lists all of the amendments incorporated or to be incorporated in any amended ARO;
 - (iv) publish and keep updated on its publicly available wholesale website both clean (unmarked) and tracked change (marked) versions of the ARO Price List(s) (insofar as it relates to the products, services and facilities to be provided in accordance with the requirements of this Decision Instrument). The tracked change version of the ARO Price List shall be sufficiently clear to allow Undertakings to clearly identify all actual and proposed amendments from the preceding version of its ARO Price List;
 - (v) publish and keep updated on its publicly available wholesale website an ARO Price List Change Matrix which lists all of the amendments incorporated or to be incorporated in any amended ARO Price List; and

- (vi) maintain and make available on its publicly available wholesale website a copy of historic versions of its ARO, ARO Price List, ARO Change Matrix and ARO Price List Change Matrix.
- 10.8 Eircom shall ensure that its wholesale invoices in respect of products, services and facilities within the Relevant Market are sufficiently disaggregated, detailed and clearly presented such that an Undertaking can reconcile invoices to Eircom's ARO and ARO Price Lists.
- 10.9 In respect of non-pricing amendments or changes to the ARO resulting from the offer of a new product, service or facility which falls within the scope of the Relevant Market, the obligations set out in sub-sections (i) and (ii) below shall apply. The periods referred to in this Section 10.9 may be varied with the agreement of ComReg or at ComReg's discretion:
- (i) Eircom shall make publicly available and publish on Eircom's publicly available wholesale website at least six (6) months in advance of coming into effect, any proposed amendments or changes to the ARO or the making available of any product, service or facility, pertaining to non-price information in respect of product specification, services, facilities and processes resulting from the offer of a new product, service or facility and
 - (ii) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, seven (7) months prior to any amendments or changes coming into effect.
- 10.10 In respect of material non-pricing amendments or changes to the ARO resulting from an amendment or change to an existing product, service or facility which falls within the scope of the Relevant Market, the obligations set out in sub-sections (i) and (ii) below shall apply. The periods referred to in this Section 10.10 may be varied with the agreement of ComReg or at ComReg's discretion:
- (i) Eircom shall make publicly available and publish on Eircom's publicly available wholesale website at least two (2) months in advance of coming into effect, any proposed amendments or changes to the ARO pertaining to non-price information in respect of product specification, services, facilities and processes resulting from an amendment or change to an existing product, service or facility (including details of any amendment or change in the functional characteristics of an existing product, service or facility); and
 - (ii) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, three (3) months prior to any amendments or changes coming into effect.

10.11 For the purposes of Section 10.10 above, material amendments or changes are those which impact on product functionality or technical specifications, the process supporting a product, service or facility, and the pricing and terms and conditions associated with a product, service or facility. Notwithstanding Section 10.10, amendments or changes to an existing product, service or facility which are so significant that the product, service or facility effectively amounts to a new product, service or facility, shall be notified and published in accordance with the requirements of Section 10.9 above or as otherwise agreed with ComReg or at ComReg's discretion.

10.12 In respect of pricing amendments or changes pertaining to prices in the ARO and/or ARO Price List, Eircom shall make publicly available and publish on its publicly available wholesale website information relating to:

- (i) proposed changes to the prices of existing products, services or facilities set out in the ARO Price Lists and which are offered or provided in accordance with the obligations set out in this Decision Instrument, for price decreases at least two (2) months in advance of such changes coming into effect and for price increases at least three (3) months in advance, unless otherwise determined by ComReg; and
- (ii) the pricing of a new product, service, or facility that will be offered or provided in accordance with the obligations set out in this Decision Instrument at least two (2) months in advance of the commercial launch of a new retail service by Eircom, unless otherwise determined by ComReg.

10.13 For the purpose of Section 10.12 above, Eircom shall, unless otherwise agreed with or determined by ComReg, notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place.

10.14 Where Eircom proposes to conduct a trial, whether such trial is for the purposes of testing operational and/or technical issues, the following obligations shall apply:

- (i) Eircom shall invite all Undertakings to participate in the trial, by means of:
 - a. direct written invitation to each Undertaking that has signed a contract with Eircom on the basis of the ARO; and
 - b. the publication of a general invitation on Eircom's publicly available wholesale website;
- (ii) Eircom shall provide a statement of the objectives of the trial and the requirements for participation to all Undertakings in sufficient time to allow participation; and
- (iii) the trial must be for a reasonable period sufficient only to achieve the objectives of the trial.

- 10.15 Eircom shall in respect of any proposed trials, whether such trials are for the purposes of testing operational and/or technical issues:
- (i) notify ComReg in writing at least one (1) month in advance of each such proposed trial being notified to Undertakings, in accordance with Section 10.14 above, unless otherwise agreed with ComReg;
 - (ii) notify Undertakings at least three (3) months in advance of the commencement of each such trial, in accordance with Section 10.14 above, unless otherwise agreed with ComReg; and
 - (iii) unless otherwise agreed with ComReg, terminate each such trial at least one (1) month prior to the launch of the new or amended product, service or facility being trialled.
- 10.16 Eircom shall, as specified by ComReg in writing from time-to-time, make publicly available on its wholesale website, information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices, in respect of the products, services and facilities referred to in Sections 7 and 8 above.
- 10.17 Pursuant to Regulation 9(3) of the Access Regulations, ComReg may issue directions requiring Eircom to make changes or amendments to its SLAs, the ARO (and its associated documents), ARO Price List, ARO Change Matrix or ARO Price List Change Matrix to give effect to obligations imposed by this Decision Instrument and to publish such documents with such changes. In accordance with Regulation 18 of the Access Regulations, ComReg may issue directions to Eircom from time-to-time requiring it to publish information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices.
- 10.18 Eircom shall publish Key Performance Indicators (KPIs) on its publicly available wholesale website. The specification of the content of the KPIs shall be in accordance with the obligations set out in ComReg Decision D05/11.
- 10.19 Eircom shall, on a quarterly basis, publish on its publicly available wholesale website a report that evidences actual performance achieved in each of the three (3) previous months in respect of all Undertakings on an aggregate basis compared to the committed service levels contained in the relevant SLA for the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument. Eircom shall also include in the report the methodology and a description of the source data used to determine the actual performance achieved. The report shall also describe how the source data was processed by Eircom and include worked examples as to how the processed source data relates to the actual performance achieved.

- 10.20 Eircom shall make publicly available on its wholesale website all SLAs (and any updates thereto) relating to the provision of the products, services and facilities that are to be provided in accordance with Sections 7 and 8 of this Decision Instrument.
- 10.21 Where Eircom considers certain aspects of information to be provided under the obligations set out in this Section 10 to be of a confidential and/or commercially sensitive nature, Eircom shall, without delay, provide ComReg with complete details of such information along with objective reasons justifying why it considers the information to be confidential and/or commercially sensitive. ComReg will consider the information in accordance with ComReg Document No. 05/24, so far as relevant or otherwise. If ComReg considers that the information is not confidential and/or commercially sensitive, it shall be published by Eircom in accordance with its obligations under this Section.
- 10.22 If, having considered a submission from Eircom in accordance with Section 10.21 above, ComReg concludes that the information is confidential and/or commercially sensitive, the following provisions shall apply:
- (i) Eircom shall not be required to publish the information; or
 - (ii) Notwithstanding sub-section 10.22(i), in circumstances considered appropriate by ComReg, Eircom shall publish general non-confidential details as to the nature of such information and shall make the information or, as agreed with ComReg, extracts of such information, available to an OAO that has signed a Non-Disclosure Agreement (“NDA”), the terms and conditions of which shall be fair, reasonable and non-discriminatory. The NDA shall also be published on Eircom’s publicly available website; and
 - (iii) Without prejudice to the generality of Section 9.1, any confidential and/or commercially sensitive information (or, as agreed with ComReg, extracts thereof) referred to in this Section 10 shall not be made available by Eircom to its downstream operations until such time as it is made available to an OAO, or as otherwise agreed with ComReg.
- 10.23 If and when any commercially sensitive and/or confidential information referred to in this Section 10 ceases to be commercially sensitive and/or confidential, it shall be made available by Eircom on its publicly available wholesale website without undue delay and without the need for an NDA to be signed.

10.24 Pursuant to Sections 9.1 and 10.1 of this Decision Instrument, Eircom shall make available on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg), information regarding the introduction of, changes to, or technical developments relating to, Eircom's network, infrastructures or new technologies, as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WLA, including as regards such products, services or facilities to be offered to Eircom's retail or downstream division. Eircom shall keep this information updated on its publicly available wholesale website; however material amendments and changes to information may not be notified by way of such an update, but shall be notified at least six (6) months in advance as set out herein, or by agreement with ComReg, or at ComReg's discretion.

10.25 Without prejudice to the generality of Section 10.24 Eircom shall in particular make available on its publicly available wholesale website in advance of implementation, information regarding its NGA rollout plans, and information relating to wholesale products, services and facilities, such as the expected time for service availability, as follows:

- (i) For the Exchange areas included in Eircom's NGA rollout plan the following details shall also be made available on Eircom's publicly available wholesale website at least six (6) months in advance of the Ready for Order Date:
 - a. a list of cabinets with their associated geographic coordinates;
 - b. the location and name of the Exchange which houses the MPoP for each cabinet and for each proposed FTTH network;
 - c. the expected Ready for Order Date for each cabinet or fibre based FTTH network; and
 - d. for each Exchange area the number of premises that Eircom forecasts will be passed by FTTH.
- (ii) For the Exchange areas included in Eircom's NGA rollout plan Eircom shall make available on its publicly available wholesale website at least three (3) months in advance of the Ready for Order Date sufficient information to enable Undertakings to identify the addresses that will be passed by FTTH. Such information may take the form of a detailed map or cross references to Eircom's address database;

- (iii) For the Exchange areas included in Eircom's NGA rollout plan the following details shall also be made available on Eircom's publicly available wholesale website at least 28 calendar days in advance of the of the Ready for Order Date by way of a data file which shall include the following information:
 - a. a list of the premises, as uniquely identified, that are capable of receiving FTTC and the associated Pre-Qualification Value for each such line/premises; and
 - b. a list of all addresses passed by FTTH categorised by the Exchange area and showing the MPoP for each address; and
- (iv) For Exchange areas included in Eircom's NGA rollout plan, Eircom shall publish on its publicly available wholesale website on a monthly basis, or as reasonably required by ComReg, in advance of particular cabinets becoming enabled or any FTTH fibre routes being completed, information to update, reconcile or revise any previous announcements or notifications, projections or plans, regarding NGA rollout, as matters progress in order that accurate, clear and current information is made available in respect of plans for particular cabinets or plans for particular FTTH fibre routes. Material amendments or changes to information may not be notified by way of such an update but shall be notified in accordance with this Section 10.25 or by agreement with ComReg, or at ComReg's discretion.

10.26 Without prejudice to the generality of Section 10.1 Eircom shall, in particular, make available on its publicly available wholesale website in advance of implementation, information regarding its CEI rollout plans, and information relating to wholesale products, services and facilities, such as the expected time for service availability, as follows:

- (i) For the Exchange areas in which Eircom plans to build CEI, at least the following details shall be included in Eircom's CEI build plan. Route information listed below shall be added to the CEI build plan when the work order for deployment of CEI is issued.
 - a. a map showing the proposed CEI routes (Pole and Duct), which includes, in the case of Poles, the x and y co-ordinates of the Poles, and, in the case of Ducts, the location of the proposed Ducts;
 - b. the proposed number and size of Ducts on each proposed route; and
 - c. the planned and, when available, actual Ready for Order Date for the planned infrastructure.
- (ii) Eircom's CEI build plan shall be updated as necessary on Eircom's publicly available wholesale website at least every 28 calendar days.

