Commission for
Communications Regulation

Market Review

Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers

All responses to this consultation should be clearly marked:-
"Reference: Submission re Market Review – Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers, ComReg 12/117" and sent by post, facsimile, or e-mail, to arrive on or before **17:00 on 21 December 2012**, to:

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Please note ComReg will publish all respondents' submissions with the Response to this Consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24.

Consultation and Draft Decision

Reference: ComReg 12/117

Date: 26/10/2012

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Content

Section **Page**

Appendix

Section **Page**

Table of Figures

Section **Page**

Chapter 1

1 Introduction

1.1 As part of its duties under the European Framework for Electronic Communications,[1] the Commission for Communications Regulation ("ComReg"), like all other national regulatory authorities ("NRAs") across the EU, is required to carry out periodic reviews of relevant electronic communications markets.

1.2 Consistent with ComReg's regulatory role to review certain electronic communications markets, this Consultation Paper presents ComReg's preliminary views on its analysis of the retail market for access to the public telephone network at a fixed location for residential and non residential customers[2] (referred to for convenience in this Consultation Paper as the Fixed Voice Access (FVA) market(s)). The European Commission has described this market in general terms as the retail market for provision of a connection or access (at a fixed location or address) to the public telephone network for the purpose of making and/or receiving telephone calls and related services, such as, fax and dial-up[3] internet access.[4] Broadband has superseded dial-up internet access as a means of accessing internet services and therefore a review of connection or access (at a fixed location or address) to the public telephone network for the purpose of making and/or receiving voice calls is the primary focus of this Consultation Paper.

[1] European Commission, Revised European Framework for Electronic Communications, 18 December 2009, http://ec.europa.eu/information_society/policy/ecomm/index_en.htm

[2] Corresponding to Market 1 listed in the Commission Recommendation 2007/879/EC of 17 December 2007 on relevant product and services 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**"), (OJ L 344, 28.12.2007, p. 65).

[3] This is a narrowband service implying an upper limit of 128 kbps which would be achieved through channel-bonding using a basic integrated services digital network ("ISDN") connection supporting 2 circuits with 64 kbps each.

[4] Commission Staff Working Document: Explanatory Note accompanying the 2007 Recommendation (13 November 2007, C(2007) 5406), p.21.

1.3 When ComReg last reviewed the FVA market(s) in 2007, it considered, in particular, the following: the state of competition in relation to analogue (PSTN)[5] and digital ("ISDN")[6] telephone lines for consumers and businesses across Ireland, that is, fixed narrowband access.[7]

1.4 However, there have been a number of developments since ComReg's last review of the FVA market(s), including increased broadband penetration, increased use of Voice Over Internet Protocol ("VOIP")[8] and increased take up of bundled products including FVA combined with fixed voice calls and broadband internet access. This suggests that new emerging access technologies and broadband infrastructures involved in the provision of voice services need to be further analysed to understand if the relevant FVA market boundaries, defined in 2007 as consisting of PSTN and ISDN access only, are still relevant. This current market review will assess the significance and impact of these market developments on the precise boundary of the relevant market(s).

1.5 In this Consultation Paper, ComReg also considers whether or not there is effective competition in the relevant FVA market(s), whether (absent regulation) any undertaking has significant market power ("SMP") in the relevant FVA market(s) and, if so, what appropriate regulatory obligations should be maintained, amended or imposed in order to address competition problems that have arisen or could arise in the relevant market(s). ComReg will consider all regulatory options, including the option of de-regulation or regulatory forbearance at the retail level in order to ensure that regulation remains focused and responsive to the needs of a changing environment.

1.6 The remainder of this introductory section describes the background to the applicable legal and regulatory framework as well as the approach to regulation in the relevant FVA markets to date.

[5] This provides a single channel, originally designed to provide voice traffic but capable also of supporting fax and data modems with speeds of up to 56 kbit/s.

[6] An ISDN connection provides two or more connections capable of being used simultaneously. Three types of ISDN are generally available: ISDN Basic Rate Access (BRA), which supports 2 channels for user voice and data; ISDN Fractional Rate Access (FRA), which supports between 16 and 30 channels; and ISDN Primary Rate Access (PRA), which supports 30 channels.

[7] "Narrowband" usually refers to communication links that have a limited bandwidth, generally defined implicitly through "not being broadband".

[8] VOIP refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the transport of telephone calls over Internet Protocol ("IP") technology.

Legal basis and Regulatory Framework

1.7 This market review is being undertaken by ComReg in accordance with the obligation under the **Framework Directive**[9] that NRAs should analyse and define relevant markets taking the utmost account of the **2007 Recommendation**[10] (including the **Explanatory Note to the 2007 Recommendation**)[11] and the **SMP Guidelines**.[12]

1.8 Regulation 26 of the **Framework Regulations**[13] requires that ComReg, taking the utmost account of the 2007 Recommendation and of the SMP Guidelines, defines relevant markets appropriate to national circumstances, in accordance with the principles of competition law.

1.9 The European Commission refers in the 2007 Recommendation to the FVA market as follows:

> *"***access to the public telephone network at a fixed location for residential and non-residential customers***."*[14]

1.10 Having regard to Regulation 25 of the Framework Regulations, 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 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.

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[9] Articles 15 and 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'.**

[10] 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**').

[11] European Commission Staff Working Document, Explanatory Note accompanying the 2007 Recommendation (the '**Explanatory Note to the 2007 Recommendation**'), (C(2007) 5406).

[12] 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 (the '**SMP Guidelines**').

[13] 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.

[14] Appendix to the 2007 Recommendation, point 1.

1.11 In accordance with Regulation 27(4) of the Framework Regulations, where an undertaking is designated as having SMP in a relevant market, ComReg is obliged to impose on such an undertaking such of the obligations set out in Regulations 9 to 13 of the **Access Regulations**[15] and/or Regulation 13 of the **Universal Service Regulations**[16] as it considers appropriate (or maintain or amend such obligations where they already exist). In accordance with Regulation 8(6) of the Access Regulations, obligations imposed under the Access Regulations 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 Acts 2002 to 2011**,[17] 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.

1.12 Regulation 13(1) of the Universal Service Regulations states that where:

(a) ComReg determines, as a result of a market analysis carried out, in accordance with Regulation 27 of the Framework Regulations, that a given retail market identified in accordance with Regulation 26 of the Framework Regulations is not effectively competitive; and

(b) ComReg concludes that obligations imposed under Regulations 9 to 13 of the Access Regulations would not result in the achievement of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011, and Regulation 16 of the Framework Regulations

ComReg shall impose such obligations, as it considers appropriate to achieve those objectives, on undertakings identified by ComReg under Regulation 27(4) of the Framework Regulations as having SMP on a given retail market.

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

[16] European Communities (European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (S.I. No. 337 of 2011).

[17] Communications Regulation Act 2002 (No. 20 of 2002), as amended by Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011) (the '**Communications Regulation Acts 2002 to 2011**').

1.13 Regulation 13(2) of the Universal Service Regulations states that any obligations imposed by ComReg under Regulation 13(1) of the Universal Service Regulations must be based on the nature of the problem identified under the market analysis and be proportionate and justified in the light of the objectives laid down in section 12 of the Communications Regulation Acts 2002 to 2011, and Regulation 16 of the Framework Regulations.

1.14 Section 12(1)(a) of the Communications Regulation Acts 2002 to 2011 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:

(a) to promote competition;

(b) to contribute to the development of the internal market; and

(c) to promote the interests of users within the European Union.

1.15 It should further be noted that Regulation 16(1) of the Framework Regulations states that ComReg shall:

(a) unless otherwise provided for in Regulation 17, take the utmost account of the desirability of technological neutrality in complying with the requirements of the Specific Regulations having particular regard to those designed to ensure effective competition,

(b) in so far as the promotion of competition is concerned

(i) ensure that elderly users and users with special social needs derive maximum benefit in terms of choice, price and quality, and

(ii) ensure that, in the transmission of content, there is no distortion or restriction of competition in the electronic communications sector,

(c) in so far as contributing to the development of the internal market is concerned, co-operate with BEREC in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of European Union law in the field of electronic communications, and

(d) in so far as promotion of the interests of users within the European Union is concerned

(i) address the needs of specific social groups, in particular, elderly users and users with special social needs, and

(ii) promote the ability of end-users to access and distribute information or use applications and services of their choice.

1.16 Apart from conducting a public consultation in accordance with Regulation 12 of the Framework Regulations, ComReg is also obliged to make draft measures accessible to the European Commission, BEREC and the NRAs in other Member States pursuant to Regulation 13(3) of the Framework Regulations. Pursuant to Regulation 27(1) of the Framework Regulations, ComReg shall carry out an analysis of the relevant markets in accordance, where appropriate, with an agreement with the Competition Authority under section 34 or 47G of the Competition Act 2002.

1.17 Overall, in preparing this Consultation Paper, ComReg has taken account of its functions and objectives under the Communications Regulation Acts 2002 to 2011, in addition to requirements under the Framework Regulations, the Access Regulations and the Universal Service Regulations. ComReg has taken the utmost account of the 2007 Recommendation and the Explanatory Note to the 2007 Recommendation and the SMP Guidelines. ComReg has further taken account of the European Commission's **Notice on Market Definition**[18] and any relevant common positions adopted by **BEREC.**[19]

1.18 ComReg has also had regard to relevant European Commission comments made, pursuant to Article 7 and Article 7a of the Framework Directive, with respect to other National Regulatory Authorities' (NRAs') market analyses.

Previous Market Review

1.19 The FVA market was last reviewed by ComReg in 2007. The review was notified to the European Commission in May 2007,[20] and a final decision was adopted by ComReg in August 2007.[21]

[18] Commission notice on the definition of relevant market for the purposes of Community competition law, (the '**Relevant Market Definition Notice'**), Official Journal C 372, 09/12/1997 P. 0005 – 0013.
[19] 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 (BEREC) and the Office.
[20] See letter from European Commission to ComReg dated 7 June 2007 (Case IE/2007/0632).
[21] ComReg Decision Market Analysis: Retail Fixed Narrowband Access Markets: D07/61, 24 August, 2007.

1.20 When ComReg last reviewed the FVA market in 2007, it identified two separate relevant national markets, for lower[22] and higher[23] level retail narrowband access from a fixed location, which differed[24] from those defined in the European Commission's 2003 Recommendation on relevant product and service markets.[25] In its 2007 decision, ComReg designated Eircom Limited ("Eircom") with SMP on each of these relevant markets (Decision D07/61).[26] Competition on the relevant markets was determined to be ineffective based on a prospective analysis of various criteria, including market share, absence of potential competition, high barriers to entry and expansion, and absence of or low countervailing buyer power.

1.21 Having designated Eircom with SMP, in Decision D07/61, ComReg imposed wholesale obligations: single billing wholesale line rental ("SB-WLR")[27] and carrier pre-selection ("CPS")[28] and a selection of remedies supporting these access obligations (including obligations relating to access to and use of specific network facilities, transparency, non-discrimination, accounting separation, price control and cost accounting). ComReg also imposed on Eircom retail obligations relating to the following:

- price control
- transparency
- cost accounting
- obligation not to show undue preference to specific end-users
- obligation not to unreasonably bundle services

[22] Access to the public telephone network over analogue exchange lines and ISDN BRA carried over copper, cable and FWA.
[23] Access to the public telephone network over ISDN FRA and ISDN PRA exchange lines.
[24] ComReg defined the markets appropriate to national circumstance and believed that it was not appropriate to segment the market by user type (i.e. separate markets for residential and non residential users). Although not listed as such, ComReg's identified markets were a further distinction of services covered by markets listed in the 2003 Recommendation – access to the public telephone network at a fixed location for residential customers (market 1) and access to the public telephone network at a fixed location for non-residential customers (market 2).
[25] European Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation (2003/311/EC).
[26][26] 'Decision Notice and Decision Instrument - Designation of SMP and SMP Obligations Market Analysis: Retail Fixed Narrowband Access Markets' dated 24 August 2007.
[27] SB-WLR enables FSPs to issue one single bill to end-users for CPS "all calls" and line rental charges and to maintain a primary relationship with the end user. The OAO may offer its own branded telephony service to its SB-WLR end-users based on the contracted wholesale narrowband access line and ancillary services from eircom.
[28] CPS the facility offered to customers which allows them to opt for certain defined classes of call to be carried by an operator selected in advance (and having a contract with the customer), without having to dial a routing prefix or follow any other different procedure to invoke such routing.

1.22 The European Commission made no comments on ComReg's market definition and SMP analysis as set out in Decision D07/61. However, it did invite ComReg to complete all planned further consultations (i.e. in relation to (i) the SB-WLR price control obligation, (ii) the accounting separation and cost accounting obligations, and (iii) the retail price cap ("RPC") in the shortest timeframe possible to increase legal certainty and transparency. ComReg subsequently undertook consultations and adopted decisions in relation to (i) the SB-WLR price control obligation, (ii) the accounting separation and cost accounting obligations, and (iii) the RPC.[29]

Current Review

1.23 Given the time that has elapsed since ComReg's previous analysis of the FVA market(s), and having regard to market developments, it is now considered appropriate to carry out a further review.

1.24 As part of this market review, ComReg has obtained qualitative and quantitative information from operators through a series of formal[30] and informal information requests in relation to the retail FVA and related fixed wholesale markets. This 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 Report**'). ComReg has also reviewed, in detail, the experience of regulating relevant FVA markets in other EU jurisdictions and has carefully analysed guidance available from the European Commission, BEREC and other relevant commentators before arriving at its preliminary view in this Consultation Paper.

1.25 ComReg has also carried out market research[31] to inform its understanding of consumer and business attitudes/behaviours in the FVA market, a copy of which is set out in Appendix 1 (the '**2012 Market Research**'). ComReg is mindful that surveys, while a useful practical means of gathering information on consumer and business preferences/behaviours, need to be interpreted with care and that stated preferences of survey respondents can overestimate what they will actually do in practice.

1.26 The purpose of this exercise was to assist ComReg in analysing the retail access (i.e. FVA) and voice calls market(s) provided at a fixed location. The research field work took place over the period from February to April 2012, with the results being presented to ComReg in April/May 2012.

[29] See ComReg Documents 07/76, 08/19, and 10/67.
[30] Information provided by operators in response to detailed statutory information requests issued by ComReg.
[31] Attitudinal surveys of retail consumer and business users of fixed telephony services.

1.27 1,000 non-business/residential households were surveyed via face-to-face interviews. In addition, 550 businesses were surveyed via computer-aided telephone interview (CATI), with the person interviewed being the individual responsible for selecting the relevant business's telecommunications provider. In respect of retail FVA and voice calls services, the issues surveyed included:

- Prevalence and use of voice and other telecommunications services provided by at a fixed location by operators,
- Prevalence and use of mobile voice and internet;
- Payment methods, price plan details, pricing awareness and choices;
- Switching behaviour and important factors driving selection of platforms and service providers;
- Awareness of costs of retail fixed voice access and calls services and attitudes towards making/receiving calls on various telephone platforms;
- Price sensitivity to increases in the costs of fixed voice access and calls services; and
- Usage policies and monitoring of these (business survey only).

1.28 ComReg will refer to these market research findings[32] throughout this Consultation Paper. It should be noted that, rather than being definitive, this 2012 Market Research informs the analysis throughout this Consultation Paper, and its outputs are considered alongside empirical data/evidence, where available.

Relationship with Other Market Reviews and Other Related Projects

1.29 In considering market analysis, there is a clear relationship between any analysis of retail markets and their supporting wholesale markets. Any forward looking analysis of competition in retail market(s) would necessarily depend on a set of assumptions on the structure of wholesale markets and the wholesale remedies available to support competition at the retail level. In terms of linked fixed wholesale markets,

[32] It is important to highlight that the results of surveys carried out are not sufficient to draw definitive conclusions across all aspects of consumer preferences. In particular, reported preferences/consumer behaviour may diverge from actual consumer behaviour in practice. ComReg has considered market research results alongside other available evidence and analysis, where such additional evidence is available.

- ComReg has issued a consultation on the Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location;[33]
- ComReg plans to issue a consultation in relation to its Market Review: Wholesale Call Origination and Transit Services during Q4 2012; and
- ComReg also plans, subject to a finding of SMP in relation to FVA, to commence a review in 2013 of the implementation of price control obligations relating to SB-WLR and the RPC.

1.30 Other related projects include the various consultations in relation to the detailed implementation of price control obligations imposed on Eircom, including the consultation to which the following relate:

- Review of the appropriate price controls in the markets of Retail Fixed Narrowband Access, Wholesale Physical Network Infrastructure Access and Wholesale Broadband Access: Further specification of certain price control obligations in the markets of Retail Fixed Narrowband Access and Wholesale Physical Network Infrastructure Access;[34] and
- ComReg's Supplementary Consultation to ComReg 11/72: Price regulation of bundled offers.[35]

Liaison with the Competition Authority

1.31 In accordance with Regulation 27(1) of the Framework Regulations, ComReg will consult with the Competition Authority on its preliminary views on the relevant FVA market(s). ComReg will continue to keep the Competition Authority informed throughout the conduct of this market analysis process.

Consultation Process

1.32 As noted above, the purpose of this Consultation Paper is to set out ComReg's preliminary views on its analysis of the relevant FVA market(s) (i.e. product and geographic definition, competition analysis and assessment of SMP and proposed remedies). ComReg invites all interested parties to respond to the questions set out in this Consultation Paper, and/or to comment on any other aspect of the Consultation Paper. In so doing, respondents are requested to clearly explain the reasoning for their response, indicating the relevant paragraph numbers within the Consultation Paper to which their response refers, along with all relevant factual evidence supporting views presented.

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[33] See ComReg Document 12/96 at: http://www.comreg.ie/publications/market_review_-_wholesale_voice_call_termination_services_provided_at_a_fixed_location.583.104189.p.html
[34] See ComReg Document 11/72 at http://www.comreg.ie/_fileupload/publications/ComReg1172.pdf
[35] See ComReg Document 12/63 at http://www.comreg.ie/_fileupload/publications/ComReg1263.pdf

1.33 Respondents should submit views in accordance with the instructions set out on the cover page of this Consultation Paper. Respondents should also be aware that all non-confidential responses to this Consultation Paper will be published, subject to the provisions of ComReg's guidelines on the treatment of confidential information.[36] Confidential elements of responses should be clearly marked as such and, preferably, be set out in a separate document.

1.34 All responses should be sent by post, facsimile or email to the address below to arrive on or before 17:00 on 21 December 2012. Any responses received after this date may not be considered.

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Structure of the report

1.35 The remainder of this Consultation Paper is structured as follows:

- Section 2 contains the executive summary of the issues and proposals for regulation of the relevant FVA markets.
- Section 3 provides an overview of the market structure and key retail trends that have occurred in the FVA market(s) over the last five years.
- Section 4 sets out ComReg's proposed definition of the boundary of the FVA market(s) in terms of both the product and geographic scope.
- Section 5 assesses competition within each of the defined relevant FVA market(s) and considers whether any undertaking operating within such markets holds a position of SMP.
- Section 6 sets out the main competition problems that could, absent regulation, occur within the relevant FVA markets, along with proposed regulatory remedies to address competition problems, namely, in the form of obligations that would be imposed on undertakings having SMP.

[36] See ComReg Document 05/24, "Guidelines on the treatment of confidential information", March 2005.

- Section 7 sets out the Regulatory Impact Assessment ("RIA") of the proposed approaches to regulation in the relevant FVA market(s).
- Section 8 sets out the next steps that will follow the publication of this Consultation Paper.
- Appendix 1 The 2012 Market Research.
- Appendix 2 Other SMP criteria considered.
- Appendix 3 Draft Decision Instrument.
- Appendix 4 Consultation questions.
- Appendix 5 Glossary of terms.

Chapter 2

2 Executive Summary

Introduction

2.1 ComReg is required to review certain electronic communications markets in order to decide whether regulation is appropriate and, if so, what form such regulation should take. The European Commission has established in the 2007 Recommendation[37] that the retail market for "*access to the public telephone network at a fixed location for residential and non-residential customers*" (i.e. the FVA market) is susceptible to ex ante regulation and this Consultation Paper presents ComReg's preliminary views on its analysis of that market. ComReg is obliged to take the utmost account of the 2007 Recommendation. Accordingly, the FVA identified by the European Commission in the 2007 Recommendation is the starting point of ComReg's market analysis process.

2.2 Therefore, the starting point for this review is concerned with the ability of customers to access the public fixed telephone network for the purposes of making voice calls and related fixed services. However, ComReg must conduct its own assessment of the FVA market specifically in the Irish context to identify whether such market boundaries are narrower or broader than the starting point set out above and consider whether regulation of this market remains justified in light of national circumstances. The objective of the review is thus to:

- Determine the scope of the FVA market(s) in Ireland, that is to say – to define the precise boundaries of the market(s) in terms of both the product and geographic scope;
- Assess whether any individual operator or operators hold SMP in any of those markets; and
- If the market or markets in question are not effectively competitive, to impose appropriate remedies.

[37] 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 (2007/879/EC) (the "**2007 Recommendation**").

2.3 ComReg has undertaken a market review and public consultation process in relation to the retail FVA market(s) on two previous occasions. In accordance with its statutory functions and obligations, ComReg is now undertaking a further round of market review to consider, in particular, the following: (i) the boundaries of the FVA market(s) in terms of both the product and geographic scope, (ii) the state of competition in the identified relevant market(s), (iii) whether any undertaking(s) should be designated with SMP in the relevant market(s) and (iv) the nature of any appropriate remedies that should be imposed. In addition, ComReg is mindful of the evolving technological, market and regulatory developments and considers on a forward-looking basis the extent to which such developments bring alternative infrastructure to copper and/or further service competition to an area in which competition may traditionally have been limited.[38]

2.4 Other factors support the review at this time:

- Changes to wholesale regulation facilitating competition in downstream retail markets;
- Changes in technology;
- Changes in consumer behaviour which are currently underway (e.g. bundling of multiple products from a single supplier); and
- Promoting competition – furthering the ladder of investment and incentives in transition to next generation networks and services (“NGNs”).[39]

Summary Proposals

2.5 Table 1 briefly summarises ComReg’s preliminary findings as outlined in this Consultation Paper as regards market definition, SMP, and appropriate SMP obligations and how these findings differ from those contained in the 2007 FVA market review.

[38] While Eircom’s copper infrastructure is ubiquitous, replication of the copper infrastructure in the local loop for supply of FVA may not be possible (or efficient) in every area.

[39] The ladder of investment or ‘stepping stone’ hypothesis concerns the development and regulation of infrastructure competition. FSPs challenge an incumbent by offering services that, as their market share rises, relies less on the resale of the incumbents assets and more on their own, as they ‘buy’ less and ‘make’ more. By these means FSPs progressively build out their own networks closer to their customers.

Table 1 Summary of proposals market definition, SMP and remedies

2007 Markets[40]	SMP	Remedies	2012 Proposed Markets	SMP	Remedies
Lower level access **(PSTN and ISDN BRA access)**	Yes	Wholesale obligations: CPS and SB-WLR, and supporting obligations Retail obligations RPC Not to unreasonably bundle Transparency Cost accounting Not show undue preference	**Lower level FVA over** (copper PSTN and ISDN BRA access and broadband using managed VOIP[41] over cable, fibre, FWA and DSL) (referred to as" LLVA")	Yes	Wholesale obligations: CPS and SB-WLR, and supporting obligations Retail obligations RPC Not to unreasonably bundle Transparency Cost accounting Not show undue preference
Higher level access **(Business ISDN PRA and FRA access)**	Yes	Wholesale obligations: CPS and SB-WLR, and supporting obligations Retail obligations RPC Not to unreasonably bundle Transparency Cost accounting Not show undue preference	**Higher level FVA over** (ISDN FRA and PRA access) (referred to as "HLVA")	Yes	Wholesale obligations: CPS and SB-WLR supporting obligations only

[40] See ComReg Decision D07/61 "Decision Notice and Decision Instrument – Designation of SMP and SMP obligations.

[41] ComReg broadly considers VOIP services according to three main service types—managed, partially managed, and unmanaged. **Managed VOIP** means that the supplier also provides and maintains the customer's access path, either directly on its own network, or indirectly by renting the access path from a third party (e.g. using wholesale inputs). A managed VOIP supplier will also have its own switching platform, interconnect(s) and numbering allocations. Managed VOIP suppliers can manage their broadband network in such a way that prioritises quality of service requirements for the voice service. **Partially-managed VOIP** means that the supplier has interconnect(s) and, therefore, its own switching platform and numbering allocations. The partially managed VOIP provider does not, however, provide the access path to its customers and the customer uses it own broadband service to access the supplier's voice platform. **Unmanaged, or —Over the Top ("OTT") VOIP** means that the supplier does not necessarily have a switching platform with interconnects and does not itself provide access paths to its customers. Its customers must access the service via the internet using their own broadband connections.

Market definition

2.6 The legal process set out in the legislation on the market definition stage is considered in detail by ComReg throughout this document. In particular, ComReg has taken utmost account of the European Commission's Recommendation and SMP Guidelines when identifying market(s) in this review.

2.7 ComReg took the market identified by the European Commission in the 2007 Recommendation as its starting point for defining the relevant product market. The 2007 Recommendation identifies retail access to the public telephone network at a fixed location for residential and non-residential customers as a market susceptible to *ex ante* regulation and, hence, a market which ComReg should analyse when defining relevant markets appropriate to national circumstances in accordance with Article 15(3) of the Framework Directive.

2.8 On the basis of the analysis set out in Chapter 4 below, ComReg is of the preliminary view there are two distinct relevant product market(s):

- The national market for lower level FVA consisting of access via PSTN and ISDN BRA over copper and via broadband connections using managed VOIP over cable, fibre, FWA and DSL ("LLVA"); and

- The national market for higher level FVA consisting of access via ISDN FRA and PRA ("HLVA").

2.9 In 2007 ComReg, taking a forward looking account of technological and competitive developments at that time, defined a narrow lower level retail narrowband access market including primarily access via PSTN and ISDN BRA. In this Consultation Paper, ComReg proposes to draw on relatively recent market developments in again taking a forward-looking approach to market definition and, therefore assuming market trends continue to develop as anticipated, define a broader market consisting not only of FVA via PSTN and ISDN BRA but also of FVA via managed VOIP over broadband infrastructure (i.e. that supports the delivery of voice services) based on the following:

- Managed VOIP over broadband is a functionally similar service to the traditional PSTN and ISDN based voice service;

- Increasing fixed broadband penetration and the purchase of bundles, in particular, comprising FVA, fixed voice calls and broadband internet access; and

- Growing presence of alternative operators (mainly cable) that offer a voice bundled with a broadband service to end-users which is increasing in demand.

2.10 ComReg is of the preliminary view that there is also a distinct relevant market for HLVA consisting of access via ISDN FRA and PRA only.

2.11 For the reasons set out in Chapter 4 below, ComReg considers on a preliminary basis that the relevant geographic market for both the LLVA and HLVA markets is national in scope (notwithstanding the emergence of some localised competitive pressures, particularly insofar as FVA is sold as part of a bundle with other services). In the absence of a clearly identifiable break in conditions of competition across geographical areas to justify separate relevant markets for the purposes of the present review, ComReg nonetheless proposes to take such emergent competitive pressures into account when designing relevant and proportionate regulatory remedies. ComReg also proposes to keep any emergent competitive pressures under review and to revisit its analysis if more stable and discrete geographic boundaries can be identified on a forward-looking basis.

Competition analysis and assessment of SMP

2.12 In this Consultation Paper, ComReg analyses the proposed LLVA and HLVA markets to determine whether or not they are effectively competitive. As a result of its analysis, ComReg is of the preliminary view that the evidence indicates that Eircom has SMP in each of the relevant markets. This proposal by ComReg is supported by a detailed analysis of a number of key criteria set out in Chapter 5 and at Appendix 2. Those criteria and ComReg's preliminary conclusions in relation to them are in summary as follows.

2.13 In terms of the LLVA market:

- **Market share:** In presence of the existing CPS/SB-WLR remedy, Eircom has 58% share of the LLVA market. This is indicative, but, it should be noted, not by itself determinative of SMP. In the absence of the SB-WLR remedy, Eircom would have more than an 80% share of the LLVA market. This indicates that while competition is not yet effective in the relevant LLVA market, any competitive developments to date have been significantly dependent on the existence of a CPS/SB-WLR remedy in that market. It is proposed that such a wholesale remedy would continue to be imposed on an interim basis as part of the current market review pending ComReg's forthcoming consultation on the wholesale call origination market.[42] In the event of any SMP finding as part of the latter wholesale market review process, ComReg will consider whether the CPS/SB WLR remedy should be imposed as a wholesale remedy in that context.

[42] As noted earlier in this document ComReg plans to issue a consultation in relation to its Market Review: Wholesale Call Origination and Transit Services during Q4 2012.

- **Existing and potential competition:** In the presence of regulation (CPS/SB-WLR) in the market concerned, existing competition continues to evolve, though high and non-transitory barriers to entry into the LLVA market remain. Absent regulation, ComReg believes that existing competition would be virtually non-existent in the LLVA market. Competition is primarily based on resale of Eircom's wholesale inputs and Local Loop Unbundling ("LLU)[43] does not play a role in the provision of FVA. While competition is emerging in the form of voice services provided by other operators via broadband infrastructure using managed VOIP services, ComReg's preliminary view is that competition in the LLVA market is currently not effective. Because voice over broadband is not currently offered on a standalone basis to end-users in Ireland, alternative broadband platforms represent an additional choice of supply for only a subset of the population that place a higher value on broadband and the wider bundle of communication services. ComReg's preliminary view is that suppliers of managed voice over broadband do not act as a sufficient constraint on the PSTN/ISDN network nationally (though may exert a degree of competitive pressure for a subset of end users that primarily value broadband and bundles of broadband and add on voice services) in view of the significant proportion of the population that value voice as the primary fixed telephony service.

- **Countervailing buyer power ("CBP"):** It is ComReg's preliminary view that there is insufficient CBP to prevent Eircom from behaving to an appreciable extent independently of its customers and competitors in setting its prices in the LLVA market.

2.14 In terms of the HLVA market:

[43] LLU allows FSPs to install their equipment in Eircom's local telephone exchanges to provide broadband and telephone services directly to their customers.

- **Market share:** In the presence of the existing CPS/SB-WLR remedy, Eircom has approximately a 43% share of the HLVA market. This is indicative, but, it should be noted, not by itself determinative of SMP. In the absence of the SB-WLR remedy, Eircom would have approximately a 62% share of the HLVA market. This indicates that while competition is not yet effective in the relevant HLVA market, it is evolving at a faster pace than in the LLVA market. However, any competitive developments to date have been relatively recent and also significantly dependent on the existence of a CPS/SB-WLR remedy in that market. It is proposed that such a wholesale remedy would continue to be imposed on an interim basis as part of the current market review pending ComReg's forthcoming consultation on the wholesale call origination market.[44] In the event of any SMP finding as part of the latter wholesale market review process, ComReg will consider whether the CPS/SB WLR remedy should be imposed as a wholesale remedy in that context. Where such a wholesale remedy is imposed in the related upstream wholesale call origination market, it may be appropriate for ComReg to revisit the retail HLVA market to identify whether a finding of SMP continues to be appropriate in that context.

- **Existing and potential competition:** Although high and non-transitory barriers to entry persist in the HLVA market, ComReg believes that they may be less significant compared to the LLVA market. Recent evidence indicates increasing supply of FVA by operators other than Eircom on the basis of own infrastructure which may suggest that the competitive conditions on the LLVA and HLVA markets are not uniform with facilities-based competition less difficult to sustain compared to the LLVA market. However, ComReg believes that, absent regulation, Eircom's share of the HLVA market would likely be closer to 62%. LLU does not play a role in the sole provision of voice services to end-users. The HLVA market is potentially addressable on a forward looking basis by alternative IP-based solutions/systems, such as, SIP Trunking.

- **Countervailing buyer power ("CBP"):** It is ComReg's preliminary view that there is insufficient CBP to prevent Eircom from behaving to an appreciable extent independently of its customers and competitors in setting prices on the HLVA market.

2.15 Having regard to the analysis set out in Chapters 4 and 5 below, ComReg proposes, in accordance with the Framework Regulations, to designate Eircom with SMP in each of the identified LLVA and HLVA markets.

[44] As noted earlier in this document ComReg plans to issue a consultation in relation to its Market Review: Wholesale Call Origination and Transit Services during Q4 2012.

Remedies

2.16 Where ComReg concludes that a relevant market is effectively competitive, it shall not impose or maintain SMP obligations on any operator. Where ComReg determines that a relevant market is not effectively competitive and designates one or more operators with SMP, ComReg is obliged to impose on such operator(s) appropriate specific regulatory obligations referred to in Regulation 27(2) of the Framework Regulations or maintain or amend such obligations where they already exist, in order to address the competition problem(s) it has identified. This issue is addressed in detail in Chapter 6 below.

2.17 ComReg has considered the potential problems which may arise from Eircom's position of SMP in the LLVA and HLVA markets and has carefully examined a number of regulatory options for addressing those problems. In this Consultation Paper, ComReg proposes to impose certain SMP obligations on Eircom in order to address the competition problems that have been identified in the LLVA and HLVA markets.

Wholesale Obligations

2.18 In view of the high and persistent barriers to entry (particularly, the fact that other operators would need to build out a fixed network of their own), absent wholesale regulatory intervention via CPS/SB-WLR and LLU, competition would be virtually non-existent in relation to the LLVA market and restricted in the HLVA market. ComReg believes that the existing wholesale SMP obligations imposed on Eircom under Decision D07/61 (i.e. SB-WLR and CPS obligations and the various supporting obligations, including access to and use of specific network facilities, transparency, non-discrimination, accounting separation, price control and cost accounting) continue to be needed to facilitate competition in each of the proposed LLVA and HLVA markets.

2.19 ComReg is of the view that it is appropriate that the requirement for SB-WLR and CPS obligations should be considered in detail as part of ComReg's analysis of the wholesale call origination market rather than in the context of the present FVA consultation. It should be noted that it is ComReg's intention to publish a consultation document in relation to the wholesale call origination and wholesale call transit markets in Q4 2012. Therefore, in this present Consultation Paper ComReg is proposing that the SB-WLR and CPS obligations (and related supporting obligations) set out in Sections 5 and 6 of the Appendix to Decision D07/61 should be maintained in force on a transitional basis pending the outcome of ComReg's separate forthcoming consultation on the wholesale call origination and wholesale call transit markets. That forthcoming consultation in relation to wholesale call origination and wholesale call transit will consider in detail whether it is appropriate to continue to impose SB-WLR and CPS obligations on Eircom and, subject to any proposed SMP finding, will include a Draft Decision Instrument containing the text of any proposed updated SB-WLR and CPS obligations. If it is the case that SB-WLR and CPS obligations are proposed to be included as part of the wholesale call origination market review, ComReg will need to examine whether its proposed finding of SMP in the retail HLVA market would remain relevant in that context.

Retail Obligations

2.20 With regard to the LLVA market, ComReg considers that wholesale obligations imposed under Regulations 9 to 13 of the Access Regulations would not result in the achievement of ComReg's objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations. Accordingly, ComReg considers it appropriate to impose retail obligations pursuant to Regulation 13 of the Universal Service Regulations. It is ComReg's view that some of the competition problems identified in the LLVA would persist in spite of regulatory measures at the wholesale level. As such, ComReg considers it appropriate to impose certain regulatory obligations at the retail level, while remaining cognisant of regulatory obligations in place at the wholesale level.

2.21 It is ComReg's preliminary view that it is appropriate to impose the following retail obligations on Eircom in the LLVA market pursuant to Regulation 13 of the Universal Service Regulations:

- Price control via a retail price cap measure
- Obligation not to unreasonably bundle services
- Transparency obligation
- Cost accounting obligation

- Obligation not show undue preference to specific end-users

2.22 In view of market and regulatory developments since the 2007 review of the HLVA market, and based on an analysis in this Consultation Paper of existing and future market conditions over the period of the review (up to 2015), ComReg is of the preliminary view that while Eircom retains an SMP position, it is likely appropriate to rely at this stage on wholesale SMP obligations alone to address the relevant competition problems and not to impose any SMP obligations at the retail level for HLVA. In particular, ComReg notes that the proportion of direct access offered by operators other than Eircom has significantly increased very recently in this market. Furthermore, the continuing prospect of increasing competition from emerging IP based substitutes, such as, fibre based SIP Trunking, would on a forward looking basis likely minimise competition concerns and associated impacts resulting from Eircom’s SMP in the HLVA market. In accordance with the spirit of the EU framework, ComReg’s regulatory approach is to impose obligations only where appropriate, proportionate and justified. As outlined above, ComReg is proposing that the wholesale SB-WLR and CPS obligations (and related supporting obligations) set out in Sections 5 and 6 of the Appendix to Decision D07/61 should be maintained in force on a transitional basis pending the outcome of ComReg’s separate forthcoming consultation on the wholesale call origination and wholesale call transit markets. ComReg is of the view that those wholesale obligations are sufficient to address the competition problems identified in the HLVA market. Accordingly, ComReg is proposing in this Consultation Paper not to impose any retail SMP obligations on Eircom in the HLVA market.

2.23 The Draft Decision Instrument, contained in Appendix 3 below, specifies in legal terms the nature of the regulatory remedies that ComReg is proposing to impose on Eircom.

2.24 ComReg seeks feedback from interested parties on all the preliminary views set out in this Consultation Paper, including (but not limited to) the specific questions raised throughout the Consultation Paper.

Chapter 3

3 Retail Market Structure and Trends

Introduction

3.1 Before later defining the precise boundary of the relevant FVA market(s) in Ireland in terms of both the product and geographic scope, and then assessing the strength of any competitive constraints in the relevant market(s), ComReg reviews the broad structure of the retail markets and overall trends that may have impacted the provision of FVA since the time of ComReg's last review of the FVA markets in 2007.

Overview of the structure of the retail market

3.2 The starting point for the assessment of the retail market at a general level comprises a connection or access (at a fixed location or address) to the public telephone network which enables end-users to use voice[45] and related services[46] typically referred to as "plain old telephony services" ("POTS") or also referred to as "narrowband telephony".

3.3 POTS have traditionally been provided in Ireland by the incumbent operator (i.e. Eircom) and other authorised operators ("OAOs"), including re-sellers and, where appropriate, cable operators[47] offering telephony services. The operators providing such services are referred to for convenience in this Consultation Paper as fixed service providers ("FSPs").

3.4 FVA is provided at the network termination point to the local loop and may be supplied by a variety of technical means including over:

- the Public Switched Telecommunications Network (PSTN) and ISDN telephone lines (typically referred to as "fixed narrowband access"); and
- broadband infrastructure using managed VOIP and, which may be via cable, fibre, fixed wireless connections or a Digital Subscriber Line ("DSL). [48]

3.5 The various types of FVA may be offered:

[45] That is, for the purpose of making and/or receiving various types of telephone calls, including, local, national or international calls and calls to mobile and non geographic numbers.
[46] Such as, fax and functional internet access ("FIA").
[47] At the time of the 2007 market review, however, neither cable operator, NTL Communications (Ireland) Limited and Chorus Communications Limited, offered direct access to voice services extensively. Cable connections in the past would not have been synonymous with access to narrowband services: cable was deployed primarily as a broadcast infrastructure, thus lacking a return path.
[48] Digital Subscriber Line technologies use the traditional copper network to deliver digital broadband signals.

- Directly – this is where the end-user is connected directly to the FSP's network.

  In terms of competitive supply, Eircom is the largest provider in the direct access market, and remains the only ubiquitous supplier of FVA (via a combination of copper, Fixed Wireless Access ("FWA") and fibre) to the public telephone network. Other owners of access networks offering direct access are the cable operator, UPC Ireland ("UPC"),[49] as well as Magnet and Digiweb/Smart[50] (via fibre-based networks). There are also a number of FSPs offering direct fixed telephony services to specific types of end-user, mainly large businesses. For the purposes of this review, ComReg considers that access via LLU is a form of direct access.

- Indirectly – this is where Eircom's wholesale input products are used to offer retail access services to their end users.

  Availability of wholesale input products, such as SB-WLR and CPS, mean that, while ownership of assets may not change, access services can be offered to end-users by a third party. Allowing an FSP to purchase wholesale inputs, thereby not requiring long term investment by that FSP in physical access infrastructure, enables easier entry into the retail FVA market. The SB-WLR product impacts on competition for POTS by facilitating the provision of access and calls to end-users by one FSP using single billing.

3.6 ComReg's 2007 review of the FVA markets highlighted that the most common technology used by end-users to access fixed voice services was by means of traditional telephone networks using twisted copper pairs (i.e. PSTN and ISDN lines). These networks continue to be the predominant form of FVA used by end-users in Ireland today. Radio solutions, such as FWA, have primarily been used in certain remote locations and areas where copper is not available.[51]

[49] NTL and Chorus were merged having been purchased by Liberty Global Inc. who established UPC Ireland ("UPC") in 2005 on the basis of the acquired and combined assets.

[50] It should be noted that the Digiweb Group acquired the entire business and residential customer base and assets of Smart Telecom in December 2009 (see: **http://media.digiweb.ie/news/2009/12/08/smart-telecom-joins-digiweb-group-and-exits-examinership-process/**). The Digiweb Group currently operates under both the "Digiweb" and "Smart" brands.

[51] In Ireland, radio solutions (point-to-point and point-to-multipoint) also provide a means of providing customer access and have also been used in other countries during the roll-out of competing service offerings. In the past, ComReg has offered licences for the use of suitable spectrum. For various reasons, use of this technology remains low in Ireland.

3.7 The level of infrastructure competition was limited in 2007. Eircom was the only ubiquitous supplier of access to the public telephone network. FSPs had undertaken some infrastructure investment, yet very little infrastructure in the access network was not provided by Eircom. In terms of direct access, no FSP supplied POTS to end-users based on LLU. In addition, provision of voice services by cable operators was insignificant. While Esat BT (now BT) was the main competitor to Eircom in the lower and higher level access markets at that time, it predominantly competed for POTS through indirect access (hence relying on Eircom's wholesale access inputs). Furthermore, the overall number of internet access subscriptions early 2007 was relatively lower at approximately one million subscriptions (compared to over 1.6 million currently). At that time, narrowband dial-up represented 42% of the overall total of internet subscriptions, the remaining 58% consisted of broadband subscriptions. Mobile broadband and managed VOIP over broadband as part of a bundle using a broadband only connection were only emerging services at the end of 2006.

3.8 In the time period since 2007, however, alternative access technologies and providers with the potential to compete with Eircom's copper PSTN and ISDN networks in the provision of voice services have become more prevalent. This is largely because alternative networks are increasingly investing in their own networks and are building out to connect to Eircom's local loop in certain regions, in particular, in more densely populated areas. Where alternative access networks have been rolled out, this has been driven to a large extent by their ability to provide services other than FVA – mostly multi channel TV delivered through cable networks initially, but more recently also broadband connectivity and other multi-service bundles.

3.9 Another key development since 2007 has been the growth of VOIP, particularly with the emergence of OTT suppliers. This is noticeable in the international calls market where OTT suppliers, such as, Skype, Google Voice and Viber, have made significant inroads. The latter providers supply access to web-based VOIP (or “unmanaged” VOIP services).[52] Alternatively, an FSP may provide its own VOIP offering over its broadband access service (“managed” VOIP services)[53] independent of Eircom. The main benefit of VOIP as an alternative to the traditional PSTN based voice service appears to be its cost advantages for service providers. Routing phone calls over existing data (broadband) networks helps eliminate the need for FSPs to operate separate voice and data networks, and permits cost savings through achieving economies of scope.[54]

3.10 Already there are a number of FSPs that offer managed VOIP in the Irish retail market. Most of the managed VOIP subscriptions currently active in Ireland are provided over cable and fibre networks as part of a bundle with broadband and television services.

- UPC launched a managed VoIP service as an add-on to its broadband and pay-TV customers in 2006 (essentially offering voice as part of a bundle with either broadband and/or television);
- Digiweb and Imagine offer managed VoIP services over a FWA platform in Dublin;
- Magnet and Digiweb/Smart both offer managed VoIP services over fibre networks deployed in certain (typically suburban) residential developments; and
- Blueface offers a VOIP service which relies on its VOIP customers having an existing broadband connection supplied by a third party.

[52] “Unmanaged” services are provided over the networks of third parties and the supplier has very limited control over the quality of the service experienced by the end user. In addition, the end user would also need access to a non telephone access device e.g., a computer.
[53] “Managed” services are provided over a managed network allowing the supplier to retain some control over the quality of the service. Managed VOIP in Ireland includes only services provided by switched licensed operators in the Republic of Ireland and does not include web based services such as Skype and Viber.
[54] This is a supply-side feature that arises where the service provider is able to produce given quantities of products at a lower total cost than the total cost of producing these quantities separately.

3.11 The gradual shift to an all IP environment will likely enable other FSPs to compete with cable operators when bundling fixed telephony and broadband with TV services, though these developments are still nascent in Ireland. Likewise, UPC now uses its cable infrastructure for supplying higher speed broadband telecommunications services, as well as managed VOIP services. Since 2007, UPC has been investing significantly in its cable network in Ireland[55] which has opened the way for direct provision of products other than pay-TV. Therefore, UPC is no longer a pure pay-TV provider rather a multi-product operator. It offers cable voice ("home phone"), though only as part of a bundle with its television and broadband services. UPC also supplies FVA to business customers to a limited extent based on higher level ISDN PRA access.

3.12 FSPs that previously operated in different markets may therefore now offer a similar range of products. As a result, two demand side scenarios emerge in relation to the end-user's choice of FVA supplier. End-users wishing to avail primarily of broadband internet access combined in a bundle of higher value services, including voice as an "add on" service (i.e. are relatively more broadband centric where the perceived value of the fixed service has potentially moved from voice to internet access for multiple services) have additional choice in relation to their supplier of FVA. On the other hand, end-users wishing to avail of FVA only or primarily voice services based on PSTN and ISDN networks (and hence who are voice centric where the perceived value of the fixed service is voice) possibly have less choice of FSP.

Regulatory and Market Developments

3.13 This sub-section sets out the developments, since 2007, in the retail and wholesale markets that underpin the analysis in the later sections. In particular, ComReg considers the impact of changes to wholesale SMP regulation, including the changes to the SB-WLR price, changes to the market from bundling and increased mobile use, in particular, potential fixed to mobile substitution ("FMS"). This will be a broad introduction to the trends which will be considered in more detail below in relation to the extent to which they may tend to change ComReg's findings in relation to FVA since the 2007 review.

[55] First, to DOCSIS 2.0 standard and, more recently, to DOCSIS 3.0, for the delivery of fibre power next generation broadband services.

Developments in Wholesale SMP Regulation

3.14 The 2007 market review described FVA markets which were dominated by Eircom. While the use of CPS had led to a degree of competitive pressure in the calls markets,[56] access to narrowband fixed lines in most of Ireland was overwhelmingly dominated by Eircom – its market share was just over 83% for lower level access (PSTN and ISDN BRA) and approximately 66% for higher level access (ISDN FRA and PRA).[57]

3.15 Eircom had maintained a position of SMP in relation to the provision of FVA despite wholesale regulatory measures and regulation in related wholesale and retail markets. Therefore, competition in the provision of FVA is heavily dependent on effective competition at the wholesale level, or, where this is not the case, through effective regulation of the applicable wholesale markets. To this end, ComReg has focused on measures to enhance competition at both the wholesale and the retail levels. The aim has been to encourage real competition for the benefit of consumers and businesses; and achieve a reduction in Eircom's market power in relevant retail and wholesale markets. This has included:

1. The further development of the wholesale services supporting the delivery of retail FVA and fixed voice calls to end-users,[58] such as:

    a. The implementation of an SLA capturing both Provisioning and Service Assurance targets;

    b. Aggregated SB-WLR Performance (Provisioning and Service Assurance) statistics are provided to ComReg by Eircom and published on a quarterly basis;

    c. The introduction of a Web-services functionality allowing FSPs to submit orders and report faults in real-time to Eircom Wholesale's Unified Gateway;

    d. FSPs also have the facility to make appointments with Eircom Wholesale's technical support;

    e. Provisioning order types have been expanded to cater for end-users migrated from or to the on-net environment, as well as the introduction of a combined SB-WLR and Bit-stream order type; and

[56] See ComReg Document D07/111.
[57] ComReg document 07/61.
[58] Changes and improvements to CPS and SB-WLR processes and facilities are agreed by industry at regular industry meetings.

2. The further development of a set of appropriately priced wholesale input services, in particular, LLU[59] and SB-WLR.[60]

3.16 In the following, ComReg highlights the evolution of wholesale remedies, such as the requirements on Eircom to provide CPS, SB-WLR and LLU services, which have enabled FSPs other than Eircom to provide retail fixed telephony services to end-users. It is necessary to identify developments in relation to these input services to later determine the structure of the retail FVA market(s) and assess competitive outcomes at the retail level.

3.17 Since 2007 the competitive environment continues to evolve – for example in the growth in residential and business retail FVA providers (18 using CPS/ SB-WLR[61] and 5 LLU[62]) – with corresponding impacts on price and choice for end-users and on Eircom's market share.

3.18 In relation to the FVA markets defined by ComReg in 2007, Eircom's market share has declined from 76% to approximately 72% in Q2 2012 in the lower level access market (largely residential PSTN) and from 66% to 43% in Q2 2012 in the higher level access market (ISDN FRA and PRA respectively). Prior to 2007, CPS and SB-WLR were the only real options to compete for FSPs other than Eircom who wished to provide FVA. For example, less than 1% of retail fixed telephony subscriber lines were delivered directly on cable networks in that period.

3.19 In 2008, ComReg directed Eircom to amend the retail minus percentage applicable to SB-WLR from a margin of retail minus 10% to retail minus 14%.[63] Figure 1 shows that overall there has been a significant increase in the provision of FVA by FSPs (other than Eircom), with the trend towards the provision of a complete access package (either SB-WLR and CPS or full LLU).

[59] See ComReg document 10/10 at http://www.comreg.ie/_fileupload/publications/ComReg1010.pdf

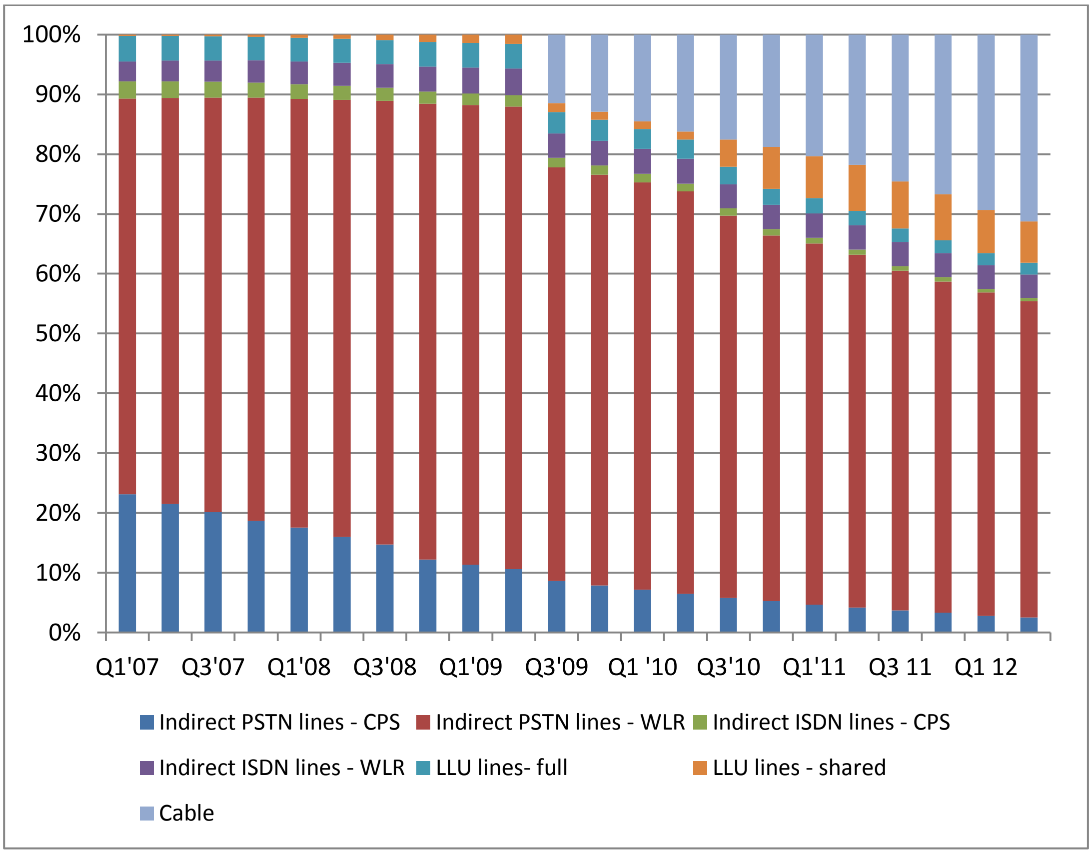
[60] ComReg reviewed the margin available to FSPs in 2009 where a 10% margin applied since 2003. Following a review of the available margin to FSPs when selling retail narrowband services, it was concluded that a 10% margin was insufficient and the margin was increased to at least 14%. This margin is still in place.

[61] This includes both switched and switchless resellers supplying a service at the retail level to both residential and business customers. A number of the resellers are also providers of retail CPS on a standalone basis.

[62] LLU Retail Providers in Ireland are BT Ireland, Magnet, Colt, 3 Play Plus and Smart Telecom (Digiweb). BT Ireland and Magnet also act as wholesale providers of LLU to a number of other telecoms service providers.

[63] ComReg Document (08/19) Information Notice: Single Billing Wholesale Line Rental Directions to Eircom regarding retail minus %: http://www.comreg.ie/_fileupload/publications/ComReg0819.pdf

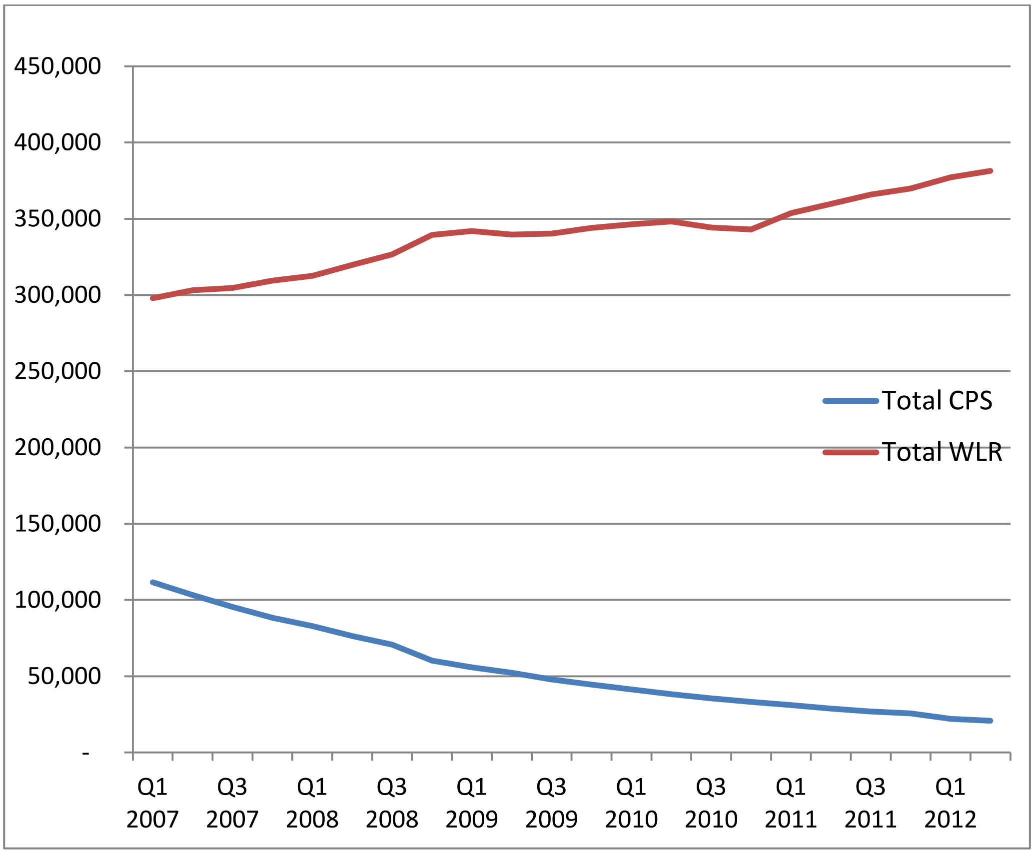
Figure 1 Non-Eircom fixed telephony access lines



3.20 Data shows that the total number of narrowband only (excludes FVA over broadband) indirect access paths[64] increased, representing 26% of all access paths in the fixed market as of the end of Q2 2012.[65] There was migration from CPS-only to SB-WLR – the fall (72%) in CPS represents a decrease of 86,033 lines. At the same time, however, SB-WLR lines have grown (24%), an increase of 72,619 lines. The migration of CPS customers to SB-WLR is driven by the convenience of receiving a single bill or "one stop shopping" for the end-user.

[64] Access paths are not synonymous with access lines for example, in the case of ISDN paths, there may be more than 1 path provided via a single ISDN line.
[65] ComReg Quarterly Report, June 2012.

Figure 2 Total CPS and SB-WLR (PSTN and ISDN)



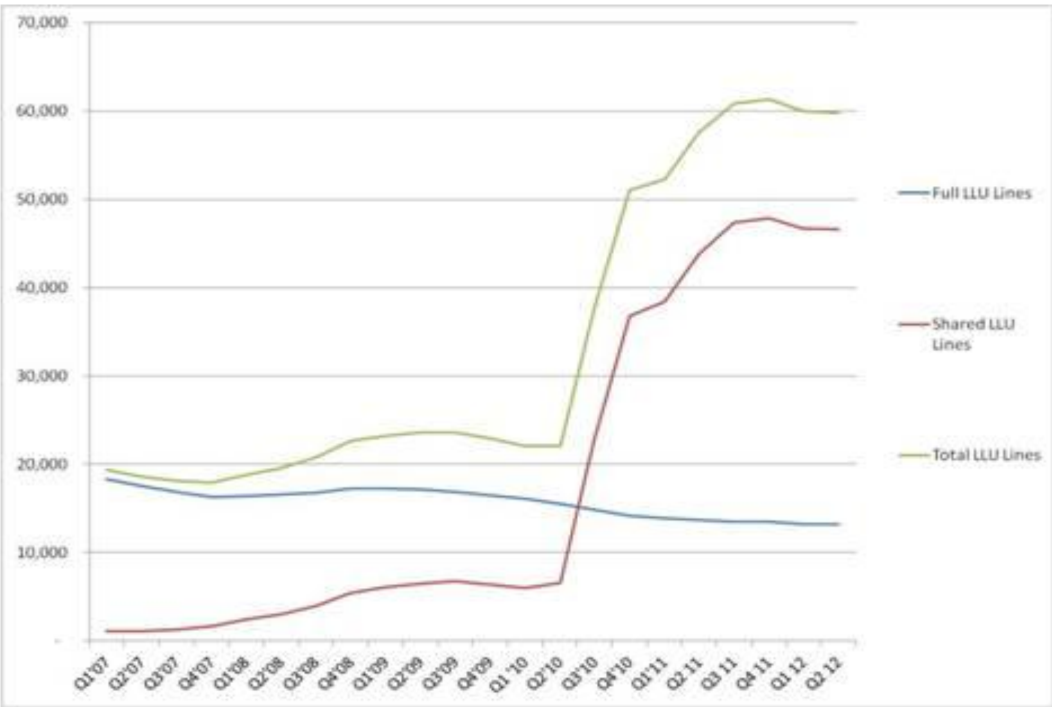
3.21 Total CPS and SB-WLR combined reached 402,200 lines in Q2, 2012. The corresponding figure stood at 409,421 in April 2007, indicating an overall decline of 14,020 lines (or 3.4%). Combined CPS and SB-WLR reached a low of 376,211 lines in December 2010 but have been increasing since then.

3.22 Although relatively nascent, the use of LLU by Eircom's competitors has grown – some FSPs have been migrating to LLU, for example, Vodafone and BT Ireland have a joint venture allowing potentially for significant uptake of LLU-based services.[66] However, this is only in the growth stage and LLU penetration is still relatively limited – geographically, it is limited to some regions in Ireland and in general LLU penetration is below the EU average.[67] Figure 3 shows there are currently 59, 844 unbundled local loops, up from 19,337 in 2007 but down from 61,374 in Q4 2011.

[66] http://forum.vodafone.ie/index.php?/topic/300-bt-and-vodafone-agreement-to-significantly-boost-competition-and-network-investment-in-republic-of-ireland/ - Detail of Vodafone / BT agreement & unbundling of exchanges.

[67] In comparison, the number of fully unbundled lines in the UK increased from 2.7 million in Q4 2009 to 5.2 million in Q4 2011 (Ofcom) Fixed Narrowband Market Review and Network Charge Control, May, 2012.

Figure 3 Evolution LLU Lines[68]



3.23 Despite falls in the wholesale price of full LLU in August 2009 from €16.43 per line per month to €12.41 per line per month[69] significant take-up of this wholesale input has yet to occur. More recently however, growth in overall LLU has been driven by a sharp growth in shared LLU connections – Line Share ("LS") grew to 46,742 lines at Q2 2012 up from 46,594 in 2009. The wholesale price for LS was reduced in 2009 from €8.41 per line per month to €0.77 per line per month.[70] The majority of the growth in LS came as a result of BT's migration from Eircom bitstream in 2010 to this alternative wholesale input.[71] BT has contracted with Vodafone to supply it with [✂]

[68] ComReg's Quarterly Report, June 2012, p32-33.
[69] ComReg Decision D4/09 available at www.comreg.ie/_fileupload/publications/ComReg0966.pdf
[70] See ComReg document 09/66 at http://www.comreg.ie/_fileupload/publications/ComReg0966.pdf
[71] According to Peter Evans, product director at BT, "*This price drop is critical. BT is driving competition for wholesale and retail broadband by investing significantly in Local Loop Unbundling to provide up to 24Mb speeds to close to two-thirds of broadband lines in the country*", http://www.siliconrepublic.com/comms/item/15004-llu-price-drop-lays/

3.24 Where the local loop has been unbundled, it is generally for the provision of broadband internet access and services, and not solely for POTS. In the context of broadband offers, however, FSPs, such as, Digiweb/Smart, rely on LLU to provide access to a combined voice and broadband service. BT and Vodafone use different wholesale inputs to provide fixed telephony services [✂]. The evolution of telephony services over the cable network is set out in the following retail trend analysis. ComReg later explores whether or not there has been a significant change in the supply of FVA since 2007, in particular, direct provision of this service and its potential implications for the competitive dynamic in FVA markets.

