Commission for
Communications Regulation

Market Review

Wholesale Voice Call Termination Services Provided at a Fixed Location

All responses to this consultation should be clearly marked:-
"Reference: Submission re Market Review – Wholesale Voice Call Termination Services Provided at a Fixed Location, ComReg 12/96" as indicated above, and sent by post, facsimile, or e-mail, to arrive on or before 17:00 on 15 October 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 12/96

Date: 03/09/2012

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Redacted Information

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1 Introduction

1.1 Fixed voice[1] service providers ('**FSPs**'[2]) offer their retail customers the ability to make calls to and receive calls from customers on other fixed and mobile networks. In doing so, at the wholesale level, the recipient FSP of the called party offers a call termination service to the FSP or mobile service provider ('**MSP**') originating the call, essentially allowing retail customers of the originating FSP or MSP the ability to connect to and call retail customers of the recipient FSP. This wholesale interconnection service, provided by the recipient FSP, is known as Fixed Voice Call Termination ('**FVCT**')[3].

1.2 In providing FVCT, the terminating FSP will charge the originating FSP or MSP a Fixed Termination Rate ('**FTR**'). It should be noted that FSPs and MSPs are referred to collectively for the purposes of this Consultation Paper as 'Service Providers'. The relationship between the calling party, the called party, along with the underlying wholesale interconnection[4] and payment mechanisms, are illustrated in Figure 1 below.

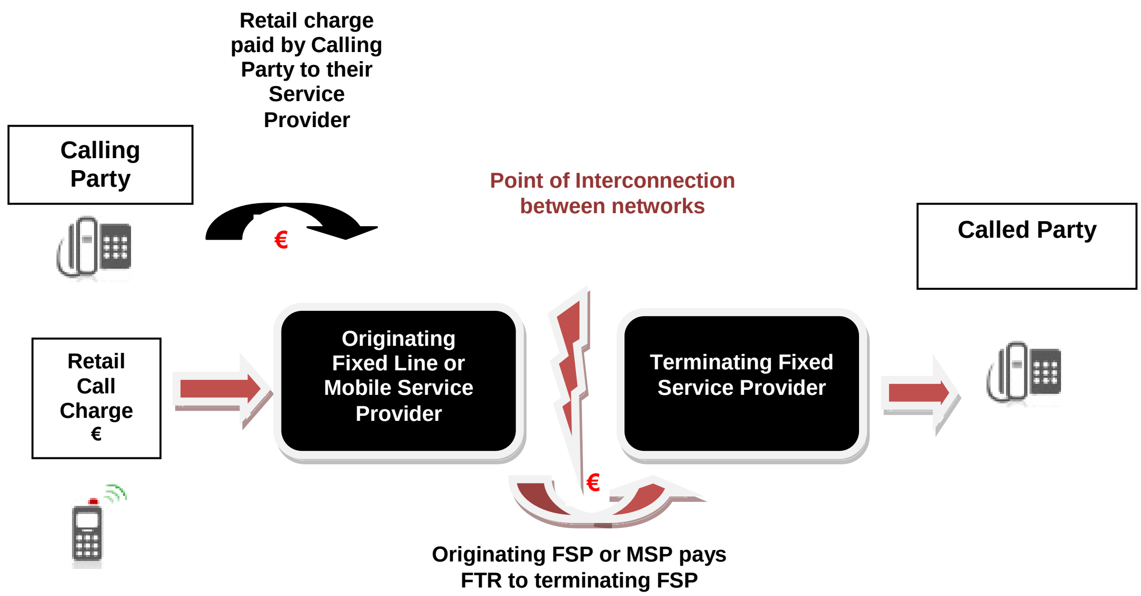
[1] Please note that for the purposes of this Consultation Paper, the term "fixed voice" refers to voice services provided to end users who make/receive voice calls at a fixed location, i.e. typically within the home or a business premises. While the definition implies that the voice calls service would be provided at a fixed location, it does not necessarily imply that the underlying or supporting network is always a wired network.

[2] Further to footnote 1 above, please also note that for the purposes of this Consultation Paper the term "FSP" refers to the fact that the undertaking in question provides services to subscribers which enables them to make/receive voice calls at a fixed location and it does not necessarily imply that the underlying or supporting network is necessarily a wired network.

[3] Further to footnote 1 above, please also note that for the purposes of this Consultation Paper the term "FVCT" refers to the fact that the recipient of the voice call is located at a fixed premises and it does not necessarily imply that the underlying or supporting network is necessarily a wired network.