- 10.27 Without prejudice to the generality of Section 10.1, Eircom shall provide the latest versions of its Engineering Planning and Design Rules in relation to CEI for Duct, Pole and Chamber space management, as such versions become available, to each Undertaking that has signed an agreement with Eircom for Access to CEI.
- 10.28 For the avoidance of doubt, the obligations set out in this Section 10 (with the exception of the obligation set out in Section 10.27 above) apply irrespective of whether or not a specific request for products, services, facilities or information has been made by an Undertaking to Eircom.
- 10.29 With regard to the obligations set out in Section 8.10 above relating to requests from Undertakings for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall publish on its publicly available wholesale website the relevant information referred to in that Section 8.10 at the same time as it provides the information to the requesting Undertaking.
- 10.30 Without prejudice to the generality of Section 10.1, the following obligations shall apply with respect to the publication of information in respect of the development of products, services and facilities:
- (i) Eircom shall publish, and keep updated, on its publicly available wholesale website, a description of its product development process, including a description of all process steps and activities and identifying all Milestones and Product Development Decision Points, commencing with the receipt of a written request for Access from an Undertaking and terminating with the launch of a new or amended wholesale product, service or facility;
 - (ii) For each written Access request accepted by Eircom as being related to a product, service or facility within the Relevant Market, Eircom shall publish a new or, as appropriate, a revised, Product Development Roadmap on its publicly available wholesale website no later than fifteen (15) working days after receipt of the request. The Product Development Roadmap shall be kept updated and shall contain (a) a list of all Access requests accepted by Eircom as being related to a product, service or facility within the Relevant Market and (b) the following detail in relation to each Access request:
 - (a) the unique reference to identify the Access request;
 - (b) a description of the request and copies of or links to all relevant documentation;
 - (c) the date by which Undertakings can submit their views on the priority of the request relative to other requests pertaining to the Relevant Market that have already been submitted by that Undertaking;

- (d) the Milestones and associated target dates required to develop and launch the product, service or facility to meet the Access request. Eircom shall also include a method for tracking the actual development of the product, service or facility against the Milestones and associated target dates. Eircom shall inform Undertakings of any changes to such target dates at the earliest point in time after the need for such changes has been identified by Eircom.
- (iii) Eircom shall publish, and keep updated, on its publicly available wholesale website, a Product Development Roadmap listing all of the Access requests accepted by Eircom as being related to a product, service or facility within the Relevant Market and stating the priority given by Eircom to the development of each request relative to other developments of regulated products, services or facilities within the Relevant Market. Within eighty-five (85) working days from receipt of an Access request, Eircom shall update the Product Development Roadmap so as to identify the degree of priority that it proposes to assign to the proposed development arising from that request, and shall inform ComReg of the degree of priority assigned. In the event of the reprioritisation by Eircom of an Access request or requests, Eircom shall state the objective reasons for such reprioritisation(s) in the Product Development Roadmap and shall inform ComReg of the reprioritisation and the reasons therefor.

10.31 Without prejudice to Section 8.10, following a written Access request from an Undertaking (including a written request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility, the following obligations shall apply from the date of receipt of such a written request (unless otherwise agreed with ComReg):

- (i) For each written request received by Eircom and accepted by Eircom as being related to a product, service or facility within the Relevant Market Eircom shall, at the earliest possible time, but not later than fifteen (15) working days after the receipt of the request, advise all Undertakings that the request has been received and provide them with information regarding the request as set out in Section 10.31(ii) below;
- (ii) The information shall include a unique reference number to allow tracking of the request and all known details relevant to the request including but not limited to a copy of the request and a description of the key features and functionality requested;

- (iii) Unless otherwise agreed with ComReg, not later than forty (40) working days after receipt of the written request, Eircom shall publish an accurate description of the requested product, service or facility on its publicly available wholesale website;
- (iv) Unless otherwise agreed with ComReg, not later than eighty five (85) working days after receipt of the written request, Eircom shall confirm in writing to all Undertakings whether it agrees to provide the requested new or amended product, service or facility. Where the request is refused in full or in part, Eircom shall comply with Section 8.9 above in its response to the Undertaking that has made the request. In addition, Eircom shall advise all other Undertakings of a full or partial refusal and provide written reasons for its refusal, at the time of refusal. Where the product, service or facility proposed by Eircom differs from the original request, Eircom shall provide the objective reasons for such differences in writing to all Undertakings within the eighty five (85) working day timeframe;
- (v) Eircom shall, not later than eighty five (85) working days after receipt of the written request, identify the degree of priority that it proposes to assign to the development related to the Access request relative to all other developments, including Access requests and amendments proposed by Eircom, of regulated products, services or facilities in the Relevant Market, and advise all Undertakings of this degree of priority. In the event of the reprioritisation by Eircom of an Access request or requests, Eircom shall advise all Undertakings of such reprioritisation;
- (vi) Eircom shall for each such development provide all Undertakings with all other relevant documentation including but not necessarily limited to any revised Industry Process Manual, price lists or technical manuals;
- (vii) At all stages of the product development process Eircom shall make available and keep updated on its publicly available wholesale website all relevant documentation describing the product, service or facility which will be delivered for each development in sufficient detail to allow an Undertaking to be reasonably aware of the proposed key features, functionality and geographic reach of the product, service or facility, and any relevant limitations of the product, service or facility; and
- (viii) Eircom shall publish on its publicly available wholesale website the prioritisation process and the criteria used by Eircom in reaching decisions with respect to the prioritisation of product developments relative to each other.

11 OBLIGATION OF ACCOUNTING SEPARATION

- 11.1 Pursuant to Regulation 11 of the Access Regulations, Eircom shall have an obligation to maintain separated accounts in respect of the products, services and facilities falling within the scope of this Decision Instrument and the Relevant Market. All of the obligations in relation to accounting separation, set out at Appendices 1 and 2 of ComReg Decision D08/10, applying to Eircom and in force immediately prior to the Effective Date of this Decision Instrument, and relating to products, services and facilities falling within the scope of this Decision Instrument and the Relevant Market, shall be maintained in their entirety.

12 OBLIGATIONS RELATING TO PRICE CONTROL AND COST ACCOUNTING

COST ACCOUNTING

- 12.1 Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall maintain appropriate cost accounting systems in respect of products, services and facilities in the Relevant Market.

COST ORIENTATION

- 12.2 Pursuant to Regulation 13(1) of the Access Regulations, prices charged by Eircom to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 7 above shall be subject to a cost orientation obligation, with the exception of FTTH-based VUA.

ULMP and SLU

- 12.3 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by Eircom to any other Undertaking in relation to ULMP shall be the lower of:

- (i) a price equal to the average costs incurred by an efficient operator providing ULMP within the Modified LEA which shall be calculated using the Revised Copper Access Model. Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and a Top-Down HCA costing methodology; or
- (ii) the LLU rental charge as amended based on changes made by Eircom to the main parameter(s) of the Revised Copper Access Model. Any such amendment or changes would be subject to prior approval by ComReg.

- 12.4 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the price offered or charged by Eircom to any other Undertaking in relation to SLU shall be the lower of:

- (i) a price equal to the average costs incurred by an efficient operator providing SLU nationally which shall be calculated using the Revised Copper Access Model. Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and a Top-Down HCA costing methodology; or
- (ii) the SLU monthly rental charge as amended based on changes made by Eircom to the main parameter(s) of the Revised Copper Access Model. Any such amendment or changes to be subject to prior approval by ComReg.

Line Share

- 12.5 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to Line Share recovers no more than the incremental costs associated with the provision of Line Share, which shall be calculated using the Revised Copper Access Model.

CEI and Dark Fibre

- 12.6 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by Eircom to any other Undertaking in relation to Civil Engineering Infrastructure shall be no more than a price equal to the costs incurred by an efficient operator providing Civil Engineering Infrastructure, which shall be calculated using the Revised Copper Access Model. Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and a Top-Down HCA costing methodology.
- 12.7 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by Eircom to any other Undertaking in relation to Dark Fibre shall be no more than a price equal to the costs incurred by an efficient operator providing Dark Fibre, which shall be calculated using the Revised Copper Access Model. Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and a Top-Down HCA costing methodology.

12.8 Pursuant to Regulations 8, 9 and 13 of the Access Regulations and without prejudice to Section 12.6 of this Decision Instrument and Eircom's obligations contained in the Decision Instrument attached to ComReg Decision D08/10, Eircom shall submit annually to ComReg a reconciliation of Eircom's actual investment in Poles for the preceding financial year as well as the forecasted Pole investment consistent with the template contained in Annex 13 of ComReg Decision D03/16. The reconciliation statement referred to in this Section 12.8 shall be provided to ComReg in accordance with the procedure which governs the provision of Additional Financial Information contained in the Decision Instrument annexed to ComReg Decision D08/10 and shall be provided no later than seven months after the end of Eircom's financial year.

FTTC-based VUA and Exchange launched VUA

12.9 Without prejudice to the generality of Section 12.2 above, for the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to FTTC-based VUA and/or Exchange launched VUA is cost oriented.

Ancillary Services

12.10 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that it recovers no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of Ancillary Services to Current Generation WLA products, services or facilities and the provision of Ancillary Services to Next Generation WLA products, services or facilities, which shall be calculated using the Ancillary Services Cost Model.

12.11 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the price offered or charged by Eircom to any other Undertaking in relation to fault repair charges associated with Current Generation WLA products, services and facilities and Next Generation WLA products, services or facilities shall include an option of either:

- (i) a monthly fault repair charge of not more than €0.96 cent per End User line; or
- (ii) a one off per event fault repair charge of not more than €110 (excluding line test) or €117 (including line test).

In the event that the fault is on the Undertaking's network then Eircom shall charge the Undertaking a one-off fault charge of no more than €100.

MARGIN / PRICE SQUEEZE

- 12.12 Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall have an obligation not to cause a margin/price squeeze.
- 12.13 Pursuant to Regulation 13(1) of the Access Regulations and without prejudice to the generality of Section 12.12, Eircom shall have an obligation not to cause a margin/price squeeze between (a) Wholesale Local Access products, services and facilities it offers or provides and (b) products, services and facilities in wholesale markets downstream from the Relevant Market.
- 12.14 Pursuant to Regulation 13(1) of the Access Regulations and without prejudice to the generality of Section 12.12, Eircom shall have an obligation not to cause a margin/price squeeze between (a) Wholesale Local Access products, services and facilities it offers or provides and (b) retail products, services and facilities in retail markets downstream from the Relevant Market.

Wholesale Margin Squeeze Obligation

- 12.15 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.13 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to WLA shall not cause a margin squeeze between (a) Wholesale Local Access products, services or facilities; and (b) Wholesale Central Access products, services and facilities provided in the WCA Markets.
- 12.16 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.13 above and pursuant to Regulations 8 and 13 of the Access Regulations, the price at which Eircom sells or offers a Downstream Wholesale Service must be greater than the sum of: (i) the ULMP Cost Stack and (ii) the unavoidable costs of a Reasonably Efficient Operator that must be incurred in order to provide a service equivalent to the relevant Downstream Wholesale Service.
- 12.17 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.13 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to FTTH-based VUA shall not cause a margin/price squeeze between (a) FTTH-based VUA; and (b) FTTH-based Bitstream in WCA Markets.

Retail Margin Squeeze Obligation

- 12.18 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.14 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to Wholesale Local Access (including the wholesale price for products, services, facilities, Promotions and Discounts) shall not cause a margin/price squeeze between (a) Next Generation WLA products, services and facilities; and (b) the retail price of a retail product(s), whether sold singly or as part of a Bundle, delivered by Next Generation WLA.
- 12.19 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.14 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to Wholesale Local Access (including the wholesale price for products, services, facilities, Promotions and Discounts) provided in the area corresponding to the footprint of the Urban WCA Market shall not cause a margin/price squeeze between (a) FTTH-based VUA; and (b) the retail price of a retail product, sold singly, which is delivered by FTTH-based VUA.
- 12.20 In circumstances where more than one retail product is provided on the basis of a single Eircom wholesale product, service or facility, the retail price of a retail product for the purposes of Sections 12.18 and 12.19 above shall be the weighted average (by number of Subscribers) of the individual retail prices of retail products provided on the basis of that Eircom wholesale product, service or facility.