Retail Trend Analysis

3.25 Since the last review of the FVA markets in 2007 consumption of electronic communications services by end-users and the provision of such services have evolved considerably, driven by technological developments. This section sets out the key changes in retail FVA markets which in summary are:

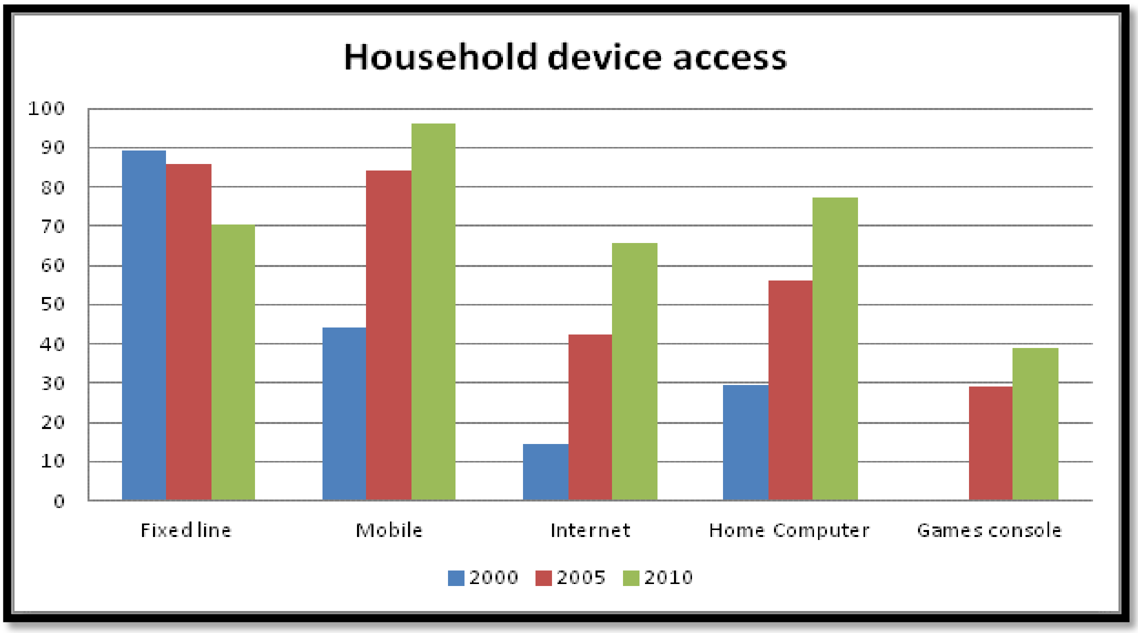
- Falls in the more traditional fixed phone lines PSTN and ISDN;
- Growth of different types of telephone access available within the home and businesses;
- Dramatic increase in internet penetration and usage including mobile internet;
- Migration from narrowband to broadband connections to access the internet;
- Complexity in consumer needs of those using multiple telephone access devices;
- Purchasing voice packages and voice and broadband as a bundle are increasingly appealing to end-users who place greater emphasis on value.

3.26 The changing end-user preferences and usage in respect of mobile technology, broadband access and bundled services may have the potential to (prospectively) impact market definition and encourage greater competition. The potential implications of these trends in that regard are assessed in more detail in Chapters 4 and 5 below.

Access infrastructure and technologies are evolving

3.27 There is a growing and more sophisticated consumer usage of electronic communications. A recent Household Budget Survey[72]from the CSO found that 70% of households had a fixed telephone line in 2010, compared with 86% in 2005, while mobile phone use increased by 12% and internet penetration increased by more than 20% in the same period –see Figure 4.

Figure 4 Household Device Access

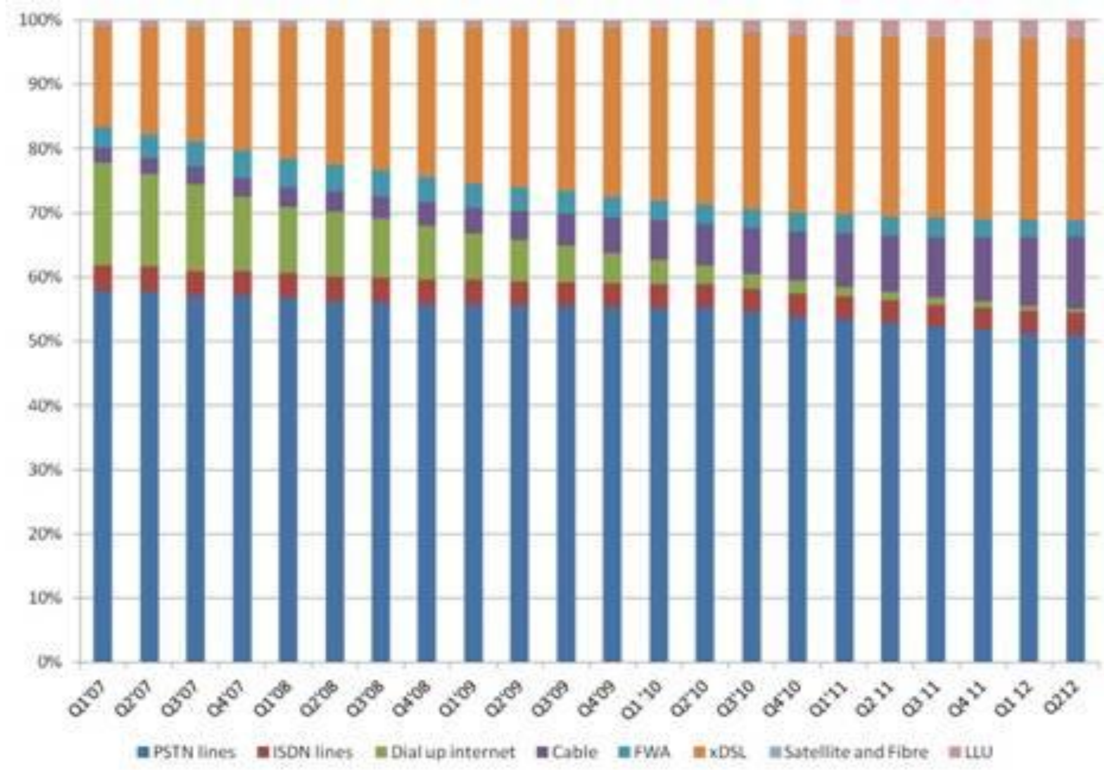


Source: Central Statistics Office

3.28 This trend is reflected in how consumers and businesses access public electronic communications networks which has evolved significantly since ComReg's 2007 review of the FVA markets. Figure 5 illustrates how the distribution of all the different types of access infrastructure and technologies (which provision both voice and data services) at fixed locations has changed since 2007.

[72]http://www.cso.ie/en/media/csoie/releasespublications/documents/housing/2010/0910first.pdf

Figure 5 Fixed Retail Connections by Technology



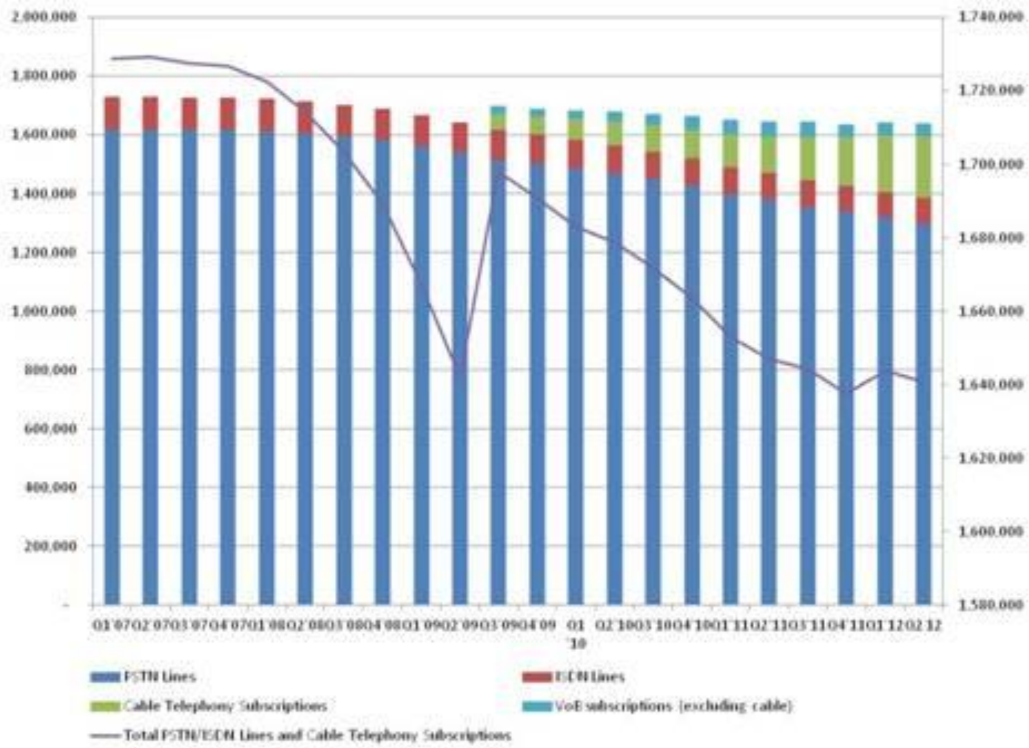
3.29 In terms of overall retail connections supplying fixed voice and data services, the overall size of the fixed telephony market has marginally declined (9%) in Ireland since the 2007 FVA market review.[73] In light of the evolution in retail connections provisioning both voice and data services, Eircom and potentially FSPs utilising its wholesale inputs for the provision of FVA over the PSTN and ISDN networks are likely facing a migration of customers to alternative infrastructures that can deliver voice services, primarily cable and, more generally, in respect of fixed telephony services.

PSTN and ISDN Landlines Decline

3.30 While the total number of retail connections has fallen marginally in Ireland, as is evidenced by Figure 6, the overall number of FVA subscriptions (PSTN, ISDN and managed VOIP over broadband) has declined, though the driver of this decline is the reduced take-up of FVA over the more traditional PSTN and ISDN landlines.[74] Combined PSTN/ISDN lines have been declining steadily in recent years, falling from 1.7 million in Q1 2007 to 1.3 million in Q2 2012.[75]

[73] ComReg Quarterly Report data, June 2012.
[74] Since 2007, fixed retail voice traffic has also fallen, from 2.4 billion minutes in Q1 2007 to 1.3 billion minutes in Q2 2012, a decrease of 45%. See the Market Review: Fixed voice call termination, ComReg document 12/96, paragraphs 3.12 to 3.16.
[75] ComReg Quarterly Report data, June 2012.

Figure 6 Evolution PSTN, ISDN Lines, Cable voices subscriptions and other managed VOIP



3.31 PSTN lines are down (20%) from 1.62 million lines in 2007 to approximately 1.34 million in Q2 2012.[76] Overall demand for ISDN access products has also decreased, by approximately 22% since 2007. ISDN access services account for approximately 86,845 lines currently down from 110,777 lines at the beginning of 2007. This is in part a reflection of end-users migrating away from dial up internet access, to a broadband connection, primarily DSL technology/ modems. This is supported by the available data which suggests that ISDN BRA has experienced a fall of close to 26,000 lines over the period since the last review. In contrast demand for higher capacity ISDN FRA and PRA lines has increased primarily at the end 2011/ early 2012. One of the reasons for this perhaps is because these products are taken by business users who want multiple voice lines (as opposed to consumers who wanted voice and dial up internet). Nevertheless, whereas ISDN may no longer be used primarily for voice, many SMEs may now be using this access product as a back-up for their data management systems. Take up of FWA declined significantly (31%) in the period since the last FVA review. In Q2 2012, there were 69,519 FWA subscriptions, compared to 123,456 FWA subscriptions early in 2008.

[76] ComReg's Key Quarterly data.

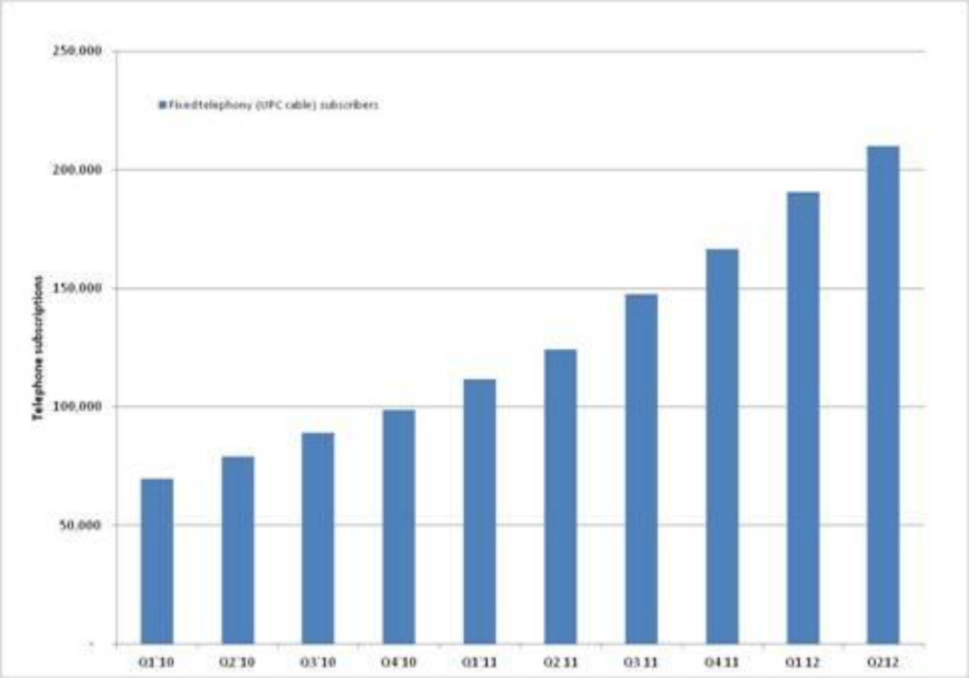
3.32 ComReg considers that the decline of narrowband FVA will be steady because PSTN/ISDN access remains the predominant form of FVA for households and businesses accounting for 84.5% of FVA subscriptions.[77] The continued importance of PSTN/ISDN as a means of providing FVA is reflected in Figure 6 and also the 2012 Market Research – the majority (77%) of consumers use PSTN/ISDN network for their FVA service, while 80% of businesses do so. Possibly much of the decline in PSTN and ISDN is driven by end-users switching to alternative FSPs or to relatively newer infrastructure or technologies, such as cable or broadband (i.e. switching away from dial-up internet). On the other hand, ComReg believes that it is likely also to be the case that the shift in end-user demand is due to the effects of the poor economic climate. A similar decline was also experienced in the mobile sector. Figure 6 shows that much of the decline in PSTN/ISDN lines has coincided with the start of the recession in 2008 yet this decline has not reversed since then while retail mobile revenues have returned to growth.

Cable subscribers are growing

3.33 From UPC's press releases their customer base is on an upward trend. According to UPC's most recent reports,[78] its cable network has a current reach of 728,300 households, 46% of the approximately 1.6 million households in Ireland, primarily in urban areas. As of Q2, 2012, UPC has approximately 283,400 broadband customers and has 205,800 voice customers. Figure 7 shows the evolution in UPC's cable telephony subscriptions. As of Q2, 2012, UPC's cable telephony subscriptions represented a retail share of approximately 13% of all fixed telephony subscriptions.[79] In particular, the development of managed VOIP service over cable broadband has spurred the growth in availability and subscription to UPC's cable telephone service.

[77] ComReg's Quarterly Report data, June 2012.
[78] According to UPC, "UPC Holding Reports Second Quarter 2012 Results", press release available from: http://www.lgi.com/pdf/press-release/UPC-Holding-Press-Release-Q2-2012-FINAL.pdf
[79] ComReg's Quarterly Report data, June 2012

Figure 7 Cable telephony subscriptions (UPC)



3.34 On average, the decline in narrowband FVA is evident, yet, concerning substitution patterns it is necessary to distinguish between access technologies and potentially market segments, for example between business and residential customers. In terms of substitutability patterns, these issues are considered in detail in Chapter 4 below.

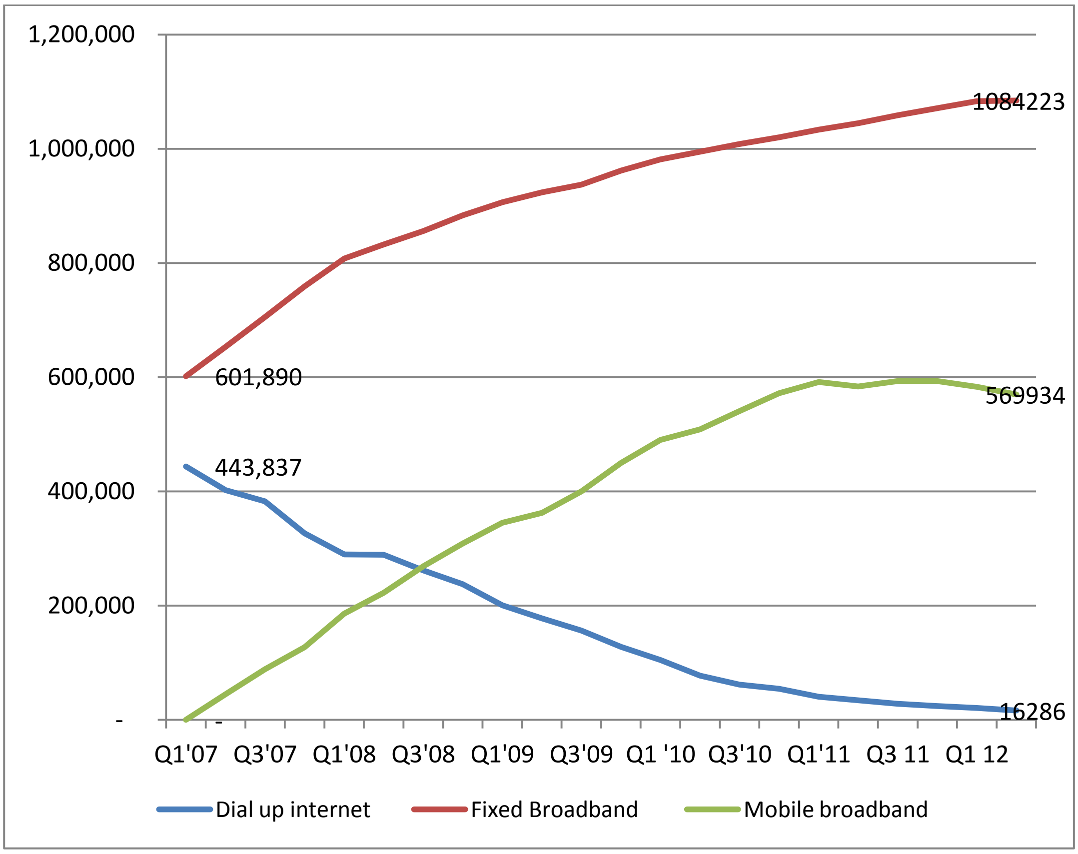
Increasing importance of broadband connections

3.35 According to ComReg's Key Quarterly data, total broadband subscriptions (fixed and mobile) reached 1,654,157 in Q2 2012 (with mobile broadband accounting for 35% of all internet subscriptions). This significant increase in internet subscriptions since 2007 is evident in Figure 8. The estimated fixed broadband household penetration rate was 55.6% in Q2 2012.[80] The broadband per capita penetration rate (including mobile broadband) was 36.1% while the fixed broadband only per capita penetration rate was 23.6%.[81]

[80] ComReg Quarterly Report, September 2012, p39. This estimate excludes business subscriptions and mobile broadband subscriptions).

[81] ComReg Quarterly Report, September 2012, p39. This estimate excludes business subscriptions and mobile broadband subscriptions).

Figure 8 Internet Subscriptions by Type

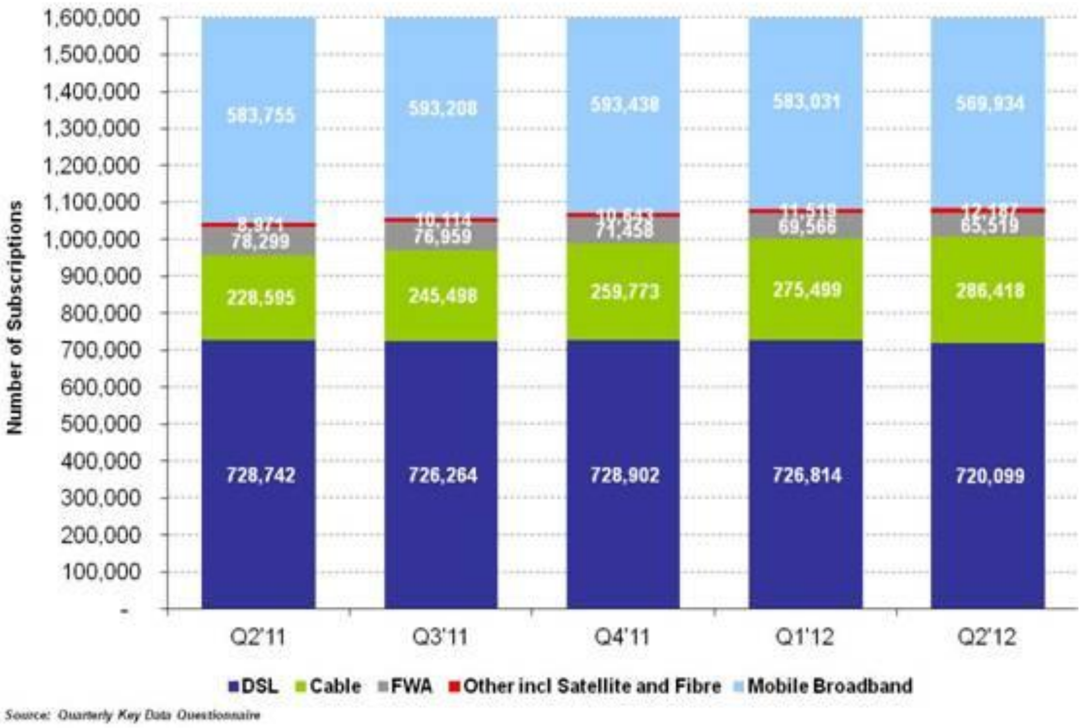


3.36 Broadband access has superseded dial-up access as a means of accessing the internet driven by the advances in the functionality and quality of broadband services. Since the 2007 FVA market review, a significant number (419,508) of residential subscribers and small business users accessing the internet from fixed locations have switched away from slower dial–up technologies[82] to broadband access. In 2012, only 1.2% of all internet subscriptions are narrowband compared to 98.8% broadband (fixed and mobile) subscriptions.[83] The 2012 Market Research indicates that less that 5% of households in our survey choose dial up internet access.

[82] A narrowband connection delivers data at speeds less than 144kb per second and unlike a broadband connection is not "always on".
[83] ComReg Quarterly Report, June 2012, p28.

3.37 Figure 9 illustrates that in terms of choice of broadband internet access, most end-users are connecting using DSL technology/ modems (44%), with Eircom being the leading provider. The share of non-DSL fixed broadband lines has increased. Relative to other EU countries Ireland has a high proportion of mobile broadband subscriptions (35%).[84] Internet access using the cable network has also increased – reaching levels above 16% in Q 2012. Satellite and fibre (excluding cable) broadband subscriptions combined currently account for less than 1% of the market.

Figure 9 Broadband Subscriptions by platform



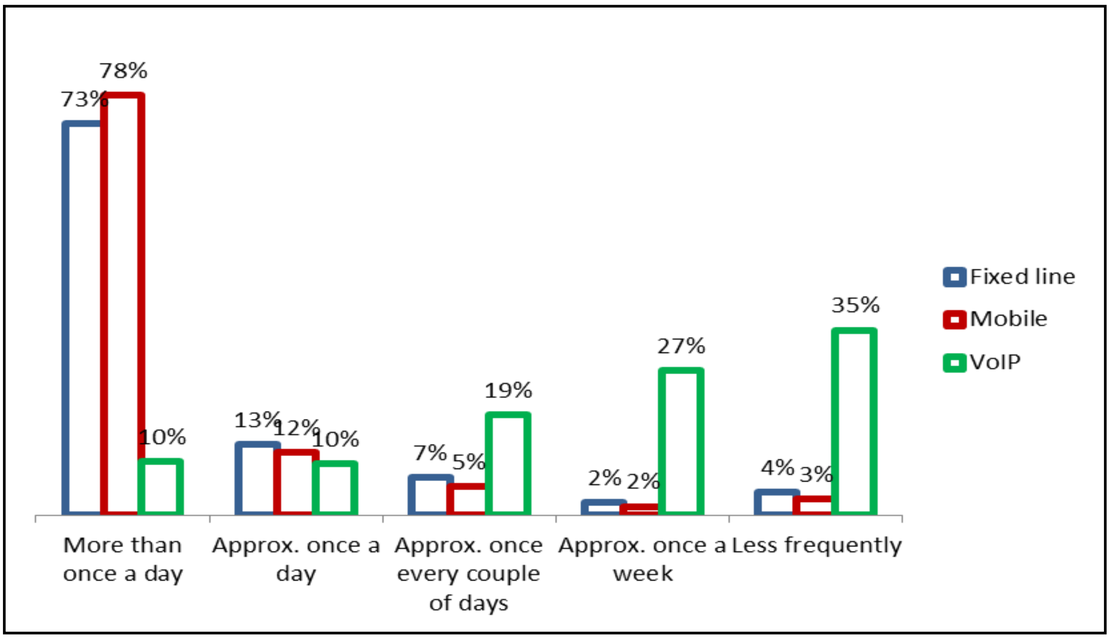
VOIP is increasing

3.38 As set out at paragraphs 3.9 to 3.11, increasingly managed VOIP is a means of providing voice services to consumers and businesses. In total, managed VOIP minutes accounted for approximately 9.6% of total fixed voice minutes in Q1 2012 up from 6.0% in Q1 2011. There were just under an estimated 255,000 managed VOIP subscribers in Ireland as of Q2 2012,[85] representing 15.5% of total fixed telephony subscriptions for that period. Growth in managed VOIP subscription is driven primarily by increasing take up of cable telephony.

[84] This includes mobile dongles/data cards. Mobile broadband subscriptions over a handset are not included, ComReg quarterly data reports dedicated mobile broadband subscriptions.
[85] ComReg Quarterly Report Data, June 2012. Note that these traffic and subscription figures refer to managed VOIP only and do not include unmanaged VoIP services such as Skype.

3.39 There has also been an increase in the use of unmanaged web-based VOIP services by consumers, frequently used by consumers via a personal computer, laptop computer, smart phone or tablet in order to communicate with other users on these devices. The 2012 Market Research indicated that 36% of households with a fixed broadband service in their home claimed to have used unmanaged VOIP services.[86] However, reported usage levels for unmanaged VOIP services were much lower than for mobile and other fixed voice services with only 10% of respondents using unmanaged VOIP services more than once a day (compared to 73% for other fixed voice and 78% for mobile voice telephony) as illustrated by Figure 10 below.

Figure 10 Frequency of usage of fixed voice, mobile voice and unmanaged VoIP services[87]



[86] The 2012 Market Research Appendix 1.
[87] The 2012 Market Research Appendix 1.

3.40 In addition to the above, residential respondents to the 2012 Market Research identified a clear difference in usage preferences between unmanaged VoIP services and other voice telephony services. For example, household respondents indicated a clear preference for using their fixed voice telephony service to make calls to other fixed numbers (e.g. 80% preferred to use their fixed voice telephony service for calls to national fixed numbers) whereas unmanaged VoIP was cited as their communications method of choice for calls by only a very small number of respondents (e.g. only 2% preferred to use unmanaged VoIP for calls to national fixed numbers). However, a higher number of respondents indicated unmanaged VoIP as their communications method of choice for international calls (11% preferred to use unmanaged VoIP for international calls compared to 55% preferring fixed voice telephony and 12% preferring mobile voice telephony for making international calls).[88]

Discounted packages or bundled services are becoming more popular

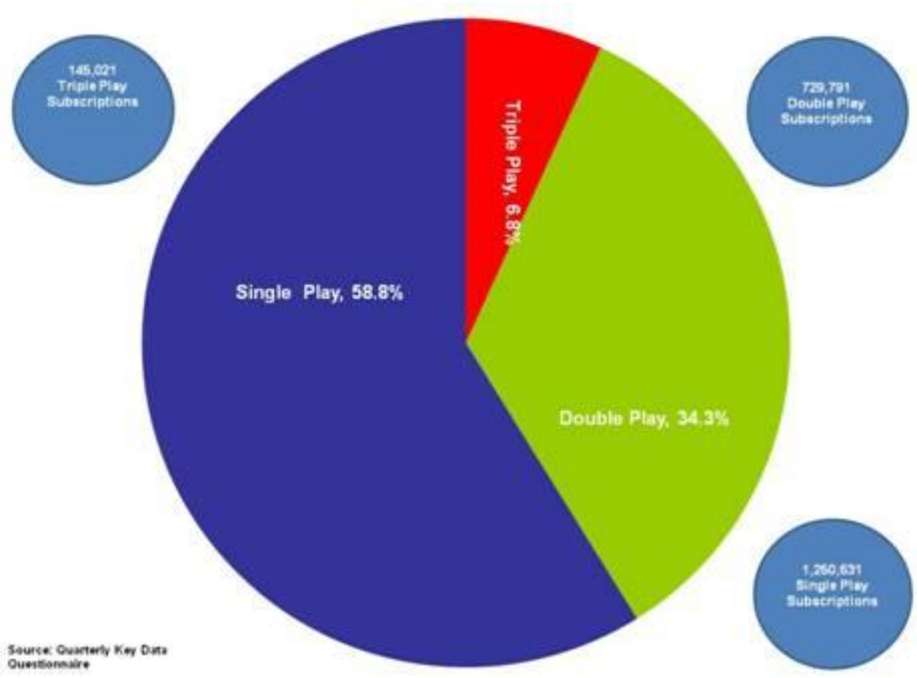
3.41 Service packages and bundles that include FVA and fixed voice calls continue to grow in popularity among households and businesses. Since ComReg published its last review of the FVA markets in 2007, Ireland has faced a period of significant economic contraction. Irish consumers and businesses undoubtedly face severe constraints on their purchasing power following the economic downturn. Consumers are looking for ways to reduce household expenditure and for better value/lower prices. For example, when asked whether the recession has impacted on their usage of information and communications technologies, 19% of respondents to a recent ComReg survey[89] stated they had shopped around for cheaper packages or deals, while 17% of respondents said they had reduced their usage of telecommunications services in general. Only 1% actually cancelled their broadband connections, 2% had cancelled their landline and 3% had cancelled their Pay TV service.

3.42 Irrespective of the economic climate, clearly there is an emerging trend in terms of end users preference for “one stop shopping” and better value in terms of communications services. FVA and fixed voice calls are more often sold as a bundled package than on a standalone basis. As of Q2 2012 over half (56%) of FVA subscribers are offered FVA and fixed voice calls as part of wider communications bundle, the remaining 44% of FVA subscribers purchase FVA and calls as standalone service.[90]

[88] The 2012 Market Research, Appendix 1.
[89] http://www.comreg.ie/_fileupload/publications/ComReg1196b.pdf
[90] ComReg Key Quarterly data, June 2012. Bundled subscriptions are subscriptions of a single operator who receive two or more services such as fixed and mobile telephony service, access to TV programmes and broadband internet access from that single operator, usually for a single price and as part of a single bill.

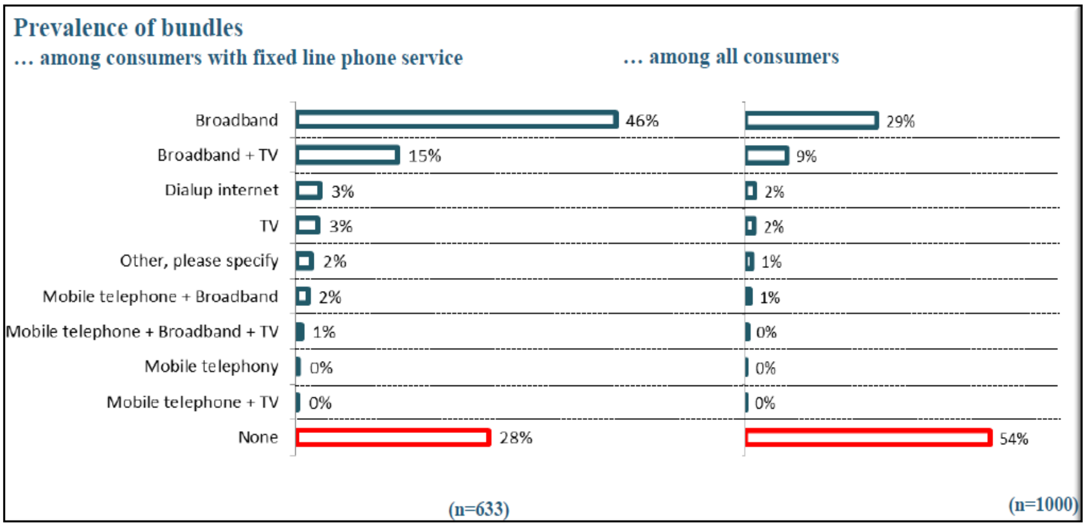
3.43 Figure 11 highlights that bundles offering "double play" (in particular, the combination of FVA, fixed voice calls and fixed broadband internet access) are the most common. Demand for triple (e.g. fixed telephony, internet and TV) and multiple-play is still relatively nascent in Ireland, though evolving and likely to change with growing cable services and also likely as a result of the recent SKY /BT alliance for the provision of communications services.

Figure 11 Fixed Market Retail Subscriptions by single play, double play or triple-play



3.44 This general trend of FVA and fixed voice calls being increasingly sold as part of a wider communications bundle is supported by the 2012 Market Research – in Q1, 2012, 72% of FVA consumers interviewed purchased this product as part of a bundle. The most commonly purchased bundle among these respondents was POTS and broadband (46% of all FVA subscribers purchased this bundle) –see Figure 12.

Figure 12 Prevalence of bundles among consumers[91]



3.45 This has both benefits in terms of convenience (receiving a single bill) and better value price to end-users. It is evident that consumers and businesses are increasingly leveraging their use of the fixed line for access to services like broadband, often at a discount to the price of standalone fixed telephony services. Consumers and businesses can benefit in terms of more predictable bills and, when chosen correctly, real cost reductions. These benefits were seen across both business and residential customers. Business respondents in the 2012 Market Research indicated that bundles made it easier to manage a supplier (54%) and negotiate better discounts/best price (40%). The potential impact of bundling developments is considered in more detail in Chapters 4 and 5 below.

Convergence and Fixed Mobile Substitution ("FMS")[92]

3.46 Fixed mobile convergence is becoming an increasingly prominent topic in electronic communications markets not least because, in some cases, it may lead to increased FMS or possible integration of fixed and mobile services in the same relevant market. The following technological and commercial developments may drive FMS:

- Operator participation in both the fixed and mobile markets (although this could also be evidence of insufficient FMS, e.g. where distinct value propositions continue to be offered to fixed and mobile customers respectively);
- New technologies coming on stream are improving the performance of mobile networks, in particular, in relation to mobile broadband;

[91] The 2012 Market Research, Appendix 1.
[92] In this context, refers to where consumers switch mobile services for fixed narrowband or broadband services.

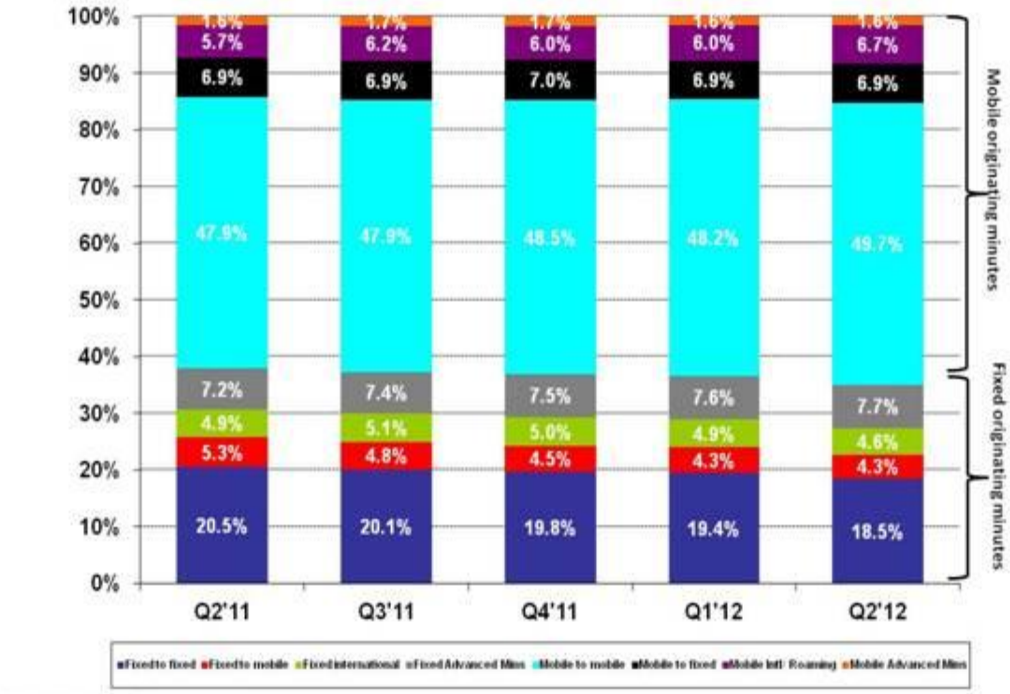
- New devices adapted to fixed and mobile usage (e.g. depending on price and usage trends converged devices relying on mobile network inputs[93] may lead to increasing FMS to such convergent offers);

- Commercial offers and usage habits; and

- Lower Mobile Termination Rates ("MTRs").

3.47 There are some signs of FMS generally increasing – particularly for voice services. As set out in ComReg's recently published consultation document entitled "Market Review: Fixed Voice Call Termination", fixed voice telephony is declining both in terms of revenues and volumes, while there has been growth in mobile voice call traffic volumes. In 2012, mobile originating voice minutes accounted for 63% of all voice minutes (compared to 45% in 2007) while traffic originating on a fixed line network accounted for the remaining 37% of all voice minutes (compared to 55% in 2007)[94] pointing towards increasing competitive development. The following Figure 13 profiles recent volumes of originating voice calls by call type on both fixed and mobile networks on a quarterly basis.

Figure 13 Share of originating voice calls[95]



Source: Quarterly Key Data Questionnaire

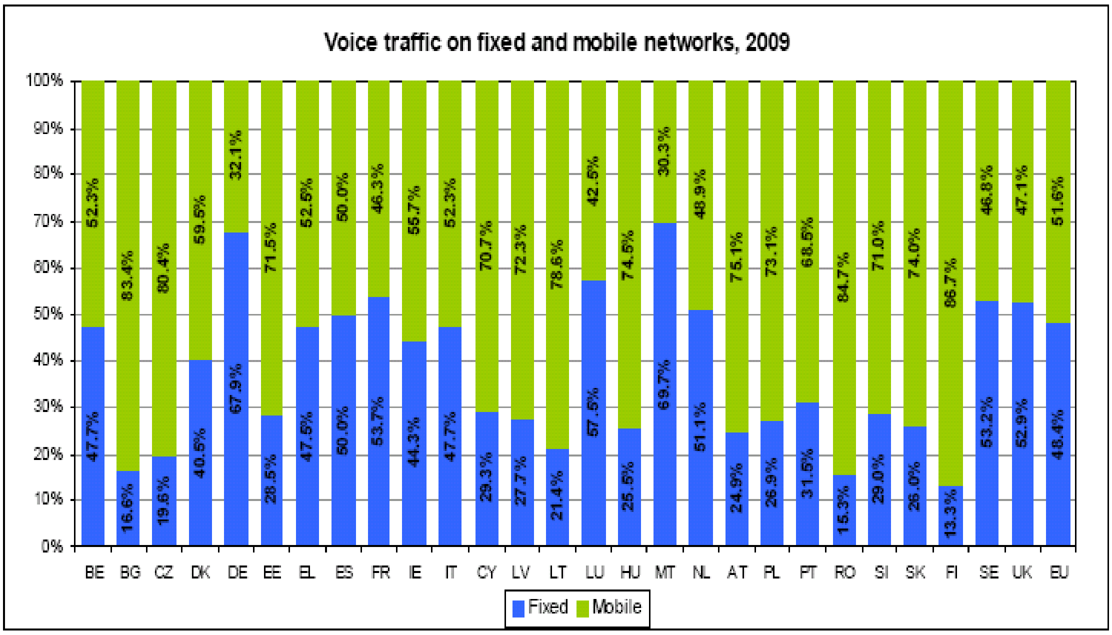
[93] For example, a BEREC report on converged services (BoR 10/65, December 2010) describes a 'Homezone' offer as allowing the end-user to make and receive calls using a mobile network at a fixed location and being charged a fixed tariff. The service is a fixed service at "home" and a mobile service outside the homezone area, that is, when the end-user is at home he can make and receive calls as if using a fixed network, while when the end-user is outside of the area drawn up by the Base Transceiver Station defined as "homezone", he is able to use the same terminal as a mobile phone, thus being charged a mobile tariff.

[94] ComReg key quarterly data, 2007 to 2012.

[95] Source: ComReg quarterly report, June 2012, p13.

3.48 It is evident from Figure 14 that the European trend in outgoing voice traffic on fixed and mobile networks suggests a highly mixed picture in relation to potential FMS at the calls level.[96]

Figure 14 Voice traffic on fixed & mobile Networks



3.49 As with voice traffic across Europe, it is evident from Figure 15 that fixed line penetration is also extremely heterogeneous across Europe.

96 Digital Agenda Scoreboard, 2011.

Figure 15 EU Household Survey 2012: Overall Telephone Access

Overall telephone access + evolution (EB75.1 - EB72.5)

	Households combining a fixed and mobile telephone access		Having a fixed telephone access but no mobile telephone access		Having a mobile telephone access but no fixed telephone access		None fixed telephone access nor mobile telephone access	
EU27	62%	=	9%	-2	27%	+2	2%	=
BE	59%	+6	5%	-6	34%	-1	2%	+1
BG	41%	-7	10%	-4	41%	+11	8%	+1
CZ	15%	-6	1%	-3	81%	+8	3%	+1
DK	52%	-10	4%	-2	44%	+12	0%	=
DE	71%	+2	16%	-4	12%	+1	1%	=
EE	44%	=	5%	-3	48%	+3	2%	-1
IE	55%	-11	8%	+2	35%	+7	2%	+1
EL	78%	+12	7%	-7	15%	-4	1%	=
ES	54%	-6	12%	+2	31%	+2	3%	+1
FR	76%	=	11%	-1	13%	+2	1%	=
IT	59%	-3	5%	=	34%	+2	2%	+1
CY	80%	+3	5%	-2	15%	-1	0%	=
LV	45%	+3	3%	-2	51%	=	2%	=
LT	33%	-4	6%	-1	58%	+6	3%	-1
LU	84%	-1	6%	=	10%	+1	0%	=
HU	40%	=	8%	-3	47%	+3	5%	-1
MT	90%	+10	6%	-9	3%	-2	0%	=
NL	85%	+2	3%	-2	11%	=	0%	=
AT	42%	-1	10%	-1	47%	+2	1%	=
PL	37%	-4	9%	-2	49%	+5	4%	=
PT	54%	+8	8%	=	34%	-7	5%	=
RO	35%	+2	7%	-6	47%	+8	11%	-4
SI	77%	+2	6%	-1	16%	-2	0%	=
SK	27%	-3	8%	+1	59%	=	5%	+1
FI	17%	-7	3%	-1	78%	+7	2%	+1
SE	94%	=	4%	-1	2%	+1	0%	=
UK	76%	+7	6%	-5	17%	-3	1%	=

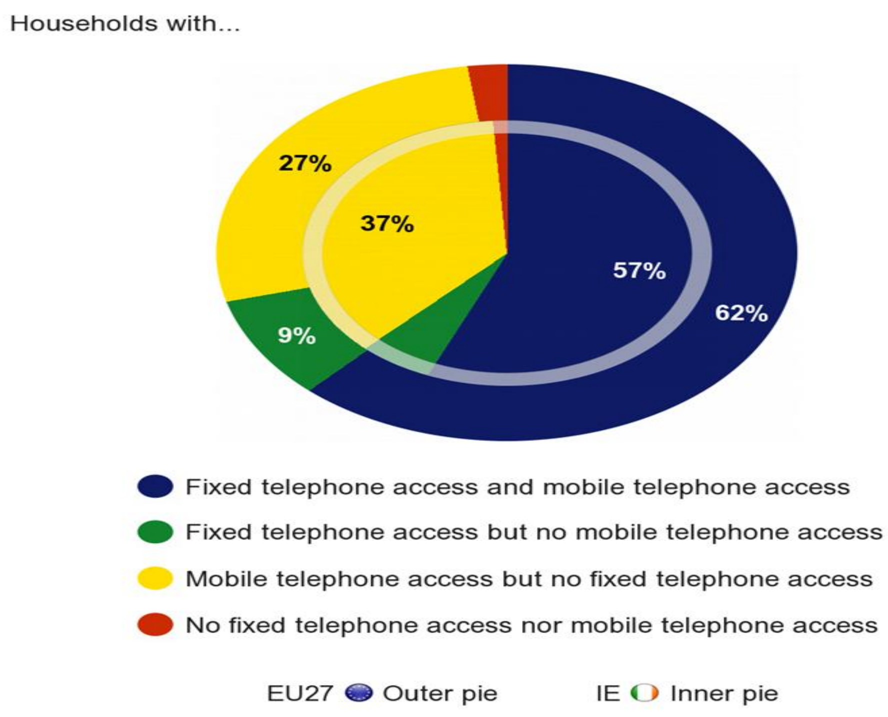
Highest percentage per country *Lowest percentage per country*

Highest percentage per item Lowest percentage per item

3.50 At the access level, ComReg observes a trend towards more mobile phones and fewer fixed lines in Ireland. At the end of March 2012, the mobile penetration rate was 120.3% (including mobile broadband) and 107.6% (excluding mobile broadband). This is reflected in the high rate of access to a mobile phone – the 2012 Market Research shows that over nine out of ten households (95%) have a mobile phone. At the same time, however, a significant majority of households in Ireland (64%) still retain a fixed telephone line,[97] despite falls in the overall number of traditional landlines (i.e. PSTN and ISDN). Between 2007 and 2012, the volume of FVA subscriptions (inclusive of cable and other broadband access for managed VOIP services) only marginally decreased.

3.51 According to the most recent EU Household survey,[98] nearly all Irish residents have access to a fixed or mobile telephone (99%). From Figure 16 dual access (i.e. having both fixed and mobile telephone access) is still the most common scenario with the majority of Irish households (57%) having this type of access. The overall rate of combined access has been broadly stable in Ireland. A third of households (37%) have mobile only access while fewer than one in ten (6%) have fixed telephone access only.[99]

Figure 16 Household Telephony type



[97] The 2012 Market Research, Appendix 1.
[98] Europe (2012 E-Communications household survey at http://ec.europa.eu/public_opinion/archives/ebs/ebs_381_en.pdf
[99] European Commission report 'E-Communications household survey, Special Eurobarometer 381', June 2012. p12.

3.52 According to ComReg's 2012 Market Research, while 36% of households are mobile-only households, only 5% of businesses do not have fixed line access. This shows that businesses continue to place a high value on access to FVA. The 2012 Market Research showed that businesses preferred to use FVA for calls of all types, i.e. to other fixed lines, mobile, international. Furthermore, households surveyed[100] indicated a continued use of the fixed line phone, primarily using fixed lines to make calls to other fixed numbers while mobiles were used to make calls to other mobile numbers. In addition, 68% of these household respondents perceive mobile voice services to be more expensive than fixed voice services when making calls to local/national fixed numbers.

3.53 Average prices paid by consumers for FVA and fixed voice call services increased by 14% in real terms from 2007 to 2012, primarily due to increasing cost of calls. After an increase of approximately 5% in the price of PSTN and ISDN line rentals in September 2007 they have remained unchanged. ComReg notes that this period was largely deflationary in view of the poor economic climate. The real cost of mobile services also marginally increased, by 3% over the same period. Figure 17 shows that mobile prices seem to have been steadily decreasing relative to the prices for FVA and fixed voice calls. However, the rate of decline has been falling in more recent years. Furthermore, in Q4 2011 mobile APRU was €29 per month, down from €37 in Q4 2009 which is likely to be a reflection of a number of factors.[101]

Figure 17 CPI: Mobile & Fixed Telephony[102] [✂]

3.54 Regarding the possible inclusion of FVA and mobile access in the same relevant market, these developments may impact or change the competitive constraints. ComReg examines the potential impact of FMS on the boundary of the market(s) in more detail in Chapter 4 below. Furthermore, existence of FMS may also have implications for the assessment of competition and whether mobile access can act as a potential competitive constraint for FVA (and potentially dilute the SMP of any FSP). A full assessment of these factors is set out in detail in Chapter 5 below.

[100] The 2012 Market Research, Appendix 1.
[101] ComReg Quarterly data, June 2012.
[102] Central Statistics Office ("CSO") and ComReg.

Next Generation Networks

3.55 UPC has launched consumer broadband products with speeds of up to 150Mbps,[103] which, according to UPC's operating data, is expected to be available to approximately 728,300 homes by the end of 2012 using DOCSIS 3.0 technology. These broadband products are offered on a standalone basis or, as part of TV and voice bundles.[104]

3.56 While Eircom has deployed next generation broadband ("NGB") core network elements, it is in the process of introducing Next Generation Access ("NGA")[105] solutions, as manifested through fibre to the cabinet ("FTTC") and fibre to the home ("FTTH") in selected areas. In that regard, a further significant development was the announcement by Eircom of a NGA pilot in Wexford, Sandyford and other exchange locations (involving 16,000 homes and businesses). The pilot allows the delivery of speeds of up to 150Mbps through FTTH and 50Mbps through FTTC. In July 2011, Eircom announced its intention to upgrade the existing copper access network with a NGA rollout.[106] ComReg's understanding is that Eircom plans to have upgraded infrastructure to 200,000 premises by early 2013. NGA roll-out will concentrate on the top 10 exchanges and focus on urban areas. The network will be based mainly on FTTC architecture, with 5-10% FTTH, and will offer a virtual unbundling product.

[103] See http://www.upc.ie/broadband/hundredfifty/

[104] See recent NGA press announcements from UPC:http://www.irishexaminer.com/business/upc-smashes-internet-speed-record-207930.html

[105] Next Generation Access ("NGA") is the term most commonly used to describe very high speed broadband services for residential as well as business users typically in the range 30mb/s to 100mb/s.

[106] See recent NGA press announcements from Eircom: http://www.eircomwholesale.ie/News/Fibre_Rollout_Locations/

Preliminary Conclusions on Retail Trends

3.57 Further to the above assessment of retail trends in the provision of FVA since the 2007 decision, ComReg is of the preliminary view that the following key trends have been observed:

- There has been a gradual decline in POTS, that is, retail FVA subscriptions and associated retail voice traffic. However, a majority of households (64%) and businesses (95%) continue to subscribe to FVA for their voice and internet services;
- There has been significant growth in broadband internet access and growth in VOIP services, including, managed VOIP services over broadband;
- There is a clear trend towards end-users purchasing FVA and fixed voice calls as part of a bundle with other products, such as broadband or TV. Fixed broadband is the service most commonly bundled with FVA and fixed voice calls. In particular, increased subscriptions to cable offerings of bundled broadband with voice telephony have been observed; and
- Having both fixed and mobile telephone access (i.e. dual access) is still the most common scenario among Irish households, though there is an increasing trend to mobile only households. However, end users tend to use fixed and mobile services in a complementary manner, for different purposes, and perceive price differences between the two services (even though actual price differences have been declining).

Q. 1	Do you agree that the above identifies the main relevant developments in the provision of FVA since ComReg's previous review of this market in 2007? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Chapter 4

4 Market Definition

Introduction

4.1 The European Commission in its 2007 Recommendation continues to identify, at the retail level, *access to the public telephone network at a fixed location for residential and non-residential customers* as a market susceptible to *ex ante* regulation. Under Regulation 26 of the Framework Regulations, ComReg is required, taking the utmost account of the 2007 Recommendation and the European Commission's SMP Guidelines, to define relevant markets appropriate to national circumstances, in particular relevant geographic markets within Ireland, in accordance with the principles of competition law.

4.2 According to the Commission's SMP Guidelines, "[*I]n assessing whether an undertaking has SMP, that is whether it 'enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately consumers', the definition of the relevant market is of fundamental importance since effective competition can only be assessed by reference to the market thus defined."* Therefore, market definition is not an end in itself but is undertaken as part of the market review in order to provide the context for the competition analysis. It allows ComReg to consider the competitive constraints imposed by demand and supply side substitutes, on a forward-looking basis, that is, taking into account expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of this market review.[107]

4.3 In the following sections, ComReg seeks to define the relevant market (the types of FVA services that make up the relevant product market(s)[108] and the geographic extent of each such market) having regard to the specific circumstances prevailing in Ireland.

[107] Framework Directive recital 27.

[108] The relevant product/service market comprises all products and/or services that are sufficiently interchangeable or substitutable with its products, not only in terms of the objective characteristic of those products, their prices or their intended use, but also in terms of the conditions of competition and/or the structure of supply and demand for the product in question (SMP Guidelines, paragraph 44).

4.4 Consistent with the European Commission's recommended approach for defining product markets, ComReg considers a relevant FVA market by commencing with the narrowest possible FVA product (i.e. the candidate product) that might reasonably form a starting point for the market definition assessment. ComReg then examines whether the focal product should be broadened to include other products or services, taking account of evolved product characteristics and demand- and supply-side substitutability considerations. In addition, the market is defined prospectively taking into account foreseeable developments, as set out in Chapter 3 above.

4.5 In considering the definition of the relevant FVA market(s), it is necessary to consider whether any effective demand-side and supply-side substitutes exist such that they would directly or indirectly constrain the price-setting behaviour of a hypothetical monopolist ('HM') supplier of the narrow candidate FVA product which forms the starting point of the assessment.[109] To the extent that such effective substitutes exist and constrain this behaviour, then a broader FVA product definition may be appropriate.

4.6 In this regard, it may be appropriate for products not linked by demand or supply-side substitution to be placed in the same market if the conditions in their supply or demand are sufficiently homogeneous. For example, where end-users buy a bundle of goods[110] and the overall focus of competition is on the price of the bundle as opposed to the prices of its constituent elements, a bundle market definition may be appropriate even though elements of the bundles may not be substitutes. However, this depends on the starting point of the market definition assessment.

[109] This is assessed through what is known as the Small but Significant Non-transitory Increase in Price ('SSNIP') test and provides a conceptual framework within which to identify the existence of close substitutes. The SSNIP test examines whether, in response to a permanent price increase in the range of 5% to 10% by a hypothetical monopolist (HM) of a given product set of interest which forms the starting point for the assessment ('the candidate product'), sufficient customers would switch to readily available alternative substitute products such that it would render the price increase unprofitable. If the level of switching away from the Candidate Product to alternative products is sufficient to render the price increase unprofitable (say because of the resulting loss of sales) then the alternative products are included in the relevant product market.

[110] Bundling takes place if end-users purchase two or more services from a single supplier with a single contract and a single bill, rather than from different suppliers with different contracts and bills.

4.7 The Commission's SMP Guidelines do not explicitly deal with bundles, although the Explanatory Note accompanying the 2007 Recommendation on relevant markets acknowledges that when consumers prefer to purchase the services from a single supplier, given high transaction costs, the bundle *"may become the relevant product market".* However a BEREC Report on the Impact of Bundled Offers in Retail and Wholesale Market Definition ('BEREC Report on Bundled Offers')[111] notes that the latter conclusion depends critically on the relevant starting point for the market definition assessment and a different conclusion might be reached depending on whether the starting point or candidate product is the standalone components of the bundle, or the bundle itself. The BEREC Report on Bundled Offers notes in this respect that the presence of a separate market for the bundle of services does not necessarily indicate that there is no competition problem with the individual components of the bundle.

4.8 In setting out its analysis and views on consumer behaviour, ComReg has relied on data from a number of sources, including *inter alia* the 2012 Market Research and ComReg Quarterly Report Data.[112]

Product Market

4.9 In Decision D07/61, ComReg defined, in view of national circumstances, two relevant FVA markets:

- A national market for **lower level retail narrowband access**, including access via analogue exchange lines and ISDN BRA carried over copper, cable or FWA; and

- A national market for **higher level retail narrowband access**, including access via ISDN FRA and PRA.

4.10 ComReg was of the view that this market differentiation was justified since there was limited demand and supply-side substitution between lower level (PSTN and ISDN BRA) and higher level narrowband access (ISDN FRA and PRA). This arose from differing functional characteristics along with the absence of a common pricing constraint. In addition, ComReg considered that there were different conditions of supply present in the two markets.

[111] BoR (10) 64, Report on the Impact of Bundled Offers in Retail and Wholesale Market Definition, December 2010 (page 16).
[112] See paragraphs 1.25 to 1.27 for further details regarding the 2012 Market Research.

4.11 However, it needs to be examined whether any previous market definition continues to be relevant over time in light of any technological or other changes. Therefore, it is appropriate to reconsider the 2007 market definition on the basis of market and regulatory developments in the intervening period (see Chapter 3 above). As recognised by the European Commission in its 2007 Recommendation: "*The definition of relevant markets can and does change over time as the characteristics of products and services evolve and the possibilities for demand and supply substitution change*."

4.12 As set out in Chapter 2, the 2007 Recommendation establishes that the retail market for "access to the public telephone network at a fixed location for residential and non-residential customers" (i.e. the FVA market) is susceptible to ex ante regulation. ComReg is obliged to take the utmost account of the 2007 Recommendation. Accordingly, the FVA identified by the European Commission in the 2007 Recommendation is the starting point of ComReg's market analysis process. However, ComReg must conduct its own assessment of the FVA market specifically in the Irish context to identify whether such market boundaries are narrower or broader than the starting point set out above.

4.13 In order to determine the extent of the FVA market, ComReg begins by considering whether the relevant market is in fact broader than the traditional narrowband FVA product, and whether it consists of bundled products, for example, access and calls, or additional products such as broadband and/or TV. ComReg then considers whether a relevant market comprising narrowband FVA as a focal product would need to be further segmented according to customer demand. ComReg furthermore considers whether other types of alternative access technologies (e.g. managed VOIP over broadband and mobile access) are in the same relevant market as FVA. In summary, therefore, the scope of market definition exercise involves the following:

- Is the appropriate starting point for the market definition exercise a standalone FVA product or a bundle of FVA with other complementary services?
- Is there a single relevant market for FVA combined with fixed voice calls?
- Is standalone FVA a separate market to a bundle of FVA with other services?
- Are residential and non-residential FVA customers in the same relevant market?
- Are all forms of fixed narrowband access in the same relevant market as the candidate FVA product?

- Is fixed broadband access an effective substitute for fixed narrowband access?
- Are FVA and mobile access services in the same relevant market?
- What is the geographic scope of the relevant market(s)?

Q. 2	Do you agree with the scope of the review of the FVA market? Please substantiate your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your views.

Is the appropriate starting point for the market definition exercise a standalone FVA service or a bundle of FVA and other services?

4.14 Consistent with the methodology recommended by the European Commission in relation to market definition,[113] ComReg begins its analysis by considering a narrow set of FVA services and examining whether the narrow product set should be broadened to include other FVA services, taking account of demand- and supply-side substitutability considerations.

4.15 ComReg's preliminary view is that, in accordance with national circumstances, the appropriate starting candidate product is still narrowband FVA, i.e. FVA delivered over PSTN. The European Commission's Explanatory Note to its 2007 Recommendation noted traditional telephone networks using metallic twisted pairs as the most common technology to deliver FVA at that time and EU regulatory practice to date is generally consistent with taking narrowband FVA as the initial starting point for the market definition assessment.[114] This technology is still the predominant form of FVA service used by consumers in Ireland. There were 1.34 million PSTN lines in Q2 2012 compared to 255,000 managed VOIP connections as of the same period.[115] It is the main product currently susceptible to ex ante regulation and in relation to which obligations have been imposed on Eircom. Accordingly, FVA delivered over PSTN is under review in relation to completion problems that are believed may continue to exist.

[113] See paragraph 41 of the SMP Guidelines and paragraph 16 of the Commission's Notice on Market Definition.

[114] The experience in the European Union and the analysis of the European Commission has been that market failures continue to arise in the market for FVA. So far, there has been limited withdrawal of the existing SMP designations in the relevant FVA markets: see the Market Status Chart as of April 2012.

[115] ComReg Quarterly Report data, June 2012.

4.16 Clearly there are incentives for FSPs to provide, as well as end-users to buy, packages or bundled services. Simple bundling of services does not affect the functionality of the services (as the products sold as part of a bundle are in general inherently different products). Its prime purpose is to allow end-users to make transactional economies[116] by contracting with, and getting billed by, a single FSP ("one-stop shopping"). Price-wise, bundles may also be cheaper, because, on the supply side, possibly there are economies of scope[117] from retailing services by a single entity. For example, the gains from joint marketing, billing and customer care can be significant. Bundling may offer also suppliers the possibility of reducing churn in a market which is characterised by high customer acquisition costs, and may increase the revenue per customer even when the price of individual services is decreasing. From a demand perspective, transactional economies and price savings are the main drivers of bundling – the 2012 Market Research indicates that 36% of household respondents said that a better value bundled price was their top reason for switching their FSP. In terms of reasons for switching their FSP, 19% of business customers give 'better value bundle/package' as a top reason for switching FSP, with 53% reporting the 'cost of making calls' as the top reason.

4.17 At paragraphs 4.6 and 4.7 above, ComReg highlighted that the prevalence of bundles could impact the relevant starting point for the market definition exercise. To this end, establishing the starting point for the market definition exercise ensures that ComReg recognises the critical features of the relevant product when subsequently assessing demand-side and supply-side substitutes. The prevalence of bundling can indicate a high degree of complementarity between products, and in some cases a broader starting point might be more justified for assessing product substitutes. However, bundling in itself does not necessarily justify defining a relevant market for bundles. Customers who purchase a bundle from a single supplier may return to purchasing individual components from several suppliers if the price of the bundle is increased above its competitive level. If that is the case, the bundle will not create a separate relevant market; instead the components will be part of distinct relevant markets. The European Commission states[118] that the SSNIP test should be used when determining whether it is necessary to define a separate market for bundles of services and similarly argues that service elements constitute markets in their own right if a sufficient number of customers would 'unpick' the bundle if a SSNIP were introduced.

[116] Transactional complementarity is a demand-side feature that effectively ties consumer purchases of multiple products to individual firms, and thereby can make the cluster a relevant product market.
[117] This is a supply-side feature that arises where a firm is able to produce given quantities of products at a lower total cost than the total cost of producing these quantities separately.
[118] Explanatory Note to the 2007 Recommendation, p. 16.