[4] Originating Service Providers may not be directly interconnected with an FSP and, in such circumstances, the purchase of FVCT from the terminating FSP may take place via a third party transit provider. This type of indirect purchase of FVCT is not shown in Figure 1.

Figure 1: **Retail charging and fixed termination interconnect arrangements**



1.3 Take the example of a retail customer seeking to make a call (the '**Calling Party**') from their fixed line telephone or mobile phone in order to contact someone on a phone at a fixed location (the '**Called Party**'). The Calling Party will pay their Service Provider a retail charge for making the call. At the wholesale level, the Calling Party's Service Provider originates the telephone call on its network and, where it is directly interconnected[5], hands the call over to the FSP of the Called Party, thereby facilitating the connection of the call. In general, the completion of the call by the Called Party's FSP involves the provision of a FVCT service by the Called Party's FSP. The Called Party's FSP will ultimately charge the Calling Party's Service Provider an FTR to reflect the cost of providing the FVCT service. Neither the Calling Party nor the Called Party has direct visibility of the FTR charged, however, it is likely that the originating Service Provider will pass some or all of the FTR charge through to the Calling Party *via* its retail call charges.

1.4 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 wholesale market(s) for the provision of call termination on individual public telephone networks provided at a fixed location (the '**Relevant FVCT Market(s)**'). The objective of this review is ultimately to decide if, absent regulation, any FSP has significant market power ('**SMP**') in any of the Relevant FVCT Market(s) and, if so, to impose

[5] The originating network may also route its traffic via a third party transit interconnect provider who, in turn, hands the call over to the terminating FSP.

appropriate remedies to address competition problems that have arisen or could arise in this market. Such competition problems could, for example, include:

- refusal to supply FVCT resulting in an undermining of competition and the inability for consumers to make calls across networks;
- the levying of excessive FVCT charges resulting in higher costs for those network operators handing over calls, with such higher costs fed through to consumers in the form of higher call or other charges.

1.5 Remedies imposed by National Regulatory Authorities ('**NRAs**') in other EU Member States to address such competition problems have mainly tended to focus on access obligations, FTR price controls and related issues.

1.6 In this Consultation Paper, ComReg presents its preliminary findings on its analysis of the Relevant FVCT Market(s). The analysis set out in this paper adopts the approach recommended by the European Commission and, in doing so, takes the utmost account of:

- the **2007 Recommendation**[6] and the **Explanatory Note to the 2007 Recommendation**[7] on relevant product and service markets susceptible to *ex ante* regulation within the electronic communications sector;
- the **SMP Guidelines**[8] on market analysis and the assessment of significant market power;
- the **2009 Termination Rates Recommendation**[9] on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU; and
- the **2005 Accounting Separation and Cost Accounting Recommendation**[10].

[6] 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**').

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

[8] 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**').

[9] European Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC) (OJ L124/67 20.5.2009) (the '**2009 Termination Rates Recommendation**').

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

1.7 ComReg also takes account of:

- the **Notice on Market Definition**[11] for the purposes of community competition law;
- any relevant common positions adopted by **BEREC**[12];
- European Commission comments made, pursuant to Article 7 and 7a of the Framework Directive, with respect to NRAs' market analyses.

1.8 The Consultation Paper defines the Relevant FVCT Market(s) (product and geographic), assesses competition within those markets and then, finally, examines potential competition problems and proposes appropriate regulatory remedies (along with assessing their impacts) to address these problems. ComReg seeks feedback from all interested parties on the preliminary views set out in this Consultation Paper.

1.9 Before discussing the detail of the analysis, 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 FVCT Market(s) to date.

Legal Basis and Regulatory Framework

1.10 This market review is being undertaken by ComReg in accordance with the obligation under the Framework Directive[13] (transposed into Irish law as the Framework Regulations)[14] that NRAs should analyse the Relevant FVCT Market(s) taking utmost account of the 2007 Recommendation and the SMP Guidelines.

1.11 Regulation 26 of the **Framework Regulations** 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.

1.12 The European Commission refers in the 2007 Recommendation to the Relevant FVCT Market(s) as follows:

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[11] 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.

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

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

[14] 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.

"Call termination on individual public telephone networks provided at a fixed location." [15]

1.13 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.

1.14 Where an operator is designated as having SMP in a relevant market, ComReg is obliged, under Regulation 8(1) of the **Access Regulations**[16], to impose on such an operator (or maintain where they already exist) such of the obligations set out in Regulations 9 to 13 of the Access Regulations as it considers appropriate. Obligations imposed must:

(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.