13 STATEMENT OF COMPLIANCE

- 13.1 Pursuant to Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations Eircom shall submit to ComReg a written statement of compliance (Statement of Compliance) that adequately demonstrates its compliance with its regulatory obligations in the Relevant Market, to include the following:
- (i) a full and true written statement, signed by a Director of Eircom authorised to provide such statements on behalf of the board of Directors of Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations and in which:
 - a. the Directors confirm that, in their opinion, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its obligations as set out in this Decision Instrument; and

- b. the Directors explain the basis upon which the confirmation in subparagraph a. above is made, including a description of the information relied upon, and the process followed, by the Directors of Eircom in order to be satisfied that to the best of their knowledge the arrangements, structures and internal controls in place provide reasonable assurance that Eircom is in compliance with the obligations set out in this Decision Instrument.
- (ii) a description and explanation of the governance measures implemented by Eircom to ensure that it is, and remains, in compliance with the obligations set out in this Decision Instrument, in particular:
 - a. a description and explanation of the relevant reporting structures and reporting processes implemented by Eircom; and
 - b. the information relied upon and the process followed by Eircom's management to assess the operation and effectiveness of the processes used to identify and mitigate risks of non-compliance in their areas of responsibility.
 - (iii) a description of the risks identified and the controls developed to mitigate potential risks of non-compliance with Eircom's regulatory obligations, as they relate to the categories of activities in Section 13.2 below and shall include the following in particular:
 - a. a description of the purpose of each process which was analysed for risks of non-compliance;
 - b. a detailed description of the risk analysis process, to include the following:
 - I. a description of the expertise employed by Eircom;
 - II. a list of all material including all relevant documentation;
 - III. a description of how the material and expertise was used.
 - c. a detailed description of the control development process to include the following:
 - I. a description of the expertise employed by Eircom;
 - II. a list of all material including all relevant documentation used;
 - III. a description of how the material and expertise was used;
 - IV. a description of the process used to assess the effectiveness of the controls.

- d. a description of the operation of controls including the method employed by Eircom to record and store the data produced when controls are operated;
- e. a description of and the identification of the repository in which the data from the operation of each control is recorded and stored.

13.2 The obligations set out in this Section 13 shall apply, but for the avoidance of doubt, are not limited to the following categories of activities:

- (i) Pre-provisioning, provisioning and service assurance for products, services and facilities;
- (ii) Product development including product enhancements, and pre product development screening of Access requests;
- (iii) Product prioritisation and investment decisions;
- (iv) Access to shared resources including IT and product development resources; and
- (v) The management of information, both Structured Information and Unstructured Information, in conformance with regulatory requirements.

13.3 The documentation referred to in this Section 13 shall be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the Statement of Compliance for completeness and accuracy. Such documentation and information shall also enable ComReg, or a third party as determined by ComReg, to assess Eircom's risk assessment and control and governance measures in order to enable ComReg to determine whether Eircom has provided reasonable assurance to ComReg that Eircom is compliant and will remain compliant with the obligations set out in this Decision Instrument.

13.4 Eircom shall clearly identify, explain, document and demonstrate the following in particular:

- (i) In respect of the standard of Equivalence of Inputs, any and all differences as between systems and processes used to supply OAOs and Eircom's downstream arm setting out why it believes that any such differences are very minor and insignificant and can be objectively justified; and
- (ii) In respect of the standard of Equivalence of Outputs, any and all differences as between systems and processes used to supply OAOs and Eircom's downstream arm. The explanation shall include a description as to how and what controls are in place to ensure an Equivalence of Outputs standard notwithstanding the differences in systems and processes used.

- 13.5 Eircom shall ensure that the Statements of Compliance are updated as required to reflect material changes to the documentation and information detailed in this Section 13. Each such update shall be provided to ComReg within one (1) month of the update being made by Eircom.
- 13.6 Updates or changes to any Statement of Compliance provided to ComReg must be presented such that the changes are highlighted and the Statement of Compliance documents include a Version Control and Revision History.
- 13.7 Eircom shall publish the Statement of Compliance, and updates to the Statement of Compliance, on its publicly available wholesale website within one (1) month of providing it to ComReg, unless otherwise agreed with ComReg.
- 13.8 Unless otherwise agreed with ComReg, Eircom shall provide a Statement of Compliance, as referred to in this Section 13, to ComReg within six (6) months of the Effective Date of this Decision. Eircom shall also provide a Statement of Compliance:
- (i) in the case of any offer of a new WLA product, service or facility, seven (7) months in advance of its being made available;
 - (ii) in the case of any change to an existing WLA product, service or facility, three (3) months in advance of it being made available;
 - (iii) as otherwise may be required by ComReg.

PART III - OPERATION AND EFFECTIVE DATE (SECTIONS 14 TO 17 OF THE DECISION INSTRUMENT)

14 STATUTORY POWERS NOT AFFECTED

- 14.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument).

15 MAINTENANCE OF OBLIGATIONS

- 15.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg, applying to Eircom, and in force immediately prior to the Effective Date of this Decision Instrument, continue in force and Eircom shall comply with the same.
- 15.2 For the avoidance of doubt, to the extent that there is any conflict between a Decision Instrument dated prior to the Effective Date and Eircom's obligations set out herein, it is the latter which shall prevail.

15.3 If any Section(s), clause(s), or provision(s), or portion(s) thereof, contained in this Decision Instrument is(are) found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that(those) Section(s), clause(s), or provision(s), or portion(s) thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining Section(s), clause(s), or provision(s), or portion(s) thereof, of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument or other Decision Instruments.

16 IMPOSITION OF NEW OBLIGATIONS AND WITHDRAWAL OF SMP OBLIGATIONS

16.1 Pursuant to Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations, the following Decision Instruments, and/or ComReg Documents and/or Decisions shall be withdrawn when Sections 4 to 13 (inclusive) of this Decision Instrument come into effect:

- (i) The Decision Instrument contained in Appendix C of ComReg Decision D05/10;
- (ii) The Decision Instrument contained in Annex 1 of ComReg Decision D03/13;
- (iii) The Decision Instrument contained in Annex 4 of ComReg Decision D04/13;
- (iv) The Decision Instrument contained in Annex 1 of ComReg Decision D03/16; and
- (v) The obligations pertaining to VUA that were included in (a) the Decision Instrument contained in Annex 2 (entitled "Annex: 2 Decision Instrument - WBA Market") of ComReg Decision D03/13 and (b) the Decision Instrument contained in Section 8 of ComReg Decision D06/11.

17 EFFECTIVE DATE

17.1 The Effective Date of this Decision Instrument shall be the date of its notification to Eircom and it shall remain in force until further notice by ComReg.

**JEREMY GODFREY
COMMISSIONER
THE COMMISSION FOR COMMUNICATIONS REGULATION
THE 19TH DAY OF NOVEMBER 2018**

Appendix: 21 Wholesale Central Access: Decision Instrument

1 STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

- 1.1 This Decision Instrument (“Decision Instrument”) is made by the Commission for Communications Regulation (“ComReg”) and relates to the market for wholesale central access provided at a fixed location as identified by the European Commission in the 2014 Recommendation and analysed by ComReg in ComReg Decision D10/18.
- 1.2 This Decision Instrument is made:
- (i) Pursuant to and having had regard to Sections 10 and 12 of the Communications Regulation Act 2002 (as amended); Regulation 6(1) of the Access Regulations and Regulation 16 of the Framework Regulations;
 - (ii) Having taken the utmost account of the 2014 Recommendation, the Explanatory Note and the SMP Guidelines;
 - (iii) Having, where applicable, pursuant to Section 13 of the Communications Regulation Act 2002 (as amended) complied with Ministerial Policy Directions;
 - (iv) Having had regard to the analysis and reasoning set out in ComReg Document No. 16/96 and having taken account of the submissions received from interested parties in response thereto following a public consultation pursuant to Regulation 12 of the Framework Regulations;
 - (v) Having consulted with the Competition and Consumer Protection Commission, further to Regulation 27 of the Framework Regulations;
 - (vi) Having notified the draft measure and the reasoning on which the measure is based to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Regulation 13 and Regulation 14 of the Framework Regulations and having taken utmost account of any comments made by these parties;
 - (vii) Pursuant to Regulations 25, 26 and 27 of the Framework Regulations and Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations; and
 - (viii) Having regard to the analysis and reasoning set out in ComReg Decision D10/18.

- 1.3 The provisions of ComReg Document No. 16/96 and ComReg Decision D10/18, as well as ComReg Document No. 17/26 and ComReg Decision D11/18, together with ComReg Document No. 17/51 and ComReg Decision D12/18 shall, where appropriate, be construed consistently with this Decision Instrument. For the avoidance of doubt, however, to the extent that there is any conflict between a decision instrument dated prior to the Effective Date (as defined in Section 2.1 of this Decision Instrument) and this Decision Instrument, this Decision Instrument shall prevail.

PART I - GENERAL PROVISIONS (SECTIONS 2 TO 5 OF THE DECISION INSTRUMENT)

2 DEFINITIONS

- 2.1 In this Decision Instrument, unless the context otherwise suggests:

“Access” shall have the same meaning as under Regulation 2 of the Access Regulations;

“Access Path” means the connection from the NTU/ONT in the End User’s premises to the Point of Handover. The Points of Handover for physical unbundling are the MDF (for metallic) and the ODF (for fibre) in the Exchange, and the Point of Handover for non-physical unbundling (virtual access) is the WEIL at the serving Aggregation Node for the End User, i.e., at the MPoP;

“Access Regulations” means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), as may be amended from time to time or replaced with equivalent effect;

“Active Assets” in the context of this Decision Instrument means the line card, digital subscriber line access multiplexers and the broadband remote access servers associated with the provision of Standalone Broadband;

“Aggregation Node” means a network concentration point for Access Paths;

“Ancillary Services” are a subset of Associated Facilities and shall include services such as Migrations, fault repair and access connections, Co-Location, In-Building Handover, In-Span Handover and Customer-Sited Handover;

“Associated Facilities” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Authorisation Regulations” means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011), as may be amended from time to time or replaced with equivalent effect;

“Backhaul” means the provision of dedicated transmission capacity (contended or uncontended in accordance with an OAO’s requirement) by Eircom at various bandwidths, using an appropriate mechanism (e.g. Ethernet or fibre) between an OAO’s equipment at the Co-Location site and the OAO’s nominated Point of Handover or between an OAO’s equipment at the Co-Location site and the Eircom Exchange;

“BAFO” means the best and final offer made by Eircom to Undertakings in respect of a new or amended SLA;

“BEREC” means the Body of European Regulators for Electronic Communications, as established pursuant to Regulation (EC) No. 1211/2009 of the European Parliament and of the Council of 25 November 2009;

“Bitstream” means a wholesale product which consists of an Access Path to the End User premises and a transmission service to a defined set of Points of Handover;

“Bitstream Ethernet Access” or **“BEA”** is a specific implementation of the Bitstream Wholesale product. The BEA product is described in detail in Eircom’s product description V35 dated 13 June 2017 (as may be amended or supplemented from time-to-time);

“Bitstream Internet Protocol” or **“BIP”** is a specific implementation of the Bitstream Wholesale product. The BIP product is described in detail in Eircom’s product description V35 dated 13 June 2017 (as may be amended or supplemented from time-to-time);

“Bitstream Managed Backhaul” or **“BMB”** is a specific implementation of the Bitstream Wholesale product. The BMB product is described in detail in Eircom’s product description V35 dated 13 June 2017 (as may be amended or supplemented from time-to-time);

“Bitstream Plus” is a specific implementation of the Bitstream Wholesale product. The Bitstream Plus product is described in detail in Eircom’s product description “NGA Product Description Bitstream Plus” V3.0 dated 16 June 2017;

“Bitstream Soft Migration” means the facility whereby an End User can migrate from SB-WLR with Current Generation Bitstream or Next Generation Bitstream to standalone Current Generation Bitstream or Next Generation Bitstream and without the need for physical network intervention at the time of provisioning and must include the porting of their telephone number from the current service provider, if required;

“Bottom Up Long Run Average Incremental Cost plus” or **“BU-LRAIC +”** means the methodology used to estimate the “LRAIC plus” of an efficient operator which is derived from an economic and/or engineering model of an efficient network. The LRAIC plus costs are the average efficiently incurred directly attributable variable and fixed costs, including an appropriate apportionment of joint and common costs;

“Bulk Migration” means the facility whereby an Undertaking can have multiple Migrations facilitated via a single request;

“Bundle” means, for the purposes of this Decision Instrument, a package of retail products or retail services, consisting of more than one service, which is on offer or on sale by Eircom;

“Class of Service” means a network traffic management technique which involves the autonomous treatment of traffic at a single router, switch, or equivalent equipment using classes to group and manage traffic that have common forwarding characteristics;

“Co-Location” shall have the same meaning and description as under Part B “Co-Location services” of the Schedule to the Access Regulations but shall also for the purposes of this Decision Instrument include access to services and facilities (at Eircom Exchange(s) or their equivalent) to facilitate access to Next Generation Bitstream and Current Generation Bitstream products;