4.18 Two of the narrowest bundles available to retail subscribers would be a bundled market containing for example (i) a narrow bundle of fixed access and calls and/or (ii) a wider bundle which may consist of FVA, fixed voice calls and other access products, such as, broadband. For example, voice plans or packages may incorporate line rental with 'free call minutes' to other fixed or mobile telephones. Often line rental is bundled in voice packages with additional call minutes (which may vary depending on typical usage of calling patterns), or in a broader bundle with a retail broadband service. According to ComReg's Quarterly Report data and the 2012 Market Research, FVA is most often bundled with fixed voice calls and broadband products. Typically, these packages or bundles are sold at a discount to the price of individual components.

4.19 In light of an increasing proportion of households and businesses bundling of FVA with fixed voice calls and, in particular, broadband internet access, it is timely and appropriate to consider whether a 'standalone' FVA (as listed in the 2007 Recommendation) service remains a relevant starting point for an ultimate assessment of competition in the provision of FVA to end-users. ComReg considers in this section the following potential starting points for the market definition assessment:

1. Standalone narrowband access
2. Narrowband access and fixed calls
3. Narrowband access, fixed calls and broadband
4. Narrowband access and broadband

4.20 Consistent with BEREC guidance on the assessment of bundles for market definition purposes,[119] ComReg considers that, in addition to the HM and SSNIP test, the following factors are relevant to consider when assessing the potential impact of the prevalence of packages and/or bundles on the boundary of the relevant FVA market (and how competition is assessed in Chapter 5):

- Economies of scale and scope;
- Transaction costs faced by end users;
- Differing competitive conditions; and
- End user behaviour (SSNIP test).

[119] BEREC report on impact of bundled offers in retail and wholesale market definition (see BoR (10) 64, December, 2010).

Should the starting point include fixed voice calls?

4.21 This section considers whether ComReg should include products, such as, fixed access and fixed calls - which are largely complements[120] – in the same or in separate economic markets. The classical way of defining an economic market, the SSNIP test, provides only limited guidance as to when products are sufficiently complementary to be included in the same market. Therefore, ComReg will apply the principles, set out at paragraph 4.20, to assess whether fixed access and fixed voice calls form a single relevant market.

4.22 In the 2007 review, ComReg concluded, consistent with the Relevant Markets Recommendation (2003), that there were separate markets for FVA as distinct from the market for fixed voice calls. From its assessment, ComReg was of the view that there was not sufficient demand-side or supply side substitutability between a bundled access and calls product or between each element sold separately to render a single FVA and fixed voice calls market.

4.23 ComReg notes that the European Commission's Explanatory Note to the 2007 Recommendation continues to make a distinction between the access (a network connection) and usage (actually making calls) components of a retail telephone service. This view is reached on the basis that customers may choose alternative undertakings to provide these respective services.

4.24 ComReg’s view is that FVA and fixed voice calls are not substitutable products. In particular, FVA provides a user with a fixed connection which they can then use to obtain a voice service or internet access service. However, ComReg accepts that purchasing fixed voice calls (and related telephony services) inherently requires some form of fixed access. Thus, these complementarities often lead towards the packaging of FVA and fixed voice calls together, and competition may take place across these collective products as a group rather than as individual products. Initial bundles in fixed telecommunications markets tended to include FVA and fixed voice calls sold as varying price plans, though bundled offers are constantly evolving in view of technological change and changing consumer preferences, for example, the increasing up take of VOIP services.

[120] Fixed access and calls are complements in the sense that both access and calls need to be purchased in order to make a voice call. They may also be economic complements if an increase in the price of access reduces the demand for calls (and vice versa).

Economies of scale and scope

4.25 It is probable that there are economies of scope associated with the supply of FVA and fixed voice calls because fixed voice calls is supplied over FVA. Therefore the provision of these respective services involves common inputs and infrastructure. These include some network costs, shared billing systems, customer services, and various other administrative and business costs that can possibly be shared across various services, including, FVA and fixed voice calls.

4.26 For this reason, the additional cost incurred by a FVA supplier of providing certain types of voice calls (i.e. on-net calls) on a per-call or per-minute basis can in some cases be relatively low.

4.27 These economies of scope are reflected in the marketing behaviour of FSPs. In the past CPS operators provided fixed voice calls only, which required the customer to purchase line rental separately from Eircom. However, as set out in Chapter 3, many CPS customers are migrating to SB-WLR primarily due to the convenience of "one stop shopping". In terms of residential users, the largest three FVA suppliers in this market (eircom 63%, UPC 20%, Vodafone at home 13%),[121] which make up a combined 97% of the residential FVA subscriptions, are not currently offering fixed voice calls independently of FVA. Typically, fixed voice calls provided by these FSPs are supplied in combination with line rental, though the FVA and fixed voice calls products may not always by supplied as part of a discount package or voice plan.

4.28 FVA products typically contain a limited allocation of voice call minutes within the fixed price (usually local calls or other low-value call types). For example, Eircom's entry level FVA product is advertised at a price of €25 per month, which includes both line rental and free calls to local/national fixed lines.[122]

4.29 The economies of scope are less relevant for off-net calls of high value, such as, calls to mobile phones or international numbers. These calls involve FSPs incurring interconnection charges that are often significantly higher than the cost of providing an on-net call, which mean that the economies of scale are less pronounced. Generally, as distinct from the typically 'once off' charge for FVA, calls to mobile or international numbers are typically priced at a marginal rate per-unit that differs depending on the destination of the call.

[121] According to 2012 Market Research attached at Appendix 1.
[122] Quote product data retrieved from www.eircom.net on July 12th 2012.

Transaction costs faced by end-users

4.30 Bundle markets are likely to exist where significant transaction costs apply, since end-users may seek to mitigate these costs by bundling multiple products. End users are likely to face transaction costs when purchasing services from FSPs. For example, these costs are associated with the time involved in setting up and monitoring individual accounts, and making regular payments for services. In these circumstances, end users may attempt to reduce these costs by choosing a single FSP of multiple telecommunications services (including POTS). In other words, by purchasing product bundles.

4.31 An FSP is likely to respond to this demand by marketing products that include FVA and fixed voice calls. As considered in the ‘end-user demand’ section below, survey data indicates that most end-users purchase bundled voice plans consisting of FVA and fixed call minutes (particularly to local and national numbers) from a single supplier. The high degree of demand for these voice plans by end users (analysed below) suggests that end-users face some degree of transaction costs, and as a result demand-side transactional complementarities are present between these products.

Differing competitive conditions

4.32 Bundled markets are less likely to arise in circumstances where the competitive conditions differ substantially between products or components of the bundle. Therefore, variation in demand and supply conditions between elements of the bundle often indicates that each element belongs to its own relevant market.

4.33 The competitive constraints in respect of access and calls, and the nature of the decision process in each case, appear to some degree different. Choosing an FVA supplier is a relatively significant decision, since FVA often entails a medium to long-term contract and often supports various other services.

4.34 FVA is attached to a broad range of functions and the purchasing decision can take into account a number of factors unrelated to voice calls. For example, some end users still retain a PSTN/ISDN connection to avail of the broadband service provided by that same supplier. For example, Vodafone provides a FVA product bundled with a broadband service but includes no calls. The service is offered to Vodafone mobile customers at a price of €29.95 (and at €31.95 for other customers), and appears to be targeted at mobile phone users who wish to purchase FVA as a fixed broadband platform, but primarily use their mobile phone to make calls. Customers may also choose an FVA supplier on the basis that it offers a superior broadband service to other FVA suppliers. Many businesses also retain a PSTN/ISDN connection because a fixed line contact number is important for business continuity and maintains a professional image.

4.35 Once the end-user has selected a FVA supplier, that customer has a different set of options available to them in terms of how they make voice calls. End-users could make a fixed call using their fixed line telephone, but could also choose to use a mobile phone or an unmanaged VOIP service to make calls. The decision about how to make a fixed voice call is made more frequently and typically involving less effort than a decision regarding an FVA supplier.

4.36 ComReg's recent consumer survey showed that most consumers prefer to use their fixed line phone when making calls to local, national, or international landlines, although 16% of respondents preferred to use a mobile phone to call local numbers and 13% for national numbers. Whereas consumers prefer to use their mobile phones when calling other mobile phones (78% for on-net mobile calls and 62% for off-net). Having said that, 27% of consumers prefer to use a landline phone to call a mobile on a different network to their own mobile phone. While a fixed line phone was the most popular preference for international calls (55%), 12% preferred using a mobile phone for international calls and another 11% of consumers reporting a preference for using Skype.

4.37 The increasing availability of alternative calling options also seems to be evident in an observable decline in fixed voice traffic, which has corresponded with the growth of mobile traffic (as shown in Figure 18 below), and suggests that mobile calls (to other mobile phones) are becoming a more common relative to fixed calls (to other fixed phones).

Figure 18 Fixed and mobile voice traffic trends, 2007–2011

4.38 In addition, the percentage decrease in fixed traffic volumes has fallen at a greater rate than the decline in demand for fixed access, which suggests that some end users are retaining their fixed line (FVA service) but making few calls on their fixed line phone.[123]

4.39 In summary, ComReg acknowledges that there remains a strong link between a choice of FVA supplier and subsequent decisions on how to make a fixed voice call. End users typically make a significant proportion of their telephone calls using their standard fixed line telephone. Having said that, ComReg has highlighted a number of alternative options available for making calls, which enable end-users who purchase FVA to purchase calls separately, along with evidence that customers are in some cases choosing alternative means of making telephone calls, despite continuing to purchase FVA.

End-user behaviour

4.40 End-user behaviour should reflect the overall impact of the factors considered above. For example, if economies of scale exist between FVA and certain call-types, ComReg would expect suppliers to offer discounted prices for the products when sold within a bundle, relative to prices available when purchasing the services from separate suppliers. These potentially more favourable prices would likely attract demand from end-users for the bundled product.

4.41 If transaction costs are high, ComReg would expect demand to arise from end-users for the purchase of FVA and calls in a product bundle, in an attempt to avoid those costs.

4.42 If competitive demand and supply conditions differed significantly between FVA and certain call types, end-users may demonstrate greater willingness to break up a product bundle in search of a favourable price for calls or FVA (particularly in the market in which competition was potentially more intense).

4.43 Therefore end-user behaviour is a useful gauge in determining whether bundle market consisting of FVA and fixed voice calls exists. ComReg has assessed actual end-user behaviour i.e. are consumers purchasing these products separately, or in a bundle, as well as surveying consumers on their likely reaction in response to a SSNIP of a product bundle by the hypothetical monopolist. The fundamental question is whether end users have demonstrated willingness to break up the bundle of fixed calls and FVA.

[123] Note that retail call substitution will be considered further in the context of ComReg's wholesale call origination and call termination market reviews. The purpose of this assessment is only to highlight the distinction between the task of selecting a FVA provider and subsequently choices around how to make a telephone call.

End-users prefer to purchase fixed calls from their FVA supplier

4.44 End users have been able to buy fixed voice calls separately from FVA, from an FSP other than Eircom, since the introduction of Eircom's CPS product in 2000 (which facilitates the provision of calls only). Since end-users can purchase access (line rental) from one supplier and then purchase calls from a CPS operator, an access provider that raises the price of calls above the competitive level in theory faces the risk of customers switching to alternative FVA suppliers.

4.45 However, SB-WLR (which facilitates the provision of access and calls together) was introduced in 2004 to allow retail customers to make a combined purchase of FVA and calls with a single bill from Eircom's downstream competitors. The impetus for the introduction of SB-WLR was that it was considered that separate billing for FVA and calls acted as a constraint on the development of competition since many customers preferred to receive a single bill for both products from a single operator.

4.46 Fixed telephony consumers therefore have a choice over whether to buy FVA and fixed calls together from the same supplier, or separately from different suppliers. In Ireland the majority of consumers (approximately 99%)[124] choose to purchase them together.

4.47 This preference for end-users to purchase narrowband access and calls from the same supplier is evident in the relevant wholesale markets, where the trend in CPS and SB-WLR take-up in Ireland has been such that CPS has declined while SB-WLR has continued to grow (see Figure 2, Chapter 3). The number of consumers purchasing a CPS plan from a supplier other than Eircom is only 1.3% of all other fixed voice customers.[125] This demonstrates that the vast majority of Irish customers purchase FVA and fixed voice calls together.

4.48 The 2012 Market Research examined how consumers thought about FVA and fixed calls. Survey respondents were separated into three categories based on how they reported they thought about their fixed-line bills. Out of the respondents who had a fixed line, 15% indicated that they thought about access and calls separately, while 84% thought about calls and access together as a package (including 60% who thought about fixed telephone services as part of a wider bundle of products). This perception of the close relationship between these products, particularly in relation so assessing the value of packages and choosing a supplier, is consistent with the purchasing behaviour of end-users.

[124] ComReg Quarterly Data, May 2012
[125] ComReg Quarterly Data, May 2012.

End users can potentially adapt their call usage behaviour more flexibly than their choice of FVA provider

4.49 As noted above, the decision involved in selecting an FVA provider is distinct from those involved in subsequent recurrent decisions regarding how to make telephone calls.

4.50 The decision around selecting an FVA supplier is likely to take into account a broader range of considerations (e.g. relating to broadband or other bundled services) compared with decisions about how to make a telephone call. Once the end-user has selected a FVA supplier, that customer has a different set of options available to them in terms of how they make voice calls. End-users could make a fixed call using their fixed line telephone, but could also choose to use a mobile phone or an unmanaged VOIP service to make calls. As discussed in the previous section, this different set of decisions has been evident in the preferences expressed by end users in practice. In particular, mobile voice traffic continues to increase, while fixed traffic volumes are decreasing at a rate that exceeds the fall in line rental subscriptions. This implies that those customers with a fixed line are making few calls over that connection.

Conclusion on end-user behaviour

4.51 The evidence suggests that end-users typically use the same supplier for FVA and for purchasing fixed calls made over that connection. This suggests strong complementarity between purchasing FVA and fixed calls, relating to economies of scope and transaction costs faced by end-users. However, end-users have more recurring opportunities to switch away from their ‘fixed calls’ provider on a ‘call-by-call’ basis to alternatives such as mobile phones or VOIP services. Hence, on a forward-looking basis there is the potential for any changing competitive dynamics in FVA and fixed calls to evolve at a different pace. It is thus considered appropriate to ensure that the market definition can accommodate any such time-based variances in the evolution of competitive pressures in FVA and fixed calls respectively should they evolve on a forward-looking basis.

Preliminary conclusion

4.52 There is evidence pointing both ways about whether there is a combined market for FVA and fixed calls or, separate markets for each component.

4.53 FVA and fixed calls perform different functions and are therefore not substitutes but complement each other. The 2012 Market Research indicates that the majority of customers in Ireland purchase their fixed voice services as a package of access and calls and also indicates that they think about their purchase decision over these products as a single decision.

4.54 There are likely economies of scale and scope relating to the provision of FVA and fixed voice calls. This means that an FSP providing FVA to a given customer is as a result typically better placed to also provide fixed calls to that customer. Exceptions may arise for high-value calls, such as those to mobile phones or international numbers, where higher off-net costs associated with termination alter the cost drivers and can weaken the degree of complementarity.

4.55 There is evidence that FVA and fixed voice calls prospectively face different competitive conditions. In particular, consumers even when retaining their fixed connection have more frequent opportunities to adjust their calling behaviour and may be willing to use their mobile phones or unmanaged VIOP services to make certain types of calls (as suggested by the declining trend in fixed calls as against growth in mobile calls). This is particularly common for calls to other mobile phones, or to international numbers. However, the 2012 Market Research highlighted a strong preference by end users for a fixed line phone and a significant portion of FVA end users continue using a fixed telephone to make calls to both fixed and mobile phones and also to mobile and international numbers.

4.56 ComReg's preliminary view is that there is evidence in both directions for whether FVA and fixed voice calls are in the same or different relevant markets. While, ComReg acknowledges that it is likely that there is a movement towards a broader voice telephony market due to complementarity between FVA and fixed voice calls services, ComReg has observed the scope for competitive constraints to evolve differently for FVA and fixed voice calls respectively which implies that they potentially belong to separate markets. ComReg also notes that regardless of whether or not the retail market for FVA is defined more broadly to include calls product, it should not have a significant impact on the current competition assessment given that both products are currently jointly supplied in almost all cases.

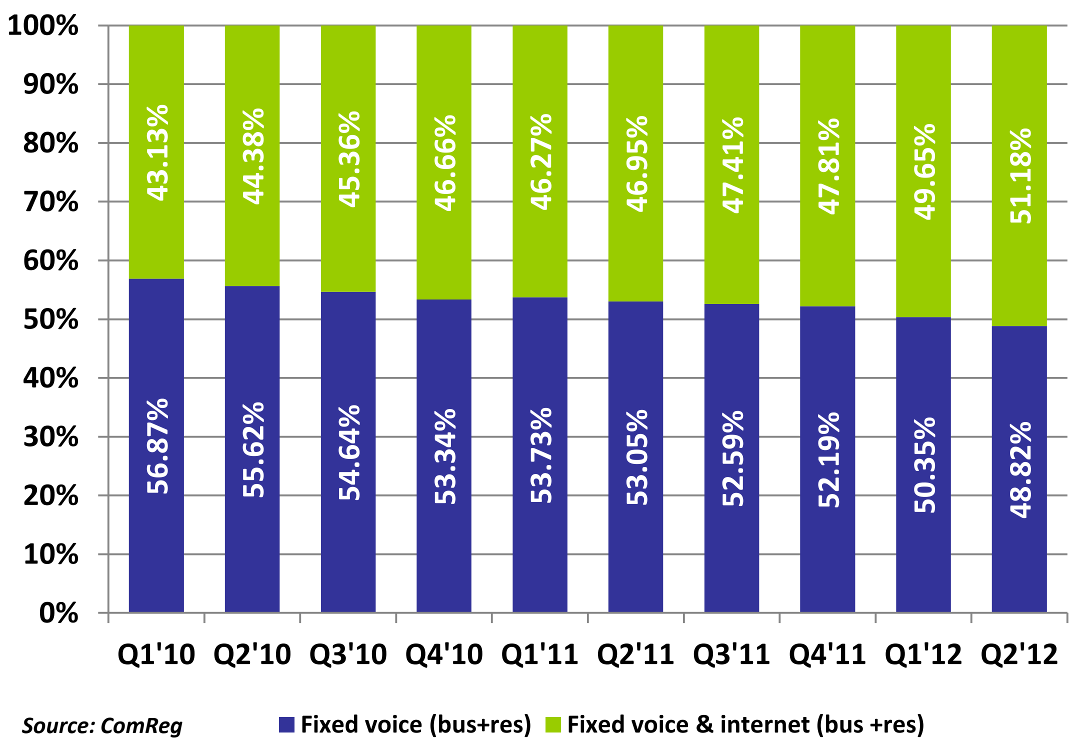
Q. 3 Do you agree that FVA and fixed voice calls are in separate relevant markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Should the starting point include broadband?

4.57 This section considers the potential impact of bundling developments, as set out in Chapter 3 above, on the boundary of the relevant FVA markets in view that Households and businesses are increasingly purchasing FVA as part of a broader product bundle, and bundle penetration is high at approximately 55% of total retail fixed subscriptions.[126]

4.58 Households and businesses are increasingly purchasing product bundles that include FVA combined with fixed voice calls and broadband. As noted previously, evidence of this pattern of demand is reflected in the 2012 Market Research and in ComReg Quarterly Report data. For example, Figure 19 illustrates the percentage of FVA customers purchasing their FVA independently of broadband, versus the percentage of those purchasing FVA and fixed voice calls bundled with broadband.

Figure 19 Percentage of FVA connections purchased with broadband and FVA on standalone basis



[126] ComReg Quarterly Key Data Report 12/62R, June 2012.

4.59 For these reasons, ComReg has considered whether the trend towards consumption of bundled offers implies that a bundle of FVA, fixed voice calls and broadband should form the relevant starting point for ComReg's assessment of product market substitutability. For the purposes of this assessment, ComReg considers the indicators identified earlier at paragraph 4.20.

Economies of scale/ scope

4.60 ComReg considers that there can in principle be economies of scale and scope associated with the supply of FVA, fixed voice calls and broadband access. These arise because the provision of these respective services involves common inputs and infrastructure. Additional economies of scope can arise relating to shared billing systems, customer services, and various other administrative and business costs that can be shared across various services, including, FVA and broadband access.

4.61 For this reason, the additional cost incurred by FVA suppliers associated with providing broadband can in some cases be low, depending on the nature of the wholesale inputs. For example, Eircom for the most part uses the same copper local loop for providing FVA and broadband. However, some additional equipment is required in order to provide broadband but not for FVA, such as, DSLAMs and backhaul. These costs are significant, but not compared to the hypothetical overall cost of replicating the local loop network. Therefore, it is probable that Eircom gains economies of scale and perhaps economies scope in the provision of FVA combined with fixed voice calls and broadband.

4.62 UPC uses its broadband access network to provide voice services, so the additional cost incurred by UPC when adding a voice service to its broadband access, or internet access bundle is likely to be low (limited to the cost associated with shared capacity in the broadband network).

4.63 These opportunities for economies of scale and scope are reflected in the marketing behaviour of many FSPs, which are increasingly focused on selling product bundles to end users.

4.64 Given that broadband infrastructure can now be used to deliver managed VOIP (similar to PSTN/ISDN based voice calls), it should in principle be possible for a broadband supplier to relatively promptly substitute into the provision of different components of a bundle sufficient to constrain a SSNIP in retail FVA prices (for the proportion of end users who have broadband access and/or value a wider bundle of communications services). Therefore, opportunities for economies of scale and scope are likely on a forward looking basis to lead to an increased migration of fixed voice services over a broadband platform. This will, to some extent, depend on Eircom's NGA network developments over the period of this review (i.e. availability of naked DSL and wider availability of higher speed broadband).

4.65 As it stands, bundling of FVA with fixed voice calls and broadband access is more prevalent for competing FSPs than it is for Eircom. According to ComReg's quarterly data as presented in Figure 20, Eircom supplies the majority of its subscribers [✀] with FVA and fixed voice calls outside of a broader bundled package of communications services. On the other hand, competing FSPs typically supply FVA in a bundle.

Figure 20 Standalone FVA and bundled FVA subscriptions, Q4 2011 [✀]

4.66 With FSPs increasingly offering wider bundles of communications services to end-users, it is probable that there are economies of scale and scope to be achieved by FSPs in the provision of FVA combined with fixed voice calls and broadband access connection.

Transaction costs faced by end-users

4.67 As discussed in the previous section, bundle markets are likely to exist where significant transaction costs apply, since end-users may seek to mitigate these costs by bundling multiple products. End users are likely to face transaction costs when purchasing services from telecommunications suppliers. For example, these costs are associated with the time involved in setting up and monitoring individual accounts, and making regular payments for services. In these circumstances, end users may attempt to reduce these costs by choosing a single supplier of multiple telecommunications services (including POTS). In other words, by purchasing product bundles.

4.68 Increasingly FSPs are responding to this demand pattern by offering bundled products that appeal to households and businesses who wish to purchase a fixed telephony service and broadband from one supplier. As indicated in Figure 19 above, end-users are increasingly purchasing FVA bundled with fixed voice and broadband. In addition, ComReg's 2012 Market Research indicates a high incidence of bundles amongst households with a FVA service, with most (72%) purchasing a bundle from their supplier with a single contract and single bill, rather than from different suppliers. Almost half (46%) of surveyed businesses with FVA subscriptions purchase other services as well as their FVA service as part of a bundle.

4.69 The high degree of demand for these bundle products by end users suggests that end-users face some degree of transaction costs, leading to demand-side transactional complementarities between these products. On the other hand, for consumers without broadband or who have a preference for standalone voice services, the requirement to purchase broadband service and associated VOIP mediation hardware is likely to be a constraint on consumers switching away from standalone FVA.

Differing competitive conditions

4.70 Bundled markets are less likely to arise in circumstances where the competitive conditions differ substantially between products or components of the bundle. Therefore, variation in demand and supply conditions between elements of the bundle may indicate that each element belongs to its own relevant market.

4.71 The competitive constraints in respect of FVA and broadband access appear to be tending in a broadly similar direction in respect of those end users which consume both products, given the high degree of economies of scope which mean that FSPs providing FVA also typically offer broadband access. While competition from alternative infrastructures, such as cable, appears to have initially focused more on the provision of retail broadband access services, an increasing trend towards joint provisioning and consumption of retail fixed voice and broadband access bundles may show a broadly similar competitive pattern emerging in respect of both services, insofar as they concern end users with both forms of access, over the period of the current market review. However, in the case of voice-only customers, which do not currently have or prospectively have a fixed broadband connection, differing competitive conditions may arise in respect of this particular subset of consumers which might require separate consideration.

End-user behaviour

4.72 End-user behaviour is a useful gauge for assessing whether a market for standalone FVA services exists, separate to a discrete bundle market. ComReg has assessed trends in actual end-user behaviour (i.e. are consumers purchasing FVA separately, or in a bundle), as well as, surveyed end-users on their likely preferences in terms of deciding whether to purchase FVA on a standalone basis, or as part of a broader bundle. The fundamental question is whether end users have demonstrated willingness to purchase FVA and fixed voice calls separate from broadband.

4.73 A breakdown of subscription types[127] suggests that a significant proportion of end users value complementary services like, fixed voice calls, broadband or TV, and, therefore, purchase product bundles tailored according to their preferences and valuation of the wider bundle of communication services. However, Figure 19 also highlights that nearly half of FVA connections are purchased independently of broadband or other services.[128]

4.74 A significant number of households and businesses require access to fixed voice services and access to fixed broadband. End users who require both telephony services are increasingly more likely to purchase these services bundled because:

a) FSPs typically offer discounted prices for the products when sold within a bundle, relative to prices available to end users when purchasing the services from separate providers. These discounts possibly reflect the cost benefits accrued by FSPs in terms of achieving economies of scale and scope. For example, Vodafone at Home offers home phone only for €30 a month, broadband only for €30 a month, or a bundle of the two for €40 a month.[129]

b) End users are likely to face additional transaction costs when purchasing services from more than one supplier (such as, time spent reviewing bills or managing an additional account). As such, end users who value broadband access will often prefer to purchase FVA and fixed voice calls with broadband access from the same FSP.

[127] Reported by FSPs for ComReg's Quarterly Report process.
[128] ComReg notes that there is some variance between the Quarterly Report Data provided by operators to ComReg, and ComReg's consumer and business survey data in this regard. According to the market research, 46% of FVA customers purchase FVA with broadband and a further 15% purchase it with broadband and TV. So that's 61% of all FVA customers surveyed purchasing it with some form of broadband connection. Whereas QR data indicates that 51% of FVA connections are bundled with broadband. In either case the proportion of end users purchasing standalone FVA remains significant.
[129] As of September 2012.

4.75 However, there remains separate end user demand for standalone FVA services that is, not bundled with other communications services, such as, broadband. According to the 2012 Market Research, almost 40% of households[130] and 54% of businesses[131] with a FVA subscription purchase FVA independently.

4.76 In the case of households, a discrete demand for standalone FVA generally persists where households purchase these products independently because they do not wish to purchase both services and would thus not value a bundle comprising the sum of the two. According to the 2012 Market Research, approximately a third of households have no fixed broadband internet access. In addition, the research shows that lack of fixed line internet access is clearly linked to social grade and age. For consumers without a broadband connection, after not needing internet access, the most common reason for not having broadband is a wish to reduce household bills. These customers are not likely to immediately switch their FVA access to a broadband and voice bundle given the focus of their demand and/or likely transaction costs associated with the purchase of broadband including in a bundle.

[130] According to the 2012 Market Research, a fixed voice and broadband bundle was purchased by 46% of FVA household subscribers, while a further 15% purchased a fixed voice, broadband and TV access bundle.
[131] According to the 2012 Market Research, 30% of businesses with a FVA subscription purchase it as a ‘voice only’ service while a further 24% purchase it with other services but not as part of a discounted bundle. Hence for the purposes of this analysis, these two segments combined (i.e.54%) are deemed to constitute the extent of the business demand for standalone (non-bundled) FVA.

4.77 While voice telephony is universal among businesses approximately a quarter have no fixed broadband internet access. On the other hand, many businesses consume both FVA and broadband access services. However, a significant proportion of these end users also purchase FVA as a standalone product. For example, even where FVA might be supplied in combination with other services it is frequently not supplied as part of a bundle). According to the 2012 Market Research, 30% of businesses with a FVA subscription purchase it without other services and a further 24% purchase FVA in combination with other services, though not as part of a bundle. In the case of businesses, this implies that potential substitution between a standalone FVA service and FVA bundled with other services might work in both directions (i.e. from standalone FVA to FVA bundled and vice versa). In terms of the latter, the 2012 Market Research indicated that of the 46% of businesses that do reportedly purchase FVA as part of a bundle, 70% do so as part of a bundle with fixed broadband access implying strong complementarities between these services for businesses. Notwithstanding this, the fact that a significant proportion of businesses with a FVA connection (24%) still purchase it jointly with other services but not as part of a bundle implies scope for substitution to also work from bundled FVA services to standalone FVA services, although this latter form of substitution is not considered the appropriate focus of the current market review as will be discussed further below.

Preliminary conclusion

4.78 ComReg's analysis suggests that end users who have a preference for a FVA and a fixed broadband connection are likely to purchase these products within a bundle. This is because there is a high degree of supply-side complementarity in the provision of these respective products, and because, on the demand-side, end users typically prefer to have a single supplier of fixed telecommunications services where possible. However, there are a significant proportion of households that do not require a fixed broadband service, but still choose to purchase FVA as a standalone product to access voice call services. Similarly, other end users (e.g. mobile-only households) only wish to purchase fixed broadband, without a FVA connection. Furthermore, even though the vast majority of businesses consume both FVA and fixed broadband access, over half of businesses surveyed as part of the 2012 Market Research with FVA still consumed FVA as a standalone (non-bundled) product. This would indicate that the fixed voice connection component, irrespective of whether it is sold standalone or as part of a bundle, constitutes a relevant market in its own right.

Q. 4	Do you agree that standalone FVA is a separate market to a bundle of FVA with other services? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

4.79 For the above reasons, FVA is a separate market to a bundle of FVA with other services – FVA and fixed voice calls or additional products, such as, broadband or TV. Therefore, ComReg's view is that the standalone narrowband FVA product, which was the focus of ComReg's earlier market review in 2007, is considered the appropriate starting point for the current market review. As set out at paragraph 4.15, because the relevant market was intended by the European Commission to address potential competition problems relating to fixed narrowband access, ComReg considers that, similar to its 2007 market review, the appropriate starting point for assessing substitutability is a standalone narrowband FVA product, rather than a product bundle incorporating FVA.

4.80 Irrespective, however, of a separate market for standalone FVA, it is also possible that that a proportion of end users may consider bundles of voice and broadband to be a substitute for FVA. In particular, where households and businesses consume both FVA and broadband services, there is scope for substitution between standalone FVA and FVA bundled with other services. In this scenario, the bundle of voice and broadband could be in the market as defined with standalone FVA as the candidate product, though this would necessarily depend on whether the bundle element constrains the HM of standalone FVA from maintaining prices profitably above the competitive level. It is clear that product bundles that include fixed voice and broadband services are viewed by some end users as a form of substitute to a FVA connection. Therefore, ComReg will further consider below the suitability of various product bundles as potential substitutes for a standalone FVA connection.

4.81 Substitution may also be analysed in the other direction, i.e. from the bundled FVA product to the standalone FVA product. However, it is considered that the appropriate starting point for the current market review is the standalone narrowband FVA product. Hence the relevant question which will be addressed in further detail below is whether substitution from a standalone FVA product to a bundled FVA product would be sufficiently effective to constrain a SSNIP in the standalone FVA product.

Q. 5 Do you agree that, in line with ComReg's previous market review, the appropriate starting point for carrying out the subsequent market definition assessment is narrowband FVA sold on a standalone basis and not a bundle entailing retail FVA sold with other services? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Are residential and non-residential FVA customers in the same relevant market?

4.82 This section considers whether there is a narrower possible starting point for the market definition assessment—one that is specific to customer type (i.e. residential or business)—than FVA over PSTN.

4.83 ComReg acknowledges that different types of FVA customers are likely to exhibit different preferences and levels of price responsiveness. Similarly, supply-side characteristics might also vary when it comes to providing FVA to different customer groups, notably those in different geographic areas or types of premises. It is therefore appropriate to consider whether separate markets representing different categories of end-users exist, or whether there is sufficient overlap between end-users with slightly different demand profiles such that a chain of substitution[132] linking all categories of end-user can be identified. ComReg considers whether a chain of substitution exists between residential and business FVA products which would result in one single FVA market. The analysis is based primarily on whether a residential customer of FVA would be likely to find a business product an effective substitute, and vice versa. ComReg also considers whether supply-side substitution would imply combined or separate relevant FVA markets for these respective customer segments.

[132] See paragraph 57 of the Commission Notice on Market Definition which notes that, in certain cases, the existence of chains of substitution might lead to the definition of a relevant market where products or areas at the extreme of the market are not directly substitutable. A chain of substitution may exist, for example, where a customer would not substitute from product A to product C to avoid a SSNIP, but would substitute to an adjacent product B. This may suggest that products A and B are in the same market but that products A and C are in separate markets. However, if there are customers who would substitute from product B to product C to avoid a SSNIP then this may also suggest that products B and C are in the same market. Because of a chain of substitution between products A and B and products B and C, products A and C would be defined as in the same market.

4.84 ComReg notes that the European Commission does not distinguish between residential and non-residential customers in the characterisation of the FVA market set out in the 2007 Recommendation.[133] The European Commission considers that one single FVA market for residential and non-residential customers is now more appropriate because notifications received from NRAs so far have shown that the contractual terms do not significantly and systematically differ between the two types of access. The European Commission also noted the scope for supply-side substitution to operate across the customer groups.[134] However, it has accepted that the maintenance of such distinctions may be appropriate in some countries. As recognised in the Explanatory Note to the 2007 Recommendation, the NRA has some discretion to further segment the market for FVA on the basis of national circumstances and in line with competition law principles where it is found that no or very limited demand-side and supply-side substitution between such products exists.

Demand-side considerations

4.85 For the purposes of market definition, it is not necessary that all residential customers would be likely to consider a business product a substitute in order for them to be included in the same relevant market as business customers. It is only necessary that a sufficient number of residential customers would switch to (adjacent) business products (*and/or vice versa*) such as to render a SSNIPunprofitable (assuming that the hypothetical monopolist supplies only business customers or, only residential customers).

Functionality, intended use and product characteristics

4.86 Each customer type is primarily buying relatively homogeneous FVA products in terms of their core functionality. For example, when consuming FVA over copper infrastructure (PSTN and ISDN), the same infrastructure is being used to supply their voice and related services. The core functionality of the FVA service as a platform for providing fixed voice calls between business and residential customers are similar. However, there may be differences in some cases between business FVA products and residential products in terms of the calling and customer support services attached to the package. For example, some business customers are looked after by an account manager, and large business customers may have bespoke product bundles with specific service level agreements (for example, around the timing of fault repairs etc). Furthermore, businesses are more likely to purchase additional functionality with the calling service, such as, call conference facilities or call forwarding.

[133] In the initial Recommendation (2003), however, a distinction was made between residential and non-residential access.

[134] In Decision D07/61, ComReg defined the markets appropriate to national circumstances and believed that it was not appropriate to segment the market by user type (i.e. separate markets for residential and non residential users).

4.87 FSPs generally provide both residential and business FVA products. The following Table 2 illustrates the significant crossover between the five largest FVA suppliers for residential and business customers respectively, according to the 2012 Market Research. In each case these five suppliers represent nearly all of the FVA subscriptions reported by respondents.

Table 2 Share of Subscriptions: [135] Households and Business

Households		Business	
Supplier	Share of subscriptions	Supplier	Share of subscriptions
Eircom	63%	Eircom	63%
UPC	20%	Vodafone	20%
Vodafone at home	13%	Imagine	7%
Digiweb	1%	O2	6%
Imagine	1%	UPC	3%

4.88 Table 2 shows that UPC has a more significant presence in supplying residential customers than it does supplying businesses (owing to its reliance on a CATV broadband network that was originally to for the purpose of providing TV to households). O2 does not provide FVA to residential customers, yet is the fourth largest supplier of FVA to businesses with 6% of subscriptions. Imagine also has a more significant presence in terms of supplying business customers, relative to their proportion of residential subscriptions.

[135] Based on survey data from the 2012 Market Research at Appendix 1.

4.89 Business products tend to be somewhat more flexible than residential products as they are often tailored to the needs of a specific business. There can be differences in terms of additional features offered to the FVA service, such as greater access to enhanced support services including reduced repair and response times for business customers. In addition, products are available that typically cater for corporate or high-volume and multi-office users. These products differ from standard off-the-shelf business products by offering features, such as inter-site connections, centralised and shared functionality between sites (e.g. call divert), multiple incoming calls to the same number and a single bill for the main number and all its auxiliary lines. These differences in the additional features provided to business and residential customers could be indicative of separate markets, but only if they are sufficiently large that users at adjacent levels in the value chain (e.g. high volume residential users and low volume business users) would not view the products as sufficiently interchangeable in the event of a SSNIP in either product.

4.90 The 2012 Market Research shows that most businesses in Ireland are SMEs based in a single premise (85%), employ fewer than 10 people (70%), and require only one FVA connection (55%). This is comparable with the demand profile of a household, which means that in many cases there is a cross-over between the type of FVA connection required by a business (with, for example, fewer than 10 people) and by a household. Indeed, PSTN is the most common form of FVA purchased by both business (80%) and residential (77%) customers. However, the next most common platforms in each case differ. For example, 18% of residential customers chose cable technology for their FVA service compared to 4% of businesses. Cable is a popular form of FVA platform for residential customers because UPC provides multi-product bundles that include television, fixed broadband access and voice calls. As discussed further below, UPC's network is primarily connected to households, since it was originally a television network and, therefore, UPC has targeted residential customers. On the other hand, 12% of businesses chose ISDN access. Demand for ISDN connections has declined significantly, but the services are sometimes used by businesses who have not yet switched to a broadband service, or who have specific requirements (e.g. to support a traditional PABX multiple-line telephone network).

4.91 It is possible that households and businesses use that fixed connection in a different way and that it may be priced differently according to those different needs. ComReg considers whether the way in which households use their fixed connection compared with businesses would indicate the extent to which residential and business products represent suitable substitutes for one another.

4.92 Many businesses will require a fixed phone line as their primary point of contact for customers. Businesses may therefore be less sensitive to the price of FVA than residential consumers. This is reflected by the relatively large proportion of households that do not have a FVA connection (36%) compared with only a small group of businesses without a fixed line connection (5%).[136] The 2012 Market Research also revealed that businesses make a greater proportion of their outgoing calls using the FVA connection compared to households. For example, only between 16 and 22% (for on-net and off-net respectively) of residential calls to mobiles were made from fixed lines compared to 51% of calls made by business users.[137] This reflects perhaps a greater reliance by businesses on the fixed line connection for making calls, which may be linked partly to the higher mobile penetration rate across households relative to businesses (where employees more often only have a fixed connection) as well as to the perception that a fixed line phone is important to the day-to-day functioning of the business, as demonstrated by the 2012 Market Research.

4.93 Despite these variances, there is a significant cross-over between the ways that business customers use FVA compared with the way that residential customers use the service. The FVA connection is typically used by households and businesses primarily as a platform over which voice services are provided. Other services, such as, broadband access to the internet are often supplied in addition to the FVA service, and more often as part of a bundle for both customer types. The 2012 Market Research further indicated that business and residential customers both prioritise similar factors when it comes to selecting a FSP. Those were the cost of making calls, the cost of line rental, the value of the package or bundle offered.

4.94 While customised contracts may involve enhanced service-level agreements over and above the standard product descriptions that both residential and standard business customers are offered, according to the 2012 Market Research, only 20% of businesses report customising their contracts. Furthermore, while 60% purchase a standard business contract, a further 12% of business customers purchase a residential fixed telephony contract. This overlap in the products consumed is likely attributable to the predominantly SME profile of businesses in Ireland. It is probable, therefore, that a chain of substitution between retail and business customers exists, as a significant number of SMEs may be content with a residential product, depending on the nature of their business.

[136] The 2012 Market Research.
[137] The 2012 Market Research.

4.95 Breaks in the chain of functional and pricing substitutability might arise where, for example, significant differences arise in the number of voice channels supported by the FVA connection to accommodate different usage needs (e.g. in terms of the number of channels supported between PSTN and ISDN BRA access on the one hand and ISDN FRA and PRA access on the other).[138] The extent to which these respective forms of access satisfy differing customer needs and the extent to which this is reflected in the associated pricing structure will be discussed further below in the section analysing whether combined or separate relevant market exists for PSTN, ISDN BRA, ISDN FRA and ISDN PRA respectively.

Pricing

4.96 Pricing of the standard FVA service (i.e. PSTN and ISDN BRA) is identical for both residential and business users. However, as noted above, FSPs typically distinguish between business and residential customers in terms of usage by formulating packages of communications services at different price points for each set of customers. For FVA services taken as part of a voice plan, [139] the pricing generally differs between these customer categories reflecting differences in the scale of calls expected to be made by each type of customer. Business products are generally priced at a higher rate than residential products in view of the option for additional or more enhanced features. Typically, business products include a call plan with free peak time calls as part of a packaged access and calls product, whereas residential packages focus on offering free off-peak calls as part of a call plan, with peak calls charged at a given rate per minute.[140]

[138] PSTN supports one direct dial number and ISDN BRA provides two; in contrast, ISDN FRA and PRA may accommodate up to 50 and 100 direct dial numbers respectively.

[139] Voice plans refer to overall packages of retail fixed access and calls which may vary depending on typical usage or calling patterns.

[140] For example, Eircom's website (as of 2nd April 2012) presents different packages to residential and business customers. The three main products for residential customers are Eircom Talk Weekend, Eircom Talk Evenings and Eircom Talk Anytime. The first two of these are centred around providing off-peak calls as part of the bundle. The two main business packages offered are Eircom value business plan and Eircom telephone line, neither of which provides off-peak calls separately (the former has free unlimited anytime calls).

4.97 In addition, the pricing of business products in some circumstances can be negotiated or tailored to an individual business. This differs from residential products, which are typically priced in an 'off-the-shelf' manner. Nevertheless, it may be more appropriate to define the relevant FVA market in terms of product type rather than user type. For example, distinct markets for higher level access (ISDN FRA and PRA) and lower level access (primarily PSTN and ISDN BRA) may more usefully capture the different needs of larger and smaller users of FVA, primarily by defining the market in terms of the services they use rather than in terms of the features they have in common.[141] The possible distinction between various narrowband FVA products is assessed below. Furthermore, ComReg recognises that large business customers may demand certain customised products with significantly higher specifications and quality levels than those currently offered by PSTN/ISDN BRA or standard broadband access connections. For instance, where such business customers require 'dedicated capacity' services for their data needs, such dedicated services might also be used to service their FVA needs. Such a business need would typically be supported by other products such as PPCs or leased lines and would accordingly not form part of the relevant FVA market currently under consideration, but would rather be serviced by other relevant markets such as the retail (and wholesale) leased lines markets.

4.98 In any case, the 2012 Market Research indicates that almost two-thirds of businesses surveyed are on standard and not customised contracts in relation to their fixed telephony services and this is likely driven by the predominantly SME profile of businesses in Ireland.

4.99 While residential and business customers may have different needs in terms of FVA service features/add-ons, according to BEREC,[142] this does not necessarily imply the existence of separate residential and business markets. Separate markets only prevail where FVA service features and pricing are sufficiently differentiated such that business customers would not switch to (adjacent) residential FVA products in sufficient numbers to constrain a SSNIP by the HM of business services, and *vice versa* for residential customers.

[141] ComReg in the 2007 review of FVA, defined the market appropriate to national circumstance and believed that it was not appropriate to segment the market by user type (i.e. separate markets for residential and non residential users) rather it was more appropriate to have separate markets for higher and lower level access. ComReg notes that a number of other NRAs have a similar market delineation.

[142] BEREC Report on relevant market definition for business services – http://www.erg.eu.int/doc/berec/bor_10_46rev1a.pdf

4.100 ComReg considers that in relation to FVA, chain substitutability is likely to lead to the occurrence of this type of switching, which would prevent any such SSNIP from being effective. Since there are generally no restrictions on residential customers taking out a business product or *vice versa*, products aimed at each customer type, particularly at the margins, will place some degree of pricing constraint on each other. For example, a sufficiently high-usage residential customer, in terms of demand for call minutes, may elect to switch to a business product in response to a SSNIP on a residential product. Conversely, low-usage business users may be able to switch to a residential package in response to a SSNIP on business packages.

4.101 Table 3 compares the price and non-price characteristics of standard residential and business products offered by a selection of the largest five retail FVA suppliers:

Table 3 Price and non-price characteristics of standard residential and business products

Supplier	Product	Business	Residential
Eircom[143]	Line rental (entry level)	€20.96	€25
	Line rental plus broadband (range)	€52.99 up to €68.99	€40 up to €55
Vodafone[144]	Line rental	€30	€30
	Line rental plus broadband	€49 up to €89	€40 up to €59
UPC[145]	fixed line phone with broadband (standalone FVA not available)	€45.50 up to €65.50	€49 up to €89
Digiweb[146]	Fixed line phone with broadband (FWA)	Prices not published on website	€15.25 up to €40.65
	Fixed line phone with broadband (DSL)	€49.95 - €59.95	€29.47 up to €37.60

4.102 As discussed above, most households and businesses in Ireland purchase standardised FVA and bundled products, rather than purchasing tailored products. Although the price range varies between those offered to business and residential customers, the chart illustrates that there is a significant cross-over between the standard products available to business and residential customers online.

143 Prices as of October 2012. Available on the Eircom website here for residential products: https://secure.eircom.net/talktime/talktime-evolution-flow;jsessionid=BFBB3E7DC24FCC302FA3A92B61184C8E.jvm1?execution=e1s1 and here for business products: http://business.eircom.net/broadband/products/landline/voice/19272383/

144 http://www.vodafone.ie/df/homebroadband/homephoneonly/ and http://www.vodafone.ie/businessbroadband/fixed/office/

145 http://www.upc.ie/phone/ and http://business.upc.ie/products/

146 Prices as of October 2012. Available on the Digiweb website here: http://www.digiweb.ie/business/products/voice/

4.103 The price premium that exists in some cases for business products seems to relate to the additional call volumes and call types typically included with FVA for business customers. Some FSPs provide additional calling functionality to businesses. For example, Eircom provides caller ID, three way calling, call waiting and a guaranteed 8 hour line repair time can be purchased for an addition €2.50 per month.[147]

4.104 Suppliers tend to offer a basic entry level product with a limited allocation of minutes included in the bundle (typically the residential entry level product includes a lesser allocation of bundled minutes compared with the analogous business product). The more expensive products either have additional bundled minutes included, or faster broadband speeds.

4.105 Note that in addition to these standard products, most suppliers offer bespoke products to meet the needs of large businesses and corporate customers with specific telecommunications needs. These are typically products with a higher specification that include services which are beyond the scope of this review. For example, FVA may be purchased in the form of a primary rate ISDN connection with a virtual private network. Alternatively, corporate customers may purchase a leased line service or an un-contended symmetric wireless link, which would have a different set of product characteristics. ComReg therefore recognises that larger businesses tend to purchase products that are significantly more expensive and offer more extensive functionality than that required by households and small businesses. However, the chart above captures the types of business products that are purchased by the majority of households and businesses. It further indicates that there are likely to be greater similarities between the products purchased by SME and households, than between the SME targeted products and those products purchased by large businesses and corporate customers. Thus there is no obvious delineation between business and residential customers, but there are potential breaks in the chain of substitutability, and varying competitive conditions for high-end business connectivity and related products.

4.106 ComReg will consider in the subsequent section of this market definition exercise whether high-end telecommunications products (such as, Primary rate ISDN or SIP Trunking) fall within the relevant FVA product market/s for the purpose of this market review.

[147] http://business.eircom.net/broadband/products/landline/voice/19272383/

Supply-side considerations

4.107 Given the physical similarities of the underlying physical delivery mechanism for residential and business products, as well as their overlapping service attributes at the margins (in particular for high-usage residential and low-usage business packages), it appears likely that a supplier of residential FVA could in most cases switch to providing business FVA, and vice versa, relatively easily and within a reasonably prompt timeframe to constrain non-transitory price changes.

4.108 Some FSPs supply only business customers or only residential customers. For example, BT Ireland has, since selling its retail customers to Vodafone Ireland in 2009, chosen to supply only business customers. While UPC primarily supplies residential customers (97% of its customer base), FSPs like Eircom and Digiweb provide FVA services to both types of customer, which would indicate that existing FVA suppliers not currently active in both segments could find it commercially viable to broaden their offerings to serving adjacent customer groups. FSPs can compete in both segments nationally primarily through resale of wholesale SB-WLR.

4.109 The main restriction in terms of supply-side substitution occurs where a provider is unable to access infrastructure that would allow it to provide services to a particular customer type (e.g. businesses in a large industrial estate). However, this form of restriction appears to be limited. Where such infrastructure is not available, suppliers are typically unable to supply to either residential or business users, but where a supplier does have access to infrastructure and can provide services to one customer type it can typically provide services to both.

4.110 In areas where there is a marked separation of residential and business premises then supply-side substitution may be more limited. For instance, UPC's cable network was originally designed around being a TV network and hence has primarily been implemented in residentially focused areas. However, given the large proportion of small businesses in Ireland many areas have substantial integration of residential and business premises.

Preliminary conclusion

4.111 On the basis of the above factors, ComReg's preliminary view is that, taking demand and supply-side considerations into account, SME businesses and residential customers are in a unified FVA market. Physically, the underlying network used for delivery of FVA is the same or similar for business and residential users. Although there are some differences in customer usage (which will be further analysed and addressed in the section considering substitutability between specific PSTN and ISDN products below) it seems likely that there would be a chain of substitution between residential and business in relation to FVA. In addition, many FSPs currently supply both residential and business products indicating the ability of FSPs to engage in sufficient supply-side substitution.

Q. 6	Do you agree that there is a single FVA market for business and residential customers? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Are all forms of fixed narrowband access in the same relevant market as the candidate FVA product?

4.112 Narrowband access refers to PSTN and ISDN copper lines and FWA.

Demand side considerations

4.113 For the purposes of market definition, the key issue in considering the scope for effective demand-side substitution amongst different forms of narrowband FVA is the extent to which end users would be prepared to switch from one form of narrowband FVA to another in response to small price increases. To that end, the following considers their functional interchangeability and any pricing differentials or similarities in coming to a view on the likely degree of substitution between the various narrowband FVA products in response to small price changes.

Functionality, intended use and product characteristics

4.114 In general, telephony service delivered over FWA[148] is not considered to be distinct from PSTN and ISDN BRA carried over copper. As previously identified by ComReg, the functionality of Eircom's FWA product[149] corresponds to that of PSTN and ISDN BRA carried over copper. FWA mimics most elements of the PSTN/ISDN BRA voice service provided over copper (in terms of numbering, access to emergency services, ability to receive faxes, ease of use ability to use standard end user equipment).[150] While FWA can accommodate internet access, the service can be limited by bandwidth capacity and, in the case of Eircom, will not support broadband technology. In addition, FWA access is not widely available and eircom primarily uses it as an alternative technology to provide PSTN type service to customers in rural locations where copper is not currently available.

4.115 Overall, ComReg considers that the similarities in functionality, prices and intended use to the PSTN and ISDN BRA service marks Eircom's FWA access service as in the same market as PSTN and ISDN BRA access. ComReg further assesses from a forward looking perspective, at paragraph 4.132 to 4.168 below, the likelihood of increased substitution in cases where FWA access, as well as other means of broadband access, is used to provide end users with managed VOIP service (e.g., Digiweb (Smart) offers managed VOIP over FWA in Dublin).

4.116 Broadly speaking, the preference for using ISDN rather than PSTN for access to voice services is primarily because the subscriber needs more than one channel. Functionally, the ISDN product may be seen as a multiple of PSTN lines, with ISDN terminating equipment allowing transparent data transmission without a traditional modem. Data access via ISDN is a switched circuit service operating over a dial-up connection. ISDN access supports some 'supplementary services' not supported by PSTN access, but these are of minor importance. A PBX which is required to switch calls on the customer's side of the network termination point can be used with both PSTN and ISDN access services. Supplementary services can also be used with a PBX to allow certain additional facilities.

[148] These services operate over a fixed network except for the final link to a premise which is provided by a wireless signal (and hence is a fixed line wireless connection).

[149] Eircom plans to introduce in the near term a Fixed Cellular Solution (FCS) in replacement for FWA. Again, this is a radio solution that allows customers to make and receive calls over the mobile network while charging these calls at fixed line rates. However, this service will not support broadband technology.

[150] In addition, the same provisioning processes apply to this service (i.e. CPS and SB-WLR are facilitated) and it is possible to port exiting numbers on to such services.

4.117 However, in terms of the functional substitutability between PSTN and ISDN BRA access on the one hand and ISDN FRA and PRA access on the other, significant differences in the number of channels supported by these respective forms of access suggests they likely satisfy differing customer needs in terms of usage. Furthermore, it is of note that while PSTN only supports one direct dial number and ISDN BRA provides two; in contrast, ISDN FRA and PRA may accommodate up to 50 and 100 direct dial numbers respectively.

4.118 As such, for ISDN PRA and ISDN FRA, while these services share overall functionality with PSTN and ISDN BRA, the larger number of channels (associated with ISDN FRA and PRA) means that demand is most likely to derive from higher volume users than is the case for PSTN and ISDN BRA access. In terms of functional interchangeability between PSTN access and ISDN FRA/PRA access respectively, it is possible to connect multiple PSTN lines to a PBX, and share a single directory number. However, many PBXs are configured to use only ISDN lines, and these are often provided in conjunction with direct dialling, which allows direct dial to an individual PBX extension. Thus, for large volume users with PBXs configured for ISDN access in place, it may not be technically possible for them to switch from using ISDN access to using multiple PSTN lines in response to small price increases.

4.119 Thus, ComReg concludes in terms of functional substitutability:

- FVA over FWA is not considered functionally distinct to FVA delivered over the PSTN as access via FWA still offers access to PSTN and/or to digital ISDN and may be used to supplement PSTN services;
- The ability for large volume users with PBXs configured for ISDN FRA and PRA lines only, to switch from using higher level ISDN access to multiple PSTN lines in response to small price increases may be constrained; and
- ISDN FRA and ISDN PRA are functionally distinct from ISDN BRA, PSTN/FWA narrowband access since significant differences in the number of channels and direct dial numbers supported indicates that they meet different end user requirements.

Pricing

4.120 Table 4 shows Eircom’s pricing for narrowband services (i.e. access for PSTN, FWA and ISDN (BRA, FRA and PRA) services. Prices for ISDN BRA access lie within a comparable price range to PSTN connections. FWA prices lie within a comparable price range to PSTN/ISDN BRA connections over copper.

Table 4 Eircom Retail Pricing – Narrowband Services[151]

Product	No. channels	Connection charge	Monthly rental
PSTN/FWA	1	€107.43	€20.96
ISDN BRA	2	€202.47	€32.51
ISDN BRA 'hi speed'	2	€99.16	€32.51
ISDN FRA	16	€3,299	€166.50
ISDN PRA	30	€3,299	€277.06

4.121 In terms of the pricing of Eircom's ISDN FRA and PRA both have a connection charge of €3,299 and a monthly charge dependent on the number of channels. For example, 16 channel ISDN FRA costs €166.50 per month and 30 channels ISDN PRA costs €277. In terms of the connection charge, the price of ISDN FRA and PRA broadly reflect their characteristic as a multiple of PSTN lines. However, the monthly charge per channel for PRA ISDN variants is around €9.24, compared with a single PSTN line rental price of €20.96. This suggests that a customer would not be prepared to substitute their higher capacity ISDN access services with individual PSTN lines, as the monthly rental cost per channel would effectively more than double.

[151] For clarity, all prices are quoted exclusive of VAT. VAT is currently charged at 13.5% for standard PSTN connections only, Eircom Price List 2012, effective from 01/01/12. The VAT rate for all other services is charged at 23%. See monthly rental and connection for all products at www.eircom.ie, and also for charges in respect of ISDN; Eircom Price List, effective from 17/07/08 at www.eircom.ie.

Table 5 Analysis demand-side substitution[152]

No. Channels	1	2	8	16	30
ISDN PSTN FWA	€358.95	€717.90	€2,871.60	€5743.20	€10,768.50
ISDN BRA	€592.59	€592.59	€2,370.36	€4,740.72	€8,888.85
ISDN BRA 'high speed'	€489.28	€489.28	€1,957.12	€3,914.24	€7,339.20
ISDN FRA	€5,297	€5,297	€5,297	€5,297	n/a[153]
ISDN PRA	€6,623.72	€6,623.72	€6,623.72	€6,623.72	€6,623.72

4.122 It is therefore conceivable that a hypothetical monopolist supplier of higher capacity ISDN services could profitably raise prices by 5-10%, since the current rental differential (where multiple access channels are needed) makes it unlikely that sufficient numbers of users would switch to using multiple PSTN lines/FWA instead. Similarly, given the significant price differential between the ISDN FRA and PRA products (i.e. higher level access), on the one hand, and the PSTN/narrowband FWA and ISDN BRA access products (i.e. lower level access) on the other, it is suggested that the ability of a HM supplier of lower level access services to increase prices by a small but significant amount is unlikely to be constrained by low volume users (who require less than 16 channels) switching in significant numbers to purchasing ISDN FRA and PRA given that the connection and monthly fees are multiples of the corresponding lower level access prices. There is, therefore, a clear distinction in the pricing of lower and higher level FVA respectively based on customers' usage (i.e. it appears feasible to price discriminate between customers based on their volume of purchases).

[152] The total cost is calculated as follows: For example, in relation to demand for 8 channels, the initial connection charge and ongoing monthly rental are calculated for each access product i.e. 8 PSTN/FWA connections = 8*PSTN/FWA connection charge + 8*12*PSTN/FWA monthly rental, similarly the total cost is calculated for 4 ISDN BRA/BRA 'hi speed', 1 ISDN FRA and 1 ISDN PRA.

[153] Technically, ISDN FRA represents a variant of ISDN PRA and as such where a customer wished to avail of 30 lines they would opt for ISDN PRA.

4.123 Table 5 shows that there is a gap in the chain of substitution between lower and higher level access services and vice versa. It also indicates the limited scope for demand-side substitution between lower and higher level access products respectively in response to a SSNIP. While ISDN BRA might act as a substitute for two PSTN lines, a multiple of ISDN BRA or analogue products would not act as a cost effective substitute for ISDN FRA/PRA products where 16 or 30 channels are required. It does not appear cost effective to use lower level access products above this level or to use higher level access products below this level. Thus, a distinct break in the chain of substitution appears to arise at the 16 channel level. From a demand side perspective, therefore, ISDN FRA and PRA products are in a separate relevant FVA market than PSTN, FWA and ISDN BRA.

Supply side considerations

4.124 The economics of supply are such that the supply of BRA is more similar to PSTN access than it was to the supply of ISDN FRA and PRA products (which offer multiples of lines) since the supply of higher rate ISDN is predominantly via direct access to customers. The cost for existing suppliers of FVA over PSTN and ISDN BRA to switch to supplying FVA over ISDN FRA and PRA by building out their own infrastructure would likely be significant and limit prompt or effective switching.

4.125 In terms of switching from supplying FVA over ISDN FRA and PRA to PSTN and ISDN BRA networks, an FSP currently offering higher rate ISDN but not basic PSTN access would likely have to acquire older generation equipment at the exchange. There is therefore a cost disincentive for an ISDN FRA and PRA supplier beginning to offer FVA over PSTN; such disincentives would be especially strong if the supplier concentrated on higher rate services due to factors outlined below. In that regard, there would appear to be limited scope for effective supply-side substitution from higher rate ISDN FRA and PRA to basic PSTN access.

4.126 In terms of switching from supplying PSTN and ISDN BRA to higher rate ISDN respectively, higher rate ISDN customers are typically larger and more concentrated and as such a whole range of related costs would be significantly different from offering the more 'mass appeal' products of ISDN BRA and PSTN, the end users of which tend to be lower volume users and less concentrated. ComReg notes that the economics of serving a series of industrial estates for example compared to a residential population would be sufficiently different to negate or lessen the scope for quick or effective supply-side substitution between FVA categories. This is because the larger, more concentrated higher level FVA end users, such as, business parks are likely to be in distinct locations to the typically smaller and more disaggregated PSTN and ISDN BRA end users such that switching supply would entail significant costs and time delay in terms of additional network build and adjustments needed in terms of marketing arrangements, customer support etc. For the above reasons, ComReg considers that FVA over PSTN, FWA and ISDN BRA and over ISDN FRA and ISDN PRA are in separate markets on the supply side.

Preliminary conclusion

4.127 FVA consisting of PSTN, FWA and ISDN BRA are in the same relevant FVA market (i.e. LLVA). For the above reasons, services over PSTN, FWA and ISDN BRA are interchangeable to a sufficient degree. They are products which offer the same functionality, for the same end use and operate under similar price constraints.

4.128 However higher level FVA via ISDN FRA and ISDN PRA is in a separate relevant FVA market (i.e. HLVA). These access products are functionally distinct from LLVA since significant differences in the number of channels and direct dial numbers supported indicates that they meet different end user requirements. In addition, LLVA is unlikely to be a demand side substitute for HLVA given the retail price differences that exist between the two FVA categories.

Q. 7 Do you agree that there are distinct markets for LLVA over PSTN, ISDN BRA and FWA and for HLVA over ISDN FRA and PRA? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Is there a broader HLVA market inclusive of alternative fixed access technologies?

4.129 In considering whether leased lines are demand side substitutes for ISDN PRA and FRA, the key issue is that the ISDN services considered here are intended to provide switched voice and data access services, whereas leased lines provide only transmission capacity and therefore a retail end user cannot purchase leased lines alone as a demand side substitute for higher level FVA. This means that from a demand side perspective ISDN PRA and FRA and leased lines are not substitute products. According to the 2012 Market Research, no business reported using leased lines as the platform to access their fixed voice call services. On the supply side, the sunk cost of converting a leased line ISDN FRA or PRA is significant. For example, significant investments would likely be required in switching equipment an operational support system updates to provide higher level FVA or related telephony services. In view that ISDN FRA and PRA are mature products subject to potential future decline it is unlikely that there would be supply side substitution from leased lines into retail ISDN FRA and PRA for higher level FVA supply. Therefore, we consider they are not supply side substitutes.