1.15 Section 12(1)(a) of the Communications Regulation Acts 2002 to 2011 sets out ComReg's objectives in exercising its functions in relation to the provision of electronic communications networks, electronic communications services and associated facilities, namely:

(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.

1.16 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

[15] Annex to the 2007 Recommendation, point 3.

[16] 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".

[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**').

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 and the Access Regulations. ComReg has taken the utmost account of the 2007 Recommendation and the Explanatory Note to the 2007 Recommendation, the SMP Guidelines, the European Commission's 2009 Termination Rates Recommendation and its 2005 Accounting Separation and Cost Accounting Recommendation. ComReg has further taken account of the European Commission's Notice on Market Definition.

Previous Review of the Relevant FVCT Markets

1.18 The Relevant FVCT Markets have, to date, been regulated by ComReg's 2007 FVCT decision (the '**2007 Decision**')[18] in which Eircom and the following six other alternative FSPs ('**alternative FSPs**') were designated as having SMP on their respective networks: BT Ireland; Verizon; UPC[19]; Colt; Smart Telecom[20]; and Magnet Networks. The 2007 Decision imposed regulatory obligations on Eircom and the alternative FSPs in question[21].

Current Review of the Relevant FVCT Markets

1.19 Given the time that has elapsed since the conduct of the original analyses of the Relevant FVCT Markets, it is now considered appropriate to carry out a further review.

1.20 As part of this market review, ComReg has obtained qualitative and quantitative information from Service Providers through a series of formal and informal information requests. This supplements information which is provided to ComReg in the performance of its regular operations (e.g. for the Irish

[18] ComReg Decision No. D06/07, Market Analysis – Interconnection Market Review Fixed Wholesale Call Termination Services, ComReg Document 07/109, 21 December 2007.

[19] At the time of the 2007 Decision UPC was the parent company of Ntl Communications (Ireland) Limited and Chorus Communications Limited which it was in the process of merging. Since the completion of this merger UPC has been subject to the SMP designation by virtue of section 3.2 of the [2007 Decision Instrument] which provided that: *"In this Decision Instrument any reference to Eircom, or any of the OAOs includes a reference to their successors and assigns and any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, Eircom, or any of the OAOs and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities within the scope of the Market in Ireland".*

[20] Smart Telecom has since been acquired by Digiweb. See footnote 31 below.

[21] See paragraph 8.13 below.

Communications Market Quarterly Key Data Report ('**Quarterly Report**')[22]. ComReg has also reviewed, in detail, the experience of regulating Relevant FVCT Markets and Mobile Voice Call Termination ('**MVCT**') Markets in other 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.

1.21 ComReg has also carried out market research to inform its understanding of consumer and business attitudes/behaviours in the retail fixed voice market, a copy of which is set out in Appendix A (the '**2012 Market Research**')[23]. 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.

Liaison with the Competition Authority

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

Consultation Process[24]

1.23 As noted above, the purpose of this Consultation Paper is to set out ComReg's preliminary views on its analysis of the Relevant FVCT Market(s) (product and geographic definition, competition analysis 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

[22] The most recently published Quarterly Report is ComReg Document 12/62 (R), Quarterly Key Data Report (R), Data as of Q1 2012, 14 June 2012. Please note that only Quarterly Report data ('**ComReg Quarterly Report Data')** which is published on ComReg's main website (www.comreg.ie) or on its Comstat website (www.comstat.ie) will be made publicly available in the non-confidential version of this Consultation Paper. Certain (disaggregated) data submitted to ComReg as part of its Quarterly Report data gathering exercise, which has been used to inform this market review process but which is not already publicly available on the aforementioned websites ('**ComReg Quarterly Data')**, has been redacted from the non-confidential version of this Consultation Paper**.**

[23] See paragraph 4.11 for further details regarding the 2012 Market Research.

[24] Please note that separate consultations will be published also in H2 2012 on ComReg's preliminary updated assessment of the market(s) for Retail Access to the Public Telephone Network at a Fixed Location ('**Retail Access'**), and Wholesale Call Origination ('**CO**') and Wholesale Call Transit ('**Transit**') services at a Fixed Location. The Retail Access and CO markets correspond to markets 1 and 2 of the 2007 Recommendation. The Transit market corresponds to market 10 of former European Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex-ante regulation (OJ L 189/49 of 29 July 2003) ('**the 2003 Recommendation'**). See footnote 151 below for further details of the regulatory status of the CO and Transit markets.

within the Consultation Paper to which their response refers, along with all relevant factual evidence supporting views presented.