“Communications Regulation Act 2002 (as amended)” means the Communications Regulation Act 2002 (No. 20 of 2002), as amended;

“Competition and Consumer Protection Commission” means the body established under section 9 of the Competition and Consumer Protection Act 2014 and formerly the Competition Authority and the National Consumer Agency;

“ComReg” means the Commission for Communications Regulation, established under Section 6 of the Communications Regulation Act 2002 (as amended);

“ComReg Decision D08/10” means ComReg Document No. 10/67, entitled “Response to Consultation Document and Final Direction and Decision, Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited”, dated 31 August 2010;

“ComReg Decision D05/11” means ComReg Document No. 11/45, entitled “Response to Consultation and Decision on the Introduction of Key Performance Indicators for Regulated Markets”, dated 29 June 2011;

“ComReg Decision D06/11” means ComReg Document No. 11/49, entitled “Response to Consultation and Decision Market Review: Wholesale Broadband Access (Market 5)”, dated 8 July 2011;

“ComReg Decision D06/12” means ComReg Document No. 12/32, entitled “Wholesale Broadband Access: Further specification to the price control obligation and an amendment to the transparency obligation”, dated 5 April 2012;

“ComReg Decision D03/13” means ComReg Document No. 13/11, entitled “Next Generation Access (‘NGA’): Remedies for Next Generation Access Markets”, dated 31 January 2013;

“ComReg Decision D11/14” means ComReg Document No. 14/73R, entitled “Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream”, dated 09 July 2014;

“ComReg Decision D03/16” means ComReg Document No.16/39, entitled “Pricing of Eir’s Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision”, dated 18 May 2016. For the avoidance of doubt, the withdrawal of Annex 2 of ComReg Decision D03/16 pursuant to Section 16.2 (e) of this Decision Instrument is without prejudice to the remainder of ComReg Decision D03/16 which shall remain in force unless and until otherwise amended, revoked or replaced;

“ComReg Decision D10/18” means ComReg Document No. 18/94, entitled “Market Review - Wholesale Local Access (WLA) provided at a Fixed Location & Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products: Response to Consultation and Decision”, dated 19 November 2018;

“ComReg Document No. 05/24” means ComReg Document No. 05/24, entitled “Response to Consultation, Guidelines on the treatment of confidential information, Final text of Guidelines”, dated 22 March 2005;

“ComReg Document No. 16/96” means ComReg Document No. 16/96, entitled “Market Reviews: Wholesale Local Access (WLA) provided at a Fixed Location; Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products: Consultation and Draft Decision”, dated 11 November 2016;

“ComReg Document No. 17/26” means ComReg Document No. 17/26, entitled “Pricing of wholesale services in the Wholesale Local Access (WLA) market and in the Wholesale Central Access (WCA) markets: Further specification of price control obligations in Market 3a (WLA) and Market 3b (WCA)”, dated 7 April 2017;

“ComReg Document No. 17/51” means ComReg Document No. 17/51, entitled “Consultation on Price control: obligations relating to Bundles - Further specification of the price control obligation not to cause a margin squeeze: FACO and WLA (Market 3a) and WCA (Market 3b): Consultation and Draft Decision”, dated 9 June 2017;

“Consumer” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Current Generation Bitstream” or **“Current Generation Wholesale Central Access”** or **“Current Generation WCA”** means Wholesale Central Access offered or provided exclusively over Eircom’s copper access network infrastructure and its Associated Facilities, but excludes Exchange launched Bitstream;

“Customer-Sited Handover” or **“CSH”** means the connection from the Eircom network to an OAO’s equipment in the OAO’s premises, which includes the installation of an Eircom NTU at the OAO’s premises;

“Decision Instrument” means this decision instrument which is made pursuant to *inter alia* Regulations 8, 9, 10,11,12, 13 and 18 of the Access Regulations;

“Director” shall have the same meaning as under Section 2 of the Companies Act 2014;

“Discount” means an offer or sale of a product, service or facility at less than its standard price, for example, a price reduction, including a volume related price reduction, a rebate, a reimbursement, a refund, a set-off and any other similar words or expressions;

“Edge Node Handover” or **“ENH”** means the connection from the Eircom network through a dedicated Aggregation Node interface to the OAO’s equipment;

“Effective Date” means the date set out in Section 17 of this Decision Instrument;

“Eircom” means Eircom Limited, and its subsidiaries and any related companies, and any Undertaking which it owns or controls, and any Undertaking which owns or controls Eircom Limited, and its successors and assigns. For the purpose of this Decision Instrument, the terms “subsidiary” and “related company” shall have the meaning ascribed to them in the Companies Act 2014;

“Electronic Communications Network(s)” or **“ECN(s)”** shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Electronic Communications Service(s)” or **“ECS(s)”** shall have the same meaning as under Regulation 2 of the Framework Regulations;

“End User(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations. For the avoidance of doubt, End User(s) shall be deemed to include any natural or legal person who facilitates or intends to facilitate the provision of public communications networks or publicly available electronic communications services to other End Users and who is not acting as an Undertaking;

“Equivalence of Inputs” means the provision of products, services, facilities and information by the SMP Undertaking to OAOs such that such products, services, facilities, and information are offered and/or provided to OAOs within the same timescales, at the same price, functionality, service and quality levels and on the same terms and conditions and by means of the same systems and processes as the SMP Undertaking provides to itself. The systems and processes shall operate in the same way and with the same degree of reliability and performance as between OAOs and the SMP Undertaking’s provision to itself;

“Equivalence of Outputs” means the provision of products, services, facilities, and information by the SMP Undertaking to OAOs such that such products, services, facilities, and information are offered and/or provided to OAOs in a manner which achieves the same standards in terms of functionality, price, terms and conditions, service and quality levels as the SMP Undertaking provides to itself, albeit potentially using different systems and processes;

“Ethernet” means a technology that supports data transfer between network Nodes at Layer 2 of the OSI reference model;

“Exchange” means an Eircom network premises or equivalent facility used to house network and associated equipment and may include a Remote Subscriber Unit (RSU). The Exchange sometimes, but not always, houses the MPoP;

“Exchange Area(s)” means the geographic area(s) that is/are served by the relevant Exchange;

“Exchange launched Bitstream” means that the active equipment that is required to provide the service is housed in an Eircom Exchange building or equivalent;

“(the) Explanatory Note” means the Commission Staff Working Document: Explanatory Note accompanying the 2014 Recommendation (9 October 2014, SWD (2014) 298);

“Fibre to the Cabinet” or **“FTTC”** means fibre to the cabinet which is a variant of the FTTN access network architecture where the Node used to house active equipment is the street cabinet;

“Fibre to the Home” or **“FTTH”** means an access network architecture where fibre optic cable is used to connect the End User premises to the ODF in an Exchange;

“Fibre to the Node” or **“FTTN”** means an access network architecture where fibre optic cable is used to connect a Node in the local access network to the ODF in an Exchange;

“Flexible Interconnection Services” means the use of Interconnection Services at any technically feasible point in the network hierarchy;

“Framework Regulations” means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), as may be amended from time to time or replaced with equivalent effect;

“FTTC-based Bitstream” means Bitstream that is based on FTTC;

“FTTH-based Bitstream” means Bitstream that is based on FTTH;

“Historical Cost Accounts” or **“HCA”** means the historical cost accounts which Eircom is required to publish in accordance with ComReg Decision D08/10;

“In-Building Handover” means the connection from the Eircom network to the Undertaking’s equipment within the Exchange, or equivalent facility;

“Industry Process Manual” means the industry process manual to be made available by Eircom which sets out operational processes concerning WCA products, services and facilities and includes, but is not limited to, the Bitstream IPM V40_0 dated 01 May 2018 and the NGA Product Description Bitstream Plus V3_0 16 June 20 17 (as may be amended from time-to-time);

“In-Span Handover” means the connection between the Exchange and the Undertaking’s nominated Point of Handover;

“Interconnection” shall have the same meaning as under Regulation 2 of the Access Regulations, and for the purposes of this Decision Instrument includes, but is not limited to, the Eircom WEIL service;

“Key Performance Indicator(s)” or **“KPI(s)”** means a measure(s) of the standard(s) of product, service or facility provided by Eircom to OAOs and by Eircom to itself;

“MDF” means main distribution frame;

“Metropolitan Point of Presence” or **“MPoP”** means the point of inter-connection between the access and core networks of an Undertaking;

“Migration(s)” means where the upstream wholesale input used to supply a retail service is changed whilst maintaining services to the End User, irrespective of whether or not the supplier at the retail level changes. For the avoidance of doubt, Migrations include but are not limited to migrations:-(i) between all Next or Current Generation WCA services in any direction; (ii) between Next or Current Generation WLA and Next or Current Generation WCA in any direction; (iii) Bitstream Soft Migrations; and (iv) Bulk Migration;

“Milestones” means the key points in Eircom’s product development process that would be reasonably relied upon by Undertakings to track the progress of an Access request in that process, including, *inter alia*, Product Development Decision Points and points of transition associated with analysis, design, development and launch stages for meeting the Access request and the date on which the product, service or facility will be made available to Undertakings;

“Ministerial Policy Directions” for the purposes of this Decision Instrument means the policy directions made by Dermot Ahern TD, then Minister for Communications, Marine and Natural Resources, dated 21 February 2003 and 26 March 2004;

“Multicast” means a service that accepts a single copy of designated data streams from the Undertaking and distributes these data streams within the Eircom network to multiple End Users;

“Network Termination Unit” or **“NTU”** means the physical interface which provides the service demarcation or Point of Handover of the wholesale service within the customer premises;

“Next Generation Access” or **“NGA”** means wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband and other access services with enhanced characteristics (such as higher throughput) as compared to those provided over exclusively copper access networks;

“Next Generation Bitstream” or **“Next Generation Wholesale Central Access”** or **“Next Generation WCA”** means Wholesale Central Access provided over Eircom’s FTTC-based Bitstream, FTTH-based Bitstream, Exchange launched Bitstream and its Associated Facilities;

“Node” means any location or concentration point in the access network (excluding termination points at End Users’ premises) which houses equipment for the purpose of providing services to End Users;

“Non-Disclosure Agreement” means the non-disclosure agreement contained within the WBARO;

“ODF” means optical distribution frame;

“ONT” or **“Optical Network Terminal”** means the device that terminates the fibre Access Path at the End User’s premises;

“OSI” means open systems interconnection;

“OSS” means operational support systems;

“Other Authorised Operator(s)” or **“OAO(s)”** means an Undertaking that is not Eircom, providing or intending to provide an ECN or an ECS, and that is deemed to be authorised under Regulation 4 of the Authorisation Regulations;

“Point of Handover” means the physical point at which two networks are interconnected to allow traffic to pass between these networks;

“Product Description” means the product description to be made available by Eircom concerning WCA products, services and facilities and includes, but not limited to, the Bitstream Service Product Description V35 dated 13 June 2017, and the NGA Product Description Bitstream Plus V3 dated 16 June 2017 (as may be amended time-to-time);

“Product Development Decision Point” means a point during the development process at which Eircom takes or is due to take a decision to advance, retard or terminate the development of a product, service or facility;

“Product Development Roadmap” means a document containing a list of all proposed, planned and in progress developments for regulated products, services and facilities, and related information, as required of Eircom in accordance with Section 10.26 of this Decision Instrument;

“Promotion” means an offer in respect of a product, service or facility which is available for a finite period of time and which offers a price reduction;

“Regional WCA Market” means the market as defined in Section 4.2(ii) of this Decision Instrument;

“(the) Relevant Market(s)” means the markets described in Section 4 of this Decision Instrument and comprise the Urban WCA Market and the Regional WCA Market;

“Revised Copper Access Model” means the model, as amended from time-to-time (subject to approval by ComReg), used by ComReg and Eircom to assess Eircom’s compliance with the obligations contained in Section 12 of this Decision Instrument. The model calculates costs based on both Top Down HCA and BU-LRAIC+ costing methodologies. The operation and details of the Revised Copper Access Model are more particularly described in Section 5 of ComReg Decision D03/16;

“Revision History” means a documented list of changes to the Statement of Compliance as required under Section 13 of this Decision Instrument. The list, which contains the changes from the previous version of the Statement of Compliance, should be maintained and printed in a dedicated and indexed Section of each Statement of Compliance;