4.130 In addition, ComReg is conducting the market definition on a prospective basis. It is anticipated that FSPs that direct supply higher level FVA to large business users (e.g. BT, Colt, Verizon and others) could also, in principle, increasingly make available IP solutions, such as, fibre based SIP Trunking[154] and could in future use NGA bitstream type access which, it is anticipated, will be ideally suited for such “business class” services. In the following, ComReg considers whether such products would likely represent an effective substitute for ISDN FRA and PRA products. While SIP trunks are available to some business users these product offers would appear nascent with currently very few SIP trunks in Ireland. A number of FSPs have only very recently started to offer SIP Trunking products or are planning to start offering these services. As such, SIP Trunking is a relatively new and immature product offering. Therefore, it is as yet uncertain as to the degree of their substitutability with traditional ISDN FRA and PRA for delivery of FVA because:

- In terms of product features and functionality, concerns may currently exist regarding the robustness of SIP standards, such as, its ability to provide secure, reliable and consistently high quality of service with respect to delivery of fixed voice services relative to traditional ISDN FRA and PRA lines;

[154] This is sometimes referred to as IP Business Trunks or IP Trunks –an exchange line service that uses IP for voice and data transmission and Session Initiation Protocol (“SIP”) for the telephony control signalling. SIP Trunking services are generally multi-line services that are used to provide exchange line services to modern IP PBXs that support this type of interface.

- The deployment of SIP Trunking will likely require an IP enabled PBX. In view of this, an additional consideration of switching to alterative IP solutions may be the replacement cost of the PABX, as the penetration of PBXs appears low with penetration of IP enabled PBXs even lower. The 2012 Market Research indicates a small minority 16% of businesses surveyed report using a PBX in business and that a negligible percentage of these report use of an IP based PBX.[155]

- Given the requirement for customer premise equipment upgrade, any associated replacement cost in order to migrate from ISDN FRA and PRA to a SIP trunk, or other IP solutions may also represent an additional difficultly to switching to IP alternatives due to the economic climate; and

- There may be a time delay in a migration of ISDN FRA and PRA to a SIP trunk, or other IP solutions in view that any equipment upgrade and PBX replacement is likely to be subject to the timing of a business procurement process and contracts renewal where business reassess their fixed telephony services provision. It is likely that in the current economic climate that many businesses will seek to extend the lifetime of their existing telecoms equipment where possible.

4.131 For the above reasons, it would appear that these services are not yet well established in the market and there is likely no strong impetus to switch away from ISDN FRA and PRA. Demand and supply side substitution of ISDN FRA and PRA by SIP Trunking is unlikely to be sufficiently prompt to justify a broader market definition in relation to higher level FVA. ComReg considers that IP solutions, including, SIP trunks, fall outside the boundary of the relevant HLVA market at this time. These emerging substitutes and transitioning from one technical generation to the next are more appropriately assessed as part of the competition and SMP assessment in Chapter 5. ComReg considers these issues in its assessment of potential competition and will keep such developments under review. ComReg is therefore proposing to continue to identify a distinct retail market for higher level FVA consisting of access via ISDN FRA and PRA (i.e. HLVA).

Q. 8 Do you agree that the relevant market for HLVA is narrow including ISDN FRA and PRA only? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

[155] There may be a number of reasons for this. A high proportion of Irish businesses are SME and according to the 2012 Market Research, nearly half (48%) of businesses operate from a standalone office or home office (i.e. not in a business park or shared building/premise. It may also be the case that there is terminology misunderstanding among some business respondents.

Is fixed broadband access an effective substitute for fixed narrowband access?

4.132 In its assessment of the WBA market in 2011,[156] ComReg excluded narrowband internet access from the same relevant market as broadband internet access on the basis that narrowband does not provide a functionally equivalent product and is not a suitable substitute. Taking account of the technical characteristics of broadband, the European Commission has previously noted that narrowband would be in a separate market *"because the services and/or the quality features of those services (including their uplink and downlink speed) which can be offered over a narrowband connection would not be seen as viable substitutes from the point of view of an end-user making use of a broadband connection*".[157]

4.133 However, ComReg recognises that substitution can be asymmetric. For example, narrowband access does not support the supply of high speed internet and data services, whereas broadband access can be, and is being used, by FSPs as a platform for delivery of fixed voice services.

4.134 It is evident from Chapter 3 that broadband penetration is high, with household penetration estimated at 55.6% in Q2 2012.[158] There are in excess of one million active fixed broadband subscriptions in the country,[159] and a number of FSPs are now providing fixed voice calls to end users by means of a broadband connection as part of a broader product bundle. Robust fixed broadband connections are increasingly facilitating the delivery of managed VOIP services that are broadly similar to the traditional voice service being offered over narrowband PSTN and ISDN connections. These include UPC offering a range of fixed voice products bundled with broadband and/or television services over its cable network, Digiweb and Imagine offering fixed voice and broadband bundles over their respective FWA networks, and Blueface offering a VOIP service that relies on the end user having an existing broadband connection with a third party network provider. Unmanaged VOIP services are also being offered by third party suppliers (such as Skype).

[156] See ComReg Response to Consultation and Decision D06/11: Market Review Wholesale Broadband Access at http://www.comreg.ie/_fileupload/publications/ComReg1149.pdf

[158] ComReg Quarterly Report, June 2012, p41. This estimate excludes business subscriptions and mobile broadband subscriptions).
[159] ComReg Quarterly Report Q1 2012, p 28.

4.135 Since a broadband connection can now in some cases offer similar functions to a narrowband connection in terms of delivering a voice service, the question arises as to whether broadband access may exercise a degree of competitive constraint on the price of narrowband FVA. All technologically-enabled fixed access lines, regardless of the underlying technologies, are potentially substitutable to the extent that services similar or identical to POTS are supplied over these alternative access technologies and infrastructure. In response to notifications made by NRAs under the Framework, the European Commission has underlined that access to the public telephone network for the purposes of fixed telephony services may be supplied by a variety of technical means, including over broadband internet connections.[160]

4.136 ComReg recognises the emerging option of an alternative source of supply of FVA through managed VOIP over broadband. Where consumers and businesses increasingly purchase broadband, including, as part of a bundle with other services, managed VOIP over broadband may increasingly act as a constraint on PSTN/ISDN voice services and, ultimately, the PSTN/ISDN connections. In line with the principle of technology neutrality and the European Commission's guidance that NRAs should assess from a forward looking perspective the likelihood of increased substitution with broadband connections,[161] ComReg considers whether these alternative broadband-based voice access services are sufficiently substitutable with retail narrowband FVA to the extent that they constrain a HM in the provision of narrowband FVA. In that regard, ComReg takes into account the European Commission comments letters where it has pointed out that in order to justify the inclusion of IP-based products in the retail access market, such products must have the same functionalities as PSTN/ISDN access (in terms of numbering, access to emergency services, ability to receive faxes, ease of use, ability to use standard end-user equipment, etc), should be priced in a comparable range, and perceived by end users as substitutes.[162]

Functionality, product characteristics and intended use

4.137 From a functional perspective, there are a number of FSPs providing managed VOIP to end users over a broadband access network. ComReg considers that the managed VOIP service offer customers similarly to PSTN/ISDN networks the following functionality:

- access to the public fixed telephone network;
- the ability to make and receive calls from a fixed location to any other numbered telephone service;

[160] See also the Explanatory Note to the Recommendation (2007), p22.
[161] See, for example, Cases SE/2009/0965 and DE/2009/0897.
[162] See, for example, Cases IT/2009/0890, HU/2010/1095 and AT/2010/1117-1118.

- an allocated geographic number (or an 076 number);
- access to emergency services; and
- a telephone handset that functions equivalently to a regular PSTN fixed phone handset.

4.138 From a customer perspective, therefore, the telephone service offered by managed VOIP products is likely to be viewed as broadly similar to the traditional narrowband FVA service in terms of the voice telephony element of the service.[163] Although the delivery platform is different, managed VOIP over broadband appears to provide functional similarity to the traditional fixed telephone voice services supplied by PSTN/ISDN FSPs, in that (a) the service is provided at a fixed location; (b) it involves using a device with standard fixed telephone functionality and performance; (c) the process of making a call is identical (i.e. the user picks up the device and activates the telephone, and the phone emits a dial tone, at which point the user dials the desired destination number to connect a call); and (d) the telephone has equivalent connectivity to traditional telephones. The retail customer experience of managed VOIP is, therefore, often not distinguishable from the traditional PSTN/ISDN FVA service. This view is consistent with the one taken by Ofcom, which said that “managed VOIP services are simple to use; consumers are often unaware that they are using VOIP rather than a standard landline”.[164]

4.139 With respect to the quality parameter, the quality of broadband in terms of speed, latency and jitter impacts on the quality of VOIP that can be offered to end users. This may affect the degree to which particular broadband technologies are a functional substitute for PSTN/ISDN connections in the near term. However, ComReg notes that FSPs are unlikely to launch a managed VOIP service that falls short of customer expectations in terms of quality of service, since doing so would have the potential to undermine that FSPs credibility. Furthermore, the pace of growth in managed VOIP products to date, as discussed further below, would suggest that a significant cohort of consumers do not appear to view quality/functionality differences relative to narrowband FVA services as a barrier to their take-up of managed VOIP services with broadband.

[163] ComReg notes that some ancillary services such as monitored home alarm and fax services are not yet readily available over a broadband connection. For some customers this may represent a barrier to switching from a narrowband FVA service to a managed VOIP service until such time that these functions, or comparable features, become available over a broadband connection.
[164] Ofcom, “The Communications Market 2010”, August.

4.140 Furthermore, ComReg notes that the quality of managed VOIP services can be controlled by the FSP, through the direct dimensioning of the network. This can involve programming the network to prioritise voice traffic over other forms of traffic. Overall, for the purposes of this market review, and taking account of recent growth trends, managed VOIP over broadband appears to be viewed as a suitable substitute for narrowband PSTN/ISDN voice services by a substantial group of end users (regardless of any potential quality or functionality differences that might exist between retail narrowband FVA and managed VOIP services currently provided by FSPs).

4.141 The main functional difference appears to be that narrowband FVA is offered by FSPs as a standalone voice access service, whereas broadband-based voice access products tend typically to be marketed and sold in a product bundle. For example, end users cannot purchase a voice service from UPC without also purchasing either broadband internet access or television. This means that an end user switching to a managed VOIP supplier in response to a SSNIP of narrowband FVA would be required to take a bundle of services (including additional functions or features that are not included with a narrowband connection). This is because FSPs such as UPC, Digiweb, Magnet and Imagine originally positioned themselves as providers of television (in the case of UPC) and/or broadband. More recently these FSPs extended their product range to include a voice service. But since the voice service is provided over the existing broadband platform, it tends to be offered as an additional feature to the broadband or TV service in a bundle, rather than a standalone product.

4.142 While it would be possible for alternative FSPs to provide a standalone FVA service, to date this type of product has not been made available. Many FSPs have instead focused on meeting a growing demand from households and businesses for product bundles. This growing set of end users that wish to purchase a product bundle is evident in Figure 19, which illustrated the percentage decline in demand for standalone FVA versus that for product bundles that include a FVA and fixed voice call service. Given that a large and growing number of end users wish to purchase broadband or TV in addition to their basic voice service, there are likely to be a significant proportion of households and businesses that would consider these product bundles to be a suitable substitute (however, price is another key factor impacting on the likely extent of substitution between narrowband FVA and product bundles containing managed VOIP over broadband, and this is considered in the next sub-section).

4.143 ComReg's preliminary view is that broadband connections that offer FVA functionality, that is, by means of a managed VOIP service, are considered for the reasons set out at paragraphs 4.137 and 4.138 functionally similar to a narrowband FVA service for a significant segment of end users as to potentially (subject to price considerations below) constrain a SSNIP in the narrowband FVA service. On the other hand, ComReg notes that currently a significant proportion of broadband products do not include a managed VOIP service. Such broadband connections therefore do not offer end users the type of telephone functionality described at paragraphs 4.137 and 4.138 above, and are unlikely in the period of this review to be an effective substitute for narrowband FVA. This is, in part, because a large number of retail broadband connections are provided over a DSL connection, which at present in Ireland can only be purchased with a narrowband voice connection. DSL broadband suppliers therefore can offer a narrowband FVA service combined with the DSL broadband connection.[165] However, where coupled with an unmanaged VOIP service, a DSL broadband connection may still in principle be used to make certain fixed voice calls.

4.144 Unmanaged VOIP by means of a fixed broadband connection provides a distinct service proposition to a narrowband access connection in terms of the functionality and product characteristics. As set out in Chapter 3, these services are most commonly used by end users via a personal computer, laptop computer, smart phone or tablet in order to communicate with other users on these devices.[166] They include services from providers like Skype, Google and Viber. These unmanaged VOIP providers rely on a third party broadband network connection with the end user, and therefore have no control over how voice packets are managed within the broadband network, the general traffic management or the performance of the broadband network. This restricts the ability of the unmanaged VOIP supplier to ensure the robustness of the service.

[165] Circumstances in which naked bitstream (DSL broadband subscription without narrowband) is made available over the period of the market review is considered in the assessment of supply-side substitutes.

[166] However, voice handsets are now available for the purposes of making/receiving calls over unmanaged VoIP technology which does not require the use of a computer. See: http://www.skype.com/intl/en/get-skype/home-phone/cordless-phone/

4.145 The availability of unmanaged VOIP over a standard broadband connection may provide a limited degree of substitutability for a small number of end users responding to a SSNIP of narrowband FVA. However, unmanaged VOIP over a broadband connection is unlikely to be considered a suitable substitute for a narrowband FVA service for the majority of end users. This type of substitution would only be likely to occur at the margins, and therefore in ComReg's view would not be sufficient to constrain a SSNIP in relation to FVA. This is confirmed by the 2012 Market Research which indicated that 36% of households with a fixed broadband service in their home claimed to have used unmanaged VoIP services. However, reported usage levels for unmanaged VOIP services were much lower than for mobile and other fixed voice services with only 10% of respondents using unmanaged VoIP services more than once a day (compared to 73% for other fixed voice and 78% for mobile voice telephony).

4.146 For the above reasons, ComReg considers that retail broadband connections without a managed VOIP service are not functionally similar to narrowband FVA service.

Pricing

4.147 Price is another factor that influences the extent to which end users are likely to consider managed VOIP over broadband to be a suitable substitute for narrowband FVA. Price is a relevant factor that end users of narrowband FVA would take into account when considering whether to switch to an alternative supply source of FVA in response to a SSNIP of FVA. The European Commission's notes with regard to defining a relevant market that:[167]

> *From an economic point of view, for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions.*

4.148 In order for two products to be considered as sufficiently interchangeable to fall in the same relevant market, demand must be sufficiently responsive to small changes in relative prices around the competitive level.[168]

[167] European Commission Notice 97/C 372/03, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209(01):EN:HTML
[168] The SMP Guidelines, paragraph 44.

4.149 In a competitive market for homogeneous products, prices tend to gravitate towards a common equilibrium price as suppliers compete with each other for market share. However, when the products or services offered by FSPs are differentiated in some way, the buying decision faced by end users becomes more complex than simply choosing the product or service with the lowest price. According to Elizalde (2011),[169] on market definition with differentiated products:

> *4.150 "When products are differentiated, there are two drivers of competition: in prices and in product characteristics."*

4.151 End users will therefore assess the value of differentiated products against their relative prices, and choose that which offers the most value relative to the price on offer. In terms of a differentiated product market assessing consumer value is more complex where the 'product characteristics' in addition to price can play a significant role in determining the degree to which one product can pose a competitive constraint on another.[170] In essence, the responsiveness of end users to relative price changes maybe dependant to a large extent on how end users value different characteristics of the product or service.

4.152 Narrowband access is the only product that offers a standalone FVA service. However, in the previous section ComReg identified various alternative broadband products that are available which offer a broader set of functions, or features. ComReg identified those that in terms of functionality may represent a substitute for narrowband FVA, that is, managed VOIP over a broadband respectively. In the following, ComReg considers whether managed VOIP over broadband can be included in the market for narrowband FVA by taking into account the European Commission's comments letters which underline that to be a full demand-side substitute, prices would need to be in comparable range to justify consumers switching away from narrowband FVA. Table 6 compares pricing and marketing for a selection of potential substitutes for narrowband FVA – which represent two basic narrowband product variants (a standalone narrowband FVA services and one that includes a broadband service) and the entry level offerings from four managed VOIP suppliers:

[169] Market Definition with Differentiated Products: A Spatial Competition Application, Javier Elizalde, Working Paper No.07/11, February 2011**.**

[170] This is reflected in Elizalde paper (2011) where he notes on page 29 that '*In industries with highly differentiated products, the main source of competition is not the price but the characteristics of the products*'.

Table 6 Selection of alternative FVA products

Platform	Product name	Price
Narrowband	telephone access (narrowband)	€25
Narrowband and DSL	Telephone access (narrowband), Broadband	€40
Cable (UPC)	Broadband/telephone access (managed VOIP)	€44
	TV/telephone access (managed VOIP)	€33
FWA	Broadband/telephone access (managed VOIP)	€30 (Digiweb and Imagine)
Fibre	Broadband/telephone access (managed VOIP)	€39.95 (Magnet)

4.153 Table 6 clearly illustrates alternative broadband based FVA products are bundled with other products, whereas the narrowband FVA product is a discrete and standalone product with a narrower set of functions (i.e. cannot be used to surf the internet). In line with its functional capacity, narrowband FVA is priced significantly lower than the potential managed VOIP-based substitutes.

4.154 The extent to which alternative broadband based FVA products are substitutable for narrowband FVA necessarily depends on whether the value added features associated with the alternative products are valued sufficiently by end users requiring a fixed voice service to justify purchasing the wider bundle containing broadband and also managed VOIP service. ComReg's assessment of the market place indicates that a significant proportion of households and businesses are likely to place value on broadband internet access and television. For example, 66% of households, and almost three quarters of businesses surveyed by ComReg purchase fixed broadband internet access.[171]

[171] The 2012 Market Research.

4.155 Having made a decision to purchase broadband, some households or businesses are likely to perceive a managed VOIP connection to be a suitable substitute for a narrowband FVA connection. As was highlighted in Figure 19, the proportion of end-users purchasing product bundles (either FVA bundled with TV, broadband, or both) is large, and is growing. On the other hand, however, end users who wish to purchase a FVA service, but place no value whatsoever on broadband, are unlikely to consider these alternative products to be a sufficient driver to substitute their narrowband FVA connection. There remains a significant group of end users who do not currently purchase fixed broadband (or TV). A household or business that purchases narrowband FVA without fixed broadband or TV may consider switching to these alternative broadband based products if the value placed on the bundled broadband or TV service by the end user is greater than the difference between the post-SSNIP narrowband FVA (i.e. line rental) price and the price of the alternative bundle product.

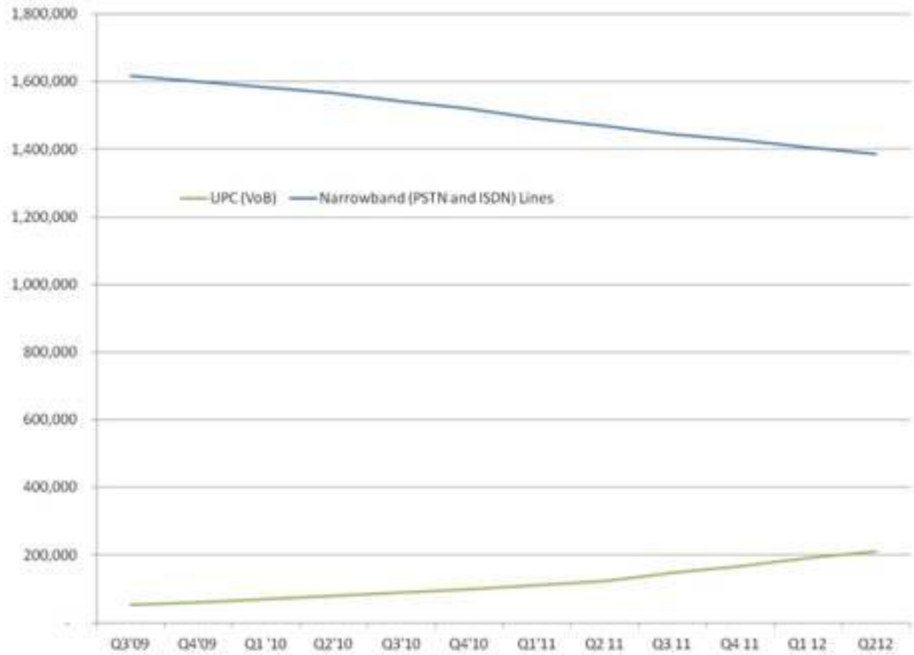
4.156 When a hypothetical SSNIP is applied to the price of narrowband FVA, the price premium that exists between narrowband FVA, and the alternative bundle, falls. To put another way, the bundled components typically become cheaper for those end users that purchase the bundle. If a sufficient number of end users value the bundled products highly enough to justify paying the reduced premium, then the collective substitution would likely constrain a profitable SSNIP on the price of the narrowband connection. In which case, the alternative bundle product in question which includes a managed VOIP service should be included in the relevant product market with narrowband FVA.

4.157 Given the practical difficulties involved in applying a hypothetical SSNIP test between differentiated products, ComReg has assessed market trends for evidence of actual substitution between narrowband FVA and broadband managed VOIP access. This has involved monitoring the behaviour of end users since broadband-based voice services became available. The most notable development was the launch of a fixed voice service by UPC in a bundle with its television and broadband services. UPC initially launched the product on a limited basis in 2006, and subsequently rolled out broadband (and managed VOIP) capability across its cable network. Growth has increased significantly since 2007. The service is now potentially available to nearly all households connected to UPC's cable network.[172]

[172] UPC's network is capable of providing broadband internet services to 728,300 households with 700,200 of these capable of receiving voice services

4.158 As of Q2 2012, UPC actually supplied (managed VOIP-based) voice calls to 205,800 retail customers.[173] These customers are either purchasing the service as part of a double-play bundle with TV or broadband, or a triple-play bundle with all three services. UPC's network is, however, capable of providing broadband internet services to 728,300 households with 700,200 of these capable of receiving voice services as of Q2 2012.[174] As illustrated in Figure 21, this growth in UPC's managed VOIP customer base has corresponded with a 17% fall in the number of total PSTN subscriptions since 2007 and a 22% fall in the number of total ISDN subscriptions since 2007.

Figure 21 UPC Voice Telephony, PSTN, ISDN Narrowband Subscriptions, Q3'09 to Q2'12



[173] UPC, "UPC Holding Reports Second Quarter 2012 Results", press release available from: http://www.lgi.com/pdf/press-release/UPC-Holding-Press-Release-Q2-2012-FINAL.pdf.
[174] UPC, —UPC Holding Reports Second Quarter 2012 Results||, press release available from: http://www.lgi.com/pdf/press-release/UPC-Holding-Press-Release-Q2-2012-FINAL.pdf

4.159 The high uptake of UPC's FVA services amongst households suggests that UPC's FVA product is seen as a credible substitute for end users of broadband services which also value a FVA service. This is further supported by evidence from ComReg's 2012 Market Research revealing that UPC has gained 37% of FVA 'switching customers' over the last three years. Nearly all of those customers switched to UPC from a narrowband access product. UPC also had a high ration of subscribers gained to those lost (9 to 1), which indicates that having switched to UPC, customers were in most cases satisfied with the service (in contrast, Eircom lost three fixed voice customers for every one acquired over that same period, however a degree of intra-narrowband switching can also be observed from the 2012 Market Research).[175] It should be noted however, that only 4% of business phone connections are reportedly provided over a cable network in Ireland. This is largely related to the cable footprint mapping to residential properties for the original intended purpose of providing pay TV services.

4.160 As ComReg has illustrated in Table 6 above, there are a number of managed VOIP products that compare with UPC's product in terms of functionality and pricing. For example, Magnet offer a managed VOIP with broadband bundle for €39.95 and Digiweb provide an entry-level broadband and managed VOIP bundle for €30.00. Although these latter platforms currently have a very small number of retail FVA customers.

Supply side substitutability

4.161 ComReg has also considered from the supply side the extent to which a broadband provider could or would switch to supplying some form of narrowband FVA substitute in response to a SSNIP in the price of retail narrowband FVA. Such supply substitution should only be taken into account in the relevant market definition if its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy, i.e. where suppliers could switch production to the relevant products and market them quickly in response to a SSNIP without incurring significant additional costs or risks.[176]

4.162 From a supply-side perspective, broadband connections currently supplied without managed VOIP could also be included in the market if the provider could or would be likely to switch to supplying a managed VOIP product in response to a SSNIP in the price of retail narrowband FVA, and in doing so would prevent a profitable SSNIP by the hypothetical monopolist.

[175] For example, Vodafone at Home has lost most to Eircom (10% of the 12% of switchers who switched from Vodafone at Home switched to Eircom).

[176] Commission Notice on Market Definition, paragraph 20.

4.163 DSL subscriptions make up a large proportion of retail subscriptions (77% for households and 80% for businesses). Managed VOIP services are not widely available on DSL networks because wholesale and retail bitstream subscriptions currently cannot normally be purchased without a narrowband connection.[177]This means that a customer cannot usually substitute a narrowband service for a DSL broadband service with a managed VOIP service. Thus the SSNIP is unavoidable, and will remain so until Eircom launches a wholesale or retail naked bitstream product (DSL subscription that does not require the purchase of narrowband access).

4.164 Eircom has recently announced a limited trial of wholesale and resale standalone bitstream products. This product would enable wholesale and retail customers to purchase DSL broadband without purchasing a narrowband connection (line rental). The trial is available to 5000 customers on a first-in-first-served basis and is limited to customers within Eircom's NGN product area. A subsequent full deployment and successful take-up of this broadband product might compel Eircom and other DSL broadband providers to develop and potentially offer managed VOIP services to accompany the standalone broadband service over the period of this review.

4.165 However, ComReg considers that there are likely to be additional costs, and time, involved in the launch of a managed VOIP service over a hypothetical wholesale naked bitstream connection. ComReg considers that given the uncertainty around the timing and effectiveness of these potential supply side constraints, this form of constraint would be better addressed in the SMP assessment. In any case, ComReg envisages that, from a technical standpoint, managed VOIP provided over DSL technology would have similar functional capabilities and be priced to compete with existing managed VOIP products offered by alternative FSPs. In which case, managed VOIP over DSL would be assessed on the same basis.

[177] ComReg understands that Magnet and Digiweb offer standalone DSL broadband with a managed VOIP service to a small number of customers using Eircom's full local loop unbundling product. The coverage is limited to certain exchange service areas and only a small number of customers have availed of this service.

Preliminary conclusion

4.166 In relation to whether broadband access falls within the relevant narrowband FVA market, ComReg recognises that there is no broadband-based standalone FVA product available at present in Ireland. Furthermore, ComReg recognises that there is still a significant segment of consumers which do not currently have a fixed broadband connection and which do not value it sufficiently to switch to a bundle incorporating FVA with broadband access in response to a SSNIP in their narrowband FVA service. However, the general trend towards households and businesses purchasing product bundles including voice and broadband and/or TV, and the actual evidence of narrowband FVA customers switching to managed VOIP services, suggests that a substantial proportion of end users consider broadband with managed VOIP to be a suitable product substitute despite only being available in a bundle with broadband and/or TV. On that basis, ComReg proposes that on a forward-looking basis broadband connections used to deliver managed VOIP services are likely to fall just within the boundary of the same relevant market as narrowband FVA over the timeframe of the current market review.

4.167 ComReg considers that broadband subscriptions that do not include a managed VOIP service do not fall within the relevant FVA market.

4.168 ComReg will continue to monitor the trend towards product bundles involving FVA services as this forward-looking substitutability assessment is significantly based on assumptions regarding a continued dynamic development towards bundles. ComReg furthermore notes that inclusion of managed VOIP broadband connections in the relevant market ensures that the competitive impacts of UPC on a forward-looking basis are fully accounted for in the existing competition analysis.

Q. 9 Do you agree that it is appropriate to define a broader FVA market to include PSTN and ISDN BRA over copper and broadband connections used to deliver managed VOIP services which may include cable, fibre, FWA and DSL? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Are retail fixed access and mobile access in the same relevant market?

4.169 In the 2007 review, ComReg concluded that FVA and mobile access were not part of the same product market. Fixed and mobile access were characterised as complementary products. However, ComReg noted the potential for convergence, and signalled that the extent to which consumers could substitute away from fixed lines in the future, in particular, in relation to narrowband access and closely related services would be kept under review.

4.170 With the growth in mobile penetration, the reduction in the cost of mobile services and the improvement in the data rates available through mobile networks, the appropriateness of the distinction between fixed and mobile markets is being questioned. Mobile is potentially a growing constraint on fixed access and telephony services. On the other hand, in terms of the susceptibility of markets to *ex-ante* regulation, the Recommendation continues to be based on separate relevant markets for FVA and mobile services. The European Commission considered that, despite the move towards converged offerings, the general division between services provided at fixed locations and those at non fixed locations should remain.[178] The European Commission was of the view that there was insufficient evidence that the pricing of mobile services (to non fixed locations) systematically constrained the pricing of services to fixed locations. For the vast majority of NRAs, fixed and mobile access and services are separate retail markets.[179]

4.171 ComReg assesses whether or not, at the current time, FVA and mobile access can still be considered overall to be sufficiently distinct in terms of demand and supply-side substitution that they are analysed separately. ComReg's preliminary analysis suggests that currently this is likely to be the case. ComReg distinguishes FMS for telephony services which can be considered in terms of calls and access. This consultation focuses on the question of possible inclusion of fixed access and mobile access in the same market. Nevertheless, this preliminary substitutability analysis also takes into account, as appropriate, FMS at the calls level.[180]

[178] Explanatory note the Recommendation, November 2007.
[179] Only RTR (Austria) has defined two retail markets integrating fixed and mobile services, that is, national calls for residential users and broadband access for residential users. The Finnish regulator (in case FI/2010/1131-1132) also took into account competitive constraints from mobile access when de-regulating its retail FVA market. See various Article 7 notifications and BEREC, BoR (11) 54.
[180] For a detailed assessment of FMS at the calls level see ComReg document 12/96.

Demand side considerations

4.172 The following analysis focuses on the potential driving forces of FMS from a consumer perspective and assesses whether there has been significant change to potential substitution on the demand side to justify the inclusion of mobile access in either of the relevant FVA markets in the short to medium term.

Functionality, intended use and product characteristics

4.173 In terms of functionality, it may be possible for users to substitute FVA with mobile access. Technically, mobile can substitute for fixed in relation to voice services because users can access the mobile network to make and receive calls just as they would do with a fixed voice connection. Voice quality is not a key driver of FMS at the calls level for both residential and business users. Consumers in general do not appear to perceive a marked difference between fixed and mobile in relation to quality of service for voice services at home.[181] The 2012 Market Research indicates that 19% of businesses reported that poor mobile coverage is *most* like the reason their business retains a fixed line with an additional 10% rating this as *like* the reason. On the other hand, transmission bandwidth is relevant particularly for data services and there may currently be limits to the extent to which mobile access may substitute for a fixed connection in relation to data services.

4.174 It is evident from Chapter 3 that mobile phones out number landlines. However, FVA suppliers have been able to maintain high (64%),[182] albeit decreasing, retail access and voice penetration in the presence of growing population penetration rates for mobile. At 64%, the household penetration rate for fixed line telephony in Ireland is high compared with countries, such as, Finland (20%), Austria (48%) or eastern European countries, such as, Slovakia (32%), Lituania (36%), Latvia (38%) and Poland (44%).[183] The development of the number of both fixed and mobile subscriptions indicates that, while there is a strong growth in mobile subscribers, the number of fixed connections has not decreased in the manner that would be expected if customers were surrendering their FVA in favour of a mobile subscription.

[181] The 2012 Market Research.
[182] The 2012 Market Research.
[183] E-communications Household Survey 2012: http://ec.europa.eu/public_opinion/archives/ebs/ebs_381_en.pdf

4.175 This trend is reflected in the 2012 Market Research where it is clear that a mobile phone is not the sole or primary means of access to electronic communication services. While mobile phone ownership is universal, 64% of households still choose to also retain a fixed line connection for access to voice and broadband services. Therefore, most households have yet to abandon their fixed connection remaining attached to a fixed line for the reasons set out in detail below. In addition, business users also have a strong attachment to FVA, 95% of which have at least one, and often more than one, FVA connection. Indeed, the 2012 Market Research indicates that approximately a quarter of businesses provide only fixed line phones to employees.

4.176 Although traditional fixed line subscriptions (i.e. PSTN and ISDN) are going down, end users in general are not substituting mobile access for fixed access services to a sufficient extent as to constrain a SSNIP. Consistent with the general trend in Chapter 3, the 2012 Market Research shows that dual access is the more common scenario among Irish households. For the majority (59%)[184] of households it is preferable to combine fixed and mobile access for voice telephony. While almost three quarters of businesses provide their employees with fixed phones just under half (45%) provide employees with access to both fixed and mobile phones. This suggests to ComReg that currently the mobile phone is largely complementary (and not a substitute) to the FVA connection.

4.177 On the other hand, ComReg recognises that for some customers, an increase in FVA line rental and connection prices may cause them to switch to mobile services exclusively. From the 2012 Market Research, the number of households choosing mobile access only (instead of a fixed connection and services) for their voice service is growing, 36% of respondents did not have a FVA connection at home for voice services. The 2012 Market Research asked households reasons for this –the alternative of using a mobile phone was most often selected as the reason primarily driven by the desire to reduce household bills. Other significant drivers not to have a fixed line also include, "*the line rental charge is too high*", "*the cost of calls is too high*" and *"prefer to prepay for services whenever I can but can't do that with a fixed line phone*".

[184] This is comparable to Europe (2012 E Communications household survey) which finds that the proportion of Irish households combining fixed and mobile access reached 57% in 2012.

4.178 FMS is most evident among a subset of predominantly residential customers– the 2012 Market Research results show that mobile-only access is more likely prevalent among younger, low income or rented households.[185] Nevertheless, other customer types, in particular, older persons and home owners remain most attached to the FVA connection for making calls in the home. Demand for landlines is driven by both price and non-price factors. Among households the non-price reasons for keeping a fixed phone at home include "*I have always had one and don't see a reason not to have one now*" (61%), "*the use of a phone in cases of an emergency*" (58%) and "*because I need a broadband connection and my phone is linked to it*"(54%).

4.179 Business users, in turn, are typically reluctant to FMS because they assign high importance to fixed network characteristics, such as, access to the internet and a single contact phone number for the business. The numbers of businesses without a FVA service is negligible (5%) with 14% providing only mobile phones to employees, largely sole traders. There is a general perception among them that a FVA connection is important to the day-to-day functioning of the business. This is reflected in the insignificant numbers cancelling their FVA connection within the last three years. For business users mobile service coverage is not a driver for retention of a fixed line.

4.180 In certain circumstances the mobile phone is more convenient and provides the opportunity to make and receive calls while on the move. Nevertheless, there are a number of reasons, why end users may not currently regard mobile access as a good substitute for FVA and, hence, fixed line abandonment is likely to remain limited.

[185] The CSO report "Household Budget Survey 2009 – 2010" furthermore shows that households who owned their house outright spent the most on telephone account payments while households who rented their house either from a local authority or private owner spent considerably more on mobile phone top-ups and other payments when compared to other households or State averages. This finding might be explained by the fact that these households are more likely to change their houses and therefore they are more reluctant to subscribe to bill-payments because of the time consuming activities associated with informing service providers when moving out to a new location.

4.181 First, while opportunities for mobile calls to at least partially substitute for fixed calls would seem to arise with greater frequency than for the FVA connection, where customers have access to both a fixed line and a mobile phone, they typically use them in a complementary way. The 2012 Market Research demonstrated that there is a clear preference amongst households for fixed to fixed and mobile to mobile communications. In terms of specified calls types, 77% of households indicated that their preference was to use FVA for calling other local fixed numbers, and 80% for calling other national fixed numbers. Fixed line phones are also preferred for other types e.g. directory enquires, 1800 and call save. On the other hand, 78% of households indicated a preference for using a mobile phone to call other on-net mobile numbers while 62% indicated a preference for using a mobile phone for calling off-net mobile numbers. These preferences in respect of use of FVA for specified call types suggests that households view access to fixed and mobile networks as complements rather than as substitutes. Moreover, the 2012 Market Research shows that FVA is also preferred by business users for all categories of calls. In the case of calls to mobiles, the majority still stated that their employees would use fixed line phones. It is clear that end users predominantly preserve their PSTN/ISDN line for voice calls rather than using a mobile to make all of their outgoing calls and using the fixed line for receiving calls. In terms of call frequency, mobile and fixed voice calling patterns are similar.

4.182 Second, the incentive to FMS is likely to be most pronounced in relation to low usage customers. However, Eircom provides low cost fixed access to some end-users by offering a vulnerable user scheme ("VUS")[186] or a "Talktime control"[187] package. These products are targeted at those who make very low volumes of fixed calls at low rates. Moreover, Eircom retains a greater share of the governments free rental scheme to certain end users.[188] Where customers are required to give up a landline service in view of affordability and the impact of the recession, it is probable that FMS is limited, with a reduced benefit to mobile where such customers try to reduce costs overall and no longer avail of any telephony service.

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[186] See Eircom Vulnerable User Scheme at http://www.eircom.ie/cgi-bin/bvsm/bveircom/bladerunner/showContent.jsp?BV_SessionID=@@@@1839949434.1349875273@@@@&BV_EngineID=ccciadfhmikjgmlcefeceiedffndffg.0&cid=LowUserSchemeRes&site=Res

[187] See Eircom Talktime control at http://www.eircom.ie/bveircom/pdf/Pt2.3.7.pdf

[188] Eircom offer a special tariff for their customers on the Department of Social Protection allowance. See details of the Social Benefit Package http://www.eircom.ie/bveircom/pdf/Pt2.3.2.pdf

4.183 Third, whereas mobile broadband penetration has significantly increased over the period since the last review[189] primarily driven by the roll-out of 3G which improved the quality and bandwidth of mobile services (and hence end users could more readily use the mobile connection also for Internet services), internet access over mobile connections has not been viewed as an effective substitute for fixed broadband access to date.[190] As set out in ComReg's assessment of the relevant WBA market,[191] growth of mobile broadband does not, in itself, imply a significant or sufficient degree of demand-side substitutability between fixed (e.g., DSL and cable) and mobile access for market definition purposes. Indeed, ComReg observes a growing trend in relation to both fixed and mobile broadband, though this growth is levelling off in more recent quarters[192] and, therefore, it is likely that both products are addressing possibly new sources of market demand and distinct needs.

4.184 In terms of functionality, mobile phone internet is limited in terms of screen size, resolution, and availability of applications. For the reasons set out in ComReg's assessment of the WBA market, broadband provided via a mobile phone is unlikely to be considered a close substitute for fixed broadband access. Moreover from that analysis ComReg believes that mobile broadband from a computer is also unlikely to be a sufficiently close substitute for fixed broadband. This is because the download speeds over mobile broadband networks are highly variable, latency on mobile networks is higher than experienced on fixed broadband networks and shared access, even possibly in an LTE scenario, could still imply capacity limitations in the face of such factors as spectrum constraints and significant increase in network usage. Substitutability of mobile broadband with other fixed broadband connections to the home or office is likely to be further limited because of the constraining effect of data caps. Consumers using fixed based broadband products download approximately five times more data than consumers on mobile broadband.

[189] As noted in Chapter 3, as at Q2 2012, mobile broadband subscriptions account for 35% of all active broadband subscriptions.
[190] See ComReg's conclusions on the retail broadband market in WBA market analysis, Document 10/81 and Decision D06/11.
[191] See: http://www.comreg.ie/publications/response_to_consultation_and_decision__market_review__wholesale_broadband_access.583.103875.p.html
[192] ComReg Key Quarterly Report data, June 2012.

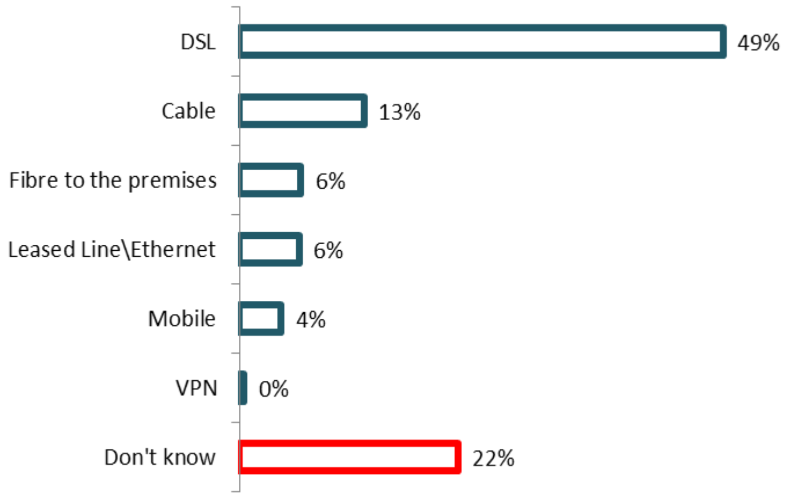
4.185 ComReg notes recent evidence from researchers such as Analysys Mason[193] suggests that some consumers who previously relied on mobile broadband or who had cancelled their fixed line are now switching back to fixed services to avail of the higher broadband speeds that are now available. Indeed, past research by ComReg[194] asked those who had previously (but no longer) subscribed to mobile broadband products why they no longer subscribed. The main reasons cited were slow speed and poor coverage of mobile broadband products.

4.186 Many residential and business end users preserve their FVA connection, because they use it for internet access (or need it to purchase DSL access which, as set out at paragraph 4.58 and in Figure 19, is often bundled with the FVA connection). The prevalence of fixed connections to access the internet across both business and residential users is evident and hence, end-users are typically unwilling to give up their fixed connection to access the internet over a mobile broadband connection. At present, 70% of households surveyed as part of the 2012 Market Research have fixed internet access (dial-up and broadband) in the home. There is a greater prevalence of fixed internet access among consumers who have a FVA service, where 77% of these respondents state they also have broadband access to the internet compared to 36% with no fixed voice service. Again, over 70% of businesses have broadband access. A large proportion of businesses use the combination of PSTN and DSL reflecting the continuing prevalence of these platforms for fixed voice and broadband services.

4.187 For business users fixed broadband is the primary means of internet access with only 4% accessing broadband via a mobile network. Figure 22 shows that similar to households, DSL is the more commonly used platform for delivery of broadband to business users.

[193] http://www.analysysmason.com/
[194] See ComReg document 10/62r: http://www.comreg.ie/_fileupload/publications/ComReg_1062r.pdf

Figure 22 Platform used by businesses for broadband



4.188 The 2012 Market Research furthermore shows that only one in ten households use mobile broadband only. For these households, which represent a very narrow segment, mobile internet access can potentially be regarded as a substitute for fixed line internet access. However, for almost half (48%) of household respondents it is preferable to have a fixed broadband line only (which may be a DSL, cable or fixed wireless connection) to access the Internet at home. Our evidence further indicates that households that purchase mobile broadband do so as a complement to, rather than a substitute for, fixed line broadband. For example, of the 29% of households that use mobile broadband (from a computer), a greater proportion (18%) combine a fixed and mobile internet access service. In addition, 27% of households with fixed line broadband also use mobile broadband.

4.189 Finally, FVA is increasingly sold as an adjunct to fixed broadband thus entrenching the consumer need for a fixed line and can, therefore, stem the tide of any substitution. In view of the increasing trend towards fixed bundles and that a significant number of users bundle voice with fixed broadband, customers will not regard generally a mobile connection as a substitute for a fixed connection. The 2012 Market Research indicates that mobile services are the services most often purchased out of package (i.e. purchased separately from fixed) in addition to the FVA services. The 2012 Market Research furthermore indicates that while fixed telephone packages or bundles often include 'free' local and national calls to landlines, they are less likely to include an allocation of calls to mobile numbers. While fixed and mobile voice plans include free or discounted calls to mobile and fixed numbers, end users generally do not yet have the opportunity to purchase bundled fixed and mobile services from a single supplier under a single bill (and hence their purchase of these services is from different suppliers under a different bill). In addition, the option generally for end users to purchase (technically) integrated fixed and mobile services is not yet available (e.g., *home-zone* which attributes a geographical telephone number for making and receiving calls in the home-zone and charging lower fixed termination rates), though ComReg notes a development in this regard has been the launch of Vodafone's One Net Express service for small business users in 2012. Although prospectively bundled (i.e. a single supplier under a single bill) or integrated fixed and mobile services could be offered commercially as part of triple or quad-play offers, it is not envisaged with the period of this review. As set out a paragraph 3.43 and Figure 11 above, the availability of triple and quad play while evolving are nascent in Ireland. In the meantime, end users who remain connected to both networks are "self bundling" or combining fixed and mobile access and services purchased from different suppliers indicating distinct markets.

4.190 Overall, the limited abandonment of the fixed line across both residential and business users is evident in their reasons for retaining a fixed line. According to the 2012 Market Research, households with a fixed phone claim to keep it because *"it is cheaper to make some types of calls"* (73%), "*I prefer to use my fixed phone rather than my mobile phone when making longer calls*" (64%), *"I have always had one and don't see a reason not to have one now*" (61%) and "*I need a broadband connection and my phone is linked to it*" (54%). While, in addition to other factors, such as, the perception that the fixed line phone is important for the day-to-day functioning of the business, 55% of business users reported "*need a fixed line connection for the internet anyway, and fixed line phone is offered as part of a bundle*" as *most like* the reason for retaining a fixed line, with an additional 24% rating this as *like* the reason.

Pricing

4.191 The tariff structures for FVA and pre-paid mobile services are different. In Ireland for FVA an end user must pay a monthly line rental of €25.78 (inclusive of VAT).[195] Beyond this the variable cost (i.e. the cost of the actual call) is relatively low. As such, the marginal cost will be lower for end users who make a higher volume of calls. This is because the fixed cost (i.e. the line rental) is spread over a larger number of fixed voice call minutes. In comparison, in relation to the tariff structure of pre-paid mobile services, the price for access and call costs are bundled. Therefore, if an end user makes a very low number of calls, a pre-paid mobile low call volume bundle may be lower in cost than fixed line rental. ComReg recognises that for lower usage customers there may be a price advantage of using a mobile over paying for a fixed line connection and these consumers may more readily switch away from fixed lines.

4.192 However, in general fixed voice is cheaper than mobile, as follows:

- The average revenue per minute on fixed networks (traffic revenues only) was marginally lower (€0.051) than the same on mobile networks (€0.055) in Q2 2012; [196]
- The average revenue per minute (including line rental and connection revenues) in mobile voice communication was higher than the same on fixed networks until mid 2010. Since then, however, the average revenue per minute in mobile voice communication has fallen and is at €0.098 in Q2 2012 compared to an average revenue per minute in FVA and fixed voice services of €0.13 in Q2 2012;[197] Figure 17 Chapter 3 also suggest that mobile prices are steadily decreasing relative to the prices for FVA and fixed voice calls. However, the rate of decline has been falling in more recent years.
- Out-of-package mobile charges for calling other fixed or mobile numbers are typically higher than the analogous call type on fixed networks, particularly for calls to fixed numbers;[198] and

[195] According to http://www.callcosts.ie/home_phones/Home_Phones_Calculator.178.LE.asp
[196] ComReg Quarterly data, June 2012.
[197] ComReg Quarterly data, June 2012.
[198] See Market review: Wholesale Voice Call Termination Services at a fixed location, p42, ComReg document 12/96.

4.193 Multi-person households and firms retain a connection to the fixed network with a view to sharing or reducing costs. Mobile termination rates ("MTRs") are higher than fixed termination rates ("FTRs") and the price of making a call to a mobile phone from a fixed connection is generally higher than the price of making a call to a fixed phone. However, the average Irish MTR has already reduced from 9.5 cents per minute as of 1 July 2009 to approximately 4.15 cents per minute as of 1 July 2012, representing approximately a 56% cumulative reduction, yet, this new MTR remains still over the EU average of €0.0357.[199] While on a forward looking basis MTRs and FTRs in Ireland are set to continue to decline, a differential will remain between MTRs and FTRs over the period of the review.[200] To offset households internalising this cost, mobile operators have yet to offer products, such as, home-zone. In terms of business users, however, as set out at paragraph 4.189 above, Vodafone has very recently launched a type of fixed mobile converged offering 'One-Net Express', whereas O2 offers a bundled product inclusive of fixed broadband, and some allocations of mobile and fixed minutes using a single bill.

4.194 In terms of the relative costs of fixed and mobile services, the 2012 Market research indicates that there is a general perception among households with a fixed line phone that mobile phones for most call types are more expensive than the fixed line phone (even though actual price differences between fixed and mobile have been declining). That is, most households believe that fixed line phone charges are lower than calls from mobile phones. The exception is for calls to the same mobile network (where MSPs offer free on-net calls), where the fixed phone is thought to be more expensive. This perception is supported by a recent European E-Communications Household Survey (2012) which found that three quarters of the Irish limit their calls with their mobile phone because of the potential cost.[201]

[199] See BEREC BoR (12) 80 at http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/972-termination-rates-benchmark-snapshot-as-of-july-2012-integrated-report-on-mobile-termination-rates-sms-termination-rates and BoR (12) 56.

[200] See ComReg Document 12/67 and notification by ComReg to European Commission under Article 7 of Directive 2002/21/EC of draft measures in relation to MTRs and FTRs (Case No: IE_2012_1371-1372-1373).

[201] See European E-Communications Household Survey (2012) page 207 at http://ec.europa.eu/public_opinion/archives/ebs/ebs_381_en.pdf

4.195 Furthermore evidence from the 2012 Market Research indicates that end users have a preference to purchase both fixed and mobile access can be seen from the fact that demand for landlines is driven by price as well as non-price factors. When households with a fixed connection were asked about their reasons for keeping a fixed line phone, 73% believe "*it is cheaper for making some types of calls*", with 64% saying "*I prefer to use my fixed line phone rather than my mobile phone when making longer calls*), 61% state that "*I have always had one and don't see a reason not to have one now*". Similarly, the fact that FVA is cheaper than mobile is stated by almost three quarters of business users as a reason their business retains a fixed line phone.

4.196 In these circumstances a mobile connection is less likely to be considered a sufficiently effective demand substitute for a fixed connection. No currently available evidence suggests that fixed and mobile access are sufficiently close substitutes as to ensure that as prices of FVA services rise by 5-10%, enough end users would switch to mobile as to render this unprofitable for the FVA supplier. After an increase of 4.9%% in October 2007 the price of PSTN and ISDN line rental has remained relatively stable – see Tables 7 and 9 above.

4.197 Overall, the available data on price trends and partial substitution of access to the mobile network for access to the fixed network would indicate that mobile access and services have yet to represent an effective competitive constraint on FVA to be included in the same relevant market. Notwithstanding this preliminary conclusion on the relevant market definition, it is proposed to assess the extent to which mobile access could still pose a potential source of competitive constraint over the timeframe of this market review. This is assessed further in Chapter 5 below.

Supply-side considerations

4.198 Concerning supply-side substitution, in Decision 07/61 ComReg was of the view that a mobile service provider would not be likely to switch sufficiently promptly or on a sufficient scale to the supply of access to the fixed network, such as, to constrain a small but permanent price increase in FVA. In the following, ComReg reconsiders the potential for supply-side substitution which would involve a mobile service provider responding to a price increase in FVA by switching production and offering FVA, or by supplying a product which is sufficiently substitutable on the demand side, in a prompt and effective manner without incurring significant additional costs, risks or time delays.[202]

[202] Such supply substitution should only be taken into account in the relevant market definition if its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy, i.e. where suppliers could switch production to the relevant products and market them quickly in response to a SSNIP without incurring significant additional costs or risks, Commission Notice on Market Definition, paragraph 20.

4.199 Since the last review of FVA markets, it is notable that a number of operators now participate in the provision of both fixed and mobile retail access and voice services in Ireland. Vodafone Ireland has taken significant steps to provide retail FVA and fixed voice calls (under its "Vodafone at Home" brand, and through its wholly owned subsidiary, Perlico). Eircom has both fixed and mobile operations and, O2, while predominantly a mobile operator, is also active in the provision of retail bundle offers to business users, that is, one bill inclusive of broadband, an allocation of mobile minutes and fixed voice minutes to certain fixed call numbers.[203]

4.200 MSPs are providing retail voice services at a fixed location primarily in two ways: 1) through the use of Eircom's wholesale products provided over fixed network infrastructure (i.e. resale) and 2) by offering retail voice services at a fixed location with fixed number allocations using mobile network infrastructure.

4.201 With respect to 1) above, Vodafone took over the residential and SME customer base of BT Ireland and entered a commercial relationship with BT Ireland that would enable the launch of services at a fixed location by Vodafone Ireland (using wholesale inputs from BT Ireland).[204] The acquisition saw BT Ireland exit the residential market to focus on wholesale markets[205] and large corporate customers. Post acquisition of BT Ireland's residential and SME customer base, Vodafone Ireland has become a significant competitor in supply of FVA. However, Vodafone's supply of FVA is still significantly dependent upon the use of wholesale inputs provided over Eircom's network. O2 is also reliant on Eircom's wholesale inputs for the provision of its business bundle offer inclusive of broadband and fixed and mobile voice services.

4.202 With respect to 2) above, a development in this regard has been the launch of Vodafone's One Net Express service in 2012. According to product information on Vodafone's website as of 16 July 2012, key functionality associated with the One Net Express product is that incoming calls to business landline numbers can be received on employees' mobiles. The One Net Express product is marketed by Vodafone as an integrated fixed and mobile voice communications solution.[206]

[203] See http://business.o2online.ie/o2b_fixedlineserviceplanqq?recordType=Fixed

[204] The Competition Authority (2009), Determination of Merger Notification M/09/015 - Vodafone Ireland/BT Ireland, (pages 6 and 7). See also http://www.vodafone.ie/aboutus/media/press/show/BAU006036.shtml

[205] See, http://www.btirelandwholesale.com/about.html, as retrieved on 5 April 2012 and http://www.btireland.ie/about_irl.shtml as retrieved on 24 August 2012.

[206] According to Vodafone Ireland's website as of 8 August 2012, businesses will have a fixed monthly company fee, €50, and a monthly device fee per mobile of €50 and per desk phone of €20. Available from: http://www.vodafone.ie/aboutus/media/press/show/BAU017026.shtml?date=May+16%2c+2012

4.203 In spite of the recent developments described above, ComReg is of the preliminary view that supply-side differences remain in the provision of access services for use at a fixed location from fixed and mobile networks. The costs and time involved in making new FVA products available using mobile network inputs as well as the need for customer substitution to such mobile-based products be sufficiently swift and pervasive as to constrain small price increases in existing FVA products implies that the distinguishing factors between fixed and mobile retail access services do not justify from a supply perspective the inclusion of mobile access in the relevant FVA market at this time. In particular, supply-side substitution is limited because of the time, cost and risk required to invest in a fixed local access network is prohibitive. Furthermore, the time, cost and risks involved in investing in comparable access products for use at a fixed location using mobile network inputs renders such supply substitution not sufficiently immediate (e.g. within one year) or effective for such mobile-based access to be considered part of the relevant FVA market at this time.

4.204 While there is some operator participation in both the fixed and mobile markets, such entry has been predominantly through acquisition or based on resale of fixed wholesale inputs (significantly provided over Eircom's network).[207] While Vodafone has recently started providing voice services at a fixed location using mobile network inputs, for example, Vodafone's One Net Express small business user product, the early stage of this development and its initial scale implies that it is not likely to pose a sufficiently effective demand or supply-side constraint on a HM supplier of FVA over the timeframe of this market review.

[207] Supply substitution is also not possible given that the wholesale inputs necessary to provide a fixed service bundle are unlikely to be available absent *ex ante* regulation.

4.205 Furthermore, when a FVA supplier is also operating within the retail mobile market, it may offer favourable pricing terms for calls destined to mobile subscribers on the FVA provider's own mobile network.[208] The latter development does not however imply FMS as the end users still maintain subscriptions for FVA and mobile access in that context. Rather, the entry of mobile service providers into the fixed telephony services market reflects recognition on the part of mobile service providers that consumers place a distinct value on mobile voice telephony as compared to fixed voice telephony and indeed, vice versa, for the fixed incumbent. These developments appear to represent a form of "value added" to either the fixed or mobile network rather than FM*S per se*. In reality, the majority of end-users continue to have access to both fixed and mobile access and services and use according to their convenience. As set out at paragraph 4.189 above, from a demand side perspective, end users are "self bundling" or combining fixed and mobile access and services purchased from different suppliers, the option generally for end users to purchase (technically) integrated fixed and mobile services to purchase bundled fixed and mobile services under one bill is not yet widely available.

4.206 While ComReg will closely monitor these emerging trends, it is considered that mobile-based access products (including converged fixed-mobile access products) do not currently belong to the relevant FVA product market because the influence they may have on FVA and fixed telephony services has yet to be established. Therefore, it is more appropriate to further examine this dynamic when assessing the scope for potential competition to materialise over the lifetime of this market review in Chapter 5 below.

Preliminary conclusion

4.207 Having considered relevant demand-side factors including functionality, price and consumer usage, as well as relevant supply-side factors, ComReg's preliminary view is that mobile access is not a sufficiently effective substitute for FVA.

[208] For example, pursuant to website checks in August 2012, Vodafone provides an allocation of 200 free' off-peak minutes to Vodafone mobiles in its entry level fixed telephone package, whereas calls to other mobile operators fall outside of the package and are charged at 20.33c per minute. Eircom provides a small allocation of 30 minutes per month to mobile phones, and then offers a discounted price for calls to Meteor or E-mobile mobile customers (5c per minute relative to 22c per minute for calls to other mobile numbers).

4.208 Although the direction of change is towards some substitutability with particular customers moving away from FVA and related services to mobile services, in general, end users consider access through mobile networks and FVA to be broadly complementary in use at home or in the office. End-users have a strong preference for purchasing both mobile as well as FVA with a mix of FVA and mobile access being used to meet different needs. In addition, the degree of FMS is not sufficiently strong such that the impact is an effective and immediate constraint on suppliers of FVA using fixed-network inputs over the lifetime of this review. ComReg will however monitor any increasing availability/provision of voice access for use at a fixed location using mobile network inputs over the timeframe of this market review. Such converged fixed-mobile offerings may prospectively be included in the relevant FVA market to the extent that end users consider such access as a sufficiently effective demand-side substitute for the existing FVA products noted earlier in the market definition assessment above. Based on the market evidence to date, however, ComReg is of the preliminary view that fixed access and mobile access are more appropriately considered to be in separate relevant markets at this time. Notwithstanding this preliminary conclusion, the scope for potential competition from converged fixed-mobile offerings to impact on any market power in the relevant FVA markets over the current review is still considered in Chapter 5 below.

Q. 10 Do you agree that retail fixed access and mobile access do not currently belong in the same relevant market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Geographic Market

Introduction

4.209 In this section ComReg considers the geographic scope of the relevant FVA markets. ComReg has traditionally used a national geographic area focus when framing the geographic scope of the relevant electronic communications markets.[209]

4.210 In its 2007 market assessment, ComReg concluded that the geographical scope of the retail FVA markets was Ireland, in particular, because the conditions of supply of FVA were homogeneous across Ireland. ComReg pointed out that while FVA provided by some entities was not available across the whole of Ireland, such entities all competed with Eircom's FVA in those areas in which they operated. Moreover, Eircom's FVA was provided on the same terms and conditions, including price, across Ireland. ComReg also noted that the General Authorisation[210] is national in scope. As a result, any operator authorised to provide FVA can do so on a national basis which would suggest a national market.

4.211 In terms of fixed broadband access, ComReg's recent review of the Wholesale Broadband Access ("WBA")[211] market found certain evidence of structural change arising in certain overlapping geographic areas.[212] Nevertheless, ComReg concluded in its WBA decision that, for the period of that review, the scope of the market for WBA was national. The main reasons for this conclusion in 2011 were that:

- The conditions of competition in the retail broadband market are still sufficiently homogeneous;
- The product characteristics offered across different areas were similar;
- The pricing practices of Eircom and alternative FSPs were nationally-driven; and
- The vast majority of retail broadband customers are serviced by operators which maintain a national commercial policy including, marketing strategy.

[209] Almost all NRAs have defined national geographic markets when analysing the market for "Access to the public telephone network at a fixed location" with the exception of Finland, Hungary and the UK which have defined their relevant markets according to the network footprints of multiple incumbent operators.

[210] This is required of any undertaking which intends to provide an electronic communications network or service in Ireland.

[211] "WBA" means wholesale broadband access comprising non-physical or active network access including "Bitstream" access at a fixed location. It includes current generation WBA and next generation WBA and is synonymous with the relevant WBA Market defined in ComReg document 10/81.

[212] ComReg Document 11/49, Market Review: Wholesale Broadband Access, Response to Consultation and Decision, Decision No. D06/11, 8 July 2011.

4.212 For the purposes of this Consultation Paper, following guidance issued by the European Commission[213] and the steps suggested by the European Regulators Group ("ERG"),[214] as a first step, ComReg assesses at a high level whether, in relation to FVA, localised markets could exist or whether the evidence suggests that a national market is more appropriate.

4.213 In general, the starting point of the geographic market definition analysis is the HM test[215] when it suggests sufficient demand and/or supply side substitution between different areas.[216] However, a strict interpretation of the HM test may have certain shortcomings when considering the geographic market in the current context. For example, from a demand side perspective, an end user can only choose a supplier that operates in their geographic area. Their ability to switch supplier may therefore be limited. An end-user is unlikely to move home or business to benefit from lower FVA prices. Supply–side substitution requires significant sunk costs and the PSTN/ISDN-based FVA service is in decline which would make cost recovery difficult. The result is likely to be extremely narrow market definitions which do not represent actual market conditions or the competitive constraints that exist. Furthermore, in transition from one technological generation to the next, uncertainties about supply and demand-side developments are somewhat acute, making implementation of the test potentially speculative.

4.214 It may therefore be more instructive to conduct an assessment of the homogeneity of competitive conditions between geographic areas. Accordingly, ComReg aims to identify geographic market boundaries on the basis of a clearly defined geographic area:

> *"in which the conditions are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas*".[217]

4.215 The European Commission has further underlined that if an NRA is to define geographic sub-markets then:

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[213] Cases UK/2007/0733; UK/2010/1065 and PT/2008/0851.

[214] ERG (2008) common position on Geographical Aspects of Market Analysis - http://erg.eu.int/doc/publications/erg_08_20_final_cp_geog_aspects_081016.pdf

[215] At the geographic level, this test broadly asks whether a sufficient amount of consumers would switch to another geographic area or operators from other areas would start to supply in response to a 5-10% price increase in voice telephony fixed access in order to make such a price increase unprofitable.

[216] In line with the Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, OJ C 165/6, 11.7.2002 ("SMP-Guidelines").

[217] According to the SMP-Guidelines (paragraphs 55-60).