1.24 A separate consultation from 28 June 2012 to 4 September 2012 (set out in Appendix B of this Consultation Paper) has considered the appropriate methodology for applying FVCT price control obligations and further proposes to determine the maximum FTRs of those FSPs designated as having SMP arising from the 2007 Decision ('**the FTRs and MTRs Consultation Paper**'[25]). As will be further discussed in paragraphs 8.86 to 8.106 below, ComReg is now proposing in this Consultation Paper that the draft principles elaborated in the FTRs and MTRs Consultation Paper should also apply to all FSPs provisionally designated as having SMP in this Consultation Paper. To that end, respondents to this Consultation Paper, and in particular those 11 FSPs not covered by the 2007 Decision, are invited to respond to/comment on the FTRs and MTRs Consultation Paper – by the deadline for responses set out in paragraph 1.26 below – only insofar as that Paper relates to FTRs. In so doing, respondents are also requested to clearly explain the reasoning for their response, indicating the relevant paragraph numbers within the FTRs and MTRs Consultation Paper to which their response refers, along with all relevant factual evidence supporting views presented.

1.25 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 and to the FTRs and MTRs Consultation Paper will be published, subject to the provisions of ComReg's guidelines on the treatment of confidential information[26]. Confidential elements of responses should be clearly marked as such and, preferably, be set out in a separate document.

1.26 All responses should be sent by post, facsimile or email to the address below to arrive on or before 17:00 on 15 October 2012. Any responses received after this date may not be considered.

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[25] ComReg Document 12/67 Voice Termination Rates in Ireland - Proposed Price Control for Fixed and Mobile Termination Rates, 28 June 2012 and ComReg Document 12/67a, Analysys Mason Final Report for Consultation, Fixed and mobile termination rates in Ireland, 26 June 2012.

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

1.27 We have also noted earlier that this is a non-confidential version of the Consultation Paper. Certain information within the Consultation Paper has been redacted for reasons of confidentiality and commercial sensitivity, with such redactions indicated by the symbol ✂. Should an individual Service Provider wish to review its own redacted information, it should make a request for such in writing to ComReg (to the person identified in paragraph 1.26 above) and indicate the specific paragraph numbers within which the redacted information being requested is contained. ComReg will consider requests for redacted information and would, subject to the protection of commercially sensitive and confidential information, respond accordingly.

Structure of the Report

1.28 The remainder of this Consultation Paper is structured to follow the process of a market analysis as follows:

- **Section 2:** This section contains the executive summary of the issues and proposals for regulation of the Relevant FVCT Market(s).
- **Section 3:** This section provides an overview of the main trends that have occurred in the retail fixed voice market(s) over the last four years.
- **Section 4:** This section provides an assessment of the structural and behavioural characteristics in the retail fixed voice market(s), with a view to informing the subsequent definition and SMP analysis of the wholesale Relevant FVCT Market(s).
- **Section 5:** This section defines the wholesale Relevant FVCT Market(s) from both a product and a geographic perspective.
- **Section 6:** This section assesses competition within each of the defined Relevant FVCT Market(s) and considers whether any FSP operating within such markets holds a position of SMP.
- **Section 7:** This section sets out the main competition problems that could, absent regulation, occur within the Relevant FVCT Market(s), along with the likely consequential impacts on competition and consumers.
- **Section 8:** This section sets out proposed regulatory remedies to address competition problems, namely, in the form of obligations that would be imposed on FSPs having SMP.
- **Section 9:** This section sets out the Regulatory Impact Assessment (‘**RIA**’) of the proposed approaches to regulation in the Relevant FVCT Market(s)
- **Section 10:** This section sets out the next steps that will follow the publication of this Consultation Paper.

- **Appendix A:** This appendix contains the outputs of the 2012 Market Research commissioned by ComReg for the purpose of informing its analysis of the Relevant FVCT Market(s).
- **Appendix B:** This appendix contains the FTRs and MTRs Consultation Paper.
- **Appendix C:** This appendix sets out the Draft Decision Instrument which specifies, in legal terms, the nature of the regulatory remedies discussed in section 8.
- **Appendix D:** This appendix sets out the (extended) Draft FTRs Decision Instrument which specifies, in legal terms, the nature of the regulatory remedies discussed in section 8 and in the FTRs and MTRs Consultation Paper.
- **Appendix E:** This appendix provides an analysis of a range of criteria considered other than those set out in section 5 when assessing whether an FSP has SMP.
- **Appendix F:** This appendix sets out the process for identifying key wholesale FVCT suppliers since the 2007 Decision
- **Appendix G:** This appendix lists each of the questions set out in the Consultation Paper and on which views from interested parties are now being sought.
- **Appendix H:** This appendix contains a glossary of frequently used terms within the Consultation Paper.