“SB-WLR” means single billing wholesale line rental;

“Service Assurance Systems Interface” means the system or systems to which OAOs connect to allow them to log faults relating to regulated services, in this case WCA services. This includes OAOs logging faults by submission of service assurance orders on an order handling system, for example, the Unified Gateway or by directly logging faults on to Eircom’s Fault Handling system;

“Service Credit(s)” means a financial credit which is provided by Eircom to an OAO in circumstances where Eircom has failed to meet the service levels which Eircom commits to from time-to-time in its SLA, or on the occurrence of events or the application of criteria specified in the SLA;

“Service Level Agreement(s)” or **“SLA(s)”** mean legally binding contracts between Eircom and OAOs in relation to the service levels which Eircom commits to from time-to-time, as more particularly set out in the WBARO. For the avoidance of doubt, however, these service levels must comply with the principles set out in this Decision Instrument and to the extent that there is any conflict between the SLAs and Eircom’s obligations set out in this Decision Instrument, it is the latter which shall prevail;

“Significant Market Power obligation(s)” or **“SMP obligation(s)”** are those obligations as more particularly described in Part II below;

“Significant Market Power Undertaking” or **“SMP Undertaking”** means the Undertaking designated in Section 5 of this Decision Instrument as having Significant Market Power;

“SLA Negotiation Period” means the duration of time required by Eircom to close negotiations between it and OAOs and make a BAFO in respect of an amended or new SLA;

“(the) SMP Guidelines” means the European Commission guidelines of 11 July 2002 on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03) (OJ C 165, 11.7.2002, p.6), as replaced by the European Commission guidelines of 7 May 2018 on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (OJ C 159, 7.5.2018, p.1);

“Standalone Broadband” means broadband service delivered without a PSTN voice telephony service;

“Statement of Compliance” means the written statement prepared by Eircom in accordance with Section 13 of this Decision Instrument;

“Structured Information” means information that is documented and managed through an established business process in a formal manner and includes memos, email messages, letters, order forms, invoices, agendas and reports;

“Subscriber(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Top-Down HCA” means the methodology in which the HCA and network information of the regulated firm are used as the starting point for calculating the costs of relevant services. These inputs may subsequently be adjusted to reflect efficiencies;

“Undertaking(s)” shall have the same meaning as under Regulation 2 of the Framework Regulations;

“Unified Gateway” is an interface to Eircom’s OSS used by Undertakings to avail of regulated products, services and facilities;

“Unstructured Information” means information that is documented and managed in a less formal manner than Structured Information and includes information passed between individuals or business units through informal communications;

“Urban WCA Market” means the market as defined in Section 4.2(i) of this Decision Instrument;

“Version Control” means a standardised regime for the management of changes to documents as it relates to Section 13 of this Decision Instrument. Different versions of the Statement of Compliance should be identified by a number, letter or code, associated with a date and timestamp. Revision History is included as part of the Version Control regime;

“Wholesale Bitstream Access Reference Offer” or **“WBARO”** means the offer of contract by Eircom to Undertakings in relation to WCA, as may be amended from time-to-time. For the avoidance of doubt the WBARO includes the documents which are expressly referred to as being part of the WBARO, and any associated or subordinate documents relied upon to meet Eircom’s Access obligations as set out in this Decision Instrument, including but not limited to the Industry Process Manual and the Product Descriptions. To the extent that there is any conflict between the WBARO and Eircom’s obligations now set out herein, it is the latter which shall prevail;

“WBARO Change Matrix” means the table of information collated by Eircom which specifies the non-price related amendments made to its WBARO, including the date(s) on which such amendments come into effect;

“WBARO Price List Change Matrix” means the table of information collated by Eircom which specifies the amendments made to the WBARO Price List(s) which are contained in its WBARO, including the date(s) on which such amendments come into effect;

“WBARO Price List(s)” means the list of charges collated by Eircom for products, services and facilities which are to be provided and specified in its WBARO in accordance with the requirements of this Decision Instrument;

“Wholesale Central Access” or **“WCA”** means wholesale central access provided at a fixed location for mass market products as defined in Section 9 of ComReg Decision D10/18;

“Wholesale Ethernet Interconnection Link” or **“WEIL”** is the interconnection service provided by Eircom which enables the handover of End User traffic for various wholesale product types including but not limited to Bitstream Plus, VUA and Next Generation Access wholesale products;

“Wholesale Local Access” or **“WLA”** means wholesale local access provided at a fixed location as defined in Section 4 of ComReg Decision D10/18;

“(the) 2014 Recommendation” means the European Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 295, 11.10.2014, p. 79).

3 SCOPE AND APPLICATION

- 3.1 This Decision Instrument is binding upon Eircom and Eircom shall comply with it in all respects.
- 3.2 This Decision Instrument applies to Eircom in respect of activities falling within the scope of the Relevant Markets defined in Section 4.2 of this Decision Instrument.
- 3.3 This Decision Instrument, pursuant to Regulation 8 of the Access Regulations, withdraws certain obligations previously imposed upon Eircom, as more particularly set out in Section 16 of this Decision Instrument.

4 MARKET DEFINITION

- 4.1 This Decision Instrument relates to the wholesale market for Wholesale Central Access provided at a fixed location as identified by the European Commission in the 2014 Recommendation and analysed by ComReg in ComReg Decision D10/18. For the purposes of this Decision Instrument, ComReg identifies two markets as more particularly defined in Section 4.2 below.
- 4.2 Pursuant to Regulation 26 of the Framework Regulations and in accordance with the 2014 Recommendation, the Explanatory Note and taking the utmost account of the SMP Guidelines, in accordance with the principles of competition law, the Relevant Markets defined in this Decision Instrument are:-
- (i) the wholesale market for central access in urban areas as more particularly defined in accordance with the criteria set out in Section 9 of ComReg Decision D10/18 and includes those Exchange Areas as listed in Appendix: 11 of ComReg Decision D10/18 which is referred to in this Decision Instrument as the Urban Wholesale Central Access market or the 'Urban WCA Market';
 - (ii) the wholesale market for central access in regional areas as more particularly defined in accordance with the criteria set out in Section 9 of ComReg Decision D10/18 and includes those Exchange Areas as listed in Appendix: 11 of ComReg Decision D10/18 which is referred to in this Decision Instrument as the Regional Wholesale Central Access market or the 'Regional WCA Market';
- 4.3 The Regional WCA Market and Urban WCA Market are more particularly defined in Section 9 of ComReg Decision D10/18. It is hereby decided that the Regional WCA Market is susceptible to *ex ante* regulation and that the Urban WCA Market is not susceptible to *ex ante* regulation.

5 DESIGNATION OF UNDERTAKING WITH SIGNIFICANT MARKET POWER ("SMP")

- 5.1 Pursuant to Regulation 25 and Regulation 27 of the Framework Regulations and taking the utmost account of the SMP Guidelines, having determined that the Regional WCA Market is not effectively competitive, Eircom is designated as having SMP in the Regional WCA Market in which it operates.

PART II - SMP OBLIGATIONS (SECTIONS 6 TO 13 OF THE DECISION INSTRUMENT) IN RELATION TO WHOLESALE CENTRAL ACCESS PROVIDED IN THE REGIONAL WCA MARKET

6 SMP OBLIGATIONS IN RELATION TO WHOLESALE CENTRAL ACCESS PRODUCTS, SERVICES AND FACILITIES

6.1 ComReg is imposing certain SMP obligations on Eircom in accordance with and pursuant to Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations, as detailed further in Sections 7 to 13 below in respect of Wholesale Central Access in the Regional WCA Market.

7 OBLIGATIONS TO PROVIDE ACCESS

7.1 Pursuant to Regulation 12(1) of the Access Regulations, Eircom shall meet all reasonable requests from Undertakings for the provision of Access to Wholesale Central Access including Associated Facilities.

7.2 Without prejudice to the generality of Section 7.1 of this Decision Instrument and pursuant to Regulation 12(2) of the Access Regulations, Eircom shall provide and grant Access to Undertakings for the following particular products, services and Associated Facilities:-

- (i) Current Generation Bitstream which includes the following:
 - a. Bitstream Managed Backhaul;
 - b. Bitstream Internet Protocol; and
 - c. Bitstream Ethernet Access;
- (ii) Next Generation Bitstream, which includes the following:
 - a. FTTC-based Bitstream;
 - b. FTTH-based Bitstream; and
 - c. Exchange launched Bitstream;
- (iii) Standalone Broadband (Current Generation and Next Generation);
- (iv) Backhaul;
- (v) Associated Facilities to Next Generation Bitstream such as Multicast and Class of Service;
- (vi) Interconnection services, to include the following:
 - a. In-Building Handover;
 - b. In-Span Handover;
 - c. Customer-Sited Handover;

- d. Edge Node Handover; and
 - e. Flexible Interconnection services;
 - (vii) Co-Location for Interconnection services;
 - (viii) Migration(s).
- 7.3 Without prejudice to the generality of Sections 7.1 and 7.2 of this Decision Instrument, Eircom shall offer and continue to offer and provide Access to the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument in accordance with the product descriptions and terms and conditions of supply or use, as specified in the current version of the WBARO (i.e. WBARO version 4.0 dated 22 June 2017 as published on Eircom's publicly available wholesale website) as may be amended from time-to-time, and, in addition, in accordance with Eircom's obligations under this Decision Instrument.
- 7.4 The access obligations set out in this Section 7 shall apply irrespective of the electronic communications service that the requested access product, service or facility shall be used to provide. For the avoidance of doubt, the purpose for which the access request is made is not limited to the provision by the Undertaking of services to End Users.
- 7.5 Without prejudice to the general obligations set out in Sections 7.1 to 7.4 of this Decision Instrument, Eircom shall:
- (i) pursuant to Regulation 12(2)(b) of the Access Regulations, negotiate in good faith with Undertakings requesting Access;
 - (ii) pursuant to Regulation 12(2)(c) of the Access Regulations, not withdraw Access to facilities already granted without the prior approval of ComReg and in accordance with terms and conditions as may be determined by ComReg;
 - (iii) pursuant to Regulation 12(2)(e) of the Access Regulations, grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of products, services or facilities; and
 - (iv) pursuant to Regulation 12(2)(h) of the Access Regulations, provide Access to OSS or similar software systems necessary to ensure fair competition in the provision of services (including those products, services and facilities described in this Section 7).

8 CONDITIONS ATTACHED TO THE ACCESS OBLIGATION

- 8.1 Pursuant to Regulation 12(3) of the Access Regulations, Eircom shall, in relation to the obligations set out in Section 7 above, grant Undertakings Access in a fair, reasonable and timely manner.