[…] the definition of geographic sub-markets has to be based on a thorough analysis of structural and behavioural factors[218]

4.216 Consistent with guidance issued by the European Commission and the ERG (now BEREC), the geographical dimensions of the relevant FVA markets are considered in more detail on the basis of a broad and holistic assessment of both structural and behavioural criteria,[219] including entry conditions and evolution of operators' market shares in particular areas; retail pricing and marketing patterns; and a consideration of any geographic differences in retail product characteristics.

Entry conditions, distribution and evolution of market shares

4.217 Eircom supplies FVA nationwide over its PSTN network and, as set out in Chapter 3, is the supplier with largest nationwide market share. Competition from other FSPs is still to a large degree dependent on regulation in the wholesale market, and hence on the resale of Eircom's wholesale products (WLR and CPS). Eircom provides WLR and CPS at a nationwide price. FSPs can buy wholesale inputs from Eircom on a national scale, enabling any FSP to also supply a nationwide service. Therefore, it can be assumed that resellers have the ability to enter any geographic area sufficiently quickly and provide FVA using resale products, in response to a 5-10% price increase. This is indicative that the market for standalone FVA is national, though this is based on the presence of *ex-ante* regulation and the availability of effective wholesale products and thus there is more limited scope for pricing constraints from these reseller FSPs to materially constrain Eircom's commercial behaviour in specific regional/local areas.

[218] European Commission, "Commission staff working document, Accompanying document to the Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the regions on market reviews under the EU Regulatory Framework (3rd report), Further Steps towards the consolidation of the internal market for electronic communications", {COM(2010) 271 final}.

[219] The European Commission has reiterated its view that a geographic delineation which is based primarily on the number of operators present in a local area is not, in itself, sufficiently detailed or robust to identify real differences in competitive conditions for the purposes of the market definition. In assessing whether conditions of competition within a geographic area are similar or sufficiently homogeneous, a combination of structural and behavioural evidence is necessary.

4.218 It is evident that, since the last market review in 2007, there has been an increase in the number, coverage and market share of alternative network-based operators. Alternative networks, such as those based on WPNIA[220] inputs, cable networks, frequencies for WLL/WiMax, or the deployment of optical fibre in the local loop are increasingly visible in certain regions due to alternative FSPs investing in their own access networks, in particular, in more densely populated areas. Entry based on alternative networks has been more difficult to achieve on a national basis, however. This is likely related to the costs associated with the build-out of such infrastructure, in particular to areas outside of the more densely populated regions of the country.

4.219 Geographic variations in competitive conditions may increasingly be driven by investments by WPNIA purchasers. The Irish market is currently characterised by a relatively low presence of operators relying on full LLU (that can support both voice and broadband services), and as Figure 3 shows, at less than 60,000 (fully unbundled and shared) lines, take-up of WPNIA remains below the EU average. Most of these lines are located in urban areas – the competitive supply of broadband using WPNIA inputs is currently distributed across 85 unbundled exchanges, accounting for 9% market share of fixed broadband subscriptions at the national level.[221] Prospectively, there is potential for unbundling to expand beyond its current footprint, though this development continues to be uncertain (the business case for unbundling may vary across exchanges and is likely to be concentrated in densely populated areas with the highest number of access lines per exchange, currently estimated to be 80-90 exchanges). In particular, the largest WPNIA purchaser (BT) has recently started supplying WBA for Vodafone's retail and SME customers.[222] More recently, BT has formed an alliance with Sky which may provide an additional business case for increasing BT demand for WPNIA inputs.

[220] WPNIA" means wholesale (physical) network infrastructure access (including shared (line share) or fully unbundled local loops) at a fixed location. It includes current generation WPNIA (over copper access network infrastructure and its Associated Facilities) and next generation WPNIA (over next generation fibre access network infrastructure and its associated facilities) and is synonymous with the Market as defined in ComReg Decision No. D05/10.

[221] The main suppliers are BT, Digiweb/Smart Telecom, Magnet and 3 PlayPlus.

[222] http://www.tca.ie/images/uploaded/documents/M-09-015%20Vodafone%20Ireland%20BT%20Ireland_Public.pdf

4.220 To date, in any region, FVA has not been supplied as a stand-alone product over purchased WPNIA inputs. Furthermore, as set out at paragraphs 3.22 to 3.24, WPNIA demand has to date been predominantly driven by the demand for the LS product which involves the FSP renting only the broadband capability of the access connection and leaving Eircom to provide the narrowband (mainly voice) part of the connection. Given the economic climate and emergent structural changes in the market (in particular, the growing cable presence and the planned rollout of NGA) FSPs using copper-based inputs may deploy combined broadband and FVA services using WPNIA inputs on a more significant scale, in particular in the residential market. However, it is unlikely that WPNIA will play a significant role in providing solely retail FVA and fixed voice calls on a forward-looking basis as the provision of (retail and wholesale) broadband services remains a key driver for unbundling developments.

4.221 In addition, ComReg has considered the scope for WPNIA purchasers to become more significantly involved in the provision of FVA bundled with other services (e.g. broadband) and to provide a more effective constraint on the provision of Eircom's FVA and bundled FVA products in certain regions over the timeframe of this review. However, in this regard a notable factor is that the absolute level of fully unbundled lines remains low in Ireland (see Figure 3). Hence, while recent announcements, including the BT/SKY partnership, are suggestive of future positive trends in WPNIA take-up, it is still not possible at this time to accurately forecast the precise extent of any future WPNIA take-up, although ComReg will continue to monitor developments in this regard over the period of the market review. Furthermore, starting from the current low base of fully unbundled lines, a stronger uptake of purchased WPNIA inputs may still not reach critical mass to be capable of materially constraining FVA pricing behaviour in local/regional areas over the lifetime of this market review. In view of the current uncertainty regarding future WPNIA developments for the delivery of FVA services, ComReg proposes to ensure ex ante regulation is capable of adapting to any future changes in this regard in terms of the remedies being proposed.[223]

[223] See ComReg 11/72, Review of the appropriate price controls in the markets of retail fixed narrowband access, wholesale physical network infrastructure access and wholesale broadband access, Consultation and Draft Directions, 10 October 2011 and ComReg 12/63, Price Regulation of Bundled Offers, Supplementary Consultation to ComReg 11/72, 15 June 2012. In particular, as part of the supplementary consultation, ComReg is currently examining the parameters of its net revenue test imposed as part of the obligation not to unreasonably bundle FVA services which was imposed on Eircom under ComReg Decision D07/61. In this respect, ComReg proposes to ensure that the test takes into account more localised competition as it evolves over time and to ensure that it is sufficiently responsive to any such developments as they arise.

4.222 Furthermore, UPC continues to expand its cable network footprint predominantly in major urban areas. The maximum potential reach of UPC's existing cable footprint is estimated in the region of 728,300 households. UPC's coverage of broadband and telephony services is significantly narrower than the PSTN/ISDN and DSL networks at a national level. Within UPC's cable footprint, however, it is evident that subscription to the bundle of broadband and voice services has increased steadily since 2007, though UPC's market share of FVA subscriptions at approximately 13% is still low on an absolute basis.[224] The extent to which UPC's growing urban presence is likely to drive geographically differentiated competitive conditions over the period of this market review is considered further at below.

4.223 To date, there are only two operators offering FTTx-based alternative networks – Magnet and Digiweb (Smart Telecom). Their FTTx commercial offerings are still very limited, both in terms of geographical coverage and market share. As highlighted above, fibre remains relatively insignificant in scale, and is currently spread over a number of small geographically separated locations covering a total of approximately 6000 homes. The coverage of FWALA is by contrast relatively broad in terms of territory, and also in terms of population (fixed wireless broadband is available in all major urban centres). Notwithstanding its sizeable coverage and some Wi-max upgrades, FWA subscriptions are steadily declining – see Figure 5. ComReg does not consider that alternative fibre or FWALA networks have led, or are likely to lead within the timeframe of this review, to material geographic differences in competitive conditions sufficient to define separate geographic markets with respect to FVA.

4.224 Eircom has to date deployed fibre services to over 10 exchanges, with 100,000 homes passed. Eircom plans to deploy fibre to a greater number of exchanges over the next two years, with a planned coverage of over one million homes passed. It is expected that Eircom's NGA rollout will cover a somewhat greater number of exchanges (194) than the current UPC or WPNIA footprint, but, similar to UPC, will be targeted to the most densely populated areas. Such a rollout will significantly impact the network structure of Eircom and the bundled services offered, as well as potentially the business models of FSPs that rely on resale of Eircom wholesale inputs. In addition, the transition from copper to fibre within the planned Eircom NGA footprint area, and how quickly this takes place will have an important bearing on sustainability of competition in different geographic areas. In addition to Eircom, some existing WPNIA-based FSPs are also considering investing in FTTC in areas outside of Eircom's planned NGA footprint. Hence, Eircom could face more competition from Virtual Unbundling ("VUA")-based competition.

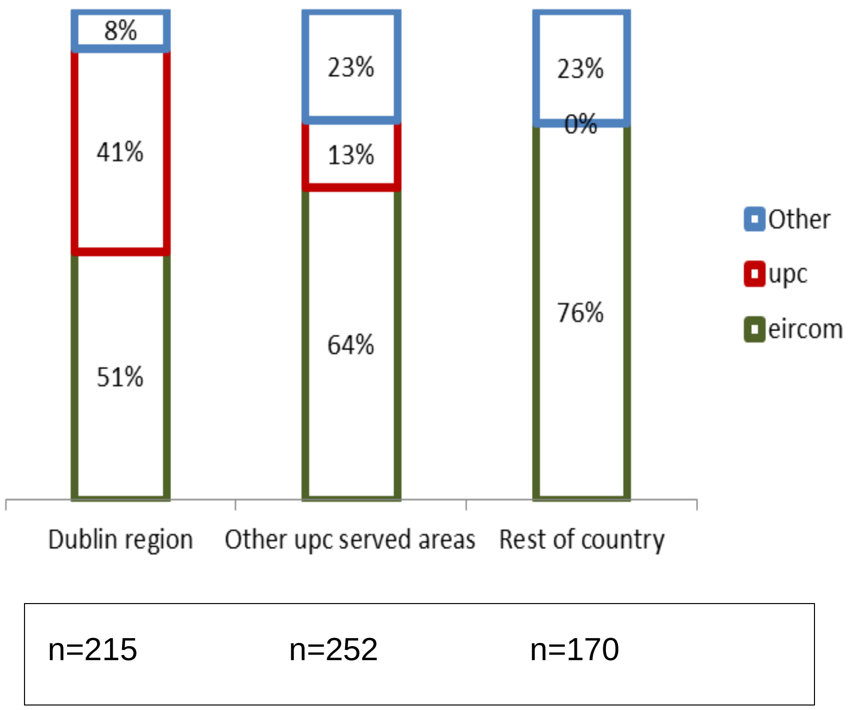
[224] For an indication of UPC's approximate market share based on survey data of the business and residential segments see Table 2 above at paragraph 4.87.

4.225 These parallel infrastructures emerging in certain geographic areas are primarily targeted to bundled offers, e.g., TV, broadband and voice (both mobile and fixed). With the rollout of alternative broadband networks, customers are increasingly migrating to broadband networks that support voice services as part of multi-product bundles – see Figure 21 and the discussion of VOIP connections as part of the product market definition assessment above, at paragraphs 4.132 to 4.168. Accordingly, at least a subset of the population which has already made the decision to purchase broadband (or TV) in addition to voice has potentially a greater choice of supply of FVA, compared to those customers who only want FVA.

4.226 In view of the parallel infrastructures (as well as Eircom's planned NGA FTTC investments) emerging in certain geographic areas - predominantly densely populated urban areas where WPNIA purchasers are largely present (although with such WPNIA inputs predominantly being used for the delivery of broadband services to date) and, for the most part, UPC is also available - the level of structural developments appears to differ between selected areas. Our preliminary analysis would suggest that, in locations where, in particular, cable-based voice services are available, Eircom is facing increasing risk of its voice customers substituting away to the cable broadband platform. According to the 2012 Market Research, while 78% of Eircom customers had never switched, respondents who purchased bundled FVA were more likely to have switched recently. Over the 3 years preceding the 2012 Market Research, UPC attracted 37% of switchers with Eircom attracting 25% by comparison. Furthermore, UPC gained most of its switchers from Eircom, with 31% of the 37% of switchers to UPC having switched from Eircom. This indicates that there is likely to be an emerging trend of more localised competitive pressures in relation to the sale of bundles that include FVA.

4.227 The Figure 23 snapshot from the 2012 Market Research, which is based on household survey evidence categorised at county level, gives some high level indication of the growing residential presence of UPC's cable service in particular urban areas, particularly in the Dublin region. However, it is important to note that the below Figure 23 does not represent actual market shares for Dublin and other regions where UPC is present –it is based on survey evidence only and[225] hence can be interpreted only as indicative evidence. In addition, it should be recalled that ComReg has provisionally identified a relevant FVA product market that incorporates both residential and non-residential services and UPC's share of the non-residential customer segment is likely to be significantly lower than that of Eircom across all regions, with the 2012 Market Research indicating only a 3% share of business FVA customers for UPC (See Table 3 above).

Figure 23 Household Survey Snapshot of FVA Market Shares by Location



4.228 Increasing competitive pressures from bundled FVA offers from alternative network-based FSPs may prospectively differ by geographic area, subject to the underlying structural characteristics and investment incentives/viability. However, the presence of alternative infrastructures and emergent structural changes, in itself, is insufficient evidence to support the existence of sub-national geographic markets.

[225] It s furthermore based on small sub-samples of household respondents surveyed at a particular point in time. For example, the snapshot of market shares in the Dublin region is based on a relatively small subsample of 215 respondents and thus can be interpreted as indicative evidence only.

4.229 The emergent localised competition observed to date and anticipated on a forward-looking basis (based on UPC's growth trends to date and Eircom's planned NGA investment) is targeted at the sale of bundles that include a voice component. However, as noted in the product market definition above, there is not yet a clear distinction between the customer segment that wants to purchase a bundle of products incorporating FVA and the customer segment that wants to purchase FVA on a standalone basis. The sizable minority of end users (44%) who have demonstrated a desire for stand-alone FVA products are spread across all areas of the country and are not exclusively concentrated in areas outside of the cable/NGA/LLU footprint. In view of the fact that one-third of Irish households still do not have a broadband connection, there is likely to be a continuing segment of customers over the period of this market review which will not avail of bundles offered over alternative networks. However, as noted above, in view of the emergent demand for bundles it is not yet possible to define concrete boundaries between the standalone and bundled customer segments at this stage. ComReg proposes to keep this situation under review.

4.230 On balance, ComReg is of the preliminary view that it appears to be too early to determine that a separate geographic market can be clearly defined based solely on the bundled FVA services offered in particular regions. It is too early to determine whether the increasing competition with regard to the wider bundle of services (in particular voice and broadband) indicates that conditions in this area are sufficiently unique and stable[226] to merit defining a separate sub-geographic market. Eircom's planned NGA investment and any NGA build-out by BT in other areas means that the current boundaries of the bundles market segment are furthermore unlikely to be stable over the next 2-3 year period. While WPNIA take-up for the provision of FVA services has been slow to develop to date, cable growth in the provision of bundled FVA services is progressing more rapidly, although is still relatively low in absolute terms. ComReg believes that market share projections for the future period based on structural trends to date are subject to uncertainty, and the planned NGA rollout may change the competitive dynamic between Eircom (and Eircom network-based resellers) and UPC, as well as potentially impacting on the commercial strategy of WPNIA purchasers in respect of FVA services.

[226] See the European Commission's comments letters, in particular, case UK/2007/0733.

4.231 As noted above, ComReg nonetheless proposes to keep the situation under review and to reflect any emergent competitive developments as they materialise by ensuring the parameters of the net revenue test for assessing Eircom's pricing of bundled offers remains sufficiently flexible to reflect those areas which potentially permit a greater degree of competition. In terms of ComReg's current proposal to recognise geographic variations in the net revenue test applicable to Eircom under Decision D07/61, ComReg Documents 11/72 and 12/63 propose to broadly define a Local Exchange Area ('LEA') where 5 structural criteria are met,[227] in order to reflect those areas where greater competition may emerge over time and which may require more flexible regulation of bundles as competition emerges.

4.232 While the scope for competitive developments to materially and sustainably distinguish the proposed LEA from the remainder of the national territory remains uncertain at this stage, and are not sufficiently stable to conclude a separate relevant geographic market at this time, ComReg Documents 11/72 and 12/63 nonetheless propose a mechanism that permits the emphasis of *ex ante* regulation to adapt to any emerging changes as they arise. For example, this would be achieved by calculating a wholesale input for the net revenue test by reference to the prices of WLR, WBA and LLU network input cost weighted for the relevant usage of each input by FSPs in the exchanges qualifying as part of the LEA. It is proposed that this would allow Eircom additional flexibility should LLU/WPNIA take-up evolve further over the relevant review period. The impact of any such developments on the currently proposed market boundaries would also be taken into account by ComReg in identifying whether or not such boundaries should be re-visited over the lifetime of the present market review.

Geographic differences in retail product characteristics

4.233 A further indicator of potential regional/local variations in competitive conditions identified by the European Commission includes differences in the functionalities or types of products being offered by both the incumbent and alternative operators or in the marketing strategies being pursued. In terms of FVA, the core products and quality of service that are provided over the PSTN/ISDN networks are identical regardless of the geographic area of provision. As noted in the product market definition assessment at paragraphs 4.137 to 4.146 above, with regard to product functionality, managed VOIP over broadband is also generally considered to be technically similar to PSTN/ISDN voice, though unlike the latter, it has generally been packaged as part of a bundle of services to date. In terms of the core functionality of the FVA service in terms of its basic ability to support voice services, no FSP currently offers a functionally distinct FVA service in different geographic areas.

[227] These criteria are further explained in ComReg Document 12/63.

4.234 While differences might arise in the mix of underlying wholesale inputs being used to support FVA services (due, for example, to network capacity, spectrum availability, whether the local exchange has been unbundled or not, network availability, etc.) this has not led to any material differences in the functionality of the FVA services offered over such inputs. Eircom's commercial strategy to date has not led it to vary the functionality of its (retail or wholesale) copper-based FVA services by geography. Hence, those operators relying on Eircom's copper-based inputs (either using CPS/WLR and/or WPNIA inputs) have also not varied the functionality of their FVA offerings on a sub-national basis.

4.235 Furthermore, while bundled FVA offers are at present tending to show a more regional emphasis, Eircom and FVA suppliers reliant on its wholesale inputs have yet to commercially offer managed VOIP services as part of multi-product bundles even alongside traditional PSTN/ISDN FVA.[228] This would indicate that the emergence of a more regionally-focused strategy on bundled FVA offers incorporating a managed VOIP-based FVA service potentially driven by an increasing competitive presence (mainly cable) in certain areas has yet to occur. Furthermore, as noted in the product market definition section above, while customer switching behaviour is increasingly focused on bundled FVA offers, it is not yet possible to identify a distinct break in competitive conditions between bundled and standalone FVA offers. ComReg proposes however to keep this situation under review.

Retail Prices

4.236 For standalone FVA (i.e., not bundled with broadband or other services), Eircom and other FSPs use predominantly national pricing strategies and marketing campaigns.[229] While Eircom is required, under its USO obligation, to maintain nationwide prices at the retail level, other FSPs have no such restrictions. Based on the data available, there is prima facia evidence that FSPs are nonetheless pursing a business policy of pricing uniformly on a national basis, suggesting that competitive conditions for standalone FVA are homogenous nationwide. In urban areas where the competitive dynamic is relatively more enhanced by the existence of multiple suppliers of multi-bundled products, there has to date been no change in the pricing or marketing of standalone FVA products. Similarly, while the initial availability of FVA bundled offers has had a regional (predominantly urban) emphasis to date, suppliers of such bundled services have not yet differentiated their pricing structure within the areas in which they are available.

[228] Such a commercial strategy would appear to have been employed by Orange in France and Belgacom in Belgium in defence of the retail business of fixed telephony and fixed broadband.

[229] This currently applies to both stand-alone voice telephony fixed access products, and bundles of voice and broadband. ComReg is consulting on the options for providing additional pricing flexibility for Eircom for the sale of bundles in the proposed LEA area. Any price changes resulting from this would apply only to bundles, and not to stand-alone voice telephony fixed access products, which would continue to be priced on a national basis.

Wholesale Input Price

4.237 Currently Eircom is the primary seller of wholesale products to support the sale of FVA. Eircom's SB-WLR pricing is currently nationally averaged and stable, for stand-alone FVA services. FSPs can purchase wholesale inputs from Eircom on a national scale, at nationally uniform prices and conditions. Recently, Eircom has proposed to change the SB-WLR and bitstream pricing for FVA sold as part of a bundle in the NGA enable exchanges (while overlapping with the NGA enabled exchanges, going forward the LEA as currently defined in ComReg Document 12/63 may have a greater footprint).

4.238 This pricing change will only apply to wholesalers who purchase SB-WLR as part of a bundle with broadband services. This discount appears targeted towards the sale of bundled broadband and voice, enabling Eircom and the other FSPs to compete against the UPC bundled product. This is indicative of some emergent pricing pressures driven predominantly by the alternative cable platform. As discussed above, however, the precise scope and sustainability of such pressures over the lifetime of the current market review remain uncertain at this time. ComReg thus proposes to monitor the market situation and to revisit the proposed market boundaries, even within the current review lifetime where deemed necessary, should the (structural and behavioural) evidence indicate a clearly identifiable break in competitive conditions in discrete geographic areas. In the interim period, and recognising the recent and partial nature of structural and behavioural developments to date, ComReg proposes (see, in particular, the proposals contained in ComReg Documents 11/72 and 12/63) to ensure that remedies can be sufficiently flexible to accommodate any more distinctive competitive developments should they materialise prior to the undertaking of a further market review.

Preliminary Conclusion

4.239 On the basis of the above assessment of the relevant criteria, ComReg is of the preliminary view that the geographical scope of each of the relevant FVA markets is national (notwithstanding the emergence of some localised competitive pressures, particularly insofar as FVA is sold as part of a bundle with other services).. ComReg considers that the conditions of competition in the relevant FVA markets are sufficiently homogenous to suggest a national market at this point in time.

4.240 It is considered premature to have geographically distinct sub-national markets at this stage. Even though there is some differentiation of suppliers on a geographical basis, ComReg does not consider that there is a sharp enough break in conditions of competition across geographical areas to justify separate markets at this stage. The boundaries are not stable enough to define a separate market but ComReg will keep this under review on an ongoing basis. On a forward-looking basis, ComReg recognises that the planned roll out of NGA infrastructure, overlaying much of the existing UPC/cable footprint, has the potential to reinforce or even partly reverse emergent differentiated competitive conditions in specific areas, once the rollout is complete. The uncertainty of the timing and geographical area of the rollout of Eircom's NGA investment, as well as any NGA infrastructure investments by FSPs, which may not overlap with Eircom's NGA footprint increases the potential for market boundaries to be unstable over the period of this review. ComReg notes that when defining markets geographically, the European Commission has underlined the importance of any proposed market boundaries being sufficiently stable over time.

4.241 In addition, given that any prospective pricing offers are likely to be targeted at multi-product bundles, rather than stand-alone voice products, the competitive pressures from UPC's cable network and other broadband-based alternatives, including BT's LLU footprint are likely to have a weaker effect on the stand-alone customer segment, which is national in scope. ComReg proposes to continue to monitor the retail pricing strategies pursued by Eircom and alternative operators respectively over the timeframe of this review with a view to identifying any significant behavioural changes at the retail level that might necessitate revisiting the geographical definition in relation to the relevant FVA markets. This conclusion does not preclude the application of geographically distinct remedies, as appropriate, and as contemplated in ComReg's consultation on bundles (see ComReg Documents 11/72 and 12/63).[230]

Q. 11 Do you agree that the relevant geographic market for the relevant FVA markets identified is Ireland? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

[230] The European Commission has recognised that, in principle, the EU regulatory framework does not preclude the imposition of different remedies in the same relevant market. See, for example, Case AT/2008/0757 (Wholesale broadband access in Austria); see also ERG Common Position on Geographic Aspects of Market Analysis: Definition and Remedies, October 2008.

Overall preliminary conclusion on market definition

4.242 The analysis which has been carried out indicates that:

- In line with ComReg's previous market review, the appropriate starting point for carrying out the market definition assessment is narrowband FVA sold on a standalone basis and not a bundle entailing retail FVA sold with other services. FVA and fixed voice calls are in separate relevant markets. Furthermore, the fixed voice connection component, irrespective of whether it is sold standalone or as part of a bundle, constitutes a relevant market in its own right.

- There is a single FVA market for business and residential customers.

- All forms of narrowband FVA are not in the same relevant market. FVA consisting of PSTN, FWA and ISDN BRA are in the same relevant FVA market. However, FVA access consisting of ISDN FRA and ISDN PRA access (i.e. HLVA) are in a separate relevant FVA market.

- On a forward-looking basis broadband connections used to deliver managed VOIP services are likely to fall just within the boundary of the same relevant market as narrowband FVA (consisting of PSTN, FWA and ISDN BRA) over the timeframe of the current market review. ComReg considers that broadband subscriptions that do not include a managed VOIP service do not fall within the relevant FVA market.

- There is a distinct market relevant market for HLVA consisting of access via ISDN FRA and PRA only. Demand and supply side substitution of ISDN FRA and PRA by emerging substitutes, such as, fibre based SIP Trunking, is not sufficiently prompt or immediate to justify a broader market definition in relation to HLVA at this time.

- FVA and mobile access do not currently belong in the same relevant market.

- For the reasons set out above, the relevant geographic market for both the LLVA and HLVA markets is national in scope (notwithstanding the emergence of some localised competitive pressures, particularly insofar as FVA is sold as part of a bundle with other services). In the absence of a clearly identifiable break in conditions of competition across geographical areas to justify separate relevant markets for the purposes of the present review, ComReg nonetheless proposes to take such emergent competitive pressures into account when designing relevant and proportionate regulatory remedies. ComReg also proposes to keep any emergent competitive pressures under review and to revisit its analysis if more stable and discrete geographic boundaries can be identified on a forward-looking basis.

4.243 Having regard to the above analysis, it is ComReg‘s preliminary view there are two distinct relevant FVA market(s):

- The national market for lower level FVA consisting of access via PSTN and ISDN BRA over copper and via managed VOIP broadband connections cable, fibre, FWA and DSL (i.e. LLVA); and
- The national market for higher level FVA consisting of access via ISDN FRA and PRA (i.e. HLVA).

4.244 ComReg proposes, taking a forward-looking approach to market definition and, assuming market trends continue to develop as anticipated, to define a broader market consisting not only of FVA via PSTN and ISDN BRA over copper and FWA but also of FVA via broadband connections used to deliver managed VOIP services which may include cable, fibre, FWA and DSL based on the following:

- Managed VOIP over broadband is a functionally similar service to the traditional PSTN and ISDN based voice service;
- Increasing fixed broadband penetration and the purchase of bundles, in particular, comprising FVA, fixed voice calls and broadband internet access; and
- Growing presence of alternative operators (mainly cable) that offer a voice bundled with a broadband service to end-users which is increasing in demand.

4.245 ComReg is of the preliminary view that there is a separate relevant market for HLVA consisting of access via ISDN FRA and PRA only.

Q. 12	Do you agree with ComReg’s preliminary conclusions on the retail FVA market definition assessment? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Chapter 5

5 Competition Analysis and Assessment of Significant Market Power

Introduction

5.1 Having defined two separate relevant FVA markets, set out at paragraph 4.243, ComReg is required to determine whether each of these relevant FVA markets is effectively competitive having regard to whether any FSP has SMP in the market in which it provides FVA services. The purpose of this assessment is to determine the effectiveness of competition in each of the identified relevant FVA markets, both currently and in the foreseeable future.

Summary

5.2 ComReg's preliminary conclusion in this Chapter is that Eircom holds SMP in the following two relevant FVA markets:

- The national market LLVA; and
- The national market for HLVA.

Our approach

5.3 The European regulatory framework for electronic communications networks and services has aligned the concept of SMP with the competition law definition of dominance advanced by the Court of Justice of the European Union in United Brands v. Commission:[231]

> "*The dominant position referred to [by Article 102 of the Treaty on the Functioning of the European Union] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers*."

5.4 Regulation 25(1) of the Framework Regulations effectively mirrors this definition of dominance[232] and equates SMP with:

[231] Case 27/76 United Brands v European Commission [1978] ECR 207, Paragraph 65.
[232] Under this definition, a firm will have SMP where it has an ability to raise prices significantly above the competitive level. Firms are more likely to have SMP where they have a persistently high market share. However, even when market shares are relatively high, a firm may not have SMP where there is a high degree of rivalry

"*a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers*".

5.5 Arising from this definition, there are three key sources of competitive constraint that may affect an undertaking's ability to act independently, namely constraints from existing competition, potential competition, and strong buyers.

5.6 ComReg assesses whether SMP exists in accordance with the framework established by the European Commission. The European Commission's SMP Guidelines, of which ComReg is required to take utmost account,[233] refer to a range of criteria that may be considered by NRAs when seeking to establish whether an undertaking(s) has SMP in a relevant market.

5.7 The SMP Guidelines also state that according to established case-law, very large market shares (that is, market shares in excess of 50%) are in themselves save in exceptional circumstances, evidence of the existence of a dominant position.

"*According to established case-law, very large market shares — in excess of 50 % — are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position. An undertaking with a large market share may be presumed to have SMP, that is, to be in a dominant position, if its market share has remained stable over time*" [234]

5.8 Market shares in excess of 50% give rise to a strong presumption of SMP. However, the SMP Guidelines also state[235] that the existence of a high market share alone is not sufficient to establish the existence of SMP; rather it means that the undertaking concerned might be in a dominant position and this needs to be considered alongside other potentially relevant criteria for assessing the existence of SMP, including:

- Overall size of the undertaking
- Control of infrastructure not easily duplicated;
- Technological advantages or superiority;
- Absence of or low countervailing buyer power;
- Easy or privileged access to capital markets/financial resources;

between the firms in the market or where there are other significant competitive constraints on its behaviour such as the threat of entry, or the countervailing power of buyers.

[233] In accordance with Regulation 25(2) of the Framework Regulations.

[234] Paragraph 75 of the SMP Guidelines.

[235] Paragraphs 78 of the SMP Guidelines.

- Product/services diversification (e.g. bundled products or services);
- Economies of scale;
- Economies of scope;
- Vertical integration;
- A highly developed distribution and sales network;
- Absence of potential competition;
- Barriers to expansion.

5.9 The SMP Guidelines also state that:

> "A dominant position can derive from a combination of the above criteria, which taken separately may not necessarily be determinative."[236]

5.10 ComReg's approach to assessing whether an undertaking has SMP in the relevant FVA markets is to carry out a forward-looking analysis on the basis of existing and likely future market conditions[237] and to consider a range of factors that are relevant to these markets over the period of the review, to 2015. ComReg considers that the relative importance of each factor may vary from one analysis to the next as the market characteristics or dynamics change. Consequently, flexibility is needed in applying the criteria set out in paragraphs 5.7 and 5.8 above. In addition, many of these above factors, while presented separately, may in fact be interrelated and all available evidence must be considered as a whole before a determination on SMP can be made.

5.11 ComReg considers that the following criteria are of the most relevance to the assessment of SMP:[238]

- Market Shares;
- Control of infrastructure not easily duplicated;
- Barriers to expansion;

[236] Paragraph 78 of the SMP Guidelines.

[237] Paragraph 20 of the SMP Guidelines states that "In carrying out the market analysis ….. NRAs will conduct a forward looking, structural evaluation of the relevant market, based on existing market *conditions. NRAs* should determine whether the market is prospectively competitive, and thus whether any lack of effective competition is durable, by taking into account expected or foreseeable market developments over the course of a reasonable period. The actual period used should reflect the specific characteristics of the market and the expected timing for the next review of the relevant market by the NRA. NRAs should take past data into account in their analysis when such data are relevant to the developments in that market in the foreseeable future."

[238] Appendix 2 contains a summary of the other SMP criteria contained in the SMP Guidelines and an explanation for why ComReg considers them less relevant in the context of this market review.

- Economies of scale;
- Economies of scope;
- Vertical integration;
- Absence of potential competition; and
- Absence of or low countervailing buyer power.

5.12 ComReg also considers that factors such as historical and likely pricing behaviour are relevant considerations.

5.13 Given an inherent degree of overlap in the relevant factors for assessing SMP, identified at paragraph 5.8, ComReg proposes to combine its assessment of these factors under the following three broad headings:

- **Existing competition** – an assessment of factors, such as market shares, relative strength of any existing competitors and pricing behaviour.
- **Potential competition** – an assessment of factors, such as control of infrastructure not easily duplicated, barriers to entry, as well as consideration of the overall strength of potential competitors.
- **Strength of any countervailing buyer power ("CBP")** – an assessment of the impact posed by any strong buyers of FVA on the competitive behaviour of FVA suppliers.

Changes since the last review

5.14 In ComReg's last review of the FVA markets in 2007 Eircom was found to have SMP in each of the relevant FVA markets identified in ComReg Decision D07/61 (i.e. higher and lower level narrowband access respectively). Since that review, there have been a number of regulatory and technological changes that have impacted upon competition.

5.15 Competition in the provision of FVA is heavily dependent on effective competition at the wholesale level, or, where this is not the case, through effective regulation of the applicable wholesale markets. To this end, as set out at paragraph 3.15, ComReg has focused on measures to enhance competition at both the wholesale and the retail levels. The most important of these are:

- Improved SB-WLR product and processes and a further reduction in SB-WLR price allowing FSPs to increasingly provide a rival FVA product. In Q2 2012 there were 402,200 active CPS and SB-WLR lines across both business and residential markets.

- FSPs which compete with Eircom can in principle provide FVA to end-users through LLU. To date, BT is the only FSP to move to an unbundling model and it currently acts as a wholesaler for operators. Other FSPs have only deployed LLU on a very limited scale across both the business and residential markets.

Approach to Existing Regulation

5.16 ComReg‘s SMP analysis considers these issues referred to in the preceding paragraph above. It furthermore should be noted at the outset that the requirement to provide SB-WLR was traditionally imposed on Eircom as a wholesale remedy as part of ComReg’s previous review of the retail fixed narrowband access markets in 2007. Although this remedy has been traditionally linked to the market under consideration, ComReg nonetheless undertakes the competition assessment taking into account two scenarios: i) the first assumes a situation absent ex-ante regulation in the retail FVA markets under consideration but with resale-based (SB-WLR) access prospectively being mandated in the related wholesale voice market of wholesale call origination on individual public telephone networks provided at a fixed location, and ii) the second assumes a situation absent ex-ante regulation (i.e. excluding SB-WLR) in the retail FVA markets under consideration as well as excluding this wholesale access remedy in the related wholesale call origination market.

5.17 There is a risk of circularity[239] in conducting the competition assessment taking into account market shares from FSPs which rely on an access remedy (SB-WLR) that was previously mandated in the market under consideration which, if found to be effectively competitive, might subsequently be removed. However, ComReg is also considering in parallel the possible imposition of SB-WLR as a wholesale obligation in its ongoing review of the wholesale call origination market, which is scheduled for public consultation in Q4 2012, subject to SMP still being identified in that market. Pending the outcome of this parallel market review process, it is thus considered appropriate to undertake the current review of the relevant FVA markets both i) including and ii) excluding market shares of FSPs reliant on this wholesale access remedy in the identified retail FVA markets.

5.18 In the context of an SMP assessment in the relevant FVA markets, the key hypothetical questions to be assessed are:

[239] In markets subject to ex ante SMP regulation an authorised undertaking‘s behaviour may also be restricted by way of existing SMP regulatory controls. It is necessary, however, to consider the potential ability of the undertaking to exert market power in the absence of ex ante SMP regulation in the market concerned. To do otherwise might lead to a circular finding of non-dominance on the basis of SMP regulatory remedies that would cease to exist following the completion of a market analysis and, in the absence of which, the authorised undertaking may be able to exert market power. The key question is therefore how the operator in question is likely to behave if it were free from regulatory constraints and if the imposition of remedies is as such warranted.

- how the FSP in question would be likely to behave in the markets being assessed if it were free from current or potential SMP regulatory constraints; and

- how the FSP in question would be likely to behave in the market being assessed having regard to the existence of any SMP and other obligations in related markets which could impact in the relevant FVA market.

5.19 We begin our SMP assessment by considering the identified FVA markets, looking firstly at evidence on market shares, and then considering the extent of other competitive constraints in the market.

Assessment of SMP

5.20 In the following, ComReg considers whether any undertaking is likely to possess SMP in each of the two relevant FVA markets identified in Chapter 4. These markets are:

- The national market LLVA; and

- The national market for HLVA.

LLVA Market

5.21 A national market for lower level FVA consisting of access via PSTN and ISDN BRA over copper and broadband connections using managed VOIP cable, fibre, FWA and DSL has been provisionally defined. For the reasons set out in Chapter 4, ComReg takes the preliminary view that, on a forward-looking basis, this relevant FVA market is wider than only FVA via PSTN and ISDN BRA over copper. It also includes broadband access used to deliver managed VOIP services primarily on the basis that these connections will increasingly act on a prospective basis as an effective constraint on traditional PSTN/ISDN platforms delivering FVA and ultimately the impact this may have on competition in the LLVA market.

Existing competition

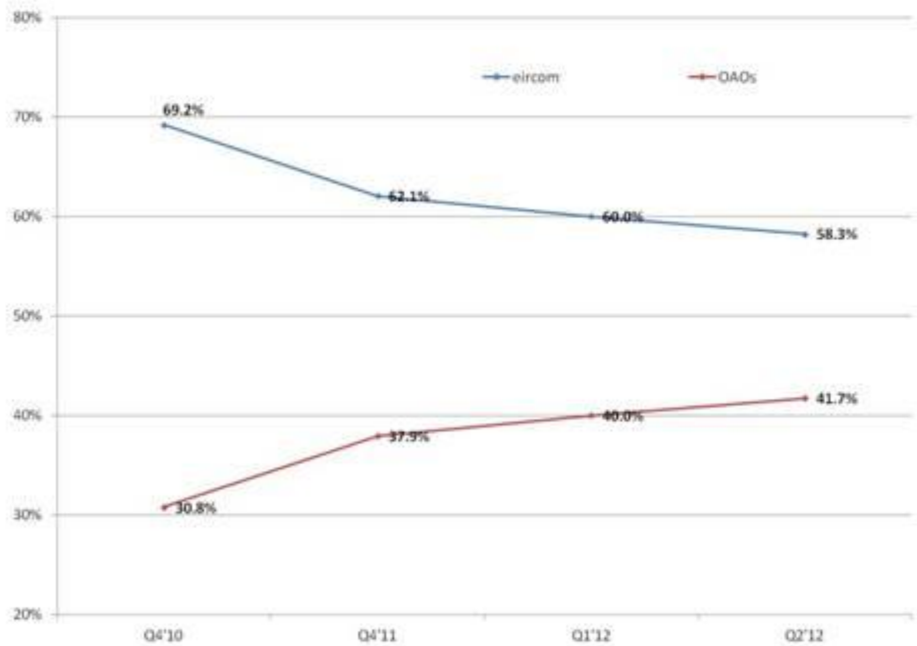
Market shares

5.22 Changes to market shares over time are often more important than static assessments, because dynamic data analysis indicates trends in the market and will contribute to an assessment of whether or not the market may tend towards effective competition over the period of this review.

5.23 Accordingly, ComReg has analysed market share data in respect of the LLVA market since 2009. At the time of the last review in 2007, Eircom’s competitors in the supply of LLVA were almost entirely resellers of Eircom’s SB-WLR product.[240] Since then, however, Eircom has faced increased competition in the supply of FVA from a number of different sources, including resellers of Eircom’s SB-WLR product, as well as from alternative broadband networks supplying managed VOIP in a bundle with broadband. Alternative retail broadband suppliers have for the most part sought to offer bundles of wider communications products, including managed VOIP, broadband, and sometimes television.

5.24 Figure 24 represents the evolution since 2009 of market shares in this broader LLVA market – as between Eircom, resellers of SB-WLR, and alternative broadband FSPs supplying bundled managed VOIP services over the broadband network (including UPC’s cable, fibre, FWA and DSL). It shows that Eircom is progressively losing market share, on the one hand, to FSPs providing FVA using SB-WLR and, on the other hand, to broadband FSPs supplying bundled managed VOIP services. As of Q2 2012, Eircom’s market share (in terms of retail FVA access subscriptions) of the broader LLVA market had fallen to approximately 58.3% from 69.2% in 2010, with Vodafone supplying approximately [✂%], and other re-sellers' market shares broadly stable. UPC’s market share has increased to approximately [✂%] of the LLVA market from approximately [✂%] in 2010.

Figure 24 LLVA market shares of FVA subscriptions Q1’10 - Q2’12 [✂]



[240] At the time of the last review of the retail narrowband market in 2007, only 0.3% of retail fixed telephony subscriber lines were delivered directly on alternative infrastructure i.e. cable networks.

5.25 The overall size of the LLVA market has remained broadly stable driven by increased supply of managed VOIP services over broadband platforms, primarily cable. As is evident by Figure 5 in Chapter 3, take-up of FVA over the more traditional consumer landlines (i.e. PSTN and ISDN BRA) has been declining steadily since 2007. As well as PSTN access, Eircom is the main supplier of ISDN BRA. Therefore, the falling demand for PSTN and ISDN BRA subscriptions has had the most significant toll on Eircom, with its PSTN and ISDN BRA lines in steady decline. However, Eircom's share of the relevant LLVA market is high at approximately 58%, even when taking into account market shares of FSPs which are still reliant on the SB-WLR input provided over Eircom's network and is falling at a declining rate. Taking a modified Greenfield approach and excluding the market shares of FSPs reliant on this wholesale access remedy to compete in the LLVA market would bring Eircom's market share over 80% of LLVA.

Strength of existing competition

5.26 In order to supply FVA, an operator requires access to a network capable of facilitating voice and that extends to a substantial base of potential customers (given that economies of scale is a factor in the provision of this service). There are currently a total of 27 providers of FVA in the LLVA market when also taking into account those which are reliant on the SB-WLR input. Eircom is the largest supplier and its largest competitors are Vodafone and UPC – see Figure 25. There are a large number of small alternative suppliers of FVA, some with fewer than 100 customers.

Figure 25 Retail FVA subscribers (PSTN, ISDN BRA, managed VOIP) by FSP [✂]

5.27 Figure 25 shows that Eircom has lost approximately [✂] FVA subscribers since Q4 2010. Meanwhile, UPC appears to have more than tripled its number of voice telephony subscribers over the same period. Resellers of Eircom's SB-WLR, in particular, Vodafone, have also grown their presence in the LLVA market over that same time period. The strength of these existing competitors in terms of their ability to constrain Eircom in the provision of FVA in the LLVA market is discussed below.

5.28 The availability of SB-WLR enables those FSPs that do not have a direct connection with end-users to provide a competing FVA service to any retail customer connected to Eircom's local loop network. Most of Eircom's competitors in the LLVA market still compete by reselling Eircom's SB-WLR product with Vodafone the largest of these. There are a large number of smaller resellers of Eircom's SB-WLR product.

5.29 The availability of SB-WLR has somewhat alleviated barriers to entry into the FVA markets since the last review. In particular, SB-WLR allows FSPs to offer FVA without any significant physical investment (and they predominantly do so based on resale). It is relatively simple by FSPs wishing to supply FVA to add FVA based on these wholesale access products to their existing range of products and the incremental cost of doing so is likely to be modest. Regulated wholesale access prices also allow new entrants to obtain the same access price as Eircom. Existing non-discrimination and transparency remedies imposed under Decision D07/61 help provide a level playing field for Eircom's wholesale customers to compete in the supply of FVA in the LLVA market.

5.30 As set out in Chapter 3, Figure 2, there has been a significant migration of CPS customers to SB- WLR since 2007. In practice, therefore, many end-users that previously purchased line rental from Eircom but purchased retail fixed calls from another supplier have since switched to that third party supplier for both the line rental and call services. However, even though Eircom loses retail line rental subscribers and revenues, on the other hand, it gains at the wholesale level in terms of an SB-WLR subscription for each customer that switches at the retail level.

5.31 Overall, the presence of SB-WLR has provided an avenue for entry into the supply of FVA in the LLVA market, and a means by which competing suppliers can offer a competitive constraint in the retail FVA market without the need to connect directly with end-users. However, it is evident that most of Eircom's competitors in the LLVA market continue to rely on the wholesale input SB-WLR to a notable extent and their business models are based on the prevailing SB-WLR price. For example, Vodafone entered the fixed market in 2010 acquiring BT Ireland's customer base,[241] but relies to a large extent on SB-WLR to compete with Eircom in the LLVA market, and is now Eircom's largest competitor with [✂] FVA subscribers.[242] However, SB-WLR was previously mandated in the market under consideration. If this continues to be the case then arguably, to avoid the circularity problem referred to in paragraph 5.17 above, reseller market share should not be taken into account here to the extent that it relies on an input which derives from ex ante regulation of the market being analysed. However, even taking the latter market share into account ComReg notes that the degree of constraint posed in the LLVA market by what are effectively resellers of Eircom's SB-WLR product is limited. In particular, resellers lack the ability to act entirely independently of Eircom, and have less flexibility in terms of product design, pricing, and ultimately the architecture and development of the underlying infrastructure.

[241] BT has withdrawn from consumer markets and is focusing on corporate and SME customers.
[242] ComReg's Key Quarterly data 2012.

5.32 Although LLU has not so far played a significant role in the sole supply of FVA, nevertheless, the increased uptake of LLU, particularly by BT, means that competing LLU operators, such as BT, can now act as a wholesale competitor to Eircom in the sale of SB-WLR (supporting voice) to third party retailers. However, while this development has increased somewhat the competitive dynamic at the wholesale level, nevertheless, the competitive impact at the retail level in terms of FVA supply is likely to be dampened to the extent that that BT is acting as an intermediary in the sale of SB-WLR, essentially resale of Eircom's inputs. The additional dynamic at the wholesale level is unlikely of itself to be sufficiently strong to constrain Eircom from acting to an appreciable extent independently of competitors, its customers and consumers.

5.33 As set out in Chapter 4, managed VOIP over broadband can constitute a viable alternative source of supply of FVA for end-users who have already decided to purchase broadband and who place value on the multi-product bundle. In combination with increased fixed broadband penetration and increasing demand for bundles of FVA and fixed voce calls with internet access, the growth in managed VOIP (primarily over cable) likely explains some of the decline in FVA, though the poor economic climate is likely also a driver of the overall decline in FVA. As shown in Figure 5 the decline in PSTN access has coincided with the start of the recession. Already there are a number of FSPs that offer managed VOIP at the retail level. As set out in Chapter 3 above, most of the managed VOIP subscriptions currently active in Ireland are provided over cable and fibre networks whereas naked DSL is not yet offered, though on a prospective basis voice over DSL might increase.

5.34 UPC's entry and growth in supply of FVA has been facilitated by the upgrade of its cable TV network to enable the provision of higher speed broadband and hence VOIP services. UPC has upgraded large parts of its cable television network in such a way that the network is capable of providing broadband internet services to 728,300 households with 700,200 of these capable of receiving voice services as of Q2 2012.[243] This amounts to approximately 46% of households in Ireland. Since 2006, UPC is no longer a pure pay-TV provider rather a multi-product operator. It commercially offers cable voice ("home phone") mostly to residential customers. As of Q2 2012, UPC supplies VOIP bundled with broadband access to 205,800 retail customers.[244] UPC has approximately 283,400 broadband customers in Ireland.

[243] UPC, "UPC Holding Reports Second Quarter 2012 Results", press release available from: http://www.lgi.com/pdf/press-release/UPC-Holding-Press-Release-Q2-2012-FINAL.pdf.
[244] UPC, "UPC Holding Reports Second Quarter 2012 Results", press release available from: http://www.lgi.com/pdf/press-release/UPC-Holding-Press-Release-Q2-2012-FINAL.pdf.

5.35 As set out in Chapter 4 there is a key point of difference between the retail product offerings of suppliers of managed VOIP over broadband (including UPC), and those offerings of Eircom and SB-WLR resellers. For example, UPC does not sell FVA independent of broadband and voice calls are not available as a standalone service. UPC customers can only purchase FVA as an add-on to their broadband or TV service, at an entry level cost of [€42 and €33] per month for the bundle. This compares to Eircom's standalone line rental which sells for [€25] per month, independent of any broadband service. Therefore, UPC's current managed VOIP offering is likely only to provide a competitive constraint for the subset of the population that have fixed broadband internet access and who additionally wish to purchase a bundle of FVA, fixed voice calls and broadband.

5.36 As set out in Chapter 4 above, ComReg anticipates that UPC will increasingly continue to grow its telephony market share, but notes that the availability of UPC's FVA service is limited to the coverage of its existing network. Unless UPC decides to launch a standalone voice product, it will only offer a significant constraint in terms of winning customers that wish to purchase FVA and fixed voice calls bundled with broadband or TV within the coverage of UPC's network. ComReg notes that a significant proportion of customers still purchase standalone FVA. The degree of competitive constraint posed by UPC and other managed VOIP over broadband suppliers in the LLVA market would be, to an extent, mitigated by the factors considered above.

Ability to price independently

5.37 ComReg notes that pricing behaviour within the LLVA market can be an indicator of market power. Moreover, the extent to which competing suppliers of FVA in the LLVA market are able to set prices independently of Eircom impacts on the degree of competitive constraint imposed by those suppliers in that market.

5.38 As was highlighted above, many of Eircom's competitors rely on its' wholesale inputs, such as SB-WLR, to provide FVA since they otherwise primarily lack a direct connection with retail end users. The price of this wholesale input is set by ComReg based on Eircom's retail price minus the retail costs associated with the supply of FVA. SB-WLR re-sellers therefore lack the freedom to price entirely independently of Eircom. The SB-WLR retail minus mechanism does not constrain Eircom in the level of the retail and wholesale prices that it sets, only the differential between those prices. For the most part, Eircom's wholesale customers purchase SB WLR alongside 'line-share' or bitstream, then use SB-WLR to provide voice whilst using line share or WBA to provide retail broadband. In fact, neither of these wholesale products can be purchased without also buying SB WLR. In the absence of naked DSL there appears little incentive either for Eircom or for FSPs to launch managed VOIP over DSL as an alternative to standalone FVA over narrowband. Full unbundling must be purchased at a significant premium, in order to avoid also purchasing a PSTN/ISDN voice connection.

5.39 On the other hand, UPC operates a separate access network and, therefore, does not rely upon wholesale inputs from Eircom to provide FVA. For this reason, UPC has greater flexibility in terms of its retail pricing relative to resellers of Eircom's wholesale products. However, ComReg's preliminary view is that suppliers of managed voice over broadband do not act as a sufficient constraint on the PSTN/ISDN network nationally (though may exert a degree of competitive pressure for a subset of end users that primarily value broadband and bundles of broadband and add on voice services) in view of the significant proportion of the population that value voice as the primary fixed telephony service.

5.40 Table 7 highlights that the headline PSTN and ISDN BRA prices for connection have remained unchanged while rental prices have increased by 4.9% since the last review.

Table 7 Evolution of PSTN and ISDN BRA line rental and connection prices

Product	No. Channels	Connection Charge 2007-2012	Monthly Rental 2007	Monthly Rental 2012	Percentage Increase
PSTN	1	€107.43	€19.98	€20.96	4.9%
ISDN BRA	2	€202.47	€30.99	€32.51	4.9%

5.41 This is despite reductions in the LLU and SB-WLR price and also in spite of a period of deflation in the broader economy. As set out in Chapter 3, Eircom's headline call charges also increased over the period since 2007. If competition was working we might expect to see FVA prices decreasing since the last review. Furthermore, a review of Eircom's most recent set of regulatory accounts[245] would indicate that Eircom has earned a positive overall gross margin on PSTN and ISDN BRA access.

Preliminary conclusion

5.42 ComReg's preliminary conclusion from assessing the state of existing competition in the LLVA market is that Eircom continues to have a high market share of at least 58% (and a higher market share of over 80% if market shares based on use of SB-WLR are excluded) and, despite the presence of regulation, that the relative strength of alternative FSPs is still restricted, with FVA primarily supplied by re-sellers at present. Some facilities-based alternatives (i.e. managed VOIP over broadband) are emerging as a constraint on FVA over PSTN/ISDN BRA with potentially the greatest constraint from managed VOIP over cable broadband. However, managed VOIP over broadband is only a viable competitive substitute for those end-users that have purchased broadband access, that value primarily a bundled service and that are within the footprint of the alternative broadband network. ComReg's preliminary analysis of pricing and profitability indicates that the strength of competition in the LLVA market does not represent an effective competitive constraint on Eircom's ability to act independently in the LLVA market in relation to pricing or commercial strategy at this stage.

Barriers to entry and potential competition

5.43 In the absence of an effective competitive constraint posed by existing competition, ComReg assesses any possible constraints posed by potential competition in the LLVA market. The threat of market entry is one of the main potential competitive constraints on incumbent firms, and the threat of market entry may prevent a SMP operator from raising prices above the competitive level. The threat of entry will be reduced by the existence of barriers to entry.

[245] See http://siteassets.eircom.net/assets/static/pdf/regulatory/HCA_Financial_Statements_signedV3.pdf

5.44 This assessment of potential competition considers whether entry (and expansion) in the LLVA market is likely to such an extent that it would constrain Eircom's ability to act independently of its competitors and customers over the timeframe of this review (i.e. two to three years). In assessing the possibility for existing and potential new entrants to act as a constraint on Eircom over the period of this review, ComReg has analysed below the nature and extent of any barriers to firms both entering and expanding in the relevant LLVA market.

5.45 Barriers to entry generally comprise any disadvantage that a new entrant faces when entering a market, when incumbents do not currently face such barriers. According to the Explanatory Note to the Recommendation:[246]

> *…high structural barriers may be found to exist when the market is characterised by absolute cost advantages, substantial economies of scale and/or economies of scope, capacity constraints, and high sunk costs.*

5.46 Barriers to growth and expansion are obstacles that a new entrant or smaller existing competitor faces in its ability to grow or expand in a particular market and which limit its ability to pose a viable competitive threat over the medium to longer term. Barriers to entry and expansion are closely related as many of the factors that make entry harder also make it harder for new entrants to grow or expand.

5.47 In considering the potential for entry or expansion in the LLVA market, ComReg has assessed current market conditions and, in this context, considers that entry could potentially come from a number of sources, including:

- Entry and expansion of retail suppliers of FVA who use SB-WLR or other wholesale inputs;
- Entry and expansion of retail suppliers of managed VOIP over broadband which may be via cable, fibre, FWA, DSL or other IP networks;
- Mobile networks when adapted to provide an equivalent service at a fixed location (e.g., *homezone*) and/ or IP based services (e.g., hosted PBX telephony solutions, SIP trunking); and
- New technologies or alliances (e.g. SKY and BT).

5.48 In the following, ComReg assesses barriers to entry and expansion associated with economies of scale, scope and density, control of infrastructure not easily replicated, and with vertical integration.

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246 Explanatory Note for recommendation on relevant markets, p. 8.

Control of infrastructure not easily replicated

5.49 The SMP Guidelines cite control of infrastructure not easily duplicated as one relevant criterion for assessing whether SMP exists. This may be relevant where, for example:

- Access to a certain infrastructure is necessary to produce a particular product or service;
- The required infrastructure is exclusively or overwhelmingly under the control of a certain undertaking; and
- There are high and non-transitory barriers associated with replacing the infrastructure in question.[247]

5.50 Consideration of this factor is thus linked to the consideration of the absolute size of Eircom above, as well as the assessment of the sunk costs and economies of scale, scope and density associated with a ubiquitous access infrastructure below.

5.51 According to the SMP Guidelines, it is not necessary for the infrastructure to be deemed "essential" within the meaning of EU competition law. Ownership of a significant infrastructure may confer an absolute cost advantage on the incumbent and the cost and time involved in operators replicating the infrastructure in question may pose a significant barrier to entry. In addition, it may be possible for the owner of the infrastructure in question to leverage their market power into horizontally or vertically related markets.

5.52 In order for an operator to be able to compete with Eircom in the supply of FVA, it would need to either resell Eircom's SB-WLR, though its ability to effectively constrain Eircom would as noted above be somewhat limited in this case or, to establish, or expand, an access network with the capacity to offer a wholesale service. This could be done by building an independent access network, or by availing of a range of SB-WLR, WPNIA or WBA inputs on a sufficient scale as to be in a position to provide a (geographically and commercially) viable FVA offering. ComReg will assess the various options below.

[247] See Revised ERG Working Paper on the SMP concept for the new regulatory framework, ERG (03) 09 rev3, September 2005, p. 5.

5.53 In terms of LLVA, it is not feasible for any other operator to replicate Eircom's access network, it is also likely to be inefficient to do so. However, ComReg notes the recent development of alternative broadband infrastructure for the provision of services similar to POTS, that is, managed VOIP services. It is important to note, however, the driver for the roll out of these alternative platforms is the opportunity to commercially offer multiple products with voice as part of the bunlde and not for the supply of standalone FVA and related telephony services. While alternative broadband infrastructure will likely provide some degree of competition (within their footprint and for consumers who already have purchased broadband while continuing to purchase bundled offers), it will not likely replicate Eircom's ubiquitous network. Nevertheless, the presence of alternative broadband infrastructure will on a forward looking basis increasingly have a positive impact on the competitive dynamics in the LLVA market by lowering somewhat barriers to entry.

5.54 In addition, with appropriate wholesale regulation, it is possible to enter the LLVA market without replicating Eircom's fixed infrastructure. In particular, FSPs wishing to enter or expand in this market can do so by purchasing SB-WLR from Eircom and reselling it to end-users. While the SB-WLR remedy goes some way to alleviating barriers to entry into the supply of LLVA, associated with replicating physical infrastructure, SB-WLR does not offer competing FSPs the same degree of commercial flexibility and independence as what could otherwise be leveraged through network investment.

5.55 Alternatively, wholesale inputs WPNIA or WBA could also potentially be used to facilitate entry or expansion into the LLVA market again by reducing the extent to which Eircom's fixed network needs to be replicated. While in principle WPNIA or WBA could be used to support the provision of FVA, and avoid the need for competing FSPs to replicate the local loop, in practice, these wholesale inputs are not used to supply FVA on a standalone basis, possibly because of the lengthy and costly process of rolling out FVA networks on that basis.

5.56 However, in terms of the supply of broadband with voice as a possible add-on, FSPs could in principle purchase Full LLU from Eircom and provide VOIP to customers without having to separately purchase SB-WLR (to support PSTN/ISDN voice) from Eircom. WBA currently can only be purchased in tandem with SB-WLR, which means that purchasers of WBA tend to use the SB-WLR element to provide a voice service, rather than offering a managed VOIP service over the WBA connection. ComReg understands that Magnet Communications and Digiweb (Smart Telecom) use full LLU to provide retail bundles that include voice calls and internet access, though on a relatively limited basis. Even in the context of broadband and the opportunity for economies of scope, LLU involves connecting to Eircom exchanges and installing DSLAM equipment within exchanges, thus replicating part of Eircom's fixed broadband network. This process involves significant investment in infrastructure within (and between) exchanges. As a result, exchanges only tend to be unbundled in densely populated exchange areas given that wholesalers are typically intermediary and effectively resell Eircom's wholesale inputs.

5.57 Although the availability of a range of wholesale inputs may have a positive impact on the competitive dynamics at the wholesale level (by lowering barriers to entry for FSPs, such as, BT or Imagine to become wholesalers) which may also impact the LLVA market, this competitive impact is unlikely to be sufficiently strong over the period of this review to constrain Eircom from acting independently.

Sunk costs

5.58 According to the Explanatory Memorandum accompanying the Relevant Markets Recommendation:[248]

> *…high structural barriers may be found to exist when the market is characterised by substantial economies of scale, scope and density and high sunk costs. Such barriers can still be identified with respect to the widespread deployment and/or provision of local access networks to fixed locations*.

[248] 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 communication networks and services page 10.

5.59 Control over local access is an essential pre-requisite for providing FVA. However, should an operator decide to enter the LLVA market using its own network, it would require significant investment. Most of this will be sunk costs, as such, costs will largely not be recoverable if the entrant decides to, or is forced to, exit the market. According to a 2002 report prepared for the European Commission, investments in civil works and underground plant can only be sold in situ and as they have few other uses, tend to have limited resale value such that a substantial proportion of these investments are unlikely to be recouped on exit. It states further that the local loop would appear to satisfy this criterion where the proportion of expenditure on trenches, ducts and underground plant is particularly high and sunk.[249]

5.60 The mere existence of sunk costs does not automatically imply that entry barriers are high. It is acknowledged that a certain level of sunk costs will be involved in entering most markets, and that the incumbent may also have had to pay a similar level of sunk cost before it entered the market. However, in some circumstances it is more difficult for new entrants to break into a market than it was for the first firm to enter, creating a decisional asymmetry where an incumbent has already paid sunk costs but a new entrant has not. In general, the higher the sunk costs of entry, the less likely it is that a firm will enter. [250]

5.61 So far, FSPs have not entered the LLVA market by building a network, but instead have relied on Eircom's wholesale SB WLR inputs, including the largest competing LLVA provider, Vodafone. This would indicate that the significant sunk costs associated with direct supply of FVA are prohibitive. Upfront investment required in order to offer FVA is considerable and where traditional FVA is beginning to decline there is a smaller window of opportunity for an FSP to recoup the costs incurred. On the other hand, Eircom's SB-WLR product enables entry into the LLVA market without incurring significant sunk costs. However, ComReg acknowledges that relying on Eircom's wholesale inputs in order to compete at the retail level can limit the ability of a supplier of FVA to act independently and innovate in terms of product design and pricing. This may mitigate the competitive constraint posed by SB-WLR customers in the LLVA market.

[249] Squire, Sanders & Dempsey LLP, May 2002, "Market Definitions Regulatory Obligations in Communications Markets", A Study for the European Commission, Executive Report, Brussels, p. 14.
[250] OECD, Barriers to Entry, (DAF/COMP(2005)42), 2006, Paris.

5.62 To the extent that alternative broadband networks seek to compete in the supply of FVA, these FSPs will also face significant sunk costs involved in entry to, and expansion within, the LLVA market. These costs are associated with establishing a direct access network (for example, this could include a copper, fibre, cable or wireless-based network) to individual homes and businesses. An alternative approach could be to develop a VOIP based platform that relies on Eircom's full LLU product. While this option would, to an extent, reduce the sunk costs involved in entry (by avoiding replication of the local loop), the sunk costs associated with purchasing LLU are still substantial (e.g. exchange equipment, DSLAMs, backhaul connections etc).