2 Executive Summary

Overview

2.1 Telephone calls will often be initiated (or "originated") on one Service Provider's network and completed ("terminated") on another's. While the person making the call pays the originating Service Provider for the call, a separate transaction usually takes place between the Service Providers themselves. That is to say that in most cases the terminating Service Provider will charge the originating Service Provider for completing the call.

2.2 This wholesale interconnection service is known as Fixed Voice Call Termination ('FVCT') in the case of calls delivered to telephones at a fixed location and essentially allows retail subscribers of the originating Service Provider the ability to call and be connected to retail customers of the recipient FSP. The charge applied by the recipient FSP for providing this FVCT service is called a Fixed Termination Rate ('FTR'). In practice many FSPs provide FVCT services. This Consultation Paper addresses the question as to whether it is necessary to regulate the provision of FVCT for any FSP and, if so, which ones. The Consultation Paper concludes that it is necessary to regulate the provision of FVCT regardless of who is providing it[27].

2.3 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. Acting under EU law, the European Commission has established that wholesale FVCT markets are susceptible to *ex ante* regulation and this Consultation Paper presents ComReg's preliminary views on the Relevant FVCT Markets in an Irish context.

2.4 Furthermore, under EU law, ComReg is obliged to take the "utmost account" of a recommendation published by the European Commission as to how FVCT should be regulated and has done so accordingly.

2.5 Since ComReg's previous analysis of the Relevant FVCT Markets, as set out in the 2007 Decision, seven FSPs have been subject to regulation[28]. Having regard to developments since 2007, ComReg is now carrying out a new analysis to assess whether regulation of FVCT provided by such FSPs

[27] This is in line with current EU practice. All NRAs have defined each individual fixed network operator as constituting a distinct relevant network market for call termination. (See footnote 234 below).

[28] In the case of Eircom, obligations in respect of: access to and use of wholesale access products, features or additional associated facilities; transparency; non-discrimination; price control and cost accounting; and accounting separation were imposed. In the case of BT Ireland, Verizon, UPC, Colt, Smart Telecom (now part of Digiweb) and Magnet Networks obligations in respect of: transparency; non-discrimination and price control were imposed (with the latter obligation deferred until certain thresholds were met). See paragraph 8.13 below.

continues to be warranted and whether it needs to be extended, for the first time, to other FSPs.

2.6 In broad terms we follow a three stage process. Firstly, we must define what the scope of the market(s) in question is/are ("Market Definition"). Second, we assess whether any FSP is dominant in any of those markets ("Competition Assessment"). Third, we assess what harm to competition and consumers could result from that dominance ("Competition Problems") and what preventative measures ("Remedies") must be put in place as a result.

2.7 In simple terms we propose that the market be defined as: *"The wholesale FVCT service provided by an FSP to other Service Providers for calls to fixed numbers and in respect of which that FSP is able to set the FTR"*. All FSPs which provide FVCT and control the termination rate that is charged are considered relevant markets for the purposes of this review. The competition assessment also shows that each FSP has dominance in its own FVCT market. Accordingly, under these proposals the FVCT service of all FSPs which provide it would be regulated. A key remedy in these proposals is that the price of FVCT for all FSPs supplying this service would be regulated. The precise details as to how this would be done are already being consulted upon in the FTRs and MTRs Consultation Paper[29]. The interrelationship between this current Consultation Paper and the FTRs and MTRs Consultation Paper respectively is further clarified by paragraphs 8.86 to 8.106 below.

2.8 The main issues set out in this Consultation Paper, upon which ComReg is now seeking inputs from interested parties, are further summarised below.

Definition of the Relevant FVCT Market(s) and Competition Assessment

2.9 As regards market definition, ComReg has, as a first step, carried out an assessment of retail market(s), principally to examine whether any retail consumer behaviour is likely to indirectly constrain FTRs being set above the competitive level. This includes an assessment of whether effective retail substitutes exist for receiving a call to a telephone number at a fixed location.