8.2 Without prejudice to the generality of Section 8.1 above, pursuant to Regulation 12(3) of the Access Regulations, Eircom shall in relation to the obligations set out in Section 7 above and in the provision of Access to the Unified Gateway:

- (i) conclude, maintain and update, as appropriate, legally binding and fit-for-purpose SLAs which shall encourage an efficient level of performance;
- (ii) negotiate in good faith with Undertakings in relation to the conclusion of legally binding and fit-for-purpose SLAs (either in the case of a new SLA or an amendment to an existing SLA);
- (iii) provide Undertakings, at the end of the SLA Negotiation Period, with Eircom's best and final offer (BAFO) in respect of the relevant SLA which, for the avoidance of doubt, shall: be fit-for-purpose; include all relevant information that is required under this Section 8.2; and accord with the principles set out in this Section 8.2. The SLA Negotiation Period ends with the closing of negotiations and the making of a BAFO by Eircom to Undertakings with respect to the SLA. When Eircom makes its BAFO, the SLA is deemed by ComReg to be concluded;
- (iv) ensure that the SLA Negotiation Period includes a discussion on the process for suspension of an SLA and the associated terms and conditions, as described in Section 8.2(x) below;
- (v) ensure that SLAs include provision for Service Credits which shall comply with the requirements of this Decision Instrument;
- (vi) ensure that the SLA specifies the circumstances upon which Service Credits must be paid by Eircom to Undertakings, such as a failure by Eircom to achieve the committed service levels contained in the SLA, the occurrence of specified events or other appropriate criteria;
- (vii) ensure that SLAs specify the methodologies for calculating Service Credits and include an example of how each methodology will be applied in the calculation of Service Credits;
- (viii) ensure that circumstances upon which Service Credits must be paid by Eircom to Undertakings and the methodology for calculating the quantum of Service Credits, taken together, are fair and reasonable and in particular that they adequately incentivise Eircom to deliver an efficient level of service quality and allow Undertakings to recoup, at a minimum, the direct costs and any other reasonable loss of value that the Undertakings incur as a result of the circumstances that had triggered the payment of Service Credits;
- (ix) ensure that Service Credits, where payable, are applied automatically and in a timely manner;

- (x) ensure that SLAs include, where appropriate, the comprehensive set of terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA. Such terms and conditions should be based on objectively defined and measurable parameters; and
 - (xi) on a quarterly basis, furnish an individual report to each Undertaking setting out the actual performance achieved in each of the three (3) previous months in respect of that Undertaking compared to the committed service levels contained in the relevant SLA for the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument. Eircom shall include in the report the methodology and a description of the source data used to determine the actual performance achieved. The report shall also describe how the source data was processed by Eircom and include worked examples as to how the processed source data relates to the actual performance achieved.
- 8.3 In relation to an existing product, service or facility, following a request from an Undertaking for an amendment to an SLA, Eircom shall within one (1) month of the receipt of such a request inform the Undertaking in writing whether the request for an amendment is accepted or rejected and, if accepted, include details of the SLA Negotiation Period and the associated start date. Negotiations in respect of the amended SLA shall close, unless otherwise agreed with ComReg, within six (6) months of the date the Undertaking makes such a request. Within one (1) month of the date the Undertaking makes such a request Eircom may seek an extension to the six (6) month period from ComReg.
- 8.4 In relation to (a) an amendment to an existing product, service or facility, or (b) the development of a new product, service or facility, in each case where Eircom itself initiates the amendment or the development of a new product, service or facility, Eircom shall within one (1) month of the commencement of the product development seek Undertakings' views as to whether the proposed new or amended product, service or facility should result in an amendment to the relevant SLA or a new SLA.
- 8.5 Eircom shall ensure that, unless otherwise agreed with ComReg, its obligations set out in Sections 8.2 to 8.4 above have been complied with prior to notifying ComReg of non-pricing amendments or changes to the WBARO resulting from the offer of a new product, service or facility or an amendment to an existing product, service or facility which falls within the scope of the Regional WCA Market.
- 8.6 Eircom shall ensure that an amended or new SLA is implemented and is made available to Undertakings by the date on which:
- (i) any amendment or change to an existing product, service or facility; or

(ii) the offer of a new product, service or facility

comes into effect in accordance with Section 10 below.

- 8.7 Where an SLA is amended resulting in minimal changes to existing products, services or facilities, or where there is no development of a new product, service or facility, Eircom shall ensure that the amended SLA is implemented and is made available to Undertakings within three (3) months from the end of the SLA Negotiation Period (unless otherwise agreed with ComReg).
- 8.8 Within six (6) months (unless otherwise agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update its SLAs to include all relevant information and accord with the principles set out in Sections 8.2 to 8.4 above.
- 8.9 Where a request by an Undertaking for provision of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument), or a request by an Undertaking for provision of information, is refused or met only in part (including any refusal or partial grant arising under Sections 8.10(ii) or 8.10(iv) below), Eircom shall, at the time of the refusal or partial grant, provide in detail to the Undertaking and to ComReg each of the objective reasons for such refusal or partial grant. Eircom's response shall be provided in a fair, reasonable and timely manner.
- 8.10 Following a written request from an Undertaking (including a written request from Eircom itself) for Access to a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall, from the date of receipt of such a written request (unless otherwise agreed with ComReg) within:
- (i) three (3) working days confirm in writing to the Undertaking that has made the written request that the request has been received;
 - (ii) fifteen (15) working days confirm in writing to the Undertaking that has made the written request whether or not the request falls within the scope of Eircom's obligations contained in this Decision Instrument and provide a unique reference to identify the request;
 - (iii) thirty (30) working days confirm in writing to the Undertaking that has made the written request whether or not the Undertaking has provided it with sufficient information to process the request including the Undertaking's view on the priority of the request relative to other written requests pertaining to the Regional WCA Market that have already been submitted by that Undertaking. During the thirty (30) working day period Eircom may seek clarification from the Undertaking;
 - (iv) eighty five (85) working days:

- a. confirm in writing to the Undertaking that has made the written request whether it agrees to provide the requested product, service or facility or amendment thereto;
 - b. where the product, service or facility or amendment thereto proposed by Eircom differs from the original request, provide the Undertaking that has made the written request with a written description of such differences, in sufficient detail to allow the Undertaking to be reasonably aware of differences in the key features, functionality and geographic scope of the product, service, facility or amendment thereto, any limitations of the product, service or facility or amendment, together with the objective reasons for such differences.
- 8.11 Without prejudice to the generality of Section 8.9, Eircom shall comply with the requirements of Section 8.9 where Eircom concludes, on the basis of additional analysis conducted during the process of development of a product, service or facility or amendment thereto that it has agreed to provide in accordance with Section 8.10(iv), that the Access request is no longer reasonable and, therefore, that the product, service, facility or amendment thereof requires amendment or cannot progress to completion.
- 8.12 For the avoidance of doubt the obligations set out in Sections 8.9 to 8.11 are separate to and independent of Eircom's transparency obligations in respect of notification and publication as set out in Section 10.8 and 10.9 of this Decision Instrument.

9 OBLIGATION OF NON-DISCRIMINATION

- 9.1 Pursuant to Regulation 10 of the Access Regulations, Eircom shall have an obligation of non-discrimination in respect of the provision of Access, including Access as regards those services, products and facilities described in Sections 7 and 8 of this Decision Instrument. Without prejudice to the generality of the foregoing, Eircom shall:
- (i) apply equivalent conditions in equivalent circumstances to other Undertakings requesting, or being provided with Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) or requesting or being provided with information in relation to such Access; and
 - (ii) provide Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) and information in relation to such Access to all other Undertakings under the same conditions and of the same quality as Eircom provides to itself or to its subsidiaries, affiliates or partners.

- 9.2 Without prejudice to the generality of Section 9.1, Eircom shall (unless otherwise specified in this Decision Instrument) offer and provide Access, including Associated Facilities, to those products, services and facilities required in accordance with Sections 7 and 8 of this Decision Instrument on, at least, an Equivalence of Outputs basis.
- 9.3 Without prejudice to the generality of Section 9.1, in relation to new access requests from Eircom's downstream arm for Current Generation WCA and its Associated Facilities, where such Access is to be used by Eircom to deliver services to Consumers Eircom shall offer and provide pre-provisioning, provisioning, fault reporting and fault repair to its downstream arm and OAOs on an Equivalence of Inputs basis.
- 9.4 Without prejudice to the generality of Section 9.1 and Section 9.2, save as otherwise provided, Eircom shall offer and provide fault reporting and fault repair for the Current Generation WCA and its Associated Facilities on an Equivalence of Inputs basis. On an exceptional basis and until the date specified in Section 9.5 below, Eircom may provide fault reporting and fault repair for the Current Generation WCA and its Associated Facilities through Service Assurance Systems Interface other than the Service Assurance Systems Interface that is used to provide services to OAOs. Notwithstanding that different interfaces can be used for fault reporting and fault repair, all service assurance processes which are executed after a fault is first reported on the Service Assurance Systems Interface shall be the same. Eircom shall ensure that the obligation set out in this Section 9.4 is implemented within six (6) months of the Effective Date of this Decision Instrument.
- 9.5 Without prejudice to the generality of Sections 9.1 to 9.4, Eircom shall offer and provide pre-ordering, ordering and provisioning for Current Generation WCA and its Associated Facilities on an Equivalence of Inputs basis by no later than twelve (12) months from the Effective Date, unless otherwise agreed with ComReg.
- 9.6 Without prejudice to the generality of Section 9.1, Eircom shall offer and provide pre-ordering, ordering, provisioning fault reporting and repair for Next Generation WCA and its Associated Facilities on an Equivalence of Inputs basis.
- 9.7 For the avoidance of doubt, the obligations set out in this Section 9 apply irrespective of whether or not a specific request for products, services, facilities or information has been made by an Undertaking to Eircom.

10 OBLIGATION OF TRANSPARENCY

- 10.1 Pursuant to Regulation 9 of the Access Regulations, Eircom shall be subject to an obligation of transparency in relation to Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument).

- 10.2 Without prejudice to the generality of Section 10.1 of this Decision Instrument, pursuant to Regulation 9(2) of the Access Regulations, Eircom shall make publicly available and keep updated on its publicly available wholesale website, a WBARO. Within six (6) months (unless otherwise specified in this Decision Instrument or as agreed with ComReg) of the Effective Date of this Decision Instrument Eircom shall update the WBARO to include information relating to any amendment to an existing obligation or new obligation imposed in this Decision Instrument.
- 10.3 The WBARO shall be sufficiently unbundled so as to ensure that Undertakings availing of Access (including Access to those products, services and facilities described in Sections 7 and 8 of this Decision Instrument) are not required to pay for products, services or facilities which are not necessary for the Access requested. Eircom shall ensure that the WBARO and related contracts only relate to products, services and facilities which fall within the scope of the Regional WCA Market.
- 10.4 Without prejudice to the generality of Section 10.2 of this Decision Instrument, and in accordance with the obligations specified elsewhere in this Decision Instrument, Eircom shall ensure that its WBARO includes at least the following:
- (i) a description of the offer of contract for Access (including Access to those products, services and facilities described in Section 7 and Section 8 of this Decision Instrument) broken down into components according to market needs;
 - (ii) a description of any associated contractual or other terms and conditions for supply of Access (including Access to those products, services and facilities described in Section 7 and Section 8 of this Decision Instrument) and use, including prices; and
 - (iii) a description of the technical specifications, processes and network characteristics of the Access (including Access to those products, services and facilities described in Section 7 and Section 8 of this Decision Instrument) being offered.
- 10.5 In the event of any conflict between the WBARO and associated documentation such as the WBARO Price List (including where represented as updated for the purposes of this Decision Instrument), and Eircom's obligations as set out under this Decision Instrument, it is the latter which shall prevail.
- 10.6 Without prejudice to the generality of Sections 10.1 and 10.2 above and pursuant to Regulation 9 of the Access Regulations Eircom shall:

- (i) continue to publish and keep updated on its publicly available wholesale website its WBARO in the same form and format as version 4.0 dated 22 June 2017, including a searchable version, as may be amended from time-to-time, insofar as those products, services or facilities contained therein relate to the obligations set out in this Decision Instrument;
 - (ii) publish and keep updated on its publicly available wholesale website both clean (or unmarked) and tracked change (or marked) versions of its WBARO (insofar as it relates to the products, services and facilities to be provided in accordance with the requirements of this Decision Instrument). The tracked change version of the WBARO shall be sufficiently clear to allow Undertakings to clearly identify all actual and proposed amendments from the preceding version of its WBARO;
 - (iii) publish and keep updated on its publicly available wholesale website an accompanying WBARO Change Matrix which lists all of the amendments incorporated or to be incorporated in any amended WBARO;
 - (iv) publish and keep updated on its publicly available wholesale website both clean (unmarked) and tracked change (marked) versions of the WBARO Price List(s) (insofar as it relates to the products, services and facilities to be provided in accordance with the requirements of this Decision Instrument). The tracked change version of the WBARO Price List shall be sufficiently clear to allow Undertakings to clearly identify all actual and proposed amendments from the preceding version of its WBARO Price List;
 - (v) publish and keep updated on its publicly available wholesale website a WBARO Price List Change Matrix which lists all of the amendments incorporated or to be incorporated in any amended WBARO Price List; and
 - (vi) maintain and make available on its publicly available wholesale website a copy of historic versions of its WBARO, WBARO Price List, WBARO Change Matrix and WBARO Price List Change Matrix.
- 10.7 Eircom shall ensure that its wholesale invoices in respect of products, services and facilities within the Regional WCA Market are sufficiently disaggregated, detailed and clearly presented such that an Undertaking can reconcile invoices to Eircom's WBARO and WBARO Price Lists.
- 10.8 In respect of non-pricing amendments or changes to the WBARO resulting from the offer of a new product, service or facility which falls within the scope of the Regional WCA Market, the obligations set out in sub-sections (i) and (ii) below shall apply. The periods referred to in this Section 10.8 may be varied with the agreement of ComReg or at ComReg's discretion:

- (i) Eircom shall make publicly available and publish on Eircom's publicly available wholesale website at least six (6) months in advance of coming into effect, any proposed amendments or changes to the WBARO or the making available of any product, service or facility, pertaining to non-price information in respect of product specification, services, facilities and processes resulting from the offer of a new product, service or facility; and
 - (ii) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, seven (7) months prior to any amendments or changes coming into effect.
- 10.9 In respect of material non-pricing amendments or changes to the WBARO resulting from an amendment or change to an existing product, service or facility which falls within the scope of the Regional WCA Market, the obligations set out in sub-sections (i) and (ii) below shall apply. The periods referred to in this Section 10.9 may be varied with the agreement of ComReg or at ComReg's discretion:
- (i) Eircom shall make publicly available and publish on Eircom's publicly available wholesale website at least two (2) months in advance of coming into effect, any proposed amendments or changes to the WBARO pertaining to non-price information in respect of product specification, services, facilities and processes resulting from an amendment or change to an existing product, service or facility (including details of any amendment or change in the functional characteristics of an existing product, service or facility); and
 - (ii) Eircom shall notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place, that is, three (3) months prior to any amendments or changes coming into effect.
- 10.10 For the purposes of Section 10.9 above, material amendments or changes are those which impact on product functionality or technical specifications, the process supporting a product, service or facility, and the pricing and terms and conditions associated with a product, service or facility. Notwithstanding Section 10.9, amendments or changes to an existing product, service or facility which are so significant that the product, service or facility effectively amounts to a new product, service or facility, shall be notified and published in accordance with the requirements of Section 10.8 above or as otherwise agreed with ComReg or at ComReg's discretion.
- 10.11 In respect of pricing amendments or changes pertaining to prices in the WBARO and/or WBARO Price List, Eircom shall make publicly available and publish on its publicly available wholesale website information relating to:

- (i) proposed changes to the prices of existing products, services or facilities set out in the WBARO Price Lists and which are offered or provided in accordance with the obligations set out in this Decision Instrument, for price decreases at least two (2) months in advance of such changes coming into effect and for price increases at least three (3) months in advance, unless otherwise determined by ComReg; and
- (ii) the pricing of a new product, service, or facility that will be offered or provided in accordance with the obligations set out in this Decision Instrument at least two (2) months in advance of the commercial launch of a new retail service by Eircom, unless otherwise determined by ComReg.

10.12 For the purpose of Section 10.11 above, Eircom shall, unless otherwise agreed with or determined by ComReg, notify ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place.

10.13 Where Eircom proposes to conduct a trial, whether such trial is for the purposes of testing operational and/or technical issues, the following obligations shall apply:

- (i) Eircom shall invite all Undertakings to participate in the trial, by means of:
 - a. direct written invitation to each Undertaking that has signed a contract with Eircom on the basis of the WBARO; and
 - b. the publication of a general invitation on Eircom's publicly available wholesale website;
- (ii) Eircom shall provide a statement of the objectives of the trial and the requirements for participation to all Undertakings in sufficient time to allow participation; and
- (iii) the trial must be for a reasonable period sufficient only to achieve the objectives of the trial.

10.14 Eircom shall in respect of any proposed trials, whether such trials are for the purposes of testing operational and/or technical issues:

- (i) notify ComReg in writing at least one (1) month in advance of each such proposed trial being notified to Undertakings, in accordance with Section 10.13 above, unless otherwise agreed with ComReg;
- (ii) notify Undertakings at least three (3) months in advance of the commencement of each such trial, in accordance with Section 10.13 above, unless otherwise agreed with ComReg; and
- (iii) unless otherwise agreed with ComReg, terminate each such trial at least one (1) month prior to the launch of the new or amended product, service or facility being trialled.

- 10.15 Eircom shall, as specified by ComReg in writing from time-to-time, make publicly available on its wholesale website, information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices, in respect of the products, services and facilities referred to in Sections 7 and 8 above.
- 10.16 Pursuant to Regulation 9(3) of the Access Regulations, ComReg may issue directions requiring Eircom to make changes or amendments to its SLAs, the WBARO (and its associated documents), WBARO Price List, WBARO Change Matrix or WBARO Price List Change Matrix to give effect to obligations imposed by this Decision Instrument and to publish such documents with such changes. In accordance with Regulation 18 of the Access Regulations, ComReg may issue directions to Eircom from time-to-time requiring it to publish information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices.
- 10.17 Eircom shall publish Key Performance Indicators (KPIs) on its publicly available wholesale website. The specification of the content of the KPIs shall be in accordance with the obligations set out in ComReg Decision D05/11.
- 10.18 Eircom shall, on a quarterly basis, publish on its publicly available wholesale website a report that evidences actual performance achieved in each of the three (3) previous months in respect of all Undertakings on an aggregate basis compared to the committed service levels contained in the relevant SLA for the products, services and facilities referred to in Sections 7 and 8 of this Decision Instrument. Eircom shall also include in the report the methodology and a description of the source data used to determine the actual performance achieved. The report shall also describe how the source data was processed by Eircom and include worked examples as to how the processed source data relates to the actual performance achieved.
- 10.19 Eircom shall make publicly available on its wholesale website all SLAs (and any updates thereto) relating to the provision of the products, services and facilities that are to be provided in accordance with Sections 7 and 8 of this Decision Instrument.
- 10.20 Where Eircom considers certain aspects of information to be provided under the obligations set out in this Section 10 to be of a confidential and/or commercially sensitive nature, Eircom shall, without delay, provide ComReg with complete details of such information along with objective reasons justifying why it considers the information to be confidential and/or commercially sensitive. ComReg will consider the information in accordance with ComReg Document No. 05/24, so far as relevant or otherwise. If ComReg considers that the information is not confidential and/or commercially sensitive, it shall be published by Eircom in accordance with its obligations under this Section.

- 10.21 If, having considered a submission from Eircom in accordance with Section 10.20 above, ComReg concludes that the information is confidential and/or commercially sensitive, the following provisions shall apply:
- (i) Eircom shall not be required to publish the information; or
 - (ii) Notwithstanding sub-section 10.21(i), in circumstances considered appropriate by ComReg, Eircom shall publish general non-confidential details as to the nature of such information and shall make the information or, as agreed with ComReg, extracts of such information, available to an OAO that has signed a Non-Disclosure Agreement (“NDA”), the terms and conditions of which shall be fair, reasonable and non-discriminatory. The NDA shall also be published on Eircom’s publicly available website; and
 - (iii) Without prejudice to the generality of Section 9.1, any confidential and/or commercially sensitive information (or, as agreed with ComReg, extracts thereof) referred to in this Section 10 shall not be made available by Eircom to its downstream operations until such time as it is made available to an OAO, or as otherwise agreed with ComReg.
- 10.22 If and when any commercially sensitive and/or confidential information referred to in this Section 10 ceases to be commercially sensitive and/or confidential, it shall be made available by Eircom on its publicly available wholesale website without undue delay and without the need for an NDA to be signed.
- 10.23 Pursuant to Sections 9.1 and 10.1 of this Decision Instrument, Eircom shall make available on its publicly available wholesale website at least six (6) months in advance of implementation (or such period as may be reasonably agreed with ComReg), information regarding the introduction of, changes to, or technical developments relating to, Eircom’s network, infrastructures or new technologies, as well as sufficient information regarding products, services and facilities which could reasonably be expected to support products, services or facilities in respect of Next Generation WCA in the Regional WCA Market, including as regards such products, services or facilities to be offered to Eircom’s retail or downstream division. Eircom shall keep this information updated on its publicly available wholesale website; however material amendments and changes to information may not be notified by way of such an update, but shall be notified at least six (6) months in advance as set out herein, or by agreement with ComReg, or at ComReg’s discretion.
- 10.24 For the avoidance of doubt, the obligations set out in this Section 10 apply irrespective of whether or not a specific request for products, services, facilities or information has been made by an Undertaking to Eircom.

10.25 With regard to the obligations set out in Section 8.10 above relating to requests from Undertakings for a new product, service or facility or a non-pricing amendment to an existing product, service or facility Eircom shall publish on its publicly available wholesale website the relevant information referred to in that Section 8.10 at the same time as it provides the information to the requesting Undertaking.

10.26 Without prejudice to the generality of Section 10.1, the following obligations shall apply with respect to the publication of information in respect of the development of products, services and facilities:

- (i) Eircom shall publish, and keep updated, on its publicly available wholesale website, a description of its product development process, including a description of all process steps and activities and identifying all Milestones and Product Development Decision Points, commencing with the receipt of a written request for Access from an Undertaking and terminating with the launch of a new or amended wholesale product, service or facility;
- (ii) For each written Access request accepted by Eircom as being related to a product, service or facility within the Regional WCA Market, Eircom shall publish a new or, as appropriate, a revised, Product Development Roadmap on its publicly available wholesale website no later than fifteen (15) working days after receipt of the request. The Product Development Roadmap shall be kept updated and shall contain (a) a list of all Access requests accepted by Eircom as being related to a product, service or facility within the Regional WCA Market and (b) the following detail in relation to each Access request:
 - (a) the unique reference to identify the Access request;
 - (b) a description of the request and copies of or links to all relevant documentation;
 - (c) the date by which Undertakings can submit their views on the priority of the request relative to other requests pertaining to the Regional WCA Market that have already been submitted by that Undertaking; and
 - (d) the Milestones and associated target dates required to develop and launch the product, service or facility to meet the Access request. Eircom shall also include a method for tracking the actual development of the product, service or facility against the Milestones and associated target dates. Eircom shall inform Undertakings of any changes to such target dates at the earliest point in time after the need for such changes has been identified by Eircom.

- 10.27 Eircom shall publish, and keep updated, on its publicly available wholesale website, a Product Development Roadmap listing all of the Access requests accepted by Eircom as being related to a product, service or facility within the Regional WCA Market and stating the priority given by Eircom to the development of each request relative to other developments of regulated products, services or facilities within the Regional WCA Market. Within eighty-five (85) working days from receipt of an Access request, Eircom shall update the Product Development Roadmap so as to identify the degree of priority that it proposes to assign to the proposed development arising from that request, and shall inform ComReg of the degree of priority assigned. In the event of the reprioritisation by Eircom of an Access request or requests, Eircom shall state the objective reasons for such reprioritisation(s) in the Product Development Roadmap and shall inform ComReg of the reprioritisation and the reasons therefor.
- 10.28 Without prejudice to Section 8.10, following a written Access request from an Undertaking (including a written request from Eircom itself) for a new product, service or facility or a non-pricing amendment to an existing product, service or facility, the following obligations shall apply from the date of receipt of such a written request (unless otherwise agreed with ComReg):
- (i) For each written request received by Eircom and accepted by Eircom as being related to a product, service or facility within the Regional WCA Market Eircom shall, at the earliest possible time, but not later than fifteen (15) working days after the receipt of the request, advise all Undertakings that the request has been received and provide them with information regarding the request as set out in Section 10.28(ii) below;
 - (ii) The information shall include a unique reference number to allow tracking of the request and all known details relevant to the request including but not limited to a copy of the request and a description of the key features and functionality requested;
 - (iii) Unless otherwise agreed with ComReg, not later than forty (40) working days after receipt of the written request, Eircom shall publish an accurate description of the requested product, service or facility on its publicly available wholesale website;

- (iv) Unless otherwise agreed with ComReg, not later than eighty five (85) working days after receipt of the written request, Eircom shall confirm in writing to all Undertakings whether it agrees to provide the requested new or amended product, service or facility. Where the request is refused in full or in part, Eircom shall comply with Section 8.9 above in its response to the Undertaking that has made the request. In addition, Eircom shall advise all other Undertakings of a full or partial refusal and provide written reasons for its refusal, at the time of refusal. Where the product, service or facility proposed by Eircom differs from the original request, Eircom shall provide the objective reasons for such differences in writing to all Undertakings within the eighty five (85) working day timeframe;
- (v) Eircom shall, not later than eighty five (85) working days after receipt of the written request, identify the degree of priority that it proposes to assign to the development related to the Access request relative to all other developments, including Access requests and amendments proposed by Eircom, of regulated products, services or facilities in the Regional WCA Market, and advise all Undertakings of this degree of priority. In the event of the reprioritisation by Eircom of an Access request or requests, Eircom shall advise all Undertakings of such reprioritisation ;
- (vi) Eircom shall for each such development provide all Undertakings with all other relevant documentation including but not necessarily limited to any revised Industry Process Manual, price lists or technical manuals;
- (vii) At all stages of the product development process Eircom shall make available and keep updated on its publicly available wholesale website all relevant documentation describing the product, service or facility which will be delivered for each development in sufficient detail to allow an Undertaking to be reasonably aware of the proposed key features, functionality and geographic reach of the product, service or facility, and any relevant limitations of the product, service or facility; and
- (viii) Eircom shall publish on its publicly available wholesale website the prioritisation process and the criteria used by Eircom in reaching decisions with respect to the prioritisation of product developments relative to each other.