5.63 Entry into the LLVA market would not necessarily require the entrant to construct an access network with equal coverage to that of Eircom's network e.g. UPC's network only extends to approximately 46% of households. However, in any case considerable costs would need to be sunk in order to enter the LLVA market even to a limited extent. Geographic coverage/reach of a given network is likely to be an important component of developing a sustainable business model, given that economies of scale, scope and density are relevant here.

5.64 The incremental sunk costs associated with providing a FVA platform might in some cases be mitigated for entrants that operate other types of networks; such is the case with UPC's entry into this market by upgrading its television network to provide broadband with a possible add on for voice. Furthermore, there are other costs associated with market entry, such as customer management and retail billing systems.

Economies of scale, economies of scope and economies of density

5.65 Economies of scale, scope and density refer to potential advantages that larger incumbents may enjoy over smaller new entrants. Economies of scale generally refer to the cost advantage which a large-scale operator may have over a smaller operator where the marginal cost of production decreases as the quantity of output produced increases. Economies of scope refer to the potential efficiencies which may be gained by a firm jointly producing a range of goods and services, e.g. where a cable network could be used to provide TV, FVA and Internet access services simultaneously, network and operational costs can be split across the three services. Economies of density refer to potential efficiencies associated with supplying customers who are geographically concentrated.

5.66 The supply of FVA is characterised by economies of scale, scope and of density:

- A potential supplier of FVA which already owns an access network would need to ensure that it has sufficient scale and /or geographic reach, and is capable of providing of FVA and, for a subset of the population, broadband services (to satisfy the customers that seek bundled offers);
- The FSP may be at a cost disadvantage if not vertically integrated where it would need to develop the associated back-office systems and processes to offer FVA;
- As noted above, a potential supplier of FVA using a purchased WPNIA input would also need to incur costs associated with co-location and installation of equipment at an exchange, as well as other backhaul and costs associated with retailing;
- The significant fixed costs associated with network upgrade/expansion, and/or of unbundling an exchange, are subject to economies of scale, scope and density. That is, the average costs per line will fall as the number of subscribers served increases, so that economies of scale and density will be achieved where an operator can serve as many subscribers as possible from its investment in a given part of the network (e.g. in an exchange); and
- Therefore, the commercial success of the service depends on the acquisition of a large number of retail customers within any given exchange area, and as a whole. This can act as a barrier to new entrants, who may find it difficult to generate a customer base of sufficient scale to compete with an incumbent that enjoys economies of scale. Figure 25 shows the numbers of LLVA subscribers of FSPs compared to Eircom as of Q2 2012.

5.67 Economies of scope may also be achieved by the incumbent supplier of FVA in the LLVA market, where horizontal or vertical integration exists. For example, UPC may benefit from economies of scope by providing television, broadband and voice calls services all on one network. UPC can sell multiple products to its customers over a single network. Economies of scope may act as a deterrent to entry into the LLVA market, if the potential competitor is unable to replicate the same range of products and has to absorb higher cost into a lesser number of products.

5.68 The ability to achieve scale and scope economies is linked to the impact of economies of density on the LLVA market. The economics of density will influence the likelihood of network deployment and ultimately entry into the LLVA market by a potential competitor. ComReg thus notes that the high sunk costs associated with entry and expansion (e.g., extending a network rather than infill will require relatively more investment) in the LLVA market act to exacerbate the effects of economies of scale, scope and density which can act as further barrier to entry and expansion. These sunk costs can be spread across a greater customer base when the density is higher, thus the barrier to entry is likely to differ between urban and rural areas.

5.69 The availability of SB-WLR mitigates to an extent the barriers to entry posed by economies of scale, because it allows FSPs to enter the LLVA market without incurring significant fixed costs. This means that entrants are better able to scale their business appropriately for their customer base, and grow their business incrementally in line with the growth of their customer base.

5.70 In addition, the availability of alternative wholesale products, such as, full LLU also has the potential to reduce the barrier posed by economies of scope, since these products can be used in tandem with SB-WLR to diversify a FSP's range of retail products. However, the extent to which this product availability allows FSPs to streamline their operations is limited to the extent that cost savings at the wholesale level are passed through. For example, WBA could in principle be used to provide managed VOIP services in addition to broadband access, except that Eircom’s wholesale customers are required to purchase SB-WLR in order to purchase WBA (and therefore already have the means to provide a PSTN voice service). The provision of Naked DSL by Eircom at the wholesale level would potentially allow for the provision of managed VOIP and broadband by an alternative FSP over Eircom’s DSL access network, therefore, avoiding the cost of purchasing a PSTN/ISDN connection for access to fixed voice calls and allowing it to gain efficiency by providing two products over one platform. It is furthermore noted that in terms of potential cost or scale advantages, Eircom likely prices its own wholesale inputs at (low) marginal cost while rival FSPs pay a much higher average cost based price.

Vertical integration

5.71 A vertically integrated operator can enjoy significant efficiencies arising from its presence in upstream and downstream markets. Such efficiencies can also be passed to end-users in the form of cheaper prices, lower transaction costs and/or enhanced product quality. However, on the other hand, vertical integration can also constitute an entry barrier where the presence of a firm at multiple levels of the production or distribution chain raises the costs of new entry (e.g. where prospective new entrants perceive the need to enter multiple markets simultaneously to pose a viable competitive constraint on the integrated operator) and/or increases the possibilities for the integrated operator to foreclose competition at one or more levels in the value chain, the threat of which could in turn act as a disincentive to new entry.[251]

5.72 A supplier of FVA in the LLVA market needs to have a means of acquiring retail customers. For an integrated operator, this would mean also controlling the relationship with the end customer thereby providing directly an access connection to its potential customer-base. Eircom is vertically integrated (i.e. commercially active at both the wholesale and retail levels). It is the primary supplier of FVA with a persistently high market share at 58% of LLVA (and higher at over 80% if the SB WLR market shares are excluded). In addition, Eircom is in a strong position to consolidate its existing position of SMP in the upstream wholesale access and calls markets being the primary wholesale supplier of inputs for the provision at the retail level of FVA. As a retail supplier of FVA in the LLVA market, Eircom has an incentive to push up the wholesale costs of its retail competitors (i.e. those retail competitors who are also wholesale customers of Eircom), and may be in a position to do so and thereby adversely affect competition.

5.73 Absent appropriate regulation in the relevant upstream markets, in particular, SB-WLR and LLU, there would likely be an incentive for Eircom as an integrated operator to reinforce entry barriers downstream in the LLVA market or indeed, in associated retail markets (e.g. calls or broadband markets) by, for example, applying a margin squeeze between wholesale input costs for its competitors and retail prices.

5.74 In relation to the LLVA market, other than Eircom and UPC, there are no vertically integrated suppliers of FVA, that is, operate independently of Eircom and are, therefore, vulnerable to Eircom's wholesale pricing strategy. However, UPC is a vertically integrated and independent competitor of potentially substantial scale in the LLVA market on a forward looking basis – at least for the subset of the population that wish to purchase broadband and increasingly purchase bundled communications services.

[251] See Massimo Motta. Competition Policy: Theory and Practice. Cambridge University Press, 2004.

5.75 The presence of large vertically integrated (or self supplying) competitors could act as a barrier to entry in the LLVA market. These firms are able to gain efficiency through the vertical supply chain that might not be passed onto non-vertically integrated wholesale customers, thus potentially placing non-vertically integrated downstream competitors at a disadvantage. Furthermore, there is potential for a vertically integrated operator like Eircom to take measures to stifle competition in the downstream LLVA market, by engaging in anticompetitive cross-market tactics that harm entrants. For example, absent regulation Eircom could reinforce its market power by cross-subsidising its activity in bundles from its standalone FVA revenues which could create further strategic barriers to entry and/or expansion. In addition, if Eircom were to apply a margin squeeze in respect of the FVA element of a bundled offering, other operators might not be able to effectively replicate the FVA element of that bundle due to insufficient margin. Such behaviour by Eircom could have the effect of (i) reinforcing its SMP in the LLVA market and/or (ii) leveraging that SMP into related markets due to an inability on the part of other operators to effective replicate the FVA part of the bundle. These competition concerns are assessed in detail in Chapter 6.

Overall strength of potential competitors

5.76 ComReg has considered the likely prospective market developments and whether the emerging competitive constraints from managed VOIP over broadband or new technologies or alliances are likely to act as a sufficient constraint on Eircom's market power in the LLVA market in the lifetime of this review. This involves assessing the likelihood, the extent, and the timeliness of any potential entry and expansion into the LLVA market.

5.77 While competition from SB-WLR re-sellers is likely to continue to intensify, ComReg believes that LLU is unlikely to present a significant competitive threat to Eircom in the LLVA market over the timeframe of this market review. The FSPs have the opportunity to provide FVA, fixed voice calls and broadband services to the connected subscriber based on the wholesale inputs of LLU and Sub Loop Unbundling ("SLU").[252] Unbundling exchanges gives operators control over more of the value chain and greater access to economies of scale. They are then able to pass these savings on to end-users. However, FVA only based LLU is not currently supplied to end-users in the LLVA market and possibly standalone FVA will not be provided on a forward looking basis.[253]

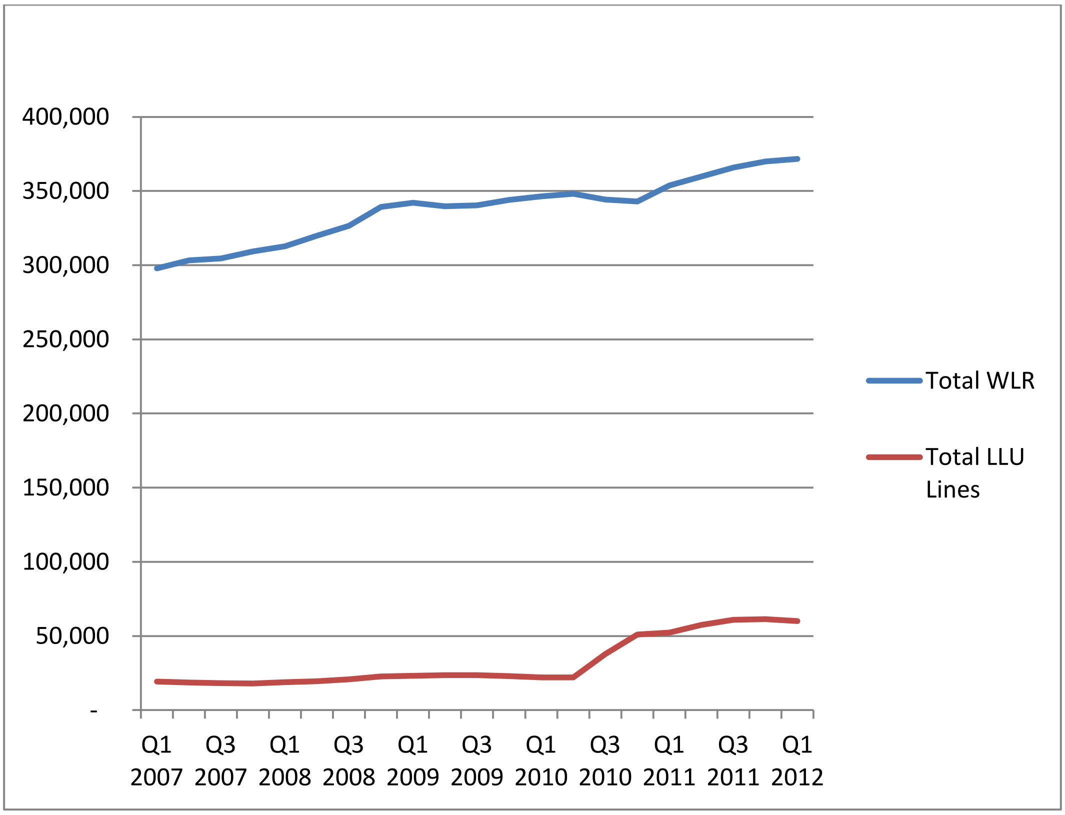
[252] Undertaking have the option to rent either the entire loop ("full unbundling"), or, alternatively, to rent only the high capacity frequencies within the loop which are then used to provide broadband services, via shared access to the unbundled local loop using LS.

[253] "Regarding retail access to the public telephone network at a fixed location, the only wholesale regulation that could impact on competition in this market is the regulation of the wholesale infrastructure access market, which enables new entrants to provide narrowband access services to retail customers. However, exploiting wholesale infrastructure access requires time and significant investments, a large portion of which are sunk.

5.78 As set out above, there are considerable barriers to entry into the LLVA market associated with LLU. In order to offer a competing national FVA service equivalent to Eircom's, an FSP would have to un-bundle a significant number of exchanges each of which would involve considerable time and costs (associated with implementing co-location at Eircom's exchanges and the appropriate purchase of backhaul), and to provide physical connectivity to each of those exchanges. Given the economies of scale available to Eircom and the existence of large sunk costs of entry into the LLVA market via LLU, it is unlikely that FVA provided by FSPs over LLU will offer sufficient potential competition over the timeframe of the review to act as a sufficiently strong competitive constraint on Eircom in the LLVA market.

5.79 The impact of LLU on competition in the LLVA market is likely to continue to be limited over the period of this review. FSPs have only deployed LLU on a very limited scale across both the business and residential markets. Overall take up of LLU is still relatively low especially when compared to SB-WLR, as illustrated in Figure 26.

Figure 26 Evolution of SB-WLR and LLU Q1 2007 - Q 1 2012



Moreover, new entrants in principle do not lease infrastructure access to provide narrowband access only. Wholesale infrastructure access therefore does not remove the high and non-transitory barriers to entering the retail access market at a fixed location, nor does it make this market tend towards effective competition. Even in combination with the development of other infrastructures such as cable or fibre-to-the-home etc., such a tendency is not yet observed at the European level. Therefore, even in the presence of wholesale regulation, the retail market for access to the public telephone network at a fixed location remains susceptible to ex ante regulation. See the Explanatory Memorandum to the 2007 Recommendation, p28.

5.80 On the other hand, competing operators primarily invest in LLU to provide data services (mainly broadband access), with voice services as a possible addition. As set out in Chapter 3, the emphasis of FSPs would appear to be on shared access, using it for providing broadband offers, including with bundled voice services. FSPs, such as Smart (Digiweb), rely on LLU to provide access to end-users to a combined voice and broadband service. BT and Vodafone use different wholesale inputs to provide fixed telephony services to end-users [✂.] The shift from full LLU to shared LLU (see Figure 3 in Chapter 3 above which shows a decline in full LLU) is significant as FSPs who wish to provide stand alone FVA or narrowband-based FVA bundled with broadband services must continue to rely in part on Eircom's PSTN/ISDN network. Shared LLU allows broadband functionality only, with voice services still being provided over Eircom's PSTN/ISDN network.

5.81 Naked DSL is not available at present. This may lead to less intensive retail competition relative to the alternative scenario of full LLU where the FSP would have greater control of services supplied over the copper access network. As set out in Chapter 4, this is an important consideration in prospectively assessing whether the FVA markets continue to require regulation or a geographically differentiated approach to regulation.

5.82 To date, no FSP has managed to generate a successful commercial proposition using WPNIA or WBA to provide standalone FVA and fixed voice calls in the LLVA market. In fact, Eircom's largest wholesale customer purchases WPNIA and WBA in conjunction with SB-WLR, thus forgoing the potential to provide managed VOIP using Eircom's wholesale broadband inputs. In any case, unbundled local loops are limited in terms of coverage and therefore the potential for expansion into the LLVA market falls only within the geographic boundary of unbundled exchanges (generally areas of high population density). Given the low levels of take-up of WPNIA in Ireland so far, significant costs and lead times would still be needed for purchasers of WPNIA inputs to achieve a sufficient presence for the purposes of effective supply of FVA in the LLVA market. Furthermore, there are other costs associated with the development of a wholesale product, such as appropriate management and billing systems.

5.83 Therefore, ComReg anticipates that the degree of competitive constraint posed by WPNIA and WBA on the LLVA market is unlikely to provide a significant competitive constraint over the timeframe of this market review. However, ComReg will monitor the performance and growth of these products in order to identify any substantial competitive constraint, if it were to arise.

5.84 Since ComReg's previous review of the FVA markets in 2007, Digiweb has launched a managed VOIP service over its Fixed Wireless Access (FWA) network. However, the take-up of FWA has fallen significantly since the last review and forms less than 4% share of total retail telephony access connections. ComReg does not expect that FWA based voice products are likely to pose any form of significant competitive constraint on Eircom in the LLVA market over the period of this review.

5.85 ComReg also considers potential competition posed by mobile networks. A mobile provider seeking to enter the LLVA market would need to provide a product which matched the quality of a fixed line, and was price competitive. This would require either the construction of a new greenfield access network or the development of a mobile (or other wireless) product which more closely resembled the FVA product in terms of price and quality. As set out in Chapter 4, converged offerings (i.e. a service where end- users are offered a combination of fixed and mobile services within one tariff package) are currently not available in the LLVA market. Prospectively, fixed/mobile converged products may emerge as a potential competitive constraint impacting the LLVA market. In practice, however, operators have yet to introduce tariff and service innovations, including flat rates and home zone products, which target FVA subscribers and which provide incentives to use the mobile phone rather than the fixed line for making calls at home or in the office. It is likely that the cost of such developments, and the economies of scale and scope involved in the fixed network, would render any such potential competition as nascent only during the timeframe of this review. Entry by mobile operators into the FVA markets has in practice been through acquisition or based on resale of Eircom's wholesale inputs. For example, Vodafone competes in the LLVA market based on resale of Eircom's wholesale inputs ("Vodafone at Home"). This approach reflects recognition on the part of mobile operators that consumers place a distinct value on mobile voice telephony as compared to fixed voice telephony. ComReg will closely monitor these emerging trends.

5.86 Another potential competitive development in relation to the supply of LLVA is the emergence of mobile/fixed converged products, such as Vodafone's 'One Net Express' product. According to product information on Vodafone's website as of 16 July 2012, key functionality associated with the One Net Express product is that incoming calls to business landline numbers can be received on employees' mobiles. The One Net Express product is marketed by Vodafone as an integrated fixed and mobile voice communications solution. The service provides a similar functional experience to other forms of fixed telephone service (though onward-forwarding of calls to the customer's Vodafone mobile telephone is marketed as a primary selling point). However, so far these products have only emerged in a niche market capacity, and appear to be targeted at small to medium size businesses with a specific set of telecommunications needs (for example, firms with a mobile workforce). While this development would indicate the potential for traditional mobile providers to increasingly use wireless-based network inputs for access to voice telephony, given their relatively early development their impact on competition is at this stage unclear. However, ComReg will monitor the performance and growth of these products in order to identify any effective competitive constraint if it were to arise.

Preliminary conclusion

5.87 For the above reasons, ComReg's preliminary view is that the supply of FVA in the LLVA market is characterised by high and non transitory barriers to entry. The available evidence suggests that FSPs have not replicated the ubiquity of Eircom's network to supply FVA in the LLVA market which would indicate that SB-WLR has a limited competitive impact in the LLVA market. LLU has not played a significant role and therefore does not remove the high and non transitory barriers to entry in to the LLVA market. Furthermore, upfront investment required in order to supply FVA in the LLVA market is considerable even where supplied over broadband networks as part of a wider communications bundle including broadband. In these circumstances, Eircom is not likely to be sufficiently constrained by a new entrant, in relation to its pricing or commercial behaviour, given the barriers associated with economies of scale, scope and density, with vertical integration and with control of infrastructure not easily replicated.

Countervailing buyer power

5.88 Another potential constraint on an undertaking's ability to exercise market power is buyer power. Countervailing buyer power can arise if, for example, a particular customer (or customers) is sufficiently important to its supplier to influence the price or other terms and conditions of supply. In its Guidelines on horizontal mergers, the European Commission notes that:

Countervailing buyer power ...... should be understood as the bargaining strength that the buyer has vis-à-vis the seller in commercial negotiations due to its size, its commercial significance to the seller and its ability to switch to alternative suppliers. [254]

5.89 In addition, the European Commission's 2009 enforcement priorities in applying Article 102 of the Treaty of the Functioning of the European Union to abusive or exclusionary conduct by dominant undertakings (the "**2009 Enforcement Priorities**")[255] are informative on the issue of CBP in competition assessments. These state that:

"Competitive constraints may be exerted not only by actual or potential competitors but also by customers. Even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength. Such countervailing buying power may result from the customers' size or their commercial significance for the dominant undertaking, and their ability to switch quickly to competing suppliers, to promote new entry or to vertically integrate, and to credibly threaten to do so. If countervailing power is of a sufficient magnitude, it may deter or defeat an attempt by the undertaking to profitably increase prices. Buyer power may not, however, be considered a sufficiently effective constraint if it only ensures that a particular or limited segment of customers is shielded from the market power of the dominant undertaking." [256]

5.90 The circumstances where CBP might be observed include where a customer (or customers):

- Accounts for a significant proportion of the supplier's total output;
- Is well-informed about alternative sources of supply; and
- Is able to switch to other suppliers at little cost to itself, or to self supply the relevant product relatively quickly and without incurring substantial sunk costs.

5.91 ComReg is required to assess the effect that these potential alternatives have in constraining Eircom's pricing behaviour. Effective CBP is that which has a broader market impact and not that which only results in a limited segment of customers benefiting from better terms and conditions.

[254] European Commission, "Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings", Official Journal C 31, 05.02.2004, paragraph 64.

[255] Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02). Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF

[256] See paragraph 18 of the 2009 Enforcement Priorities.

5.92 In terms of the guiding principles set out above, CBP is more likely when a customer accounts for a large proportion of a supplier's total output. The LLVA market is to a large extent characterised by a large number of small buyers. Therefore, at least for households, an individual customer's demand for FVA in the LLVA market amounts only to a negligible proportion of Eircom's overall 'output' (in this case an individual access line is the appropriate measure for a unit of output). Households purchase a standard contract from FVA suppliers in the LLVA market.

5.93 Some business customers are typically in a better position than households to negotiate with suppliers of FVA because, even as individual customers, they may represent a higher proportion of the supplier's revenue stream than households and are, therefore, of potential greater value to the FVA supplier. However, even the largest SME firms would individually account for only a small proportion of Eircom's revenues in the LLVA market. There is little evidence to suggest widespread ability of business customers to negotiate with Eircom regarding the terms and conditions for supply of FVA in the LLVA market. In practice, the majority of business users are on a standard contract (and hence not a negotiated commercial offer). According to the 2012 Market Research, only 20% of businesses surveyed were on a customised package.

5.94 Retail consumers are made aware of competing FVA offers through the advertising efforts of competitors in the marketplace, and further information and price-comparisons are available on ComReg's 'Call Costs' website (www.callcosts.ie). For example, Vodafone and UPC actively advertise their FVA products as well as their fixed line broadband and voice calls products through various forms of media.

5.95 Eircom controls the majority of FVA lines, however, the availability of SB-WLR has meant that alternative FSPs can purchase this wholesale product and resell it to retail customers in the form of FVA. This means that Vodafone and other FSPs provide a competing FVA service to end-users, albeit one that is based on the resale of inputs traditionally mandated in the market under consideration. Furthermore, the entry of UPC, as well as, other managed VOIP over broadband suppliers, into the LLVA market offers another supply option for some consumers of FVA and fixed calls, albeit tied with broadband.

5.96 Number portability ensures that end-users are able to switch between suppliers of FVA in the LLVA market without incurring significant sunk costs (i.e. avoid the need to re-print business cards or inform contacts of a change of telephone number). Nevertheless, the 2012 Market Research that there is a low level of switching among households and business users, 55% and 49% respectively. The research furthermore shows low levels of cost awareness among households.

5.97 Although Eircom's customers in the LLVA market are in a position to respond to changes in Eircom's commercial terms and conditions by switching to an alternative FVA supplier, the threat of losing an individual customer is unlikely to compel Eircom to negotiate with that customer regarding the terms of supply of FVA. This is because the loss in revenue resulting from that departing customer would be insignificant in relation to Eircom's overall revenues in the LLVA market. Furthermore, only those customers that have already purchased broadband or who sufficiently value the wider bundle of communication services to justify switching away from FVA are likely to view managed VOIP over broadband as a viable substitute. As set out at paragraphs 5.43 to 5.87, while alternative sources of FVA supply are becoming increasingly available in the LLVA market, there are emergent only and typically focused on particular regions. Hence the ability of consumer groups to coordinate switching behaviour or for sufficient numbers of individual customers to switch away from Eircom such as to effectively constrain its ability to price independently is likely to be undermined by the fragmentation of emerging competing sources of FVA supply. In addition, resellers lack the ability to act entirely independent of Eircom resulting in less pricing flexibility. As a result, CBP is unlikely to constrain Eircom's pricing behaviour in the LLVA market over the period of the review.

Preliminary conclusion on assessment of competition and SMP in LLVA

5.98 Having regard to all of the factors discussed above, it is ComReg's preliminary view that in the absence of appropriate wholesale and retail regulation in relation to the LLVA market:

- Eircom's high market share of 58% would be likely to persist (and would likely be over 80% absent the CPS/SB-WLR remedy);
- Existing competition from re-sellers of SB-WLR and alternative broadband access platforms delivering managed VOIP services will likely intensify and therefore would pose a degree of constraint, but are unlikely to represent an effective competitive constraint to alleviate Eircom's market power in the LLVA market over the period of this review. So far, competition from these alternative sources of FVA supply has not acted as an effective constraint on Eircom LLVA prices nationally;

- The threat of potential competition from alternative broadband platforms, and in particular through the use of Eircom's wholesale broadband products, may pose some degree of competitive constraint over the timeframe of this review. However, there is no strong evidence of future entry or expansion of a substantial scale into the LLVA market using these wholesale inputs. Furthermore, LLU uptake remains limited and the absence of a naked DSL product means that SB-WLR remains a preferred option for FSPs to provide FVA in the LLVA market. On that basis, it is unlikely that a sufficient competitive constraint will be imposed on Eircom over the duration of this review; and

- There is low CBP in the LLVA market since customers are generally small and individually represent only a negligible proportion of Eircom's revenues in that market. As such, CBP is unlikely to constrain Eircom's pricing behaviour in the LLVA market.

5.99 For these reasons, ComReg proposes that Eircom has SMP in the LLVA market.

Higher level narrowband access

5.100 A national market for higher level FVA consisting of access via ISDN FRA and PRA has been provisionally defined. For the reasons set out in Chapter 4 at paragraph 4.129 to 4.131, ComReg is of the preliminary view that the HLVA market is at this stage no wider than ISDN FRA and ISDN PRA (and hence does not include IP based solutions, such as, SIP Trunking or hosted VOIP), though these potentially emerging constraints on ISDN FRA and ISDN PRA are considered below on a forward looking basis in terms the potential impact these alternatives may have on prospective competition in the HLVA market over the period of the review.

Existing competition

Market shares

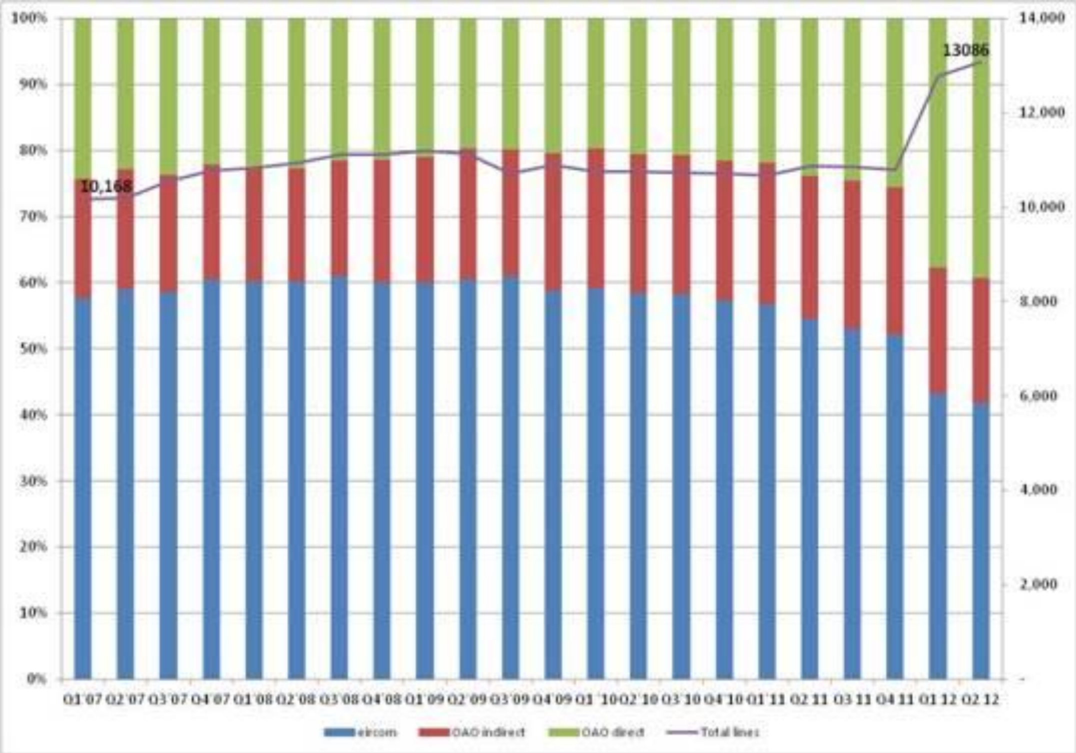
5.101 At the time of the 2007 review, retail competition in the supply of HLVA was developing with FSPs competing through a mixture of indirect (resale of Eircom's ISDN wholesale inputs) and direct connections (via FSPs' own independent networks). In 2007, FSPs were primarily supplying higher level FVA directly to customers on the basis of their own networks. Competition from cable operator was negligible. However, competition was expected to increase with improvements in the SB-WLR products and processes and a review of SB-WLR pricing in relation to FVA markets.

5.102 In contrast to the reduction in the level of demand for ISDN BRA access, Figure 27 shows that the overall size of the HLVA market (i.e. the total number of HLVA lines supplied across all FSPs) has increased primarily via greater direct supply by FSPs of this type of access at the end of 2011. Prior to that, demand for HLVA had remained broadly static since the last review. The estimated share of ISDN FRA and PRA access of total ISDN products is approximately 15%, representing approximately 13,086 lines as of Q2 2012.[257]

5.103 Competition within the HLVA market has continued to increase since 2007. Notably, Figure 27 shows that FSPs are currently increasing their market shares more significantly through an increased use of direct access paths (i.e. own network build). The proportion of FSP customers directly connected has increased in the period since the last review currently representing a 38% share of HLVA up from 28%[258] at the end of 2006. FSPs are also increasing their market share using indirect access paths (i.e. increased take up of SB-WLR), currently around 18% of HLVA compared to 6%[259] at December 2006. While FSPs continue to gain market share through a mixture of direct and indirect access paths, the gain has been more significant though direct build in 2012 with some decline in actual demand for SB-WLR provision of HLVA in the same year. This very recent evidence indicates increasing supply of FVA by operators other than Eircom on the basis of own infrastructure which may suggest that the competitive conditions on the LLVA and HLVA markets are not uniform. Facilities-based competition would appear less difficult to sustain compared to the LLVA market, though building networks out to the client is only likely to be economical for larger businesses. In view of this very recent and, therefore, short trend, ComReg proposes to review further over the consultation period the evidence as to the likely sustainability of competition in the HLVA based on increased supply of FVA over own infrastructure.

[257] ComReg Key Quarterly data June, 2012.
[258] See ComReg Document 07/29, p49.
[259] See ComReg Document 07/29, p49.

Figure 27 Evolution HLVA Market Size and Market Share



5.104 Accordingly, Eircom's market share of the HLVA market has fallen progressively from 66%[260] at the end of December 2006 to approximately 43% in Q2 2012. This fall in Eircom's market share is at a faster rate in recent quarters coinciding with the increase in HLVA supply using direct build by some FSPs. However, as well as in LLVA, basing the SMP assessment on the presence of regulation (CPS and SB-WLR are currently mandated in the HLVA market under review), may give rise to a circular argument as highlighted at paragraph 5.17 above. It is arguable that market shares of FSP reliant on such mandated inputs should not be taken into account to avoid the circularity problem.[261] In a situation where Eircom's wholesale products were not available to FSPs its share would be higher. The combined share of Eircom retail and ISDN FRA and PRA supply using SB-WLR is higher at almost 62%.

Strength of existing competition

5.105 The nature of ISDN FRA and ISDN PRA products is such that they are used solely by businesses and often in conjunction with a private branch exchange (PBX) to provide FVA and a range of value added voice services.

[260] See ComReg Document 07/29, p49.
[261] This approach is consistent with the Explanatory Memorandum to the Commission Recommendation of 17 December 2007 on relevant product and service markets.

5.106 As noted above for LLVA, the availability of SB-WLR has somewhat alleviated barriers to entry into the FVA markets since the last review. The presence of SB-WLR has provided an avenue for entry into the supply of FVA in the HLVA market, and a means by which competing suppliers can offer a competitive constraint in the retail FVA market without the need to connect directly with end-users and without any significant physical investment. CPS and SB-WLR complements FSPs supply of FVA on a direct basis to end users and has increased the FSPs (other than Eircom) overall share of the HLVA market. Table 8 shows the main purchasers of SB-WLR for the purposes of providing HLVA and include:

Table 8 Market Share Resellers of SB-WLR ISDN PRA and FRA [✂]

5.107 There are currently 12 suppliers of HLVA over ISDN PRA and FRA using SB-WLR. To avoid the circularity problem referred to in paragraph 5.17 above, reseller market share should not be taken into account here to the extent that it relies on an input which derives from ex ante regulation of the market being analysed. However, even taking the latter market share into account ComReg notes that the degree of constraint posed in the HLVA market by what are effectively resellers of Eircom's SB-WLR product is limited. In particular, resellers lack the ability to act entirely independently of Eircom, and have less flexibility in terms of product design, pricing, and ultimately the architecture and development of the underlying infrastructure.

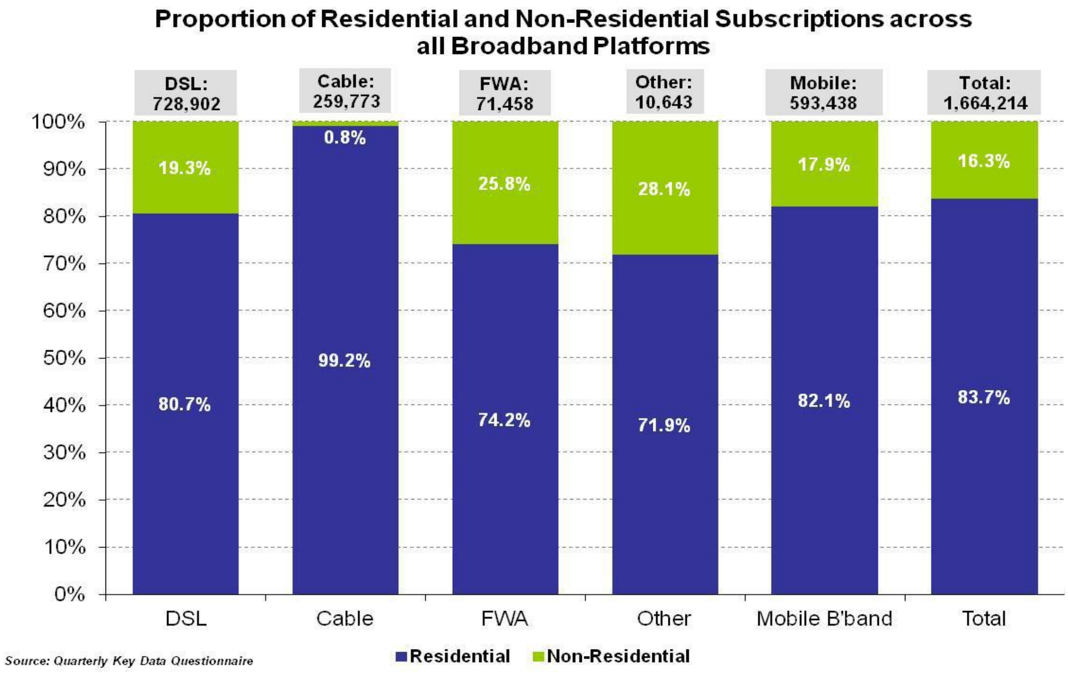
5.108 Moreover, re-sellers may now purchase wholesale indirect access from FSPs other than Eircom, such as, BT and Imagine, and sell on to their retail end users. While there is an additional competitive dynamic with BT acting as wholesaler for suppliers of FVA and other retail services, nevertheless, given that this service based competition is based on resale of Eircom's wholesale inputs it is a more restricted form of competition when compared to the increasing infrastructure based competition.

5.109 FSPs continue to compete with each other on the HLVA market through a mixture of indirect and direct connections (in addition to direct supply some FSPs supply FVA also using SB-WLR), and since late 2011 primarily on the basis of direct access paths. Given this very short and recent trend ComReg is closely monitoring the likely sustainability of competition on this basis. Direct access is offered by some FSPs, other than Eircom, exclusively in the HLVA market (FSPs do not compete through direct access in the LLVA market). Excluding Eircom, a total of five FSPs provide HLVA over ISDN FRA and PRA using their own infrastructure, the largest of which is Colt, followed by BT. UPC also supplies HLVA to business customers based on ISDN PRA access, though on a limited basis. Based on the available information it would appear that no operator supplies HLVA only based on LLU inputs and, hence, all direct access over FSPs' networks is own build.

5.110 As set out in Chapter 4, Eircom and FSP supply of HLVA over ISDN FRA and PRA would at present appear to face limited competition from IP based alternatives, for example, SIP trunks or hosted PBX telephony solutions. These products are nascent in Ireland and have yet to become more widely available. Many such SIP trunk offers are only in the planning phase and there would appear currently relatively few SIP trunks in Ireland. Any switching to these IP based alternatives will possibly take time in view of the likely need for equipment and systems upgrade.

5.111 In addition, competition from managed VOIP based broadband bundles in the HLVA market would currently appear more limited compared to the LLVA market, where cable is increasingly emerging as a strong competitor to the PSTN network for the purposes of providing FVA– see Figure 28. Based on available data most of the managed VOIP subscriptions currently active in Ireland are provided over UPC’s cable network which primarily suppliers FVA to residential end users. In addition, the 2012 Market research shows that 54% of businesses with a FVA subscription purchase FVA independently of broadband and other communication services.

Figure 28 Broadband subscription by subscription type



5.112 Some FSPs are currently building out their networks directly to the client premises suggesting that in some circumstances it continues to be economical to do so for larger businesses. This trend suggests that the limited availability and take up of IP alternatives is unlikely to act as an effective competitive constraint on Eircom with respect to HLVA over the period of the review, though we will continue to closely monitor the data in this regard. These potential emerging constraints are further considered at paragraph 5.127 to 5.129 below.

Ability to price independently

5.113 As with LLVA, Table 9 highlights that the headline ISDN FRA and PRA prices for connection have remained unchanged while rental prices have increased by 4.9% since the last review despite reductions in the LLU price and, subsequently, in 2008, the reduction in the SB-WLR price. If there was effective competition in the HLVA market we might expect to see prices decreasing since the last review.

Table 9 Evolution of ISDN FRA and PRA line rental and connection prices

Product	No. Channels	Connection Charge 2007-2012	Monthly Rental 2007	Monthly Rental 2012	% Percentage Increase
ISDN FRA	16	€3,299	€158.72	€166.50	4.9%
ISDN PRA	30	€3,299	€264.11	€277.06	4.9%

5.114 Moreover, a review of Eircom's recent regulatory accounts[262] would indicate that Eircom has earned a positive gross margin on ISDN FRA and PRA access (substantially over that of PSTN and ISDN BRA access) suggesting that prices for HLVA are at a higher level than if competition were effective.

5.115 In general, ISDN lines are usually sold as part of a package of business services and ISDN prices are not typically the focal point of competition. There appears to be limited incentive to price ISDN FRA and PRA low in order to drive demand for complementary products. Where ISDN FRA or PRA nears the end of its life cycle and where overtime businesses are increasingly likely to move to IP based solutions or broadband connectivity, incentives to reduce prices to gain market share are likely to be limited. As businesses migrate to IP based products, those businesses that continue to purchase ISDN FRA and PRA may be less price sensitive. The 2012 Market Research shows that almost half (49%) of businesses have never switched their FVA supplier and there is generally low awareness in terms of the cost of their FVA services.

Barriers to entry and potential competition

5.116 As with the LLVA market, ComReg's assessment of potential competition considers whether entry and expansion in the relevant HLVA market is likely to such an extent that it would constrain Eircom's ability to act, to an appreciable extent, independently of its competitors, customers or consumers over the timeframe of this review (i.e. two to three years). The threat of market entry, where it is credible, probable and timely, can be a disciplining factor which might impact the behaviour of FSPs within this relevant market. Barriers to entry and expansion are set out in detail at paragraphs 5.45 and 5.46 above.

5.117 In considering the potential for entry or expansion in the HLVA market, ComReg has assessed current market conditions and, in this context, considers that entry and expansion in the HLVA market could potentially come from a number of sources, including:

- Entry of new managed VOIP based /broadband FSPs which may include services provided via DSL, FWA or fibre;
- Entry through other infrastructure or technologies (i.e. other IP based solutions, such as, fibre based SIP Trunking, hosted PBX /telephony); and
- Entry of fixed-mobile integrated products and/or networks.

[262] See http://siteassets.eircom.net/assets/static/pdf/regulatory/HCA_Financial_Statements_signedV3.pdf

Control of infrastructure/inputs not easily replicated

5.118 The SMP Guidelines cite control of infrastructure not easily duplicated as one relevant criterion for assessing whether SMP exists. As noted above for LLVA, barriers to entry into the HLVA market since the last review are somewhat reduced. That is, SB-WLR allows FSPs to offer HLVA without any significant physical investment. It is relatively simple by FSPs wishing to supply HLVA to add FVA based on these access products to their existing range of products, and the incremental cost to FSPs of doing so is likely to be modest. Regulated CPS/SB-WLR prices also allow new entrants into the HLVA market to obtain the same access price as Eircom, thereby providing a level playing field. It is evident that FSPs continue to rely on the wholesale input SB-WLR to enter, and expand their presence in, the HLVA market. Nevertheless, SB-WLR does not offer competing FSPs in the HLVA market the same degree of commercial flexibility and independence as what could otherwise be leveraged through network investment.

5.119 Although it is not feasible for any other FSP supplying HLVA to replicate Eircom's ubiquitous network on any significant scale, it is of note that supply of HLVA is predominantly via directly connecting to the end user. Furthermore, a significant proportion of direct supply of HLVA is over alternative infrastructure independent of Eircom. It is anticipated that customers switching to alternative HLVA suppliers with increasing act o constrain Eircom.

5.120 As with the LLVA market, the impact of LLU on competition in the supply of HLVA is likely to continue to be limited over the period of this review. FSPs have only deployed LLU on a very limited scale across both the business and residential markets. LLU to date has been predominantly used for broadband access. LLU therefore does not remove high and non-transitory barriers to enter the HLVA market. While alternative broadband infrastructure will provide some degree of competition in relation to HLVA, it will not likely replicate Eircom's ubiquitous network and, hence, it will not act to effectively constrain Eircom in the supply of HLVA over ISDN PRA and FRA over the period of the review.

Sunk costs

5.121 As set out above, FSPs can and have entered the HLVA market by building networks out to the client. This would indicate that the significant sunk costs associated with the direct supply of FVA are not in all cases prohibitive. However, upfront investment required in order to provide an ISDN FRA and PRA offering directly to end user is considerable and, as such, direct build is likely only to be economical for larger businesses. These costs or investments would take the form of fibre roll out and/ or xDSL enabling DSLAM rollout in a copper network. There are also costs associated with enabling ISDN FRA and PRA functionality, providing capacity to support the installed base of lines and undertaking operational support systems updates, etc. Directly connecting businesses would in any case involve significant cost (which may not be sufficiently offset by the higher upfront cost paid by customers in relation to the higher level access products). Therefore, FSPs face significant sunk costs involved in entry to, and expansion by extending the network within, the HLVA market. In terms of resellers of HLVA,

Economies of scale, economies of scope and economies of density

5.122 As noted in relation to the LLVA market, the supply of FVA is characterized by economies of scale scope and density. It is highly probable that FSPs are not able to achieve economies of scale which compare with Eircom. In other words, in the size band in which FSPs would be operating, Eircom achieves economies of scale and FSPs do not. The impact of economies of scale and/or density is likely not as pronounced in the HLVA market relative to the LLVA market. This is largely because ISDN FRA and PRA are products targeted at a particular type of business customer – they are not consumer products. That is, the higher concentration of premises likely to use HLVA services in urban areas makes the deployment of alternative infrastructure economic in some cases. The supply of HLVA products is therefore well suited to niche marketing strategies.

5.123 Economies of scope may also be achieved by the incumbent supplier of FVA in the LLVA market, where horizontal or vertical integration exists. For example, BT and Colt may benefit from economies of scope by providing a range of fixed telephony services in addition to basic voice call services all on one network. Economies of scope may act as a deterrent to entry into the HLVA market, if the potential competitor is unable to replicate the same range of products as Eircom and has to absorb higher cost into a lesser number of products.

5.124 In practice barriers to entry and expansion are likely to remain. For example, to win ISDN FRA and PRA contracts FSPs other than Eircom may well need to offer a whole range of attractive communication products which makes market entry more difficult. In addition, barriers to expansion and larger scale entry are likely to be more significant where ISDN FRA and PRA is purchased by a relatively small number of businesses (compared to the number of end-users buying residential FVA) making it more difficult and costly to reach them. The 2012 Market research reveals that few businesses are purchasing ISDN for access to fixed voice call services (12%) with the majority purchasing FVA outside of a bundle.

5.125 The availability of SB-WLR mitigates to an extent the barriers to entry posed by economies of scale, because it allows FSPs to enter the HLVA market without incurring significant fixed costs. This means that entrants are better able to scale their business appropriately for their customer base, and grow their business incrementally in line with the growth of their customer base. As set out at paragraph 5.104 to 5.111, FSPs are using SB-WLR combined with direct access to compete in the HLVA market.

Vertical integration

5.126 There are some vertically integrated providers of HLVA that operate independently of Eircom and are, therefore, less vulnerable to Eircom's wholesale pricing strategy. But these providers are generally still limited in scale and geographic reach compared to Eircom's network. Moreover, there is a significant proportion of FSPs that compete in the HLVA market through resale of Eircom's SB-WLR product and hence, for these re-sellers, they lack the ability to act entirely independently of Eircom, and have less flexibility in terms of product design, pricing, and ultimately the design and development of the underlying infrastructure. As with the LLVA market, there is potential for Eircom as a vertically integrated operator to take measures upstream to stifle competition in the downstream HLVA market (which is a retail market), by engaging in anticompetitive cross-market tactics that harm entrants (e.g. margin squeeze). The potential types of competition problems in relation to FVA are assessed in detail in Chapter 6.

Overall strength of potential competitors

5.127 Eircom is likely to face increased competition in the future both from rival SB-WLR based re-sellers of ISDN FRA and PRA and from direct suppliers of HLVA. From Figure 27, it is clear that SB-WLR re-sellers have been successful in winning market share, although there is little evidence that they have imposed a particularly strong competitive constraint on Eircom's prices and margins in the HLVA market. As well as in the LLVA market, resellers lack the ability to act entirely independently of Eircom. The SB-WLR retail minus mechanism does not constrain Eircom in the level of the retail and wholesale prices that it sets, only the differential between those prices. However, there appears to be growing competition from direct suppliers of ISDN FRA and PRA access which may indicate that the structure or nature of competition in the HLVA market will likely continue to change in the near future. Though ISDN FRA and PRA appear to be mature products and even likely to be moving towards the end of their life-cycle, evidence suggests that there remains some incentive for retail competitors of Eircom to make major investments aimed at winning market share, where the opportunity arises and where economical to do so.

5.128 In the HLVA market, the anticipated change over the next 2 to 3 years is the increased availability and potential use of IP based solutions, such as, fibre based SIP Trunking or broadband connectivity possibly as alternatives to ISDN FRA and PRA. Going forward, however, ComReg envisages that ISDN FRA and PRA access services will likely decline slowly as businesses seek to replace systems and switch to IP based solutions. It is likely that in the current economic climate that many businesses would seek to extend the lifetime of their existing telecoms equipment where possible. Indeed, demand for ISDN FRA and PRA remained broadly stable over the period since the last review and has seen a significant increase in recent quarters. In view of the low take up and availability of IP based solutions currently and, as set out at paragraph 4.130 above, the potential obstacles to their increased take up, there is uncertainty over the speed of take up of IP services among larger business users. It is as yet unclear to what extent businesses migrating towards IP based products would lead to any significant increase in the competitive constraints on Eircom in the HLVA market. Nevertheless, ComReg will monitor these developments and their potential emerging constraint on ISDN FRA and PRA products.

Preliminary conclusion

5.129 The above factors indicate control of a ubiquitous network of exchange lines which could not easily be replicated. Economies of scale are evident not only in the sunk costs required to construct an access network, but are achieved also in exchange line support services. This means that Eircom achieves economies of scale both in the physical network and in the management of the network, and that these economies act as a barrier to entry into the HLVA market.

Countervailing buyer power

5.130 ComReg considers whether customers are likely to possess CBP in the HLVA market. In so doing, ComReg examines whether sufficient[263] CBP exists such that it results in Eircom not being able to sustain retail access charges (i.e. line rental and connection prices) that are above the competitive level (i.e. the effective exercise of CBP is one which results in HLVA charges being constrained to levels that would be achieved in a competitive market outcome). It is ComReg's view that effective CBP is that which results from customers being of sufficient size or importance to Eircom and having the ability to credibly switch to alternative sources of supply such that it deters Eircom from profitably increasing its prices. It is also of note that effective CBP is that which has a broader market impact and not that which only results in a limited segment of customers benefiting from better terms and conditions.

5.131 As noted above for the LLVA market, CBP is more likely when a customer accounts for a large proportion of Eircom's total output, is well informed about the alternative sources of supply and is able to switch at little cost.

5.132 Larger business customers are in a better position than households to negotiate with suppliers of FVA because as individual customers they represent a higher proportion of the supplier's revenue stream and are therefore of greater value to the supplier. While residential users and small SMEs have no CBP, larger businesses using ISDN FRA and PRA connections may have a greater degree of CBP because it should be credible for them to switch away from Eircom to competing SB-WLR or CPS FSPs or, in some instances, an LLU supplier, such as, BT. In the HLVA market, businesses have the opportunity to switch to alternative SB-WLR suppliers, and prices can be individually negotiated. Furthermore, there are a number of FSPs in this market that directly supply HLVA on the basis of their own infrastructure.

[263] The existence of some level CBP is not, in itself, a sufficient indicator. Rather, it must be sufficiently strong such that it results in eircom's line rental and connection prices being prevented from rising above a level that would pertain in a competitive market outcome.

5.133 However, even if larger SME or corporate purchasers were in a position to exert CBP on Eircom, it is probable that these businesses would not represent a exert a sufficient constraint on Eircom's market power in the HLVA market in its entirety, on the basis of the following reasons:

- The largest SME firms would account for only a small proportion of Eircom's total revenues in the HLVA market; the 2012 Market Research shows that companies with more than 500 employees represent only 2% of the businesses surveyed and for which HLVA would be appropriate;
- There is little evidence to suggest widespread ability of HLVA customers to negotiate with Eircom regarding the terms and conditions for the supply of HLVA. In practice, the majority of business users are on a standard contract (and hence not a negotiated commercial offer). According to the 2012 Market Research, only 20% of businesses surveyed were on a customised package;
- In addition, only 16% of business surveyed reported that their voice plans (i.e. with a discount) are linked to a minimum spend which upon reaching would provide them with potentially a greater discount;[264]
- Moreover the 2012 Market Research indicates that informal procurement policies are more prevalent among businesses surveyed;
- While the financial cost of switching between FSPs is likely to be low, there are likely to be transaction, search and other administrative costs. As ISDN FRA and PRA are likely to be sold as ancillary or additional services to the more general needs of a business, changing supplier could often lead to inconvenience having to deal with multiple FSPs e.g. dealing with multiple bills. The 2012 Market Research shows that there is a low level of switching even among business users with almost 50% reporting that they had never switched;[265] and
- In general there is a low level of cost awareness among these end users. For example, 43% of businesses are unable to estimate their average monthly telecommunications spend.[266]

[264] A minimum spend is where potentially a greater discount (reduced per minute rates) is offered upon reaching a pre-committed per monthly revenue spend.
[265] The 202 Market Research.
[266] The 202 Market Research.

5.134 For the above reasons, ComReg's preliminary conclusion is that CBP does not exist to the extent which would be likely to impose a sufficient competitive constraint on the price-setting behaviour of Eircom, such that it would credibly offset its market power to behave, to an appreciable extent, independently of competitors, customers and ultimately consumers in the HLVA market over the lifetime of this review.

Overall preliminary conclusion on competition assessment and SMP in HLVA

5.135 Having regard to all of the factors discussed above, it is ComReg's preliminary view that, in the absence of appropriate wholesale regulation in relation to the HLVA market:

- While Eircom's market share at 43% has declined this is in the presence of wholesale regulation in the market. Absent the availability of SB-WLR Eircom's share of HLVA would be much higher. Assuming all SB-WLR based provision migrated to Eircom if it were no longer available its share would be as high as 62% which is strongly indicative of dominance;
- This together with Eircom's apparently high level of profitability and other factors described above is indicative of dominance;
- ComReg proposes to monitor the increase in FSPs directly supplying HLVA over own infrastructure in recent years for sustainability and its impact on competition; and
- The threat from existing wholesale competition or retail constraints from alternative platforms, such as, broadband or SIP trunks are not likely to pose an effective competitive constraint on Eircom's market power in the HLVA market over the period of the review.

5.136 ComReg is of the preliminary view that on a forward looking basis increased provision of self supplied ISDN PRA and FRA combined with the availability of the SB-WLR remedy that wholesale regulation only should be sufficient of itself to promote competition in this market. Accordingly, it is proposed that exiting retail obligations on Eircom in relation to HLVA are withdrawn subject to an appropriate notification period. These issues are set out in detail in Chapters 6 and 7. As noted earlier, ComReg is in the process of conducting a market review of the market for wholesale voice origination (Market 2). As part of that process ComReg will consider whether it is appropriate to mandate SB-WLR as a remedy on that market. ComReg will reconsider at that point the question of Eircom's SMP in that context and whether the market for HLVA can be de-regulated entirely on the basis of upstream wholesale regulation in Market 2.

Designation of undertakings with SMP

5.137 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 as having significant market power.

5.138 Having regard to the preliminary conclusions of the above market analysis, ComReg is therefore of the preliminary view that:

- Eircom should be designated as having SMP in the national market LLVA; and
- Eircom should be designated as having SMP in the national market for HLVA.

Q. 13 Do you agree with ComReg's preliminary conclusions on the competition analysis and assessment of SMP? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Chapter 6

6 Remedies

Introduction

6.1 In Chapter 4, ComReg has defined separate relevant FVA markets (i.e. the LLVA and HLVA markets, referred to collectively in this chapter as the "relevant FVA markets"). For each market, ComReg has analysed the market characteristics and it is of the preliminary view that Eircom holds SMP in each market. This would indicate the potential for competition problems to arise over the review period in question, thereby justifying the imposition of some form of *ex ante* regulation.

6.2 In accordance with Regulation 27(4) of the Framework Regulations, where an undertaking is designated as having SMP in a relevant market, ComReg is obliged to impose on such an undertaking such of the obligations set out in Regulations 9 to 13 of the Access Regulations and/or Regulation 13 of the Universal Service Regulations as it considers appropriate (or maintain or amend such obligations where they already exist), in order to address the competition problem(s) it has identified.

6.3 In relation to regulatory controls on retail services, Regulation 13(1) of the Universal Service Regulations specifies that where (a) as a result of the market analysis, ComReg determines that a given retail market is not effectively competitive and (b) where it concludes that obligations imposed under Regulations 9 to 13 of the Access Regulations (i.e. in this instance CPS, SB-WLR and their supporting obligations) would not result in the achievement of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations, ComReg shall also impose appropriate regulatory obligations on undertakings identified as having SMP on the given retail market.

6.4 Regulation 8(6) of the Access Regulations provides that obligations imposed in accordance with Regulation 8 of the Access Regulations must be:

- Based on the nature of the problem identified;
- Proportionate and justified in light of the objectives set out in section 12 of the Communications Regulation Act 2002; and
- 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.

6.5 In addition, 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 the access proposed in relation to the capacity available; the initial investment made by the facility owner; and the need to safeguard competition in the long term.

6.6 Finally, Regulation 13(2) of the Universal Service Regulations states that any obligations imposed by ComReg under Regulation 13(1) of the Universal Service Regulations must be based on the nature of the problem identified under the market analysis and be proportionate and justified in the light of the objectives laid down in section 12 of the Communications Regulation Acts 2002 to 2011, and Regulation 16 of the Framework Regulations.

6.7 These considerations are taken into account, as appropriate, when assessing whether and what form of obligation to impose and are also discussed in further detail in the context of the RIA found in Chapter 7.

6.8 Apart from the above, in considering the imposition of remedies on an undertaking which it proposes to designate with SMP, ComReg has also taken the following into account:

- the **European Regulators Group (ERG)**[267] **common position on the approach to appropriate remedies** in the electronic communications networks and services regulatory framework;[268] and

- the **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 service.

6.9 In the following, ComReg seeks to identify those competition problems which, absent regulation, could potentially arise in the relevant FVA markets and, having done so, ComReg then goes on to consider the imposition of appropriate remedies in order to address such identified competition issues.

[267] 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.

[268] Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework, ERG (06)33, May 2006, available at http://www.erg.eu.int/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf

Types of competition problems

6.10 In determining what form of *ex ante* regulatory remedies are warranted in the relevant FVA markets, ComReg seeks to identify those competition problems which could potentially arise in the relevant FVA markets (a) assuming SMP regulation is absent (consistent with the Modified Greenfield approach)[269] and (b) taking account of the structure and characteristics of the relevant FVA markets (and adjacent markets) in question as outlined in Chapters 4 and 5. ComReg then goes on to consider the imposition of appropriate remedies in order to address such identified competition issues.

6.11 In the absence of regulation in the LLVA and HLVA markets, Eircom (as an undertaking designated with SMP) would have the potential ability and incentive to influence a range of competition parameters, including prices, innovation, output and the variety or quality of goods and services provided. There are two broad types of competition problems which may arise involving conduct by an SMP undertaking that is aimed at:

- Exploiting end users by virtue of its SMP position in the relevant market; and
- Restricting or distorting competition in related markets by engaging in exclusionary practices, that is, leveraging vertically and/or horizontally its market power into related markets.

6.12 ComReg would note that it is neither necessary 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 abuses materialising given that Eircom has been identified on a preliminary basis with SMP in the relevant FVA markets, and thus has both the ability and incentives to engage in exploitative and exclusionary behaviour to the detriment of competition and ultimately end-users.

[269] As outlined in the Recommendation 2007 and the independent report by Martin Cave, Ulrich Stumpf, Tommaso Valletti on behalf of the European Commission. July 2006.

Exploitative practices

6.13 Despite the introduction of wholesale measures (i.e. CPS, SB-WLR and supporting remedies) to promote competition in the relevant FVA markets, and the introduction of measures to facilitate customer switching (e.g. number portability),[270] Eircom has retained market power in the provision of FVA in both the LLVA and HLVA markets, in particular, for customers who do not yet have internet access or who purchase and value the FVA service as standalone. These end-users have relatively less choice of access providers compared with end-users who have decided to purchase broadband and/or voice in a bundle or large volume business users.

6.14 As any service provided to the end user uses the access network, control over the supply of FVA to the end user raises competition concerns at the retail level of the market (i.e. in the LLVA and HLVA markets) and with regard to the provision of wholesale services to FSP and network services (such as interconnection) to competing network operators. Eircom, a vertically-integrated FSP with SMP in markets at both wholesale and retail levels (including WPNIA, WBA and FVA), has control of important wholesale inputs necessary for an existing or entrant FSP to offer FVA. Many FSPs require effective ("fit for purpose") access to Eircom's wholesale inputs to enable them provide a competing source of supply of FVA, at either the wholesale or retail level. Given the economies of scale (and often economies of scope) identified in the relevant FVA markets, FSPs (other than Eircom) typically have not replicated the Eircom network.

6.15 As set out in Chapter 5, Eircom continues to have SMP on the relevant FVA markets – its continuing high market share in both the LLVA and HLVA markets, in particular, where the market shares of FSPs reliant on SB-WLR are excluded and the limited existence of other factors which would act to significantly dilute Eircom's market power within the timeframe of the review (e.g. CBP, the constraint from cable and mobile networks), would suggest that competition problems persist and will likely persist.

[270] The Universal Services Directive requires NRAs to ensure that number portability is available for both geographic and non geographic numbers on fixed and mobile networks.

6.16 In terms of exploiting market power in the provision of FVA in the LLVA and HLVA markets, it is ComReg's preliminary view that Eircom, having SMP in the relevant markets, would have the ability and incentives to engage in exploitative practices, such as excessive pricing.[271] Absent regulation, Eircom, as the SMP operator, would rationally have the incentive to maximise profits through raising prices and/or maintaining prices at a level higher than if competition were effective, ultimately to the detriment of end users. As outlined in Chapter 5, there is currently insufficient competitive pressure from resellers of SB-WLR and CPS or from FSPs offering bundled broadband and voice at the retail level to prevent Eircom from behaving, to an appreciable extent, independently of its competitors and customers in the LLVA and HLVA markets.

6.17 In addition, there is some risk of inefficiency or inertia – Eircom with SMP in the relevant FVA markets may also, by virtue of the lack of effective competitive pressure in those markets, engage in costlier and less efficient methods of production, consequently resulting in higher prices for wholesale customers and their consumers than would otherwise exist under competitive market conditions. For example, Eircom would not yet appear to be effectively constrained nationally to any significant degree by alternative suppliers of FVA in each of the LLVA and HLVA markets in view that it has yet to offer wholesale naked DSL or bundled voice over broadband to retail end users.

6.18 Competition concerns also arise in relation to potential exploitative behaviour at the wholesale level. For example, Eircom with SMP may push up the wholesale costs of its retail competitors (i.e. who are also its wholesale customers). Strategic benefits could be accrued through Eircom charging an unjustified high price (and hence set at a higher level than if competition were effcetive) for network services or wholesale services for resale. Such exploitative practice would restrict or distort competition by raising rivals' costs in downstream access (and related calls markets) thereby enabling Eircom to maintain and/or gain market share and profits at the expense of its rivals. Eircom would have strong incentives to supply wholesale inputs at a level higher than if competition were effective whenever FSPs are more efficient in the provision of FVA than Eircom itself on the LLVA and HLVA markets absent regulation.

[271] Economic theory suggests that where a firm possesses market power it is in a position to increase prices above and/or reduce output below competitive levels, thereby allowing the firm to earn profits that are higher than normal. These higher profits effectively create a wealth transfer from the customer to the firm with market power.