2.10 At the retail level, because of what is known as the Calling Party Pays ('**CPP**') principle, the Calling Party bears the entire cost of the call, i.e. the Called Party does not pay for it. Thus, because of the CPP principle, the retail subscriber receiving the call is not typically sensitive to the FTR set by its FSP (as the FTR is paid for by the originating Service Provider). Having regard to this and a number of other factors, ComReg provisionally concludes that retail consumer behaviour is unlikely to act as an effective constraint on wholesale FVCT pricing behaviour.

2.11 At the wholesale level, ComReg considers the key features of FVCT from a technological and numbering perspective and whether there are any effective

[29] See paragraph 1.24 above.

substitutes for FVCT, taking account of demand-side and supply-side considerations.

2.12 Key characteristics of FVCT services include:

- the FSP's control (either through a primary or secondary number allocation) of the subscriber's fixed telephone number which is key to routing the final leg of an inbound call to an end user at a fixed location[30];
- interconnection between networks and the FSP's ability to set/control the FTR for inbound calls to the fixed telephone numbers; and
- technological neutrality (i.e. FVCT services for calls to all fixed telephone numbers are included irrespective of whether the underlying technology is wired or wireless).

2.13 ComReg is of the preliminary view that there are no effective substitutes for such FVCT services within the timeframe of this market review. Technically the appropriate handover point for FVCT at wholesale level is also considered to reflect the final point on the network at which the originating Service Provider can interconnect with the terminating FSP, and beyond which only the terminating FSP can complete the call to the Called Party's fixed telephone number.

2.14 The Consultation Paper therefore reaches the preliminary view that the Relevant FVCT Markets consist of:

> *"The provision by an FSP of a wholesale FVCT service to other Service Providers from the nearest point (to the end user) or level on that terminating FSP's network at which calls can be handed over for termination to fixed numbers and in respect of which that FSP is able to set the FTR."*
>
> *The geographic scope of the Relevant FVCT Market(s) corresponds to the geographic coverage of each individual FSP's FVCT offering to fixed numbers".*

2.15 Accordingly it is proposed that the following 18 separate Relevant FVCT Markets exist[31]:

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[30] This Consultation Paper comes to the preliminary view that relevant fixed telephone numbers for the purposes of this FVCT market review include **geographic and 076 numbers** which are the subject of a "primary allocation/reservation" and a "secondary allocation/reservation", within the meaning set out in ComReg Document 11/17, National Numbering Conventions v7.0, 09 March 2011 ('**National Numbering Conventions**') . See paragraphs 5.34 to 5.59 below.

[31] For the avoidance of doubt and in line with paragraph 5.28, this includes wholesale FVCT supplied by each of these FSPs and any undertaking which it owns or controls and any undertaking which owns or controls it. The listed party also includes its successors, affiliates and assigns. For example, as Digiweb has acquired control over Smart Telecom, Digiweb is deemed to include inter alia Smart Telecom which was previously covered by the 2007 Decision. See: http://media.digiweb.ie/quick-facts/

- Wholesale FVCT supplied by Eircom Limited
- Wholesale FVCT supplied by Imagine Communications Group Limited
- Wholesale FVCT supplied by Blue Face Limited
- Wholesale FVCT supplied by BT Communications Ireland Limited
- Wholesale FVCT supplied by Cable & Wireless (Ireland) Limited
- Wholesale FVCT supplied by Colt Technology Services Limited
- Wholesale FVCT supplied by Digiweb Limited
- Wholesale FVCT supplied by Magnet Networks Limited
- Wholesale FVCT supplied by UPC Communications Ireland Limited
- Wholesale FVCT supplied by Verizon Ireland Limited
- Wholesale FVCT supplied by In2com Limited
- Wholesale FVCT supplied by Voxbone SA
- Wholesale FVCT supplied by Airspeed Communications Limited
- Wholesale FVCT supplied by Equant Network Systems Limited
- Wholesale FVCT supplied by Finarea SA
- Wholesale FVCT supplied by Modeva Networks
- Wholesale FVCT supplied by 3Play Plus Limited
- Wholesale FVCT supplied by Magrathea Telecommunications Limited

2.16 It is recognised that additional FSPs might start supplying FVCT over the lifetime of this market review. ComReg proposes to monitor and to consider such developments on a case-by-case basis. In doing so, ComReg proposes to rely substantively on the current detailed assessment in this Consultation Paper to identify whether the services provided by any new-entrant FVCT supplier constitutes a Relevant FVCT Market, whether such an FSP has SMP, and if it would be appropriate to impose similar regulatory obligations on it.