11 OBLIGATION OF ACCOUNTING SEPARATION

- 11.1 Pursuant to Regulation 11 of the Access Regulations, Eircom shall have an obligation to maintain separated accounts in respect of the products, services and facilities falling within the scope of this Decision Instrument and the Regional WCA Market. All of the obligations in relation to accounting separation, set out at Appendices 1 and 2 of ComReg Decision D08/10, applying to Eircom and in force immediately prior to the Effective Date of this Decision Instrument, and relating to products, services and facilities falling within the scope of this Decision Instrument and the Regional WCA Market shall be maintained in their entirety.

12 OBLIGATIONS RELATING TO PRICE CONTROL AND COST ACCOUNTING COST ACCOUNTING

- 12.1 Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall maintain appropriate cost accounting systems in respect of products, services and facilities in the Regional WCA Market.

COST ORIENTATION

- 12.2 Pursuant to Regulation 13(1) of the Access Regulations, prices charged by Eircom to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 7 above shall be subject to a cost orientation obligation, with the exception of FTTH-based Bitstream.

FTTC-based Bitstream and Exchange launched Bitstream

- 12.3 Without prejudice to the generality of Section 12.2 above, for the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to FTTC-based Bitstream and/or Exchange launched Bitstream is cost oriented.

Current Generation Bitstream and Bitstream Managed Backhaul

- 12.4 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to Current Generation Bitstream and/or Bitstream Managed Backhaul is cost oriented.

Current Generation Standalone Broadband

- 12.5 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking for Current Generation Standalone Broadband in the Regional WCA Market shall be no more than Eircom's total actual incurred costs in the Regional WCA Market (adjusted for efficiency) plus a reasonable rate of return associated with the provision of Current Generation Standalone Broadband, which shall be calculated in line with the Revised Copper Access Model. Such costs shall be based on a Top-Down HCA costing methodology except for Active Assets the costs of which shall be calculated using a BU-LRAIC+ methodology.

Ancillary Services to WCA products, services or facilities

- 12.6 For the purposes of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.2 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that it recovers no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of Ancillary Services to WCA products, services or facilities offered or charged by it. For the avoidance of doubt this obligation applies to both Current Generation WCA and Next Generation WCA.

MARGIN/PRICE SQUEEZE

- 12.7 Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall have an obligation not to cause a margin/price squeeze.
- 12.8 Pursuant to Regulation 13(1) of the Access Regulations and without prejudice to the generality of Section 12.7, Eircom shall have an obligation not to cause a margin/price squeeze between (a) Wholesale Central Access products, services and facilities it offers or provides and (b) products, services and facilities in wholesale markets downstream from the Regional WCA Market.
- 12.9 Pursuant to Regulation 13(1) of the Access Regulations and without prejudice to the generality of Section 12.7, Eircom shall have an obligation not to cause a margin/price squeeze between (a) Wholesale Central Access products, services and facilities it offers or provides and (b) products, services and facilities in retail markets downstream from the Regional WCA Market.

- 12.10 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.9 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to WCA (including the wholesale price for products, services, facilities, Promotions and Discounts) shall not cause a margin squeeze between (a) Current Generation Bitstream; and (b) the retail price of a retail product(s), whether sold singly or as part of a Bundle, delivered by Current Generation Bitstream.
- 12.11 For the purposes of further specifying requirements to be complied with relating to the obligation not to cause a margin/price squeeze set out in Section 12.9 above and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that the rental charge offered or charged by it to any other Undertaking in relation to WCA (including the wholesale price for products, services, facilities, Promotions and Discounts) shall not cause a margin squeeze between (a) FTTH-based Bitstream; and (b) the retail price of a retail product, sold singly, which is delivered by FTTH-based Bitstream.
- 12.12 In circumstances where more than one retail product is provided on the basis of a single Eircom wholesale product, service or facility, the retail price of a retail product for the purposes of Sections 12.10 and 12.11 above shall be the weighted average (by number of Subscribers) of the individual retail prices of retail products provided on the basis of that Eircom wholesale product, service or facility.

13 STATEMENT OF COMPLIANCE

- 13.1 Pursuant to Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations Eircom shall submit to ComReg a written statement of compliance (Statement of Compliance) that adequately demonstrates its compliance with its regulatory obligations in the Regional WCA Market, to include the following:
- (i) a full and true written statement, signed by a Director of Eircom authorised to provide such statements on behalf of the board of Directors of Eircom, acknowledging that Eircom is responsible for securing compliance with its obligations and in which:
 - a. the Directors confirm that, in their opinion, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its obligations as set out in this Decision Instrument; and

- b. the Directors explain the basis upon which the confirmation in subparagraph a. above is made, including a description of the information relied upon, and the process followed, by the Directors of Eircom in order to be satisfied that to the best of their knowledge the arrangements, structures and internal controls in place provide reasonable assurance that Eircom is in compliance with the obligations set out in this Decision Instrument.
- (ii) a description and explanation of the governance measures implemented by Eircom to ensure that it is, and remains, in compliance with the obligations set out in this Decision Instrument, in particular:
 - a. a description and explanation of the relevant reporting structures and reporting processes implemented by Eircom; and
 - b. the information relied upon and the process followed by Eircom's management to assess the operation and effectiveness of the processes used to identify and mitigate risks of non-compliance in their areas of responsibility.
 - (iii) a description of the risks identified and the controls developed to mitigate potential risks of non-compliance with Eircom's regulatory obligations, as they relate to the categories of activities in Section 13.2 below and shall include the following in particular:
 - a. a description of the purpose of each process which was analysed for risks of non-compliance;
 - b. a detailed description of the risk analysis process, to include the following:
 - I. a description of the expertise employed by Eircom;
 - II. a list of all material including all relevant documentation;
 - III. a description of how the material and expertise was used;
 - c. a detailed description of the control development process to include the following:
 - I. a description of the expertise employed by Eircom;
 - II. a list of all material including all relevant documentation used;
 - III. a description of how the material and expertise was used;
 - IV. a description of the process used to assess the effectiveness of the controls.

- d. a description of the operation of controls including the method employed by Eircom to record and store the data produced when controls are operated;
- e. a description of and the identification of the repository in which the data from the operation of each control is recorded and stored.

13.2 The obligations set out in this Section 13 shall apply, but for the avoidance of doubt, are not limited to the following categories of activities:

- (i) Pre-provisioning, provisioning and service assurance for products, services and facilities;
- (ii) Product development including product enhancements, and pre product development screening of Access requests;
- (iii) Product prioritisation and investment decisions;
- (iv) Access to shared resources including IT and product development resources; and
- (v) The management of information, both Structured Information and Unstructured Information, in conformance with regulatory requirements.

13.3 The documentation referred to in this Section 13 shall be of sufficient clarity and detail to enable ComReg, or a third party as determined by ComReg, to review the Statement of Compliance for completeness and accuracy. Such documentation and information shall also enable ComReg, or a third party as determined by ComReg, to assess Eircom's risk assessment and control and governance measures in order to enable ComReg to determine whether Eircom has provided reasonable assurance to ComReg that Eircom is compliant and will remain compliant with the obligations set out in this Decision Instrument.

13.4 Eircom shall clearly identify, explain, document and demonstrate the following in particular:

- (i) In respect of the standard of Equivalence of Inputs, any and all differences as between systems and processes used to supply OAOs and Eircom's downstream arm setting out why it believes that any such differences are very minor and insignificant and can be objectively justified; and
- (ii) In respect of the standard of Equivalence of Outputs, any and all differences as between systems and processes used to supply OAOs and Eircom's downstream arm. The explanation shall include a description as to how and what controls are in place to ensure an Equivalence of Outputs standard notwithstanding the differences in systems and processes used.

- 13.5 Eircom shall ensure that the Statements of Compliance are updated as required to reflect material changes to the documentation and information detailed in this Section 13. Each such update shall be provided to ComReg within one (1) month of the update being made by Eircom.
- 13.6 Updates or changes to any Statement of Compliance provided to ComReg must be presented such that the changes are highlighted and the Statement of Compliance documents include a Version Control and Revision History.
- 13.7 Eircom shall publish the Statement of Compliance, and updates to the Statement of Compliance, on its publicly available wholesale website within one (1) month of providing it to ComReg, unless otherwise agreed with ComReg.
- 13.8 Unless otherwise agreed with ComReg, Eircom shall provide a Statement of Compliance, as referred to in this Section 13, to ComReg within six (6) months of the Effective Date of this Decision. Eircom shall also provide a Statement of Compliance:
- (i) in the case of any offer of a new WCA product, service or facility, seven (7) months in advance of its being made available;
 - (ii) in the case of any change to an existing WCA product, service or facility, three (3) months in advance of it being made available;
 - (iii) as otherwise may be required by ComReg.

PART III - OPERATION AND EFFECTIVE DATE (SECTIONS 14 TO 17 OF THE DECISION INSTRUMENT)

14 STATUTORY POWERS NOT AFFECTED

- 14.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument).

15 MAINTENANCE OF OBLIGATIONS

- 15.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg, applying to Eircom, and in force immediately prior to the Effective Date of this Decision Instrument, continue in force and Eircom shall comply with the same.
- 15.2 For the avoidance of doubt, to the extent that there is any conflict between a Decision Instrument dated prior to the Effective Date and Eircom's obligations set out herein, it is the latter which shall prevail.

- 15.3 If any Section(s), clause(s), or provision(s), or portion(s) thereof, contained in this Decision Instrument is(are) found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that(those) Section(s), clause(s), or provision(s), or portion(s) thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining Section(s), clause(s), or provision(s), or portion(s) thereof, of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument or other Decision Instruments.
- 15.4 Pursuant to Regulation 18 of the Access Regulations and Regulation 27(3) of the Framework Regulations, an appropriate notice period of six (6) months from the Effective Date shall be provided to affected parties and during that period Eircom shall continue to provide access to Current and Next Generation Bitstream in the Urban WCA Market at prices consistent with the current draft of the WBARO [version 4.0 dated 22 June 2017].

16 IMPOSITION OF NEW OBLIGATIONS AND WITHDRAWAL OF SMP OBLIGATIONS

- 16.1 Pursuant to Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations, the obligations set out in Sections 4 to 13 (inclusive) of this Decision Instrument shall only come into effect when all of the obligations set out in Sections 4 to 13 (inclusive) of the Decision Instrument contained in Appendix 20 of ComReg Decision D10/18 (i.e. the WLA Decision Instrument) come into effect.
- 16.2 Pursuant to Regulations 8, 9, 10, 11, 12, 13 and 18 of the Access Regulations, the following Decision Instruments, and/or ComReg Documents and/or Decisions shall be withdrawn when Sections 4 to 13 of this Decision Instrument come into effect:
- (a) The Decision Instrument contained in Section 8 of ComReg Decision D06/11;
 - (b) The Decision Instrument contained in Section 5 of ComReg Decision D06/12;
 - (c) The Decision Instrument contained in Annex 2 of ComReg Decision D03/13;
 - (d) The Decision Instrument contained in Section 11 of ComReg Decision D11/14; and
 - (e) The Decision Instrument contained in Annex 2 of ComReg Decision D03/16.

17 EFFECTIVE DATE

17.1 The Effective Date of this Decision Instrument shall be the date of its notification to Eircom and it shall remain in force until further notice by ComReg.

**JEREMY GODFREY
COMMISSIONER
THE COMMISSION FOR COMMUNICATIONS REGULATION
THE 19TH DAY OF NOVEMBER 2018**