Exclusionary practices

6.19 Another potential competition problem arises when an integrated operator 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. Eircom's position as a vertically integrated FSP and with SMP in the relevant FVA markets means that, absent regulation, it would have the potential and the incentive to leverage market power into related markets (both horizontally and vertically linked). This could enable Eircom to maintain and/or strengthen its position in those related markets and potentially also reinforce its existing market power in the LLVA and HLVA markets, or to strengthen upstream market power.

6.20 Given the close relationship between the relevant retail FVA services and relevant upstream services (i.e. wholesale FVA, wholesale interconnection, WIPNIA and WBA services) as well as with other downstream retail services (e.g., retail calls, retail broadband, etc), competition problems with both vertical and horizontal leveraging are likely. Absent regulation, Eircom is in a position to control the use of wholesale inputs and would have incentives to use or leverage its control to affect SMP in downstream retail FVA markets (or other retail markets where it is also active) through price and/or non-price means.

6.21 For example, bundling can be used as a strategic tool by Eircom in the LLVA and/or HLVA markets to leverage that SMP into related horizontal markets (e.g. into retail broadband), or between markets at different stages of the supply chain (e.g. from a wholesale market to related retail markets or vice versa), or it can be used as a defensive tool to protect the operator's position of SMP in the LLVA and/or HLVA market (and/or a strong position in the retail voice calls markets). For example, there is a risk of the actual retail price for FVA being masked when sold as part of a broader package including other services such as retail (fixed/mobile) calls, retail broadband, etc. This lack of clarity as to the effective retail price for bundled FVA might potentially facilitate the application of a margin squeeze vis-à-vis the wholesale inputs, thereby undermining the effectiveness of those upstream inputs and impeding the ability of access seekers to effectively replicate the entire retail bundle.

6.22 Given that consumers typically buy a narrow bundle of (complementary) services consisting of standalone line rental and various call types (or a voice plan which offers a discount off headline prices), and that Eircom provides a wholesale input on which other FSPs rely to compete in downstream markets, coupled with its own significant presence in downstream markets, there is a range of exclusionary strategies that can be used in order to horizontally leverage market power in the provision of LLVA and/or HLVA into adjacent retail markets. For example, at the retail level, Eircom might offer a bundle of free or heavily discounted call minutes with its line rental in exchange for a high access charge, which might make its voice plans more favourable than the alternative of buying calls from a CPS operator. However, this currently is likely to be less of a risk with the introduction of SB-WLR in 2004 and consumer preference for a “one stop shop” or single billing.

6.23 In addition, there is a risk that Eircom would have ability and incentives to apply a margin squeeze between wholesale costs and retail prices (i.e. leave an insufficient margin between the upstream and downstream prices), so that an efficient downstream FSP is forced to exit the market or is unable to compete effectively. For example, Eircom has the ability and incentive to induce a margin squeeze vertically between the wholesale and related retail FVA markets and vice versa. That is, the level of the wholesale access price charged to resellers may be such that the margin between it and the FSP’s retail FVA price on the LLVA and/or HLVA market may, having regard to objective cost differences, be insufficient to cover the downstream retail costs faced by efficient FSPs. There is also a risk of margin squeeze between the relative prices of different wholesale products across the value chain (e.g. as between LLU and SB-WLR). If Eircom were to apply a margin squeeze in respect of the FVA element of a bundled offering this may undermine the effectiveness of the mandated wholesale inputs since FSPs may not be able to effectively replicate the access element of that bundle (due to an insufficient margin). Should Eircom engage in such behaviour it could have the effect of (i) reinforcing its SMP in the LLVA and HLVA markets and / or (ii) leveraging that SMP into related markets due to an inability on the part of FSPs to effectively replicate the access part of the bundle.

6.24 In the context of standalone FVA, there is a risk on a prospective basis that Eircom may engage in defensive leveraging of market power to maintain a position of SMP in the relevant FVA market itself. Competition from the wider bundles of communications products does not currently represent an effective competitive constraint on standalone FVA service. Eircom with SMP, at both the wholesale and retail levels (including WPNIA, WBA, wholesale call origination and transit and FVA), would have the ability and incentive to price key inputs at successive levels of the value chain in such a way that could prevent competitors from developing a sufficiently large customer base that would enable them to justify making efficient investments – that would be required to unbundle local loops and/or for the roll out of any new technologies, likely with the advent of NGA services. Since FSPs without their own infrastructure would continue only to resell Eircom's wholesale products, this could limit competition to the dimension of price and prevent competition from developing through more innovative offers. Where FSPs continue to be resellers, dependent on the Eircom network such exclusionary practice would restrict or distort long-term competition and ultimately harm end users (in particular, those who value standalone voice services and also those who value the wider bundle of communications services) in terms of choice, price and quality.

6.25 Even if wholesale prices were regulated in order to prevent Eircom leveraging by price means, it might leverage its position of SMP by non-price means. Non exhaustive examples of potential use or leverage of control over the necessary wholesale inputs to reinforce SMP in the relevant FVA markets include product access and development, service delivery and assurance and access to information.

6.26 Eircom would have considerable scope and incentives to restrict, deny or withdraw access to its network or to provide such access on less favourable terms to FSPs absent regulation. This would affect FSPs' ability to compete in the relevant FVA markets and ultimately result in harm to end users, potentially in the form of unjustified high access prices, reduced quality of service or choice as well as delaying innovations and investment. A refusal to deal/denial of access to CPS and SB-WLR may manifest itself as a constructive denial and not necessarily an outright and categorical refusal to supply. This could include delaying tactics, such as, protracted negotiations in respect of the provision of CPS and SB-WLR access, and/or seeking unreasonable terms and conditions associated with such access.

6.27 ComReg notes that in the period since the launch of the SB-WLR product there has been considerable take-up. Furthermore, as set out in Chapter 3, there have been a number of developments in relation to wholesale inputs supporting the delivery of FVA. For example, there have been a number of product improvements since the 2007 review including, enhancements to the Unified Gateway and the introduction of web-services functionality allowing FSPs to submit orders and report faults in real-time to Eircom Wholesale's Unified Gateway. In addition, an improved SLA (capturing both provisioning and service assurance targets) was introduced in 2009 after negotiation between Eircom and FSPs. It is now considered that SB-WLR is a mature product and that changes typically are intended to further improve the product. Requests for further improvements to the SLA are addressed as part of the industry forum.

6.28 However, progress in relation to product development, service delivery and assurance is a direct result of regulation. Eircom may not have the incentive to provide effective wholesale access absent regulation. There are some instances where Eircom fails to meet USO targets for repair. Concerns may also continue in relation to SB-WLR repair, in particular, during storm periods. The performance of SB-WLR (and retail inputs) continues to be monitored on a quarterly basis through the Key Performance Indicator ("KPI") report.

6.29 Other possible competition problems may arise with respect to the discriminatory use or withholding of information and discrimination on quality and pricing parameters. Eircom as a vertically integrated operator would have complete control over wholesale inputs and therefore may have preferential access to customer information, which could afford it an advantage in relation to its position at the retail level (e.g. the availability of real time access to necessary information which is not available to downstream competitors or potentially reduced functionality).

Preliminary Conclusion

6.30 In summary, ComReg's preliminary view is that, absent regulation, there is the potential and incentive for Eircom with SMP in the LLVA and HLVA markets to engage in exploitative and exclusionary behaviours which would have impacts on competition and customers. ComReg has provided examples of potential competition problems and the potential impact of these and, as a consequence, the imposition of appropriate *ex ante* remedies is considered both justified and necessary.

Q. 14	Do you agree with the types of competition problems identified by ComReg, as outlined above? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Approach to specifying and implementing remedies

6.31 In view that SMP has been identified in each of the relevant FVA markets, ComReg is obliged to consider what remedial regulatory obligations may be required to address the competitive failure. According to the SMP Guidelines, the purpose of imposing *ex ante* obligations on undertakings designated as having SMP is to ensure that they cannot use their market power to restrict or distort competition in the relevant market, or to leverage market power into an adjacent market to the detriment of end users.

6.32 ComReg has considered potential types of competition problems which, absent regulation, could arise in the LLVA and HLVA markets by virtue of Eircom having SMP. On the basis of the competition and SMP analysis in Chapter 5 above and, because competition problems specific to the LLVA and HLVA markets persist and will persist, ComReg is of the preliminary view that Eircom's SMP in each of these markets cannot be appropriately addressed in the absence of appropriate and proportionate SMP obligations.

6.33 In this section, ComReg considers the appropriate response to the findings of SMP and the imposition of appropriate and proportionate remedies to mitigate such competition problems, as appropriate. The analysis considers the required regulatory intervention at the wholesale level in the first instance. In accordance with Regulation 13(1) of the Universal Service Regulations, only where residual competition problems have been identified, even in the presence of the proposed wholesale measures, are remedies at the retail level justified.[272]

Regulatory controls at the wholesale level

6.34 ComReg is obliged, where an SMP designation is proposed, to impose at least one obligation. The SMP Guidelines also make it clear that the designation of SMP, without imposing any regulatory obligations, is inconsistent with the provisions of the regulatory framework, notably Article 27 (4) of the Framework Regulations.[273] In the first instance, ComReg is required to impose on an undertaking designated with SMP such of the obligations provided for by Regulations 9 to 13 of the Access Regulations as ComReg considers appropriate:

- Access to, and use of, specific network elements and associated facilities;
- Transparency;
- Non-discrimination;

[272] In accordance with Regulation 13(1) of *the USO Regulations*, S.I. no 337 of 2011.
[273] The SMP guidelines, paragraph 21 and 114.

- Accounting separation;
- Price control; and
- Cost accounting.

6.35 Eircom is currently subject to SMP regulation in relation to FVA pursuant to ComReg Decision D07/61 and, as a consequence, is subject to wholesale obligations in relation to the following:

- SB-WLR;
- CPS; and
- A selection of remedies supporting CPS and SB-WLR access obligations (including obligations relating to access to and use of specific network facilities, transparency, non-discrimination, accounting separation, price control and cost accounting).

6.36 ComReg has considered whether the option of regulatory forbearance or withdrawal of existing SB-WLR and CPS remedies is appropriate for either of the relevant FVA markets. However, 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 Chapter 5, ComReg set out its view that neither the LLVA nor the HLVA market is effectively competitive (or likely to become effectively competitive within the timeframe covered by this review). At paragraphs 6.10 to 6.34, ComReg has identified a range of competition problems that are likely to arise in these markets, absent regulation.

6.37 In view of this, absent the imposition of any remedies within the LLVA and HLVA markets, it is ComReg‘s view that such markets would not likely function effectively. For example, replication of Eircom’s access network to any significant degree has not materialised as a feasible option in relation to the LLVA and HLVA markets. SB-WLR and CPS and a selection of remedies supporting the latter access obligations are clearly necessary to provide FSPs with sufficient access to wholesale inputs, so that equivalent retail services may be offered by FSPs in the LLVA and HLVA markets using Eircom’s network.

6.38 Absent these wholesale obligations, FSPs would likely not be able to procure the relevant wholesale inputs to provide FVA in the LLVA and HLVA markets (or telephony services provided in adjacent markets, such as, calls) which would limit the effectiveness of competition on complementary retail fixed telephony markets (e.g., calls and/or bundles with broadband). As a result, there is a risk of Eircom would exploit market power (i.e. FVA prices could be set at an excessive or inefficient level) and engage in a range of exclusionary strategies (i.e. margin squeeze) thereby reinforcing its SMP on the LLVA and HLVA markets and, also potentially reducing competition on related markets.

6.39 Because of the high and persistent barriers to entry (particularly, the fact that other operators would need to build out a fixed network of their own), absent wholesale regulatory intervention via CPS/SB-WLR and LLU, competition would be virtually non-existent in relation to the LLVA market and restricted in the HLVA market and Eircom's SMP would be strengthened with even higher market share. Absent regulation, Eircom's market shares would be over to 80% in the LLVA market and closer to 62% of the HLVA market respectively. The aim of SB-WLR is to promote competition by addressing Eircom's SMP in the relevant FVA markets, and to enhance the effectiveness of the CPS remedy in the calls market. In conjunction with the CPS provision, the availability of SB-WLR has stimulated competition in retail markets, as FSPs using SB-WLR provide packages of both access and calls to end-users. In particular, it has facilitated consumer demand in respect of single billing thereby reducing somewhat barriers to competition at the retail level.

6.40 ComReg recognizes the positive impact of SB-WLR (together with CPS) on competition in the relevant FVA markets. Only in the event of a market shift to a significantly higher proportion of FVA via direct access or alternative infrastructures, including mobile, could ComReg consider the removal of SB-WLR and CPS (and their supporting measures) as obligations for the relevant FVA markets. In these circumstances, ComReg's preliminary view is that wholesale de-regulation or regulatory forbearance in each of the relevant FVA markets is not, therefore, appropriate, proportionate or justified.

6.41 For the above reasons, it is ComReg's preliminary view that the existing obligations (SB-WLR and CPS obligations and the various supporting obligations, including access to and use of specific network facilities, transparency, non-discrimination, accounting separation, price control and cost accounting) imposed on Eircom under Decision D07/61 continue to be needed to ensure competition in each of the proposed LLVA and HLVA markets.[274]

[274] The European Commission in its comments letters has urged NRAs to impose WLR in order to render CS/CPS obligations more effective, see case EE/2010/1051.

Preliminary conclusion

6.42 In this Consultation Paper. ComReg is proposing that:

- Eircom should continue to be subject to the SB-WLR and CS/CPS obligations (and related supporting obligations) in force under Sections 5 and 6 of the Decision Instrument Appendixed to Decision D07/61 on an interim basis pending the outcome of ComReg's separate forthcoming consultation on the wholesale call origination market.[275] In the event of any SMP finding as part of that latter wholesale market review process, ComReg will consider whether the CS/CPS/SB-WLR remedy should be imposed as a wholesale remedy in that context..

Q. 15	Do you agree with ComReg's proposed approach to the existing CS/CPS/SB-WLR obligations (and various related supporting obligations) imposed on Eircom under Sections 5 and 6 of the Decision Instrument appendixed to Decision D07/61? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Regulatory controls at the retail level

6.43 Regulation 13(1) of the Universal Service Regulations provides that ComReg may not impose SMP obligations on a given retail market unless it concludes that obligations imposed under Regulations 9 to 13 of the Access Regulations would not result in the achievement of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011, and Regulation 16 of the Framework Regulations.

6.44 Eircom is currently subject to a range of retail SMP obligations as set out in Decision D07/61[276] and Decision 03/07[277] relating to the following:

- price control via a retail price cap measure (see Decision 03/07)
- obligation not to unreasonably bundle services (see Decision D07/61)
- transparency obligation (see Decision D07/61)

[275] As noted above in this Consultation Paper, ComReg plans to issue a consultation in relation to its Market Review: Wholesale Call Origination and Transit Services during Q4 2012.
[276] Decision Notice and Decision Instrument – Designation of SMP and SMP Obligations; Market Analysis: Retail Fixed Narrowband Access Markets (ComReg Decision No. D07/61, Document No. 07/61, 24 August 2007).
[277] Decision Notice and Decision Instrument; SMP Obligation: Retail Price Cap Remedy – Fixed Narrowband Access Markets (ComReg Decision No. 03/07, Document No. 07/76, 1 October 2007).

- cost accounting obligation (see Decision D07/61)
- obligation not to show undue preference to specific end-users (see Decision D07/61)

6.45 Having made its preliminary finding that the relevant FVA markets are not effectively competitive and having sought to identify those competition problems which, absent regulation, could potentially arise in the relevant FVA markets, ComReg now considers the imposition of appropriate remedies in order to address those identified competition problems. In particular, ComReg considers the various alternative means by which it might intervene, including (i) SMP regulation at the wholesale level only (i.e. forbearing from any SMP regulation at the retail level, or (ii) SMP regulation at the wholesale and retail levels. In accordance with the spirit of the EU framework, ComReg's general regulatory approach is that where satisfactory competition exists at the wholesale level, regulation of affected retail markets could be relaxed or lifted. Such an approach may achieve the objectives of protecting the consumer and promoting competition by the least intrusive means, thus lightening any regulatory burden. Deregulation would allow Eircom complete freedom over all its retail access prices. This may in appropriate circumstances be beneficial for competition as it could lead to more innovative pricing, such as, price bundles and increased competition where competing operators are able to identify commercial opportunities.

6.46 ComReg believes that the main constraint on Eircom's prices in the relevant FVA markets in future should be provided by competition. Competition is increasing (but not yet effective) and ComReg believes it should be stimulated further by the continued availability of SB-WLR and increasing competition from managed voice over broadband for at least a proportion of end users who value broadband or wider bundles of communications services and/ or IP based solutions, such as, SIP Trunking. Despite Eircom's continued SMP in the relevant FVA markets, it may be a proportionate response (given wholesale developments) not to impose any future price control or other retail remedies. In assessing the appropriate form of regulation following the SMP assessment, ComReg considers the extent to which other factors – competitive pressure and other regulation – could potentially mitigate Eircom's SMP in the relevant FVA markets and therefore its pricing freedom in these relevant markets.

6.47 In considering which remedies, if any, are warranted at the retail level, ComReg first examines the extent to which wholesale remedies are sufficient to address the competition problems which have been identified. Only if the wholesale remedies are considered insufficient to address the competition problems identified in relation to the relevant FVA markets should any additional remedies at the retail level be considered.

6.48 LLU has not had an appreciable impact on the competitiveness of the FVA markets. To date, in any region, FVA has not been supplied as a stand-alone product over purchased WPNIA. On a forward looking basis, given the structural changes in the market (in particular planned rollout of NGA and the increasing take-up of broadband and managed VOIP services) FSPs other than Eircom may offer combined broadband and FVA using LLU on a more significant scale, in particular, in the residential market. However, ComReg considers that LLU is likely not to be a sufficient remedy to competition problems in the relevant FVA markets over the period of this review. Considerable barriers to entry into the FVA markets associated with LLU remain in terms of the time and costs to provide physical connectivity to exchanges (see Chapter 4). Therefore, LLU alone is unlikely to have a significant impact on the relevant FVA markets over the period of this review.

6.49 Although wholesale intervention is a necessary condition for promoting competition in the relevant FVA markets, ComReg believes that wholesale intervention is not sufficient of itself to adequately protect all consumers who face rising FVA prices. In spite of the strong growth of SB-WLR, Eircom has retained market power in the provision of FVA to end users in each of the LLVA and HLVA markets. Furthermore, the SB-WLR retail minus mechanism, as currently provided for in Section 6.11 of the Decision Instrument Appendixed to Decision D07/61 (and as subsequently amended by the direction referred to in ComReg Information Notice 08/19), does not constrain Eircom in the level of the retail and wholesale prices that it sets, only the differential between those prices. Evidence demonstrates that Eircom as the SMP operator in the markets identified in Decision D07/61 has had the ability and incentive to increase line rental charges and /or maintain them at a higher level than if competition were effective (see Chapter 5).

6.50 In view of this, some of the competition concerns persist and, ComReg believes, will persist in spite of regulatory measures at the wholesale level. For example, even in the presence of the mandated wholesale products there is sufficient scope and incentives for Eircom with SMP to sustain retail prices above competitive levels over the period of the review (as such high prices would be unlikely to attract significant entry)[278] or potentially to engage in an anti-competitive margin squeeze, possibly facilitated by bundling, which would serve to undermine the effectiveness of the relevant wholesale remedies. While wholesale measures are necessary, ComReg believes that they are not likely sufficient to address the competition problems identified in the relevant FVA markets.

[278] ComReg already noted that BT in the UK in the absence of price controls at the retail level has increases its standard line rental charges. ComReg also notes that many NRAs have imposed retail

6.51 Therefore, ComReg considers that solely relying on wholesale obligations imposed under Regulations 9 to 13 of the Access Regulations would not result in the achievement of ComReg's objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations. As yet, ComReg does not see indications that the service-based measures, or infrastructure-based competition through broadband infrastructure (mainly the cable network) or LLU would unlikely change the provisional finding of SMP in respect of LLVA and HLVA within the period of this review. There remains the need to consider additional remedies at the retail level in order to prevent Eircom from potentially engaging in exploitative and exclusionary behaviour that would restrict or distort competition and ultimately harm consumers. As such, ComReg needs to intervene where appropriate at the retail level, while remaining cogniscent of measures in place at the wholesale level.

Q. 16 Do you agree that, in addition to maintaining the existing wholesale obligations of CS/CPS and SB-WLR (and various related supporting obligations) imposed on Eircom under Sections 5 and 6 of the Decision Instrument Appendixed to Decision D07/61, some form of SMP obligation(s) should be imposed on Eircom at the retail level in order to protect consumers by promoting and ensuring effective competition in the relevant FVA markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

price control to safeguard against consumer harm given also their findings of SMP in relation to FVA, for example, CMT the Spanish regulator and AGCOM the Italian regulator.

6.52 In terms of additional retail regulation, there are 2 options which can be considered:

- Removal of retail obligations on the HLVA market (maintain retail regulation on PSTN and ISDN BRA service in LLVA market); and
- Removal of retail obligations on the LLVA market (maintain retail regulation on ISDN FRA and PRA services).

6.53 ComReg is interested in the views of respondents on possible relevant FVA markets to be considered for inclusion or exclusion from any future retail remedies, and the underlying analysis outlined below.

Proposed withdrawal of existing retail remedies for the HLVA market

6.54 One option is possible retail de-regulation of the HLVA market (i.e. forbearance from imposing any retail SMP obligations on the HLVA market, but maintaining retail SMP obligations on the LLVA market).

6.55 While it is ComReg's preliminary view that Eircom retains an SMP position on the HLVA market, ComReg believes that it is likely appropriate to rely at this stage on wholesale SMP obligations alone to address retail SMP and, hence, not to impose any SMP obligations at the retail level as regards the HLVA market. ComReg's preliminary view is that wholesale obligations combined with increased competition from alternative infrastructure and /or, prospectively, from emerging products such as hosted PBX telephony and SIP Trunks, are possibly sufficient to address the competition problems identified above in respect of the HLVA market. ComReg considers that maintaining CPS/SB-WLR and the supporting remedies will enhance the level of competition in the HLVA markets through the encouragement of FSPs to compete directly with Eircom via these resale inputs and move up the ladder of investment as appropriate. In particular, as set out in Chapter 5 the proportion of direct access offered by FSPs in this market has significantly increased in 2011 and ComReg is closely monitoring this trend in terms of sustainability.

6.56 However, Eircom would appear to be able to maintain HLVA prices at a higher level than would be if competition were effective. Chapter 5 highlighted that prices for ISDN PRA and FRA are significantly above a competitive level. After an increase of 5% in ISDN PRA and FRA line rental in 2007 these prices have remained broadly stable. This suggests that again competitive pressures alone have not yet constrained prices to a competitive level. Some form of retail remedies (e.g., a retail price cap) could, in principle, apply to HLVA services until there is further evidence as to the sustainability of increased competition based on supply of FVA directly over own networks and LLU. The appropriateness or not of retail remedies for this market would depend on the speed of the development of greater competition based on alternative sources of supply – own networks, IP alternatives, including, SIP Trunking and, from the mobile networks who are increasingly targeting businesses with attractively priced bundles.

6.57 The main impact of lifting retail regulation on the HLVA market would be to allow Eircom to increasingly offer bespoke prices to businesses or more attractive bundle offers. This would enable Eircom to compete more flexibly with FSPs. This, in turn, should encourage greater competition by FSPs and the mobile networks with the anticipated outcome of lower prices for businesses and incentives for more innovation and differentiation. To the extent that small businesses are at risk from unjustified increases in HLVA prices, they would also be protected by any implementation of a retail price cap in respect of PSTN and ISDN BRA services – small businesses tend to have a broadly similar demand profile to households and can easily switch to residential FVA offers as appropriate.

6.58 On balance, given the greater prospective competition for HLVA, ComReg considers that it may be appropriate to rely solely on wholesale measures to regulate competition on the retail HLVA market.

Preliminary conclusion

6.59 Accordingly, ComReg is proposing for the HLVA market to withdraw the existing retail SMP obligations on Eircom.

Q. 17 Do you agree with the proposed removal of the existing retail SMP obligations imposed on Eircom in the HLVA market and reliance on wholesale remedies alone as a means of addressing the competition problems in that market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Proposed retail SMP remedies in the LLVA market

6.60 In terms of the LLVA market, ComReg considers that some form of retail SMP regulation continues to be needed to prevent Eircom from exploiting and or leveraging its SMP.

6.61 Given the unlikelihood that FSPs will pose a significant competitive constraint on Eircom in the LLVA market over the review period, ComReg believes that, in addition to wholesale remedies, retail regulation of some or all of the available services in the LLVA market given the predominance of residential users is appropriate. In the longer term, in the absence of retail price control and other retail obligations Eircom may exploit market power by setting and/or maintaining prices for PSTN and ISDN BRA above a competitive level to the detriment of consumers.[279] Furthermore, as set out above, there is a risk that Eircom might take measures to stifle competition in the LLVA market (and related markets) by engaging in potentially anti-competitive cross market tactics, as discussed at paragraphs 6.19 to 6.30 above.

6.62 Many consumers (in particular low spending consumers who depend on the phone but make few calls or those in rural areas) are primarily dependent on the provision of FVA by Eircom or re-sale of FVA products. Choice of access provider is more limited in the LLVA market as compared to the HLVA market as barriers to entry are high given economies of scale and scope. Moreover, where the consumer does not value broadband internet access or voice over broadband sufficiently to justify purchasing those services on a bundle basis they would have relatively less choice in terms of a viable substitute to the PSTN voice service (compared to the subset of the population that purchase and value a wider bundle of communication services), as set out at paragraph 4.58 and Figure 19 above. There are a significant proportion of consumers who continue to primarily value only the standalone FVA product. These consumers are likely to need continued protection against the risk of potential price rises where competitive pressure alone in respect of the FVA services they purchase is too weak.

[279] ComReg notes that BT increased line rental charges despite promising to freeze prices until 2013. Customers who paid for line rental a year in advance saw the cost increase 7.5% from £120 to £129. A further charge of £1.50 a month may apply if a customer does not make at least two calls a month on their landline, which is possible if the line is used only to access BT's broadband services. BT said its price freeze promise applies only to its standard line rental charge, for customers who pay monthly. (See Nomura, February 2012).

6.63 The general objective of retail remedies is to ensure end users (in particular less active FVA users) are protected through further promoting competition, encouraging efficient investment and innovation in the relevant retail market, in line with ComReg's obligations as set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations. Given ComReg's preliminary view that Eircom has SMP on the LLVA market, and that wholesale measures are insufficient at this stage to constrain Eircom's pricing in that market or to prevent a restriction or distortion of competition through exclusionary practices, ComReg believes that forbearance from imposing retail SMP obligations on the LLVA market is not appropriate or justified.

6.64 Accordingly, and for the reasons set out in detail below, it is ComReg's preliminary view that it is appropriate to impose the following retail SMP obligations on Eircom in the LLVA market pursuant to Regulation 13 of the Universal Service Regulations:

a) Price control via a retail price cap measure

b) Obligation not to unreasonably bundle services

c) Transparency obligation

d) Cost accounting obligation

e) Obligation not to show undue preference to specific end-users

Q. 18 Do you agree with ComReg's view that it is appropriate to impose retail SMP obligations on Eircom in the LLVA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

6.65 In the following, ComReg sets out its preliminary views on the imposition of specific retail SMP obligations in the LLVA market.

a) Price control

6.66 Regulation 13(1) of the Universal Service Regulations provides that where ComReg determines that a given retail market is not effectively competitive and that the imposition of wholesale obligations under Regulations 9 to 13 of the Access Regulations would not achieve the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011[280] and Regulation 16 of the Framework Regulations,[281] it is required to impose appropriate retail obligations on the operator designated with SMP on that market.

6.67 Eircom is currently subject to a retail price control obligation under Decision 03/07[282] by virtue of its designation with SMP in the higher and lower level retail fixed narrowband access markets as set out in Decision D07/61. In Decision 03/07, adopted in October 2007, ComReg imposed on Eircom a retail price control in the form of a RPI-X cap, that is, CPI-0 (inflationary increases in line rental and connection prices only). An individual RPC (separate price caps) applies to each of Eircom's (a) ISDN FRA and PRA services and (b) PSTN and ISDN BRA services.

6.68 Chapter 5 of this Consultation Paper has set out ComReg's preliminary view that the LLVA and HLVA markets are not effectively competitive and that Eircom has SMP on each of those markets. In addition, as regards the LLVA market specifically, as set out at paragraphs 6.60 to 6.64 above, ComReg is of the preliminary view that obligations imposed under the Access Regulations would not likely achieve on their own the objectives contained in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations in the period of this review. Eircom has maintained its position of SMP in the provision of LLVA to end-users even in the presence of wholesale regulatory measures and regulation in adjacent markets, such as, LLU.

[280] Communications Regulation Act 2002 (No. 20 of 2002), as amended by the Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), the Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and the Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011) (the "Communications Regulation Acts 2002 to 2011").

[281] European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011(S.I. No. 333 of 2011) ("the Framework Regulations").

[282] Decision Notice and Decision Instrument; SMP Obligation: Retail Price Cap Remedy – Fixed Narrowband Access Markets (ComReg Decision No. 03/07, Document No. 07/76, 1 October 2007).

6.69 A consideration relevant in assessing the appropriateness of a RPC is the extent of pricing freedom afforded to Eircom by virtue of its SMP in the LLVA market. Chapter 6 above identified that the main concern arising from a finding of SMP in the relevant FVA markets is the ability of Eircom to set and/or maintain prices, to the detriment of consumers, at a level higher than such prices would be if competition were effective. Although wholesale intervention is a necessary and appropriate means of promoting competition in the LLVA market, ComReg believes that wholesale-only intervention is not sufficient of itself to adequately protect all consumers who face rising access prices. The SB-WLR retail minus mechanism, as currently provided for in Section 6.11 of the Decision Instrument Appendixed to Decision D07/61 (and as subsequently amended by the direction referred to in ComReg Information Notice 08/19), does not constrain Eircom in the level of the retail and wholesale prices that it sets, only the differential between those prices.

6.70 A specific price cap on PSTN and ISDN BRA services could offer consumers better protection where concerns over exploitation of market power may be most significant. After an increase of 5% in prices of PSTN and ISDN BRA in 2007, they have remained broadly stable which is consistent with ComReg's view that prices for PSTN and ISDN BRA are not sufficiently constrained by effective competition. Overall, prices for PSTN and ISDN BRA are at a higher level than if competition were effective. On balance, ComReg believes that the option of abandoning any form of a retail price control in the LLVA market is premature in the face of Eircom's continued SMP in that market. ComReg is mindful of the risk that, in the absence of some form of a price control to address Eircom's SMP, consumers may face rises in PSTN and ISDN BRA access prices. ComReg believes that a RPC in the LLVA market is the minimum necessary to protect consumers, notably residential users, against excessive pricing of line rental (i.e. PSTN and ISDN BRA access prices). ComReg is particularly concerned that those consumers who do not have fixed broadband internet access and, hence who have less choice in relation to their supplier of FVA, should not face unjustified price increases in circumstances where the competitive process is not operating effectively.

6.71 The objective for the imposition of a RPC on PSTN and ISDN BRA access prices is to ensure that prices for retail customers reflect efficient cost and that Eircom has incentives to deliver services as efficiently as possible. Where Eircom is engaged in offering services subject to increasing competition as well as services that are not yet demonstrably effectively competitive, it may have incentives to cross subsidise the price of the more competitive service, financing that through potential excessive pricing of non competitive services. Appropriate use of a RPC may also reduce incentives for Eircom to leverage its SMP in relation to PSTN and ISDN BRA access and will serve to protect consumers against any potential exploitative abuse by Eircom of its SMP in the LLVA market.

6.72 Further to the proposed designation of Eircom with SMP in the LLVA market (as discussed in Chapter 5 above), and the types of competitive problems identified in above in this Chapter 6, in particular, that Eircom has considerable scope and incentives to sustain prices above competitive levels, ComReg considers that it is appropriate and justified to maintain a safeguard RPC in relation to Eircom's PSTN and ISDN BRA services. ComReg believes that this would prevent excessive pricing of FVA via PSTN and ISDN BRA, while also allowing further competition to develop in the LLVA market which would act ultimately act as a check on price itself. One of the objectives for any RPC is to facilitate the rapid development of effective competition in the supply of FVA and related telecommunications services. Setting too stringent a RPC could have a potential adverse effect on competition, service innovation and long term investment. The existing RPC was set such that it acts as a safeguard cap protecting consumers against the risk of excessive price increases by Eircom in the provisioning of FVA while simultaneously facilitating the development of competition, innovation and long term investment.

6.73 For the above reasons, ComReg considers that it is appropriate, proportionate and justified that Eircom should be subject to a price control obligation in the form of a retail price cap measure in the LLVA market, pursuant to Regulation 13(3) of the Universal Service Regulations. For the purpose of further specifying the detailed implementation of that obligation, ComReg considers that it is appropriate that the existing RPC, as set out in Decision 03/07, should continue to apply to Eircom but only insofar as PSTN and ISDN BRA are concerned.[283] It is proposed that the existing RPC, as set out in Decision 03/07, will continue to apply to PSTN and ISDN BRA pending a further review by ComReg of the RPC which ComReg plans to undertake in 2013).

[283] It should be noted that ComReg does not propose, at present, to extend the application of the current retail price cap to FVA provided via VOIP, notwithstanding the fact that VOIP-based FVA forms part of the proposed LLVA market. This is because Eircom does not currently offer VOIP-based FVA at the retail level on a mass market basis. ComReg will keep the scope of the retail price cap under review in light of market developments.

Preliminary conclusion

6.74 ComReg proposes that Eircom should be subject to a price control obligation in the form of a retail price cap measure in the LLVA market, pursuant to Regulation 13(3) of the Universal Service Regulations. For the purpose of further specifying the detailed implementation of that obligation, ComReg considers that it is appropriate that the existing RPC, as set out in Decision 03/07, should continue to apply to Eircom but only insofar as FVA provided via either PSTN or ISDN BRA is concerned (pending a further review of the RPC which ComReg plans to undertake in 2013).

Q. 19 Do you agree that it is appropriate that Eircom should be subject to a price control obligation in the form of a retail price cap measure in the LLVA market? As regards the detailed implementation of that obligation, do you agree that it is appropriate that the existing RPC, as set out in Decision 03/07, should continue to apply to Eircom insofar as FVA provided via either PSTN or ISDN BRA is concerned (pending a further review of the RPC by ComReg)? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

b) Obligation not to unreasonably bundle services

6.75 Regulation 13(2) of the Universal Service Regulations provides that any obligations imposed by ComReg under Regulation 13(1) must be based on the nature of the problem identified under the market analysis and be proportionate and justified in the light of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations and may include *inter alia* requirements to ensure that the undertaking concerned does not –

….. (d) unreasonably bundle services

6.76 In Decision D07/61,[284] ComReg, having designated Eircom with SMP on the higher and lower level retail fixed narrowband access markets (as those markets were defined in that decision), imposed an obligation on Eircom not to unreasonably bundle services falling within the scope of those markets (essentially, FVA via PSTN and ISDN) with other retail services.

[284] Decision Notice and Decision Instrument - Designation of SMP and SMP Obligations Market Analysis: Retail Fixed Narrowband Access Markets' dated 24 August 2007.

6.77 In effect, Decision D07/61 requires Eircom to offer all retail fixed narrowband access services (falling within the scope of the markets defined in that decision) on a standalone basis, thereby prohibiting pure bundling.[285] In addition, paragraphs 6.216 to 6.234 of ComReg Document No. 07/26[286] (i.e. the Response to Consultation document which preceded the publication of Decision D07/61) discussed the potential nature of unreasonable bundling. In particular, ComReg noted that Eircom should ensure that any bundle avoids a margin squeeze and passes a net revenue test. ComReg is currently consulting on the further specification of the obligation not to unreasonably bundle services as contained in Decision D07/61 (see ComReg Documents 11/72 and 12/63 in this regard).

6.78 ComReg acknowledges that the bundling of end-user services can be, and usually is, welfare-enhancing. Bundling is not anti-competitive *per se*, and indeed may generate significant efficiencies for end users (e.g. in terms of lower prices, increased choice, lower transaction costs etc). Consumers may value receiving multiple services from one provider and with only one bill. Also, the price of a bundle will generally be less than buying the elements individually, and this price may simply reflect productive efficiencies that should be encouraged.

6.79 However, ComReg also recognises that bundling can in certain circumstances have certain negative consequences for competition and consumers. First, there may be potential for operators with SMP to leverage strong market and branding positions and to use bundling strategies for anti competitive reasons. This may allow an operator that already has SMP in one market (in this instance, the LLVA market) to leverage its SMP into closely related markets. For instance, Eircom might offer FVA bundled with a package of free, or heavily discounted, call minutes (including both fixed and mobile calls). In that context, and where alternative suppliers are constrained in building the same kind of bundles as the incumbent operator, the bundling of retail products can potentially distort competition by leveraging into closely related markets and by distorting pricing in such markets.

[285] Pure bundling refers to a situation in which products can only be purchased in a bundle. In contrast, under mixed bundling, a consumer has choice between purchasing the entire bundle or each product on a standalone basis.

[286] Response to Consultation and Consultation on Draft Decision - Market Analysis: Retail Fixed Narrowband Access Markets (Response to Consultation 06/39 and Consultation on Draft Decision), ComReg Document No. 07/26, 4 May 2007.

6.80 ComReg considers that bundling could also be used to protect Eircom's SMP in the LLVA market itself. The inability of new entrants to compete profitably with the SMP operator's bundled offerings may increase entry barriers in the LLVA market. This would make entry from operators in related markets (for instance, the mobile market) more difficult and thereby risk foreclosing competition.

6.81 In addition, there is some risk that Eircom may induce a margin squeeze through bundled pricing. This occurs when equally, or more, efficient operators are unable to replicate profitably Eircom's bundled offering, and are effectively foreclosed from competing with Eircom in respect of its bundled products. For example, if Eircom were to apply a margin squeeze in respect of the FVA element of a bundled offering, other operators might not be able to effectively replicate the FVA element of that bundle due to insufficient margin. Such behaviour by Eircom could have the effect of (i) reinforcing its SMP in the LLVA market and/or (ii) leveraging that SMP into related markets due to an inability on the part of other operators to effective replicate the FVA part of the bundle.

6.82 Also, when certain products are bundled together then it may be difficult to distinguish the relevant price/cost of each input, which may create problems in ensuring that the SMP operator is complying with its wholesale obligations. This is particularly important when Eircom is also supplying the wholesale inputs that allow FSPs to compete in the LLVA market. It is important that the price differences, including discounts, between bundled services and services offered separately should be transparent, objectively justified, and reflect underlying costs. For example, there is a risk of the actual retail price for FVA being masked when sold as part of a broader package including other services such as retail (fixed/mobile) calls, retail broadband, etc. This lack of clarity as to the effective retail price for bundled FVA might potentially facilitate the application of a margin squeeze vis-à-vis the wholesale inputs, thereby undermining the effectiveness of those upstream inputs and impeding the ability of access seekers to effectively replicate the entire retail bundle.

6.83 ComReg considers that the competition concerns regarding bundling outlined in paragraph 6.19 to 6.30 above would not be adequately addressed solely by means of SMP obligations imposed at the wholesale level and that it is appropriate and proportionate to impose retail SMP obligations in respect of unreasonable bundling pursuant to Regulation 13(2)(d) of the Universal Service Regulations.

6.84 First, ComReg considers it appropriate to impose a general obligation on Eircom not to unreasonably bundle services, insofar as the LLVA market is concerned. Such an obligation would effectively mean that Eircom is not entitled to unreasonably bundle FVA services (falling within the scope of the LLVA market) with other retail services.

6.85 Second, for the reasons outlined above, ComReg considers that end-users must be entitled to purchase FVA (provided via PSTN or ISDN BRA) on a standalone basis. If Eircom was entitled to compel end-users to purchase FVA (provided via PSTN or ISDN BRA) only as part of a wider bundle also comprising other services, this would limit consumer choice and would undermine the requirements of Eircom's existing Universal Service Obligation ("USO") designation.[287] It should be noted that the 2012 Market Research indicates that a significant proportion of consumers continue to value FVA provided, for example, without broadband.

6.86 Finally, for the reasons outlined above, a further key element of the obligation that ComReg proposes to impose is that Eircom must ensure that bundles containing FVA provided via PSTN or ISDN BRA (when bundled with other services) avoid a margin squeeze and comply with a net revenue test.[288]

6.87 In this regard, it should be noted that ComReg is currently consulting on the further specification of the obligation not to unreasonably bundle services under ComReg Decision D07/61 (see ComReg Consultation Documents 11/72 and 12/63) (referred to herein as the "Bundles Consultation"). ComReg proposes in this Consultation Paper that the forthcoming ComReg decision (if any) resulting from the Bundles Consultation will continue in force as if made pursuant to the general obligation not to unreasonably bundle services proposed in this Consultation Paper and will thus constitute a further specification of that obligation. For the avoidance of doubt, this would mean that the further specification proposed in the Bundles Consultation would apply insofar bundles containing FVA provided via PSTN or ISDN BRA are concerned. It should be noted that ComReg intends to notify its draft measures resulting from the Bundles Consultation to the European Commission pursuant to Article 7 of Directive 2002/21/EC within the coming days.

[287] See, for example, Regulations 3 and 9 of the Universal Service Regulations.

[288] It should be noted that ComReg does not propose, at present, to extend this obligation to FVA provided via VOIP, notwithstanding the fact that VOIP-based FVA forms part of the proposed LLVA market. This is because Eircom does not currently offer VOIP-based FVA at the retail level on a mass market basis. ComReg intends to keep the scope of this proposed obligation under review in light of market developments.

Preliminary conclusion

6.88 For the above reasons, it is considered appropriate, proportionate and justified that Eircom should be subject to an obligation not to unreasonably bundle LLVA services with other retail services. ComReg believes that such an obligation is necessary in order to address the competition problems identified above. Specifically, ComReg proposes that Eircom should be subject to the following retail SMP obligation in the LLVA market (which are set out in the Draft Decision Instrument in Appendix 4):

- A general obligation not to unreasonably bundle services falling within the scope of the LLVA market with other services at the retail level;
- An obligation to offer FVA (provided via PSTN and ISDN BRA) on a standalone basis;
- An obligation to ensure that bundles containing FVA provided via PSTN or ISDN BRA (when bundled with other services) avoid a margin squeeze and comply with a net revenue test. In this regard, it is proposed that the ComReg decision (if any) resulting from the Bundles Consultation will continue in force as if made pursuant to the general obligation not to unreasonably bundle services outlined at point (i) above and will thus constitute a further specification of the obligation outlined at point (i) above.

Q. 20 Do you agree that the obligations outlined above (and set out in the Draft Decision Instrument at Appendix 4) in respect of bundling should be imposed on Eircom? Are there other approaches that would address the identified competition problems? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

c) Transparency: Publication and notification of terms and conditions

6.89 Regulation 13(1) of the Universal Service Regulations provides that where ComReg determines that a given retail market is not effectively competitive and that the imposition of wholesale obligations under Regulations 9 to 13 of the Access Regulations would not achieve the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011and Regulation 16 of the Framework Regulations, it is required to impose appropriate retail obligations, including, a potential transparency obligation, on the operator designated with SMP on that market.

6.90 Eircom is currently subject to a transparency obligation under Decision 03/07[289] by virtue of its designation with SMP in the higher and lower level retail fixed narrowband access markets as set out in Decision D07/61. At present, Eircom is obliged under Decision D07/61 to notify ComReg no later than five working days in advance of proposed changes to the terms and conditions of supply within the markets defined in that decision. Eircom is also obliged under Decision D07/61 to publish in its public offices and on its website, all changes in relation to terms and conditions of supply promptly, once such changes come into effect. The decision also requires Eircom to supply services falling within the scope of the relevant markets only at the published price. Finally, Decision D07/61 provides that Eircom is required to ensure that transparent information in relation to applicable prices and tariffs and standard terms and conditions in respect of access to and use of publicly available telephone services is available to end users and consumers and published.

6.91 In accordance with Regulation 15 of the Universal Service Regulations, ComReg has a role in ensuring that transparent and up to date information on applicable prices and tariffs for all operators is available to end users and consumers. As set out in Schedule 3 of the Universal Service Regulations, ComReg may specify information to be published by operators including information on standard tariffs indicating the services provided and the content of each tariff element (e.g. charges for access, all types of usage charges, maintenance charges), and including details of standard discounts applied and special and targeted tariff schemes and any additional charges.

6.92 ComReg's Decision D11/04[290] in relation to ComReg's Code of Practice for Tariff Presentation,[291] sets out the requirements on all undertakings in respect of presentation of tariffs to end-users. The code established three principles in respect of tariffs presented. These are Accurate Tariff Information, Comprehensive Tariff Information and Accessible Tariff Information. The principles are designed to ensure that operators present transparent and up to date information on standard tariffs covering access, all types of usage charges, maintenance charges and including details of standard discounts applied and special and targeted tariff schemes. Regulation 14 (2) (d) of the Universal Service Regulations furthermore requires undertakings' contracts with end-users to "*specify in a clear, comprehensive and easily accessible form, at least— ………" "details of prices and tariffs, the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained*.

[289] Decision Notice and Decision Instrument; SMP Obligation: Retail Price Cap Remedy – Fixed Narrowband Access Markets (ComReg Decision No. 03/07, Document No. 07/76, 1 October 2007).
[290] See ComReg document (04/86).
[291] http://www.comreg.ie/_fileupload/publications/ComReg0486.pdf

6.93 In this Consultation Paper, ComReg considers whether it is necessary for additional transparency obligations to be imposed on Eircom pursuant to Regulation 13(1) of the Universal Service Regulations, in light of its proposed designation with SMP on the LLVA market. Given the competition concerns identified above in this Consultation Paper, and in order to ensure that the objectives of protecting end users while promoting competition are met, ComReg considers that it is appropriate, proportionate and justified that the following transparency obligations should be imposed on Eircom in the LLVA market pursuant to Regulation 13(1) of the Universal Service Regulations.

6.94 First, ComReg considers that it is necessary that Eircom should continue to be obliged to notify ComReg no later than five working days in advance of the implementation of proposed changes to the terms and conditions of supply (including prices) of services falling within the scope of the LLVA market. Such an obligation would support ComReg's monitoring, under Regulation 8(1) of the Universal Service Regulations, of the evolution and level of retail tariffs provided by the designated Universal Service Provider (i.e. currently, Eircom). In the context of the LLVA market such monitoring of prices, terms and conditions would support implementation of any RPC and obligation not to show undue preference to specific end users thereby minimising the risk of the SMP operator exploiting market power (e.g., excessive pricing or selectively targeting discounts) where competition concerns are most significant. In addition, the imposition of this proposed obligation would facilitate ComReg and resellers in monitoring compliance by Eircom with the SB-WLR price control (which is a retail-minus control) and compliance with relevant SMP margin squeeze obligations imposed on Eircom.

6.95 Second, ComReg considers that Eircom should be required to publish all changes in relation to terms and conditions of supply (including prices) of services falling within the scope of the LLVA market, promptly, once such changes come into effect. ComReg notes that publication of prices and other terms and conditions gives end-users greater visibility in relation to their purchase decision and thereby reduces informational asymmetries and search costs. The 2012 Market research highlighted low levels of switching FSP among households and businesses.

6.96 Third, ComReg considers that Eircom should be obliged, in respect of services within the scope of the LLVA market, to supply such services only at the relevant published price. ComReg notes that requiring Eircom to adhere to published prices should also benefit end-users by giving them greater confidence in the purchase decision and also giving them confidence to switch to bundles or alternative providers according to their preferences. Not to adhere to the publish LLVA prices, terms and conditions would render ineffective the obligation of transparency and would potentially undermine other retail obligations such as the RPC and not to show undue preference to specific end users to the detriment of competition and end users.

6.97 Finally, and for the avoidance of doubt, ComReg notes that Eircom is obliged to comply with any relevant requirements imposed by ComReg pursuant to Regulation 14 and Regulation 15 of the Universal Service Regulations.

Preliminary conclusion

6.98 For the above reasons, it is considered appropriate, proportionate and justified that Eircom should be subject to the following transparency obligations in the LLVA market:

(i) Eircom should be required to notify ComReg no later than five working days in advance of the implementation of proposed changes to the terms and conditions of supply (including prices) of services falling within the scope of the LLVA market.

(ii) Eircom should be required to publish all changes in relation to terms and conditions of supply (including prices) of services falling within the scope of the LLVA market, promptly, once such changes come into effect.

(iii) Eircom should be obliged, in respect of services within the scope of the LLVA market, to supply such services only at the relevant published price.

(iv) For the avoidance of doubt, it should be noted that Eircom is obliged to comply with any relevant requirements imposed by ComReg pursuant to Regulation 15 of the Universal Service Regulations.

Q. 21 Do you agree that the transparency obligations outlined above (and set out in the Draft Decision Instrument at Appendix 4) should be imposed on Eircom? Are there other approaches that would address the identified competition problems? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

d) Cost accounting systems

6.99 In accordance with Regulation 13(4) of the Universal Service Regulations, ComReg must ensure that, where an undertaking is designated with SMP and subject to retail tariff regulation, or other retail controls, the necessary and appropriate cost accounting systems are implemented in order to ensure compliance by that undertaking with any retail obligations imposed on it in accordance with Regulation 13 of the Universal Service Regulations. A cost accounting system is a set of rules to ensure appropriate attribution and allocation of revenues, costs, assets, liabilities and capital employed to individual activities and services.

6.100 From the assessment of competition and SMP in Chapter 5 above, ComReg finds that there is a lack of effective competition in the LLVA market and that Eircom with SMP has sufficient scope and incentives to engage in excessive pricing, implement a margin squeeze, show undue preference to specific end-users or unreasonably bundle services to the detriment of consumers and long term competition.

6.101 Because ComReg considers that imposition on Eircom of a price control obligation in the form of a retail price cap for FVA provided via PSTN and ISDN BRA and other relevant retail controls (e.g., not to unreasonably bundle) continue to be necessary, ComReg is also of the preliminary view that it is appropriate, proportionate and justified to maintain an obligation on Eircom to implement a cost accounting system. Obligations to maintain appropriate cost accounting systems (i.e. that are sufficiently detailed to all allow an assessment of cost allocations) generally support obligations imposed on an SMP operator, at the retail and/or wholesale level, that is, price control (and accounting separation). In this instance, the imposition of the proposed cost accounting obligation would also assist ComReg in monitoring Eircom's compliance with the obligation not to show undue preference to specific end users.

6.102 In general, if specific price control and other retail obligations are to be meaningful, it is necessary to have a clear and comprehensive understanding of the costs associated with Eircom's provision of retail and wholesale FVA products. The requirement to operate and maintain an appropriate cost accounting system ensures appropriate monitoring of costs in order to illustrate in a transparent manner the relationship between costs and prices. Access to appropriate cost accounting information is necessary in order for ComReg to monitor Eircom's compliance with its SMP obligations in the LLVA market, including, in particular, the RPC. The purpose of maintaining a retail price control and supporting cost accounting obligations is to ensure that prices charged by Eircom in the LLVA market are not excessive and do not cause a margin squeeze and, hence, ensure that consumers benefit in terms of choice, price and quality through promotion of efficient and sustainable retail competition.

6.103 Having regard to Eircom's integrated position across several upstream and downstream markets (in particular noting its SMP designations in a number of these markets), the scope for Eircom to leverage its position at the retail or wholesale levels, or both levels, and the associated need to ensure sufficient visibility of how costs are allocated across FVA and other horizontally and vertically-related input services, ComReg considers that the cost accounting system operated by Eircom should be such as to:

- Allow sufficient transparency of costs (e.g. preventing under recovery/double counting, identifying service specific costs, identifying cost savings elsewhere due to take up of the service/bundle);

- Enable an analysis of relevant costs to a greater level of granularity, as appropriate, in order to support appropriate cost mapping to different services; and

- Ensure that costs allocated to regulated services do not result in anti-competitive cross-subsidy, excessive prices and, in general, that costs are efficiently incurred by Eircom.

6.104 In terms of implementation of the cost accounting system, ComReg is of the view that Eircom should operate and maintain its cost accounting system in the manner and format specified under ComReg Decision D08/10 (‘**the 2010 Decision**’). The 2010 Decision sets out detailed requirements regarding the format and nature of Eircom’s separated accounts and as to how Eircom should document its cost accounting systems.[292] ComReg considers that allocating costs to the appropriate and relevant products and services of an operator is an important factor to consider when regulating multiple products and services carried over the same network. For transparency, the 2010 Decision required Eircom to document and make public details of its cost accounting systems.

Preliminary conclusion

6.105 For the above reasons, and in accordance with Regulation 13(4) of the Universal Service Regulations, ComReg considers that it is appropriate, proportionate and justified that insofar as the LLVA market is concerned Eircom should be subject to an obligation to operate and maintain a cost accounting system that is:

(i) suitable for ensuring compliance by Eircom with obligations imposed on it under Regulation 13 of the Universal Service Regulations;

(ii) capable of verification by ComReg; and

(iii) operated and maintained in the manner and format specified under ComReg Decision D08/10.

6.106 As discussed above, it should be noted that ComReg is proposing in this Consultation Paper that the SB-WLR and CPS obligations (and related supporting obligations, including those relating to price control, accounting separation and cost accounting) set out in Decision D07/61 should be maintained in force on a transitional basis pending the outcome of ComReg’s separate forthcoming consultation on the wholesale call origination and wholesale call transit markets.

[292] ComReg Document 10/68 (Decision D08/10) Accounting separation and cost accounting review of Eircom Limited.

Q. 22 Do you agree that, insofar as the LLVA market is concerned, Eircom should be subject to an obligation to operate and maintain a cost accounting system and that it should operate and maintain such cost accounting system in the manner and format specified under ComReg Decision D08/10? Are there other approaches that would address the identified competition problems? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

e) Obligation 'not to show undue preference to specific end-users'

6.107 Regulation 13(2) of the Universal Service Regulations provides that any obligations imposed by ComReg under Regulation 13(1) must be based on the nature of the problem identified under the market analysis and be proportionate and justified in the light of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations and may include inter alia requirements to ensure that the undertaking concerned does not –

> ….. (c) show undue preference to specific end users

6.108 In Decision D07/61, ComReg, having designated Eircom with SMP on the higher and lower level retail fixed narrowband access markets (as those markets were defined in that decision), imposed an obligation on it not to show undue preference to specific end users.

6.109 In order to protect consumers while promoting competition, ComReg considers that it is appropriate that Eircom should continue to be subject to an obligation not to show undue preference to specific end-users. ComReg considers that this obligation is necessary and justified in view of the circumstances in the LLVA market. There is a risk that an undertaking with SMP may exploit market power and show undue preference to specific end-users. An example of this might be to favour customers with lower prices simply on the basis that they are more likely to switch to another supplier or in response to a notification that they intend to switch. This could potentially have serious ramifications for competition. This would be particularly problematic if these offers were not adequately disclosed to the public at large – hence the need also for a retail transparency obligation.

6.110 In general terms, ComReg considers that Eircom would be deemed to show undue preference if it were it to apply dissimilar conditions to equivalent transactions with end-users. Such behaviour could be in the form of price offers, information or conditions of supply in the LLVA market. As set out at paragraph 6.13 to 6.18, Eircom with SMP can always increase its profits by setting an excessive price and thus may have an incentive to do so. ComReg considers that in the context of the LLVA market Eircom can use this increased profitability and potentially engage in defensive leveraging thereby maintaining or increasing its market power with respect to FVA. For example, Eircom with SMP is in a position to discriminate between its retail customers and could potentially offer more favourable pricing or conditions to certain end-users. In such a situation, Eircom might be able to exploit certain segments of consumers by virtue of its position of SMP. This may include the targeting of discount schemes or other terms and conditions at parts of the market that are, or are more likely to become, more competitive.

6.111 ComReg notes that an obligation 'not to show undue preference to specific end-users' does not mean that Eircom must offer identical terms and conditions to every retail customer, but rather that any differences must be objectively justified. In ComReg's view, the SMP operator would be deemed to have shown undue preference to specific end-users if, for example, it offered targeted discounts, rebates or other favourable terms or conditions (which deviate or vary from its published terms and conditions of supply within the LLVA market) to specific retail customers. Furthermore, where the actual retail terms and conditions for LLVA are obscured through use of such non-published promotions, this could hamper effective application of the non-discrimination obligation at the wholesale level and/or mask the application of a margin squeeze in respect of the SB-WLR input in parts of the market that may be likely to become more competitive over time, thereby potentially reinforcing or increasing Eircom's position of SMP with respect to LLVA resulting possibly in a restriction or distortion of competition to the detriment ultimately of end users. ComReg proposes that the obligation would apply to any differences that may have the effect of restricting or distorting competition to the detriment of end users and will be assessed on a case by case basis.

Preliminary Conclusion

6.112 For the above reasons, it is considered appropriate, proportionate and justified that Eircom should be subject to an obligation not to show undue preference to specific end-users insofar as the LLVA market is concerned. ComReg believes that such an obligation is necessary in order to address the competition problems identified at paragraphs 6.13 to 6.31 above.

Q. 23 Do you agree that an obligation not to show undue preference to specific end users as described above (and in the Draft Decision Instrument in Appendix 3) should be imposed on Eircom? Are there other approaches that would address the identified competition problems? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

Overall preliminary conclusion on remedies in the FVA markets

6.113 Having regard to the competition problems identified in paragraphs 6.10 to 6.31 and the discussion in paragraphs 6.37 to 6.42, ComReg proposes to maintain, pending the outcome of further consultation, the existing obligations imposed on Eircom under Decision D07/61 regarding SB-WLR and CPS (and the various supporting obligations, including access to and use of specific network facilities, transparency, non-discrimination, accounting separation, price control and cost accounting).

6.114 As regards the HLVA market, it is ComReg's preliminary view that the existing retail SMP obligations imposed on Eircom in that market should be withdrawn and that reliance should be placed on wholesale remedies alone as a means of addressing the competition problems in that market.

6.115 As regards the LLVA market, ComReg considers that solely relying on wholesale obligations imposed under Regulations 9 to 13 of the Access Regulations would not result in the achievement of ComReg's objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations. Given Eircom's SMP in the LLVA market and the insufficiency of wholesale measures at this stage to constrain Eircom's retail SMP (and hence the risk of exploitative and exclusionary behaviour), ComReg considers that it is not appropriate to forbear from retail regulation. Accordingly, ComReg considers it appropriate to impose retail obligations pursuant to Regulation 13 of the Universal Service Regulations in the LLVA market.

6.116 In particular, in relation to the LLVA market, in the case of basic services notably monthly PSTN line rental, consumers and in particular low spending consumers who depend on the phone but make few calls may need continued protection against price rises where competitive pressure alone in respect of the services they purchase is too weak. ComReg has already identified that there is a significant proportion of consumers who continue to value FVA provided, for example, without broadband and not as part of a wider bundle of communications services. To the extent that completion is not yet effective in the LLVA market and that the presence of bundles does not act as a sufficient constraint on the prices of the basic access services, ComReg considers it appropriate to impose on Eircom retail SMP obligations in the LLVA market relating to the following:

- price control via a retail price cap measure
- obligation not to unreasonably bundle services
- transparency obligation
- cost accounting obligation
- obligation not to show undue preference to specific end-users

6.117 ComReg is interested in the views of respondents on possible relevant FVA markets to be considered for inclusion or exclusion from any future retail remedies, and the underlying analysis outlined to date.

6.118 ComReg has set out its proposed remedies in the Draft Decision Instrument which is attached at Appendix 3 and respondents are invited to comment on this Appendix.

Q. 24 Do you agree with ComReg's draft Decision Instrument at Appendix 3? Do you agree with ComReg's Definitions and Interpretations as set out in the draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer.

Chapter 7

7 Regulatory Impact Assessment

Introduction

7.1 This section sets out ComReg's Regulatory Impact Assessment ("RIA"). ComReg's approach follows the RIA Guidelines[293] published by ComReg in August 2007 and takes into account the "Better Regulation" programme[294] and international best practice (for example, considering developments about RIA published by the European Commission[295] and the OECD). In addition, Section 13(1) of the Communications Regulation Acts 2002 to 2011 requires ComReg to comply with Ministerial Policy Directions. In this regard, Ministerial Policy Direction 6 of February 2003[296] 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.

7.2 The RIA is an analysis of the likely effect of proposed regulation or regulatory change. Its purpose is to help identify regulatory options, and should establish whether proposed regulation is likely to have the desired impact in terms of consumer choice, price and service quality through promotion of competition and innovation in FVA. Our ultimate aim in conducting this RIA is to ensure that all proposed measures are appropriate, proportionate and justified in light of the competition assessment and completion problems that persist and will persist over the period of the review in relation to FVA.

7.3 As part of the process in selecting an appropriate regulatory approach in this instance, ComReg has set out the key policy issues and objectives below, followed by an assessment of the relevant the wholesale and retail regulatory options and their respective impacts for consumers, FSPs and competition.

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[293] ComReg, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", ComReg Document 07/56a, 10 August 2007 (the '**RIA Guidelines**')

[294] Department of the Taoiseach, "Regulating Better", January 2004. See also "Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis", June 2009, http://www.taoiseach.gov.ie/eng/Publications/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf.

[295] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "Second strategic review of Better Regulation in the European Union", COM(2008) 32 final 30.01.2008, p. 6.

[296] Ministerial Policy Direction made by the Minister of Communications, Marine and Natural Resources on 21 February 2003.

7.4 ComReg now conducts its RIA having regard to its proposed approach to impose (or not) regulatory remedies in Chapter 6, along with a consideration of other options. The following sections, in conjunction with the rest of the analysis in this Consultation Paper represent a RIA.[297] It sets out a preliminary assessment of the potential impact of proposed regulatory obligations for the relevant FVA markets on Eircom based on the proposed SMP designation.

Describe the policy issue and identify the objectives

7.5 The European Commission, in its adoption of the regulatory framework for electronic communications networks and services, acknowledges the need for ex ante regulation in certain circumstances in order to ensure the development of a competitive communications market. 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 would be imposed to mitigate against the exercise of SMP and to ensure the development of effective competition within and across communications markets. We have noted in Chapter 2 that the European Commission has established that the retail market for access to the public telephone network at a fixed location is susceptible to ex ante regulation and, on this basis ComReg has carried out the preceding analysis in this Consultation Paper.