2.17 ComReg has assessed whether the above FSPs have SMP in the Relevant FVCT Markets, that is, the ability to act independently of competitors, wholesale customers and consumers. Having considered existing and potential competition, along with other factors such as the strength of any buyer power in FTR negotiations and FVCT pricing behaviour over time, it is ComReg's preliminary view that each of the Relevant FVCT Markets is not effectively competitive. Consequently, in line with general EU regulatory practice, ComReg proposes to designate each of the FSPs operating within each Relevant FVCT Market with SMP.

Identification of Competition Problems and Imposition of Regulatory Obligations on FSPs with SMP

2.18 Amongst the main competition problems arising in the Relevant FVCT Markets is the ability for an SMP FSP, by virtue of its market power, to set its wholesale FTRs above the competitive level. FTRs ultimately feed into the cost of making calls to fixed telephone numbers and thus impact on consumers. Where FTRs are set above efficient cost, financial and competitive imbalances between Service Providers can also result. Such distortions imply that consumers as a group ultimately pay more in terms of reduced competition, lower innovation and higher prices.

2.19 The ability of FSPs to distort competition in related markets by virtue of their SMP in FVCT (*via* leveraging behaviour) was also identified. Eircom's integrated position across multiple related markets[32] implies that it has strong ability and incentives to use its market power in FVCT to distort competition and raise barriers to entry at various levels of the supply chain (e.g. in wholesale and retail voice markets).

2.20 To mitigate identified potential competition problems that could arise from the exercise of market power by SMP FSPs, ComReg has proposed *ex ante* regulatory remedies to ensure effective and efficient access to FVCT to the benefit of competition and ultimately consumers. In this regard, ComReg proposes to apply regulatory obligations as follows:

<u>All 18 SMP FSPs (including Eircom):</u>

- **Access Obligations:** which include a requirement to meet all reasonable requests for access and to provide access to FVCT and associated facilities (in the specific case of Eircom it is proposed to expressly require it to provide access to interconnect paths as an associated facility in view of its ubiquitous network coverage); requirement to negotiate in good faith; requirement not to withdraw access to facilities already granted; requirement to grant open access to technical interfaces, protocols and other key technologies; and requirements governing fairness, reasonableness and timeliness of access (in the specific case of Eircom it is proposed to expressly require it to conclude Service Level Agreements ('**SLAs**')).
- **Non-Discrimination Obligations:** which include requirements to ensure that equivalent conditions are applied, including in respect of FTRs or other charges, in equivalent circumstances to other undertakings

[32] For example, in addition to being active in downstream wholesale and retail markets, Eircom is currently designated with SMP in two further wholesale (interconnection) input markets relevant for providing voice call services at a fixed location. These include the CO and Transit markets. The CO and Transit markets will be analysed in a separate consultation due to be published also in H2 2012. See footnotes 24 and 151 for further details.

requesting or being provided with access (including access to FVCT and associated facilities); and requirements to ensure that access (including access to FVCT and associated facilities) and information are provided to all other undertakings under the same conditions and of the same quality as the SMP FSP provides to itself or to its subsidiaries, affiliates or partners.

- **Transparency Obligations:** in addition to a general transparency obligation, each SMP FSP shall be required to make publicly available and keep updated on its website a Reference Interconnect Offer ('**RIO**') and to make FTRs publicly available and publish such FTRs in an easily accessible manner on its publicly available website[33]. In the specific case of Eircom, it is proposed to maintain the transparency obligations set out in the 2011 Decision associated with its provision of CO and FVCT within its Wholesale Switchless Voice ('**SV**') services[34]; and, where appropriate, to continue to require it to comply with the processes developed in accordance with the 2002 Decision.

- **Price Control:** a price control (specifically cost orientation) obligation is proposed for all SMP FSPs. In 2009 the European Commission published a Recommendation on the appropriate cost methodology to be employed when setting FTRs and MTRs ('**2009 Termination Rates Recommendation**'). ComReg is required to take utmost account of the 2009 Termination Rates Recommendation in establishing its national approach with respect to FTR price control obligations.