7.6 In Chapter 4 and 5 of this Consultation Paper respectively, ComReg set out its preliminary view on the definition of the individual relevant FVA markets, followed by a competition analysis within each of the identified relevant FVA markets. ComReg consequently proposes to designate Eircom with SMP on each of the identified relevant FVA markets. In Chapter 6, ComReg considered, on the basis of a preliminary SMP finding, the potential for competition problems to arise in the relevant FVA markets over the review period in question. As noted in paragraph 6.2, in order to address the identified competition problems, ComReg is required to impose on an operator with SMP one or more (as appropriate) of the following wholesale obligations:

- Access;
- Transparency;
- Non-Discrimination;
- Price Control and Cost Accounting; and
- Accounting Separation.

[297] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "Second strategic review of Better Regulation in the European Union", COM(2008) 32 final 30.01.2008, p. 6.

7.7 In addition, as noted in paragraph 6.3, where (a) as a result of the market analysis, ComReg determines that a given retail market is not effectively competitive and (b) where it concludes that wholesale obligations imposed (i.e. in this instance CPS, SB-WLR and their supporting obligations) would not result in the achievement of the objectives set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations, ComReg shall also impose appropriate regulatory obligations on undertakings identified as having SMP on the given retail market which may include:

- price control
- obligation not to unreasonably bundle services
- transparency obligation
- cost accounting obligation
- obligation not to show undue preference to specific end-users

7.8 With specific regard to the analysis of competition within the relevant FVA markets and, having regard to the competition problems identified in Chapter 6, ComReg‘s objectives are to enhance end user and consumer benefits in terms of price, choice and quality of service by promoting and ensuring the development of effective competition in the relevant FVA markets and associated markets. In so doing, ComReg is seeking to allow competitors enter the market with confidence in the CPS and SB-WLR access that Eircom provides and the prices it sets in that regard. ComReg is also seeking to provide consumers with protection against any potential exploitative behaviour, such as, excessive pricing and/or restrictions or distortions in competition amongst FSPs. ComReg will use remedies to achieve the twin objectives of promoting effective competition while pursing public interest needs, in particular, maintaining the affordability of basic services, notably, PSTN line rental.

7.9 These objectives also serve to promote efficient investment and incentives for FSPs to move up the ladder of investment given increased regulatory certainty to all FSPs through the development of an effective and efficient forward-looking regulatory regime that serves to promote competition. This is particularly important on a forward looking basis in the context of NGA and increasing trends to greater overall market convergence. In these circumstances, FSPs will likely require greater confidence in and flexibly in the combination of wholesale inputs to deploy, spurring greater innovation.

7.10 In pursuing these objectives, ComReg has considered the impact of specific forms of regulation in the relevant FVA markets. 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.

Principle in selecting remedies

7.11 In paragraphs 6.2 to 6.6 we previously set out the legislative basis upon which ComReg 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:

- Based on the nature of the problem identified;
- Proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Acts 2002 to 2011, and Regulation 16 of the Framework Regulations; and
- Only imposed following consultation in accordance with Regulations 12 and 13 of the Framework Regulations.

7.12 Section 12(1)(a) of the Communications Regulation Acts 2002 to 2011 sets out ComReg key objectives in exercising its functions in relation to the provision of electronic communications networks, electronic communications services and associated facilities:

- To promote competition;
- To contribute to the development of the internal market; and
- To promote the interests of users within the European Union.

Identify and describe the potential regulatory options

7.13 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. There are a range of potential regulatory options available to ComReg to address the competition problems in the relevant FVA markets.

7.14 In this regard, regulation can be considered to be incremental, such that only obligations are imposed which are necessary and proportionate to the competition problems which have been identified. The lightest regulatory approach would be to rely solely on wholesale measures.[298] Should this be insufficient on its own to address retail SMP and competition problems at the retail level, ComReg may apply additional retail obligations on the relevant LLVA market where competition concerns are most significant.[299] In that regard, ComReg may consider imposing a suite of retail obligations, as appropriate, starting with the lightest measure of transparency and may apply additional retail obligations, such as, price control and/or the obligation not to unreasonably bundle FVA with other services. If this is still not sufficient, ComReg may next consider the imposition of retail obligations on the HLVA market in addition to regulating the LLVA market.[300]

7.15 The question of regulatory forbearance and the incremental imposition of one or more of the above obligations are considered below.

Forbearance

7.16 It is ComReg's preliminary view that the option to discontinue all existing SMP obligations (wholesale and retail) in the relevant FVA markets is not appropriate, proportionate or justified. In Chapter 5, ComReg set out its view that none of the relevant FVA markets is effectively competitive (or likely to become effectively competitive within the timeframe covered by this review). In Chapter 6, ComReg identified a range of competition problems that could occur in these markets. Absent regulation, there is the potential and incentive for an FSP with SMP in the relevant FVA markets to engage in exploitative and/or exclusionary behaviour restricting competition to the detriment of consumers.[301] In view of this, absent the imposition of any remedies within the relevant FVA markets, it is ComReg's view that such markets would not likely function effectively.

7.17 In the case of the current analysis of the relevant FVA markets, ComReg is required to impose at least some level of regulation on FSPs designated as having SMP. As noted in Chapter 6, paragraphs 6.37 to 6.43, it is ComReg's preliminary view that the option of regulatory forbearance from wholesale remedies is not, therefore, appropriate, proportionate or justified. By not imposing any wholesale obligations on an FSP designated with SMP, ComReg would be acting contrary to its regulatory obligations.

[298] Regulations 9 to 13 of the Access Regulations.
[299] Regulation 13 of the USO Regulations.
[300] Regulation 13 of the USO Regulations.
[301] Detailed analysis of the types of competition problems that are likely to arise absent regulation are set out in Chapter 6, at paragraphs 6.10 to 6.30.

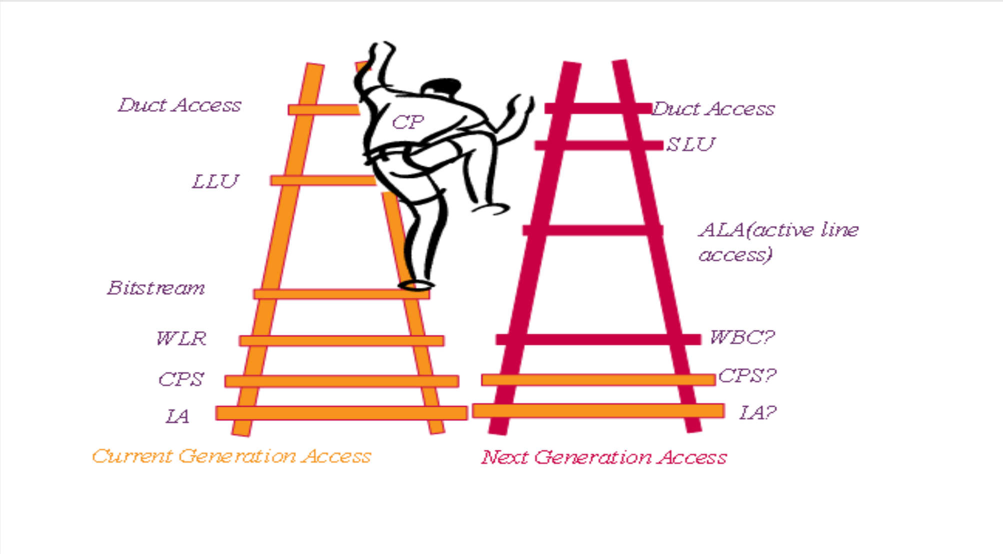
Wholesale remedies

7.18 The general objectives of SB-WLR or CPS access are to allow competitors enter the market given that replication of Eircom's access network to any significant degree is not a feasible option. So far, LLU has not had an appreciable impact on the competitiveness of the relevant FVA markets. Furthermore, growth in the number of LLU customers does not negate the requirement for SB-WLR or CPS access. The latter access remedies have enabled FSPs to enter and extend reach to rural and sub-urban areas whereas, at least initially, LLU penetration is focused on the larger exchange areas. FSPs looking to offer FVA (or a bundle of broadband and voice) on a national basis will possibly require a combination of wholesale inputs, including, in particular, SB-WLR. Based on available data, FSPs are supplying FVA primarily on a resale basis which would indicate that high and non-transient barriers to entry persist in the supply of FVA. The availability and effectiveness of mandated wholesale products are critical to facilitate competition by FSPs.

7.19 As noted at paragraph 6.36, Eircom designated with SMP by Decision 07/61 is currently subject to obligations: CPS and SB-WLR and supporting remedies. ComReg's preliminary view in Chapter 6, paragraphs 6.37 to 6.43, is that Eircom should be obligated to maintain the existing wholesale obligations outlined at paragraph 6.36 pending further consultation in relation to wholesale call origination and transit during Q4 2012 and the final outcome of that consultation during 2013. The continued provision of CPS and SB-WLR access are necessary, proportionate and justified to ensure FSPs continue to expand or can enter the relevant market by availing of access to Eircom's infrastructure. Because of the substantial market power and hence competition concerns, there is a continuing need for regulatory intervention to create an environment where FSPs can obtain the necessary wholesale components and on appropriate terms to effectively compete.

7.20 ComReg believes that concurrent obligations to provide LLU (Market 4) and SB-WLR are reasonable, justified and proportionate in addressing competition problems in the relevant FVA markets at this juncture. ComReg notes from NRAs notifications to the European Commission in relation to relevant markets, the majority have imposed an obligation of both LLU and SB-WLR.[302] ComReg believes that mandating the two products (amongst other wholesale products, such as, bitstream) concurrently promotes competition and innovation throughout the wider value chain for fixed telephony services, facilitating entry into the retail markets and, as illustrated by Figure 29, movement up the ‘ladder of investment’ as appropriate. In addition to increasing broadband infrastructure competition, FSPs can continue to take-up indirect access products and with time move towards LLU.

Figure 29 Ladder of investment[303]



7.21 As FSPs cannot to any significant degree replicate Eircom’s ubiquitous network, there would be, absent wholesale obligations, a restriction or distortion of competition in the relevant FVA markets. ComReg‘s preliminary view is that wholesale de-regulation in each of the relevant FVA markets is not, therefore, appropriate, proportionate or justified. Only in the event of a market shift to a significantly higher proportion of FVA via direct access or alternative infrastructures, including mobile, could ComReg consider regulatory forbearance for the relevant FVA markets.

302 See the Market Status Chart as of April 2012 and Cullen International.
303 Source: Ofcom and Cave, M. 2010. *Telecommunications Policy*, Volume 31, numbers 1-2, February - March, p80

7.22 Eircom will face minimal incremental burden from the proposal to maintain such obligations given that CPS and SB-WLR access and their supporting remedies are existing obligations. These products are now well established and in common use by a large number of FSPs. Therefore, the continued provision of CPS and SB-WLR access does not impose substantial additional regulatory costs, and should be easily exceeded by the benefits of enhanced competition and wholesale revenues to Eircom. ComReg recognises the improvements already made in relation to CPS and SB-WLR access products and processes, however, concerns remain regarding potential discrimination of FSPs and in relation to currently existing line faults.

7.23 At paragraphs 6.46 to 6.52, ComReg has considered whether wholesale obligations alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. For example, residual competition problems *inter alia* associated with excessive pricing, potential undue preference to specific end users or unreasonable bundling to the detriment of consumers would not be capable of being adequately addressed through wholesale obligations alone.

Retail remedies

7.24 The previous section outlined ComReg's analysis of wholesale remedies necessary to address the potential competition problems identified. However, even in the presence of mandated wholesale products there is sufficient scope and incentives for Eircom with SMP to sustain retail prices above competitive levels and/or, unreasonably bundle, leveraging its SMP in FVA services. Until such time as the increasing service based and/or facilities based competition represents an effective competitive constraint on Eircom's pricing and strategic behaviour, concerns regarding its ability and incentives to engage in exploitative practices, such as, excessive pricing persist and will persist.

7.25 Accordingly, ComReg examines what form of additional retail regulation is appropriate, in particular, which of the retail remedies identified in paragraphs 6.64 to 6.112 above are appropriate having regard to the particular circumstances of the relevant FVA markets and the associated competition problems.

Forbearance

7.26 This Consultation Paper aims to identify the opportunities to withdraw from or reduce levels of regulation in the relevant FVA markets, and as appropriate, the minimum remedies necessary to protect consumers in the transition to more effective retail competition. Retail obligations will only be imposed where there is no effective competition and where other factors do not suggest that such obligations would be inappropriate.

7.27 There are a range of options which can be considered:

- Removal of retail obligations on all relevant FVA markets (reliance solely on wholesale measures);
- Removal of retail obligations on the HLVA market (maintain retail regulation on PSTN and ISDN BRA service in LLVA market); and
- Removal of retail obligations on the LLVA market (maintain retail regulation on ISDN FRA and PRA services).

7.28 As noted in Chapter 6, at paragraphs 6.44 to 6.52, ComReg has considered whether the option of withdrawing existing retail obligations imposed on Eircom on all FVA markets relying solely on wholesale measures is appropriate in the relevant FVA markets at this time. On balance, ComReg preliminary view is that this option is premature in the face of Eircom's continued SMP in both relevant FVA markets. ComReg is mindful of the risk that, in the absence of some form of retail remedies to address Eircom's SMP, consumers may face rises in FVA prices. This means that any control at the wholesale level likely needs to be supplemented by a retail obligations, including, a retail price control measure, in order to have the desired impact on the relevant FVA markets and to achieve the correct balance between promoting competition and protecting the consumer.

7.29 For the reasons set out at paragraph 6.54 to 6.59, ComReg considers that it may be appropriate, proportionate and justified to rely solely on wholesale measures to address the retail SMP in the HLVA market.

7.30 In terms of the LLVA market, however, there are a significant proportion of consumers who continue to primarily value only the standalone FVA product. These consumes are likely to need continued protection against the risk of potential price rises where competitive pressure alone in respect of the FVA services they purchase is too weak. A specific cap on PSTN and ISDN BRA services could offer consumers better protection where concerns over exploitation of market power may be most significant. Furthermore, as set out in Chapter 6 above, at paragraphs 6.19 to 6.30, there is a risk that Eircom might take measures to stifle competition in the LLVA market (and related markets) by engaging in potentially anti-competitive cross –market tactics. In these circumstyances, ComReg considers that some form of retail regulation continues to be needed to prevent Eircom from exploiting its market power as competition develops. Accordingly, it is ComReg's preliminary view that it is appropriate, proportionate and justified to impose retail obligations on Eircom in relation the LLVA market pursuant to Regulation 13 of the Universal Service Regulations.

Transparency

7.31 As noted at paragraph 6.90, Eircom is currently subject to a retail transparency obligation. ComRegs preliminary view in Chapter 6 is that Eircom with SMP should continue to be subject to a transparency obligation. It is necessary, appropriate and proportionate in order to protect end-users where there is a risk of an SMP operator exploiting market power and/or engaging in exclusionary practices.

7.32 Publication of any changes to FVA prices when they come in to effect and supplying FVA only at the prices published and in accordance with the other terms and conditions published will benefit consumers and competition. Such requirements on Eircom will reduce any informational asymmetries for end users thereby giving them greater confidence to make informed choices in relation to FVA and/or whether to switch to bundle or other FSPs according to their preferences. Eircom is required to notify ComReg 5 days in advance of proposed changes to retail PSTN and ISDN BRA prices. This is the minimum requirement needed to ensure that ComReg can monitor compliance with the principles or transparency and undue preference to specific end users. In addition, the requirement to notify ComReg 5 days in advance of proposed changes to retail PSTN and ISDN BRA prices will also allow ComReg to monitor compliance with the retail minus SB-WLR price control and the pre-notification requirements in that regard, as appropriate.

7.33 As well as other FSPs, Eircom pursuant to the USO Regulations has a general obligation to publish prices and other terms and conditions of its retail services and Regulation 14 (2) (d) of the Universal Service Regulations requires undertakings' contracts with end-users to "*specify in a clear, comprehensive and easily accessible form, at least— ………" "details of prices and tariffs, the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained*." Furthermore, Eircom is required to publish a Reference Interconnection Offer ("RIO"). Thus, Eircom faces a relatively small level of incremental burden from implementation of the proposed transparency obligation, which is considered to be outweighed by the benefit to competition and end users.

7.34 ComReg has considered whether a transparency obligation alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. For example, problems inter alia associated with undue preference to specific, end users excessive pricing, and/or margin squeeze would not be capable of being adequately addressed through a transparency obligation alone, though the latter obligations are supported by the transparency obligations.

Not to show undue preference to specific end users

7.35 This protects consumers from being unreasonably discriminated against. ComReg considers that this obligation is appropriate and justified given the level of competition in the LLVA market where Eircom has SMP. It is also a proportionate obligation in that it does not involve any significant regulatory cost to Eircom. Rather the benefit to consumers by promoting competition would outweigh any such costs.

7.36 ComReg proposes that the status of competition in the LLVA market indicates that ex post regulation alone would not be sufficient, and that there will need to be a continued requirement for an obligation 'not to show undue preference to specific end-users' for the period of this review. In addition, measures which are taken at the wholesale level may not prevent undue preference to specific end users at the retail level. As such, intervention at the retail level is required.

7.37 ComReg has considered whether an obligation not to show undue preference to specific end users alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. While this obligation will enable ComReg carry out its duties set out in section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations, that is, to promote competition and the interests of end users by disallowing such undue preference to specific end users, the obligation would not of itself prevent margin squeeze or unjustified increases in LLVA prices.

Cost accounting systems

7.38 ComReg considers this obligation is necessary, proportionate and justified in view that competition concerns persist and will persist at the retail level. Chapter 6 noted that Eircom with SMP has the incentive and ability to engage in exploitative and exclusionary practices. Maintaining the obligation on Eircom to operate a cost accounting system, ComReg is seeking to have sufficient information available to ensure the efficient monitoring of pricing related issues (i.e. margin squeeze) and to ensure effective compliance with any retail price control. In order to do this, it is necessary for Eircom to establish cost accounting systems that capture, identify, value and attribute relevant costs and revenues to its services in accordance with agreed regulatory accounting principles, such as cost causality. If ComReg were not to impose this obligation to ensure appropriate cost recovery mechanisms, it would not have any means of ensuring the monitoring of price controls or dealing with margin squeeze issues.

7.39 ComReg considers that the incremental costs of compliance associated with these obligations would likely be minimal as Eircom already prepares and publishes regulatory financial statements and has cost accounting systems in place to comply with this obligation and related obligations.

7.40 ComReg has considered whether an obligation to maintain and operate a cost accounting alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. While a cost accounting system obligation will support the effective monitoring of compliance with any retail obligations imposed, this obligation, of itself, would not remove the risk of potential exploitative or exclusionary behaviour.

Retail price cap

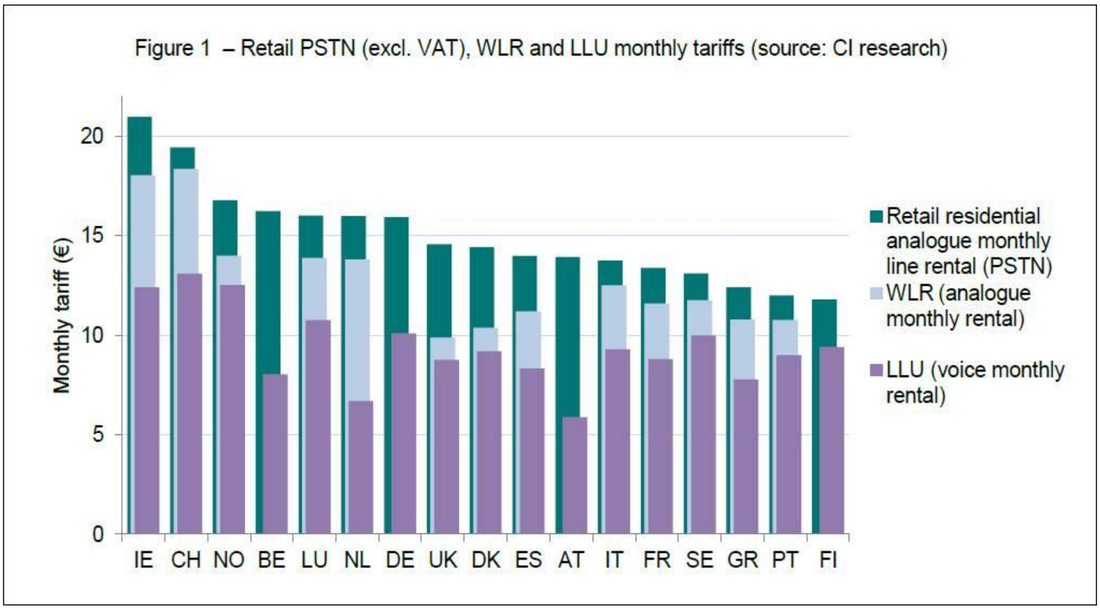
7.41 As noted at paragraph 6.67, individual price caps (separate price caps) apply to each of Eircom’s (a) ISDN FRA and PRA services and (b) PSTN and ISDN BRA services. In the case of the current analysis of the relevant FVA markets, ComReg is considering whether or not to oblige Eircom, as the identified SMP operator, to adhere to a RPC as one of the relevant remedies to address competition concerns at the retail level. In relation to a RPC as a potential remedy, there are a range of options which can be considered:-

- Regulatory forbearance - no RPC regulation on FVA in place of the existing RPC Decision 07/76; and
- Inclusion/exclusion of PSTN/ISDN BRA and/or ISDN FRA and PRA access prices for a retail price cap.

7.42 Chapter 6 sets out ComReg preliminary view that some form of a RPC continues to be necessary for at least some of the retail services provided by Eircom in relevant FVA markets. The principal objective for the imposition of a RPC is to protect consumers in circumstances where the competitive process is not operating effectively. In view that competition in each of the relevant FVA markets are not yet effective, Eircom can act to an appreciable extent independently of its competitors and consumers.

7.43 As a result, the main concern arising from the preliminary finding of SMP in relevant FVA markets is the ability of Eircom, identified as an SMP provider, to set and/or maintain prices at a level higher than they would be if competition were effective. In the absence of competitive pressure, a firm with market power will be able to sustain prices above cost to the detriment of consumers. Therefore, a key objective of intervention would be to constrain the ability of Eircom to set excessive prices to the detriment of consumers. Absent effective competition from alternative infrastructure, for example, broadband and mobile networks, ComReg would not wish to see an unjustified increase in monthly PSTN line rental charges, currently as illustrated by Figure 30 the highest in the EU.

Figure 30 Monthly Tariffs



7.44 To address the potential risk of excessive pricing in the relevant FVA markets, ComReg considers that ex ante regulation is required. Ex post competition law would be unsuitable in preventing excessive pricing in a manner that would be conducive to facilitating a reasonably certain and predictable investment environment, 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 the relevant FVA markets, which are characterised by high barriers to entry given economies of scale and possibly economies of scope, is not likely to offer adequate protection for consumers or promote effective competition. This is because addressing the issue of excessive pricing 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.

7.45 Overall, the preliminary finding that Eircom has SMP means that it has the ability to increase FVA prices above the competitive level. Regulatory obligations currently in place (SB-WLR and retail minus pricing) do not obviate the need for a continued price cap on PSTN and ISDN access services.

7.46 Applying a price cap to PSTN and ISDN BRA rentals and connections, ComReg suggests that a reason for considering this option is that while Eircom's share of the LLVA market has fallen, Eircom still has a high market share of 58%, and ComReg's market review of LLVA finds that competition is not fully effective. Absent the CPS and SB-WLR (and hence excluding the market shares of FSPs reliant on these access products to compete), Eircom's share would be closer to 80% in LLVA market as competition in the LLVA market is limited – direct build infrastructure by FSPs (excluding cable) given high barriers to entry is *de minimus*. While competition is developing in the LLVA market, it is not clear that competition in this market is (or is likely to become in the period of the review) sufficiently developed to protect fully all consumers at this time. For basic services, notably monthly PSTN line rental, consumers (and, in particular, low spending consumers who depend on the phone but make few calls) may need continued protection against price rises where competitive pressure alone in respect of the services they purchase is too weak.[304] In addition, choice of FVA supply is more limited for the subset of consumers that place no or less value on broadband internet access or a bundle of broadband and voice services. Substitution of FVA by mobile access is unlikely to act as a sufficient constraint on Eircom's pricing behaviour over the period of the review. Therefore, a specific cap on PSTN and ISDN BRA access could offer consumers better protection where concerns over exploitation of market power may be most significant.

[304] National legislation requires the designated universal service provider to maintain the affordability of basic services.

7.47 In terms of the HLVA market, an option might be to consider ISDN PRA and FRA services for withdrawal from a price cap (safeguard). ComReg notes the emergence of different levels of competition between the relevant FVA markets. It can see therefore some merit in being able to differentiate the ways in which price controls are applied in the LLVA and HLVA markets. ComReg recognises that although competition is still ineffective, higher level FVA users (predominantly business users) have a range of choice of alternative suppliers with FSPs building competing alternative infrastructure. There is evidence that Eircom is facing some competition in this market, even though Eircom remains dominant in the supply of higher level FVA services. There are now several operators offering ISDN FRA and PRA services, and the largest after Eircom has achieved a growing market share over recent years. Eircom's market share of HLVA has gradually declined from 66% in 2007 to 43% currently. Therefore, FSPs have made inroads into Eircom's market share of these services. However, excluding the market shares of FSPs reliant on these access products to compete), Eircom's share would be closer to 62% of HLVA. Prospectively, it is anticipated that emerging substitute products such as hosted PBA telephony and SIP Trunking will grow and likely become more widely available.

7.48 While HLVA is potentially more competitive than the LLVA this may still not be enough to constrain Eircom's ability to raise prices above the competitive level. In principle, however, if HLVA prices are subject to a growing constraint from alternative suppliers, more recently, from mobile networks and, end users, for instance through direct build and/or CBP, consumers might expect to see reductions in these charges.

7.49 On balance, ComReg believes that the option of no RPC regulation on FVA in place of the existing RPC is premature in the face of Eircom's continued SMP in both relevant FVA markets. Maintaining some form of upper limit on retail FVA services, ComReg is seeking to find the best balance between the interests of consumers and the long run sustainability of the industry. ComReg's view is that imposing the existing RPC in relation to PSTN and ISDN BRA on Eircom is the minimum necessary to best achieve this balance. ComReg is open to whether or not a RPC applies to HLVA services until there is further evidence as to the sustainability of competition based on increased own infrastructure and IP based solutions, such as SIP Trunking or from mobile networks.

7.50 The proposal to impose the existing RPC on Eircom in relation to PSTN and ISDN BRA access is justifiable, in that it is required to ensure that Eircom does not exploit its market power by raising FVA prices in the LLVA market (PSTN and ISDN BRA respectively) where concerns over the exploitation of market power is most significant. It does not unduly discriminate against Eircom in that, while it only applies to Eircom, the condition is imposed in order to address Eircom's ability to raise FVA prices above the competitive level in light of its SMP in markets to which the control applies. The approach to the RPC is proportionate in that it is the least burdensome means of achieving this aim. The existing PSTN and ISDN BRA safeguard cap will best achieve a balance between the interests of consumers and the long term sustainability of the industry.

7.51 ComReg has considered whether price control via the existing RPC on Eircom in relation to PSTN and ISDN BRA access alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. For example, undue preference to specific end users or margin squeeze would not be capable of being adequately addressed through such an obligation alone. While appropriate use of a price cap may reduce incentives by the SMP operator to leverage its position in relevant FVA access markets and protect consumers against any potential exploitative abuse of market power, it does not alone address potential exclusionary practices.

Unreasonably bundle

7.52 As noted at paragraph 6.77, Eircom is obliged to ensure that it does not bundle FVA unreasonably with other services. In that regard, Eircom is required not to pure bundle FVA services or engage in a margin squeeze and must therefore pass a net revenue test. The regulatory objective in this case is to prevent or mitigate the possibility of behaviour, such as, horizontal leveraging by Eircom from the relevant FVA markets into other retail markets, as well as the maintenance/strengthening of a dominant position in relation to FVA itself.

7.53 In light of the competition problems identified at paragraphs 6.19 to 6.30, this obligation is necessary and justified. Without the net revenue test, Eircom could cause a margin squeeze against FSPs by pricing its bundles anti-competitively. If this occurred, FSPs would have to attempt to match Eircom's anti-competitive pricing in order to stay in the markets for FVA. However, with a continued squeeze, this would ultimately lead to FSPs' exit and entrants not being encouraged to enter as their costs would not be covered over the long-term. This would ultimately be to the detriment of consumers as absent any competition, Eircom could then raise the prices of its retail fixed narrowband access bundles in most geographic areas. This could reinforce Eircom's SMP position in large sections of the country where the likelihood of competition expanding would be significantly reduced, which would not be in the interests of those consumers in those areas. The obligation not to unreasonably bundle specified that Eircom "must ensure that any bundle avoids a margin squeeze and passes a net revenue test" in order to ensure that the problems above do not arise.

7.54 ComReg believes that as competition develops, the obligation on Eircom not to unreasonably bundle is proportionate in view that the short term cost to Eircom is outweighed by the benefits to consumers in terms of price choice and quality of services.

7.55 ComReg has considered whether obligation on Eircom not to unreasonably bundle alone would be sufficient to address the competition problems identified in Chapter 6 and does not consider this to be the case. For example, it would not prevent an unjustified increase in the absolute FVA price to the detriment of consumers in the short term. Instead, this obligation seeks to ensure the relative prices in the value chain are set such that an appropriate economic space can be maintained.

Impact on stakeholders and competition

7.56 Given that ComReg has proposed designating Eircom with SMP, it is ComReg's view that the option of regulatory forbearance is unwarranted and can be discounted when considering the impact on stakeholders.

7.57 Having regard to the proposed SMP designation in Chapter 5 as well as the review of competition problems and remedies in Chapter 6, ComReg has, on an incremental basis, identified why a range of appropriate retail and wholesale remedies are necessary, proportionate and justified, while at the same time discounting other remedies as appropriate. Having regard to the analysis and assessment of the relevant FVA markets, ComReg has now grouped remedies into 6 options below for the purpose of considering the incremental impact of the options on stakeholders and on competition.

7.58 Broadly speaking the regulatory options in relation to the relevant FVA markets are as follows:

- Option 1 – Maintain existing access to CPS and SB-WLR and supporting obligations only;
- Option 2 – (a) Maintain wholesale remedies and (b) impose retail transparency obligation only on the LLVA market;
- Option 3 – (a) Maintain wholesale remedies and (b) impose retail transparency and an obligation not to show undue preference to specific end users on the LLVA market;
- Option 4 – (a) Maintain wholesale remedies and (b) impose retail transparency, an obligation not to show undue preference to specific end users, price control and cost accounting systems on the LLVA market;
- **Option 5 – (a) Maintain the existing wholesale remedies and (b) impose all existing retail remedies on the LLVA market only (withdraw retail remedies for the HLVA market);** and
- Option 6 – (a) Maintain the existing wholesale remedies and (b) impose all existing retail remedies on all FVA markets.

<table>
<tr><th colspan="3">Option 1: Maintain CPS and SB-WLR and supporting obligations only on all FVA markets</th></tr>
<tr><th>Impact on Eircom</th><th>Impact on Competition</th><th>Impact on Consumers</th></tr>
<tr><td>Eircom would benefit from reduced regulatory burden relative to the 2007 Decision. There would be increased flexibility for Eircom to compete with FSPs, given its increased flexibility in setting prices, terms and conditions in the retail FVA markets.

Eircom would have scope and incentive to use its retail SMP to engage in exploitative and/or exclusionary behaviour. Could facilitate extraction of excessive rents from FVA end users.

Eircom’s incentives to innovate and increase efficiency may be reduced where FVA prices set above a competitive level are paid for by FVA end users.</td><td>Wholesale controls in themselves may be insufficient to address potential competition problems in all retail FVA markets. Until such time as wholesale controls were deemed sufficient, absent retail obligations, there is a high risk that resulting market strategy of the SMP firm would lead to a level of foreclosure of FVA markets, related markets or with respect to bundled offers including FVA and fixed voice services.

Anti competitive margin squeeze or bundling could raise barriers to entry and expansion for existing or new entrant FSPs thereby restrict or distort competition in retail markets and undermine the objectives of wholesale remedies.</td><td>Consumers would likely (i) have much reduced choice of FVA supply or deprived of new or innovative bundle offers (ii) face rising FVA prices (iii) that some end users would be discriminated against (iv) and /or experience informational asymmetries and additional search costs.</td></tr>
</table>

Option 2: Maintain wholesale remedies on all FVA markets and (b) impose retail transparency obligation only on the LLVA market		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from reduced regulatory burden relative to the 2007 Decision. There would be still be increased flexibility for Eircom given its increased flexibility in setting prices, terms and conditions in the retail FVA markets. Eircom would have ability to use retail SMP to engage in exploitative and exclusionary behaviour. Could facilitate extraction of excessive rents from FVA end users. Eircom's incentives to innovate and increase efficiency may be reduced where FVA prices set above a competitive level are paid for by FVA end users.	Greater retail transparency allows ComReg and FSPs to monitor compliance with the SB-WLR retail minus control and the pre notification requirements in that regard yet there remains a high risk that the resulting market strategy of the SMP firm would lead to a level of foreclosure of FVA markets, related markets or with respect to bundled offers including FVA and fixed voice services. Anti competitive margin squeeze or bundling etc could still raise barriers to entry and expansion for existing or new entrant FSPs thereby restrict or distort competition in retail markets and undermine the objectives of wholesale remedies.	Consumers would likely (i) have much reduced choice of FVA supply or deprived of new or innovative bundle offers (ii) face rising FVA prices (iii) and /or that some end users would be discriminated against. Informational asymmetries /search costs moderated resulting in potentially increased switching of FSP or to bundles thereby increased competition intensity.

Option 3: Maintain wholesale remedies on all FVA markets and (b) impose retail transparency and an obligation not to show undue preference to specific end users on the LLVA market		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from reduced regulatory burden relative to the 2007 Decision. There would be still be increased flexibility for Eircom to compete with FSPs, given its increased flexibility in setting prices, terms and conditions in the retail FVA markets. However, Eircom would have ability to use retail SMP to engage in exploitative and exclusionary behaviour. Could facilitate extraction of excessive rents from FVA end users. Eircom's incentives to innovate and increase efficiency may be reduced where FVA prices set above a competitive level are paid for by FVA end users.	The risk of anti competitive behaviour by the SMP firm is somewhat moderated compared to Options 1 and 2. Greater retail transparency support monitoring of Eircom's compliance with the SB WLR retail minus control and the pre notification requirements; objectively justifying different treatment between consumers as appropriate minimises risk of selectively targeting discounts or other terms and conditions that could restrict or distort competition. Yet there remains a high risk that, absent retail obligations, resulting market strategy of the SMP firm would lead to a level of foreclosure of FVA markets, related markets or with respect to bundled offers. Anti competitive margin squeeze or bundling etc could raise barriers to entry and expansion for existing or new entrant FSPs thereby restrict or distort competition in retail markets and undermine the objectives of wholesale remedies.	End users may have less choice of LLVA supply or deprived of new or innovative bundle offers and /or (ii) face rising LLVA prices. End users would be protected from being unreasonably discriminated against and informational asymmetries /search costs moderated resulting in potentially increased switching and competition intensity; May not offer adequate protection for HLVA end users who given Eircom's SMP may face rises in HLVA prices and or some price discrimination

Option 4: Maintain wholesale remedies on all FVA markets and (b) impose retail transparency, obligation not to show undue preference to specific end users, price control and cost accounting systems on the LLVA market		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from reduced regulatory burden relative to the 2007 Decision. There would be increased flexibility for Eircom to compete with FSPs in the retail HLVA markets given its increased flexibility in setting HLVA prices, terms and conditions. Eircom would have both the scope and incentive to use retail SMP to engage in exploitative and exclusionary behaviour viz HLVA which could facilitate extraction of excessive rents from HLVA end users. Eircom's pricing freedom in relation to LLVA controlled; though potentially less of a compliance burden relative to a wider price control. As Eircom is currently subject to price control and cost accounting obligations in relation to FVA over PSTN and ISDN BRA as part of Decision 03/07, incremental burden of such obligations is unlikely to be significant.	The risk of anti competitive behaviour by the SMP firm is somewhat moderated compared to Options 1, 2 and 3. Greater retail transparency support monitoring of Eircom's compliance with the SB WLR retail minus control and the pre notification requirements; objectively justifying different treatment between consumers as appropriate minimises risk of selectively targeting discounts or other terms and conditions that could restrict or distort competition. Yet there remains a high risk that, absent retail obligations, resulting market strategy of the SMP firm would lead to a level of foreclosure of FVA markets, related markets or with respect to bundled offers. Anti competitive margin squeeze or bundling etc could raise barriers to entry and expansion for existing or new entrant FSPs thereby restrict or distort competition in retail markets and undermine the objectives of wholesale remedies.	Upper control on price increases for LLVA would protect these end users maintaining affordability for basic FVA services, notably PSTN. LLVA end users would be protected from being unreasonably discriminated against and informational asymmetries /search costs moderated resulting in potentially increased switching and competition intensity. May not offer adequate protection for HLVA end users who given Eircom's SMP may face rises in HLVA prices and or some price discrimination.

Option 5: Maintain the existing wholesale remedies on all FVA markets and (b) impose all existing retail remedies on the LLVA market only		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from reduced regulatory burden relative to the 2007 Decision given withdrawal of retail remedies for the HLVA market. There would be increased flexibility for Eircom to compete with FSPs in the retail HLVA markets given its increased flexibility in setting HLVA prices, terms and conditions. Existing regulatory burden on Eircom per the 2007 Decision remains in relation to LLVA market.	Wholesale mandated SB-WLR and CPS continue to be made available to FSPs, which enables them to compete in FVA markets. The risk of anti competitive behaviour by the SMP firm is somewhat moderated compared to Option 1, 2, 3 and 4. Presence of additional retail regulation supports monitoring of Eircom's compliance with the SB WLR retail minus control and the pre notification requirements; minimises risk of selectively targeting discounts or other terms and conditions that could restrict or distort competition; minimises margin squeeze, thus allowing efficient alternative FSPs to compete effectively in the LLVA markets, in related markets and for bundle offers including FVA and fixed voice services, thus increasing innovations. Increased incentives for FSPs to price and service innovate including bundles in relation to HLVA; though some risk of exclusionary behaviour in relation to supplier of HLVA.	Dynamic competition from alternative FSPs, thus LLVA end users would benefit from increased choice of FSP, delivery of bundled price and service innovations and ultimately lower prices in FVA markets. May not offer adequate protection for HLVA end users who given Eircom's SMP may face rises in HLVA prices and or some price discrimination.

Option 6: Maintain the existing wholesale remedies on all FVA markets and (b) impose all existing retail remedies on all FVA markets		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Existing regulatory burden on Eircom per the 2007 Decision remains.	Would allow efficient alternative FSPs to compete effectively in the FVA markets, in related markets and for bundle offers which include FVA and fixed voice services. May dull incentives to compete more flexibly and hence restrict service innovation and differentiation in relation to HLVA;	End users would benefit from increased choice of FSP and protected against any risk of unjustified FVA price increases.

Assess the likely impacts and choose the best option

7.59 In the discussion on its proposed approach on remedies throughout this Consultation Paper, ComReg has taken full account of its obligations under Regulation 8(6) of the Access Regulations (including that any proposed 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 Acts 2002 to 2011.

7.60 ComReg's preliminary view is that, absent regulation, there is the potential and incentive for Eircom to engage in exploitative and exclusionary behaviours which would negatively impact on competition and consumers. In Chapter 6 ComReg provided examples of potential competition problems and the impact of these on competition and consumers. ComReg has also highlighted its objectives in regulating the relevant FVA markets in paragraphs 7.10 to 7.12 above, in particular, preventing restrictions or distortions of competition in affected FVA markets (and related retail markets) and helping to ensure that consumers can achieve maximum benefits in terms of price choice and quality of FVA and fixed telephony service.

7.61 As it is proposed that the FVA markets are not effectively competitive we have considered what regulation would be appropriate to remedy the identified problem. The imposition of appropriate ex ante remedies to address competition problems was discussed and justified in Chapter 6 and each of the specific remedies is designed to promote the development of effective competition and to protect ultimately end users. ComReg is mindful that it is preferable, in the first instance, to apply regulation at the wholesale level as this both addresses SMP issues in the wholesale markets and promotes competition in downstream markets that rely on wholesale inputs (i.e. Option 1). ComReg aims to encourage efficient investment in infrastructure and promote innovation thus facilitating the 'ladder of investment'. The regulation of wholesale markets encourages competing FVA suppliers to purchase wholesale products and combine them with their own networks to create products in competition with the legacy operator, Eircom.

7.62 Given that wholesale obligations (CPS, SB-WLR and their supporting remedies) will be maintained (pending further consultation) the risk of competition problems and their associated impacts resulting from Eircom's SMP in the relevant FVA markets should be minimised. Effective access to Eircom's network will achieve the general objective for this market of allowing competitors to enter this market with confidence thereby helping to ensure that competition will drive maximum benefits for consumers in terms of price, choice and quality of service. The proposed maintenance of wholesale regulation is considered justifiable where, absent regulation, Eircom would have significant scope to undermine competition through refusal to procure CPS or SB-WLR access and/or provide such access to downstream competitors on exploitative or discriminatory terms. This would significantly disadvantage existing rivals and distort existing or prospective competition in FVA markets (and related calls markets), ultimately to the detriment to consumers.

7.63 As set out at paragraph 6.3, Regulation 13 of the Universal Service Regulations restricts the imposition of regulatory controls on retail (FVA) services to situations where obligations that could be imposed under the Access Regulations would not, in themselves be sufficient to achieve the objectives as set out under section 12 of the Communications Regulation Acts 2002 to 2011 or Framework Regulations. In proposing relevant retail FVA markets not to be effectively competitive ComReg therefore considers the effectiveness of access-related wholesale measures (i.e. CPS, SB-WLR and supporting remedies), when determining what remedies, if any, are appropriate at retail level. ComReg considers whether to rely on wholesale remedies and possibly remove existing retail obligations (i.e. Option 1 versus Option 2, 3, 4, 5 and 6). However, residual competition concerns remain at the retail level which would not be sufficiently addressed by reliance on wholesale remedies alone (i.e. Option 1). Given that some of the competition problems identified persist and will likely persist in spite of regulatory measures at the wholesale level the case for reliance on wholesale remedies in all FVA markets seems weak. For example, even in the presence of mandate wholesale products there is sufficient scope and incentives for the SMP operator to sustain retail FVA prices above competitive levels over the period of the review or potentially to engage in an anti competitive margin squeeze facilitated by bundling which would serve to undermine the effectiveness of the wholesale measures. Additional intervention at the retail level (i.e. Options 2 through 6) is therefore necessary and appropriate to promote competition in relevant FVA markets thereby ensuring maximum benefit to consumers.

7.64 Wholesale obligations CPS, SB-WLR and supporting remedies have not so far resulted in sufficient competitive entry or effective competition in the LLVA market. Accordingly ComReg considers that the protection against potential exploitation of SMP and/or, restriction or distortion of competition resulting from Eircom's position of SMP, provided by retail obligations (i.e. Options 2 through 5 which ensure that Eircom's actions are not exploitative and/or exclusionary until such time as competition in LLVA is effective) is necessary and appropriate.

7.65 In view of significant market and regulatory developments since the 2007 review of the HLVA market, ComReg considers that relying on obligations CPS, SB-WLR and supporting remedies is likely to be sufficient to address any residual competition concerns in the retail HLVA market. Based on available evidence, FSPs continue to combine the latter inputs with their own networks to create products in competition with Eircom. The continuing prospect of increased competition from emerging IP based substitutes, such as, fibre based SIP Trunking would on a forward looking basis likely minimise competition concerns and associated impacts resulting from Eircom's SMP in the HLVA market. Accordingly ComReg considers it appropriate and justifiable to withdraw existing retail regulation from HLVA while relying on exiting wholesale obligations (i.e. Option 6).

7.66 The proposed maintaining of wholesale regulation in the FVA markets and additional retail regulation of LLVA (i.e. Option 5) is justifiable, in that it is required to ensure that Eircom does not exploit its SMP at the wholesale or retail level to the detriment of competition in the FVA markets, to the ultimate detriment of consumers. The regulatory obligations chosen do not unduly discriminate against Eircom in that, while they only apply to Eircom, the obligations are imposed in order to specifically address the potential competition problems which exist in the FVA markets. They are proportionate in that they are the least burdensome means of achieving the required objectives as set out under section 12 of the Communications Regulation Acts 2002 to 2011 and, at paragraphs 7.10 to 7.12. ComReg considers that it has met the condition of transparency by setting out the potential requirements on Eircom, outlining the justification for the proposed approach to obligations, and issuing a detailed and reasoned public consultation on these matters.

7.67 ComReg invites comments from interested parties on the above Regulatory Impact Assessment and its underlying analysis.

Q. 25 Do you agree with ComReg's preliminary conclusions on the Regulatory Impact Assessment? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Chapter 8

8 Next Steps

8.1 The consultation period will run from 26 October 2012 to 21 December 2012 and all comments on the issues set out in this Consultation Paper are welcome.

8.2 The task of analysing responses received will be made easier if all comments are referenced to the specific question numbers as set out previously in Consultation Paper and summarised in Appendix 4.

8.3 Having analysed and considered the comments received, ComReg will review the proposals set out in this Consultation Paper, maintain or amend its proposals, as appropriate, including with respect to the draft measures set out in the Draft Decision Instrument at Appendix 3 below.

8.4 ComReg will then notify its final draft measures to the European Commission, other NRAs and BEREC, pursuant to Regulation 13 of the Framework Regulations. Taking utmost account of any comments received from the European Commission as well as from the other aforementioned parties, ComReg will then seek to adopt and publish the final decision in its subsequent Response to Consultation and Decision.

8.5 In order to promote further openness and transparency, ComReg will publish all responses to this Consultation Paper, subject to the provisions of ComReg's guidelines on the treatment of confidential information in ComReg Document No. 05/24.[305] ComReg appreciates that many of the issues raised in this Consultation Paper may require respondents to provide confidential information if their comments are to be meaningful. As it is ComReg's policy to make all responses available on its website and for inspection generally, respondents to this Consultation Paper are requested to clearly identify confidential material within their submissions and place any such confidential material in a separate Appendix to their response. Such material will be treated subject to the provisions of ComReg's guidelines on the treatment of confidential information as set out in ComReg Document No. 05/24.

8.6 In submitting comments, respondents are also requested to provide a copy of their submissions in an unprotected electronic format in order to facilitate their subsequent publication by ComReg.

[305] Guidelines on the Treatment of Confidential Information, Response to Consultation, ComReg Document 05/24, March 2005.

Appendix 1: Market Research 2012

A 1.1 The 2012 Market Research has been published separately as ComReg Document 12/117a and is available on ComReg's website.

Appendix 2: Other SMP criteria considered

A 1.2 As noted in Chapter 5, other factors which could be used to indicate the potential market power of a FVA supplier have been considered but, for the reasons set out below, are considered of little or no relevance for the purposes of the competition and SMP assessment in the relevant FVA markets (i.e. the LLVA and HLVA markets).

Technological advantages or superiority

A 1.3 The section on potential competition in the relevant FVA markets notes the potential for network developments or upgrades to influence the position of the relevant market participants on a forward-looking basis. In the relevant FVA markets, however, it would appear that any technological advance made by one operator could, from a purely technological point of view (absent considerations of network size, etc.) be adopted over time by others. For example, some alternative network operators are using broadband as a platform for providing voice. As such, it is unlikely that the SMP operator has superior and exclusive access to new technologies with voice technologies relate less demanding.

Easy or privileged access to capital markets/financial resources

A 1.4 As regards the extent to which access to capital markets may pose a barrier to entry, ComReg considers that many operators in this market are part of large global enterprises, and would therefore operate under similar conditions and constraints in terms of their ability to access capital.

A highly developed distribution and sales network

A 1.5 The need to establish distribution systems might delay short term market entry, unless an operator can draw on an existing customer base e.g. entrants like UPC or Sky may be able to draw on an existing base of TV customers.

Product or services diversification

A 1.6 In some cases an operator enjoys a unique ability to provide a horizontally diverse product range which may result in increased economies of scale and scope. For example, if eircom were to provide a bundle of retail products that cannot be replicated by its competitors.

Appendix 3: Draft Decision Instrument

Draft Decision Instrument: Fixed Voice Access

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 retail market for access to the public telephone network at a fixed location for residential and non-residential customers, as identified by the European Commission in its Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation[306] ("the 2007 Recommendation") and as analysed by ComReg in the document entitled *Market Review: […] (Market […] Decision No. D […], Document No. […]*.

1.2. This Decision Instrument is made:

i. Pursuant to and having regard to the functions and objectives of ComReg as set out in Sections 10 and 12 of the Communications Regulation Acts 2002 to 2011[307] and in Regulation 16 of the Framework Regulations; and

ii. Having taken account of the functions of ComReg under Regulation 6(1) of the Access Regulations; and

iii. Having taken the utmost account of the 2007 Recommendation and the European Commission's Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services ("the SMP Guidelines")[308]; and

iv. Having, where appropriate, pursuant to Section 13 of the Communications Regulation Acts 2002 to 2011 complied with the policy directions made by the Minister for Communications, Marine and Natural Resources[309]; and

v. Having had regard to the market definition, market analysis and reasoning set out in *Consultation Paper and Draft Decision, Market Analysis: […] (Market […])*, ComReg Document No. [12/XX]; and

vi. Having taken account of the submissions received from interested parties in relation to ComReg Document No. [12/XX] following a public

[306] 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, 28.12.2007, p. 65) ("the 2007 Recommendation").

[307] Communications Regulation Act 2002 (No. 20 of 2002), as amended by the Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), the Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and the Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011) ("Communications Regulation Acts 2002 to 2011").

[308] 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/C165/03) (OJ C 165/6).

[309] Policy Directions made the Minister for Communications, Marine and Natural Resources, dated 21 February 2003 and 26 March 2004.

consultation pursuant to Regulation 12 of the Framework Regulations; and

vii. Having consulted with the Competition Authority further to Regulation 27 of the Framework Regulations; and

viii. Having notified the draft measure and the reasoning on which same is based to the European Commission, BEREC and the national regulatory authorities in other EU Member States in accordance with Regulations 13 and 14 of the Framework Regulations and having taken the utmost account pursuant to Regulation 13(6) of the Framework Regulations of any comments made by the European Commission, BEREC and any national regulatory authority in another EU Member State in accordance with Article 7(3) of the Framework Directive[310]; and

ix. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations, Regulation 13 of the Universal Service Regulations and Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations.

1.3. The provisions of ComReg Document No. 12/XX and ComReg Document No. 12/XX (Decision No. D0X/12) shall, where appropriate, be construed with this Decision Instrument.

PART I - GENERAL PROVISIONS (SECTIONS 2 TO 5 OF THE DECISION INSTRUMENT)

2. DEFINITIONS AND INTERPRETATION

2.1. In this Decision Instrument:

"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;

"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;

"Bundle" means a package of services, consisting of Lower Level Narrowband Access and one or more other services, which is on offer or on sale by Eircom to End-Users;

"ComReg" means the Commission for Communications Regulation, established under the Communications Regulation Acts 2002 to 2011;

"ComReg Decision 03/07" means ComReg Document No. 07/76, Decision No. 03/07 entitled "Decision Notice and Decision Instrument – SMP Obligation: Retail Price Cap Remedy – Fixed Narrowband Access Markets" dated 1 October 2007;

[310] 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), as amended by Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009.

“ComReg Decision D07/61” means ComReg Document No. 07/61, Decision No. D07/61 entitled “Decision Notice and Decision Instrument – Designation of SMP and SMP Obligations – Market Analysis: Retail Fixed Narrowband Access Markets” dated 24 August 2007;

“ComReg Decision D08/10” means ComReg Document No. 10/67, Decision D08/10 entitled "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 Document 11/72” means [ComReg Document No 11/72 entitled “Consultation and Draft Directions: Review of the appropriate price controls in the markets of Retail Fixed Narrowband Access, Wholesale Physical Network Infrastructure Access and Wholesale Broadband Access” dated 10 October 2011;]

“ComReg Document 12/63” means [ComReg Document No. 12/63 entitled “Supplementary Consultation to ComReg 11/72: Price regulation of bundled offers” dated 15 June 2012;]

“Consumer” shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

“Effective Date” means the date set out in Section 16 of this Decision Instrument;

“Eircom” means Eircom Limited and its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls Eircom Limited and its successors and assigns;

“End-User” shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

“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;

“ISDN” means Integrated Services Digital Network;

“ISDN BRA” means ISDN basic rate access;

“ISDN FRA” means ISDN fractional primary rate access;

“ISDN PRA” means ISDN primary rate access;

"Lower Level Narrowband Access" means access to the public telephone network at a fixed location in Ireland for the provision of voice telephony services by means of (i) PSTN, or (ii) ISDN BRA;

"Lower Level Voice Access Market" means the market as identified in Section 4.2.1 below;

"Managed Voice Over Internet Protocol (VOIP)" means a voice over internet protocol service, including but not limited to managed VOIP provided over cable, digital subscriber line (DSL), fibre optic cable and fixed wireless access (FWA), which is provided to a similar quality as the voice service currently provided by Eircom over PSTN;

"PSTN" means public switched telephone network(s);

"Relevant Markets" means the markets defined in Section 4.2 below;

"Significant Market Power (SMP) Obligations" are those obligations as more particularly described in Part II below;

"Undertaking" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Universal Service Regulations" means the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (S.I. No. 337 of 2011), as may be amended from time to time;

"Working Day" means a day which is not a Saturday, Sunday or public holiday in Ireland.

3. SCOPE AND APPLICATION

3.1. This Decision Instrument applies to Eircom in respect of activities falling within the scope of the Relevant Markets defined in Section 4 of this Decision Instrument.

3.2. This Decision Instrument is binding upon Eircom and Eircom shall comply with this Decision Instrument in all respects.

4. MARKET DEFINITION

4.1. This Decision Instrument relates to the retail market for access to the public telephone network at a fixed location for residential and non-residential customers, as identified in the 2007 Recommendation and as analysed by ComReg in the document entitled *Market Review: […] (Market […]) Decision No. [D…], Document No. [..]*.

4.2. Pursuant to Regulation 26 of the Framework Regulations and in accordance with the 2007 Recommendation and the Explanatory Note[311], taking the utmost account of the SMP Guidelines and in accordance with the principles of competition law, the Relevant Markets defined in this Decision Instrument are:

[311] European Commission Explanatory Note accompanying the 2007 Recommendation, SEC(2007) 1483/2, C(2007) 5406 ("the Explanatory Note").

4.2.1. the retail market for access to the public telephone network at a fixed location in Ireland for the provision of voice telephony services (whether on a standalone basis or as part of a bundled offering) by means of:

(i) PSTN;
(ii) ISDN BRA; or
(iii) Managed VOIP (including Managed VOIP provided over cable, digital subscriber line (DSL), fibre optic cable and fixed wireless access (FWA))

which market is referred to in this Decision Instrument as the "Lower Level Voice Access Market".

4.2.2. the retail market for access to the public telephone network at a fixed location in Ireland for the provision of voice telephony services (whether on a standalone basis or as part of a bundled offering) by means of:

(i) ISDN FRA; or
(ii) ISDN PRA.

4.3. The Relevant Markets are more particularly described in Section […] of the document entitled [*Market Review: […] (Market 1) Decision No. D […], Document No. […]*].

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 Markets are not effectively competitive, Eircom is designated as having SMP on each of the Relevant Markets.

PART II - SMP OBLIGATIONS IN RELATION TO RETAIL FIXED TELEPHONY ACCESS (SECTIONS 6 TO 12 OF THE DECISION INSTRUMENT)

6. SMP OBLIGATIONS IN RELATION TO RETAIL FIXED TELEPHONY ACCESS

6.1. In accordance with and pursuant to Regulation 13 of the Universal Service Regulations, having determined that the Lower Level Voice Access Market is not effectively competitive and that obligations imposed by ComReg under Regulations 9 to 13 of the Access Regulations would not result in the achievement of the objectives set out in Section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations, ComReg is imposing certain SMP Obligations on Eircom in respect of the Lower Level Voice Access Market, as detailed further in Sections 7 to 11 below.

6.2. In accordance with and pursuant to Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations, ComReg is continuing in force certain SMP Obligations on

Eircom in respect of the Relevant Markets, as detailed further in Section 12 below.

7. OBLIGATION OF TRANSPARENCY

7.1. Pursuant to Regulation 13(1) of the Universal Service Regulations, Eircom shall notify ComReg no later than five (5) Working Days in advance of the implementation of proposed changes to the terms and conditions of supply (including prices) of services within the Lower Level Voice Access Market.

7.2. Eircom shall publish in its public offices and on its website all changes in relation to the terms and conditions of supply (including prices) of services within the Lower Level Voice Access Market as soon as such changes come into effect.

7.3. Eircom shall, in respect of services within the Lower Level Voice Access Market, supply such services only at the published price.

8. OBLIGATION RELATING TO PRICE CONTROL

8.1. Pursuant to Regulation 13(2)(a) of the Universal Service Regulations, Eircom shall not charge excessive prices for the supply of services falling within the scope of the Lower Level Voice Access Market.

8.2. Pursuant to Regulation 13(3) of the Universal Service Regulations, insofar as Lower Level Narrowband Access is concerned, Eircom shall comply with the obligations relating to lower level services contained in the Decision Instrument set out in Annex 1 of ComReg Decision 03/07.

8.3. The obligations relating to lower level services contained in the Decision Instrument set out in Annex 1 of ComReg Decision 03/07 shall continue in force until further notice by ComReg.

9. OBLIGATION RELATING TO UNDUE PREFERENCE

9.1. Pursuant to Regulation 13(2)(c) of the Universal Service Regulations, Eircom shall not show undue preference to specific End-Users as regards the supply of services falling within the Lower Level Voice Access Market.

10. OBLIGATION NOT TO UNREASONABLY BUNDLE SERVICES

10.1. Pursuant to Regulation 13(2)(d) of the Universal Service Regulations, Eircom shall not unreasonably bundle services falling within the Lower Level Voice Access Market with other services.

10.2. Without prejudice to the generality of the obligation in Section 10.1, where Eircom offers a Bundle, it shall ensure that End-Users are able to purchase an individual service included in any such Bundle on a standalone basis without being required by contractual or non-contractual means to purchase the entire bundle of services. Eircom shall also ensure that tariffs for the individual services comprising any such Bundle comply with the principle that End-Users should not be required to pay for services or facilities which are not necessary for the service requested.

10.3. With prejudice to the generality of the obligation in Section 10.1, insofar as Lower Level Narrowband Access is concerned, Eircom shall ensure that Bundles avoid a margin squeeze and comply with a net revenue test.

10.4. Without prejudice to the generality of the obligations in Section 10.1 and Section 10.3, the obligation in Section 10.1 shall be subject to the requirements further specified by ComReg in [*the decision (if any) resulting from the consultation undertaken by ComReg in Documents 11/72 and 12/63: see the Draft Direction in Relation to Decision D07/61 contained in Annex B of ComReg Document 11/72 (as amended by ComReg Document 12/63)*]. For the avoidance of doubt, the requirements further specified by ComReg in [*the decision (if any) resulting from the consultation undertaken by ComReg in Documents 11/72 and 12/63: see the Draft Direction in Relation to Decision D07/61 contained in Annex B of ComReg Document 11/72 (as amended by ComReg Document 12/63)*] shall continue in force as if such requirements relate to the obligation imposed in Section 10.1 of this Decision Instrument.

11. OBLIGATION RELATING TO COST ACCOUNTING

11.1. Pursuant to Regulation 13(4) of the Universal Service Regulations, insofar as the Lower Level Voice Access Market is concerned, Eircom shall operate and maintain a cost accounting system that is:

(i) Based on generally accepted accounting practices;
(ii) Suitable for demonstrating compliance with the relevant obligations imposed under this Decision Instrument; and
(iii) Capable of verification by ComReg or a qualified independent party.

11.2. Without prejudice to the generality of the obligation in Section 11.1, pursuant to Regulation 13 and Regulation 30 of the Universal Service Regulations and insofar as the Lower Level Voice Access Market is concerned, Eircom shall comply with all of the obligations in relation to cost accounting set out in ComReg Decision D08/10 and in any other decisions or directions which may be issued by ComReg from time to time.

12. CONTINUATION IN FORCE OF CERTAIN WHOLESALE OBLIGATIONS

12.1. In accordance with and pursuant to Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations, Sections 5 and 6 of the Decision Instrument set out in the Annex to ComReg Decision D07/61 shall continue in force until further notice by ComReg.

PART III - OBLIGATIONS AND EFFECTIVE DATE (SECTIONS 13 TO 16 OF THE DECISION INSTRUMENT)

13. STATUTORY POWERS NOT AFFECTED

13.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it from time to time under any primary or secondary legislation (in force prior to or after the effective date of this Decision Instrument).

14. WITHDRAWAL OF OBLIGATIONS

14.1. Save as provided for in Section 12.1 above, the Decision set out in ComReg Decision D07/61 is hereby withdrawn when this Decision Instrument shall take effect.

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, are continued in force by this Decision Instrument and Eircom shall comply with same.

15.2. If any section, clause or provision or portion thereof contained in this Decision Instrument is 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 section, clause or provision or portion 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 thereof of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument.

16. EFFECTIVE DATE

16.1. The effective date of this Decision Instrument shall be the date of its publication and notification to Eircom and it shall remain in force until further notice by ComReg.

ALEX CHISHOLM

CHAIRPERSON AND COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE […] DAY OF […] 2012

Q. 26 Do you believe that ComReg’s draft Decision Instrument set out above is, from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regard to the matters proposed therein? Please explain the reasons for your answer, clearly indicating the relevant section numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

Appendix 4: Glossary of terms

Acronym	Full Title
BEREC	Body of European Regulators for Electronic Communications
CBP	Countervailing Buyer Power
CPS	Carrier Pre-Select
DSL	Digital Subscriber Line
ERG	European Regulators Group (replaced by BEREC)
EU	European Union
F2F	Fixed-to-Fixed call
F2M	Fixed-to-Mobile call
FSP	Fixed Service Provider
FTRs	Fixed Termination Rates
FWA	Fixed Wireless Access
HM	Hypothetical Monopolist
IP	Internet Protocol
ISDN	Integrated Services Digital Network
LLU	Local Loop Unbundling
M2F	Mobile-to-Fixed call
M2M	Mobile-to-Mobile call
MTRs	Mobile Termination Rates
NGA	Next Generation Access
NRA	National Regulatory Authority
NTP	Network Termination Point
PSTN	Public Switched Telephone Network
SB-WLR	Single-Billing *via* Wholesale Line Rental
SLA	Service Level Agreement
SME	Small-to-Medium size Enterprise
SMP	Significant Market Power

SSNIP	Small but Significant Non-transitory Increase in Price
VoIP	Voice over Internet Protocol
WBA	Wholesale Broadband Access
WPNIA	Wholesale Physical Network Infrastructure Access

Appendix 5: Consultation Questions

Section Page