  The FTRs and MTRs Consultation Paper[35] (consultation period runs from 28 June 2012 to 4 September 2012) sets out the detailed nature and implementation of the proposed price control obligation for the seven FSPs designated as having SMP in the 2007 Decision, having regard also to the 2009 Termination Rates Recommendation (see Appendix B of the Consultation Paper). The Decision Instrument appended to the FTRs and MTRs Consultation Paper applies only to the seven FSPs which are subject to the 2007 Decision. However, it is now proposed in this current

[33] In so doing, the FSP would be *inter alia* obliged to publish a notice of its intention to amend its FTRs not less than 35 calendar days in advance of the date on which any such amendment comes into effect. The FSP would also be required to provide written notification of its intention to amend its FTRs directly to undertakings with which it has entered into an FVCT contract not less than 35 calendar days in advance of the date on which any such FTR amendment comes into effect.

[34] ComReg Decision No. D07/11, ComReg Document No. 11/67, Wholesale Call Origination and Wholesale Call Termination Markets Response to Consultation Document No. 10/76 and decisions amending price control obligations and withdrawing and further specifying transparency obligations, 15 September 2011 ('**the 2011 Decision'**). Eircom's Wholesale SV service is effectively an end-to-end service allowing other Service Providers to enter the retail fixed voice market without the need to invest in interconnection infrastructure. See 7.31 for a description of the 2011 Decision which is aimed at avoiding discriminatory treatment between CO and FVCT sold on a standalone basis and CO and FVCT sold within Eircom's Wholesale SV services

[35] See paragraph 1.24 above.

Consultation Paper that all FSPs would be subject to the same price control obligations (including the pure LRIC methodology) set out in the FTRs and MTRs Consultation Paper (see section 8 of this Consultation Paper and the (extended) FTRs Draft Decision Instrument at Appendix D of this Consultation Paper). Hence, as part of the current Consultation Paper interested parties, and in particular those 11 alternative FSPs not previously covered by the 2007 Decision, are also invited to respond to Appendices B and D of this Consultation Paper, only insofar as such responses concern the setting of FTRs for the purposes of this market review. The interrelationship between this current Consultation Paper and the FTRs and MTRs Consultation Paper respectively is further clarified by paragraphs 8.86 to 8.106 below.

Eircom only:

- **Price Control:** further to the proposed price control obligations for all SMP FSPs set out above, where FVCT is set at a pure LRIC level, the scope for Eircom to act in a discriminatory manner by giving preferential FVCT rates to its Wholesale SV service customers that are not available to interconnected FSPs appears moderated. Where FTRs are regulated according to pure LRIC, it is thus proposed that the pricing principles adopted for FVCT in the 2011 Decision would be withdrawn. However, the pricing principles adopted for CO in the 2011 Decision would continue to remain in place.
- **Cost Accounting & Accounting Separation Obligations:** in view of Eircom's integrated position across several upstream and downstream markets (in particular noting its SMP designations in a number of these markets) there is still a need to ensure sufficient visibility of how costs are allocated across FVCT and other related inputs. The Consultation Paper thus proposes to maintain cost accounting and accounting separation obligations for Eircom.

2.21 Further to the Regulatory Impact Assessment set out in this Consultation Paper, ComReg is of the preliminary view that the remedies specified are both appropriate and justified in light of the market analysis and the identified competition problems.

2.22 Having considered responses to this Consultation Paper, and consulted as appropriate with the Competition Authority and the European Commission, ComReg expects to reach its final decision on all the matters set out herein in Q4 2012/Q1 2013.

3 Retail Market Trends[36]

3.1 Before assessing the strength of any competitive constraints arising from retail voice services on the wholesale provision of FVCT, ComReg reviews trends in the supply of voice services at a fixed location in Ireland since the time of the last review. ComReg notes that demand for FVCT is derived from retail voice services and therefore trends discussed in this section are potentially relevant to understanding wholesale demand for FVCT. The key trends are examined under the following headings:

- Retail providers of voice call services at a fixed location
- Decline in retail voice traffic provided at a fixed location
- Mobile voice traffic growth continues
- MSPs begin to supply retail voice services at a fixed location
- Growth in managed Voice over Internet Protocol (VoIP) services provided at a fixed location with cable as fastest growing alternative technology
- Increased take-up of packages and bundles

Retail providers of voice call services at a fixed location

3.2 The Irish retail market currently has several active suppliers of voice telephony services at a fixed location. These suppliers differ in their relative size, technological platform and geographic coverage. Broadly, for the purposes of this discussion, FSPs can be categorised into three types based on the extent of the coverage of their own networks[37]:

- **Independent FSPs**: these FSPs provide voice calls services at a fixed location predominantly using their own network and infrastructure and hence are generally not reliant on the use of wholesale inputs from other FSPs (except when terminating calls onto another network on behalf of their retail customer). Examples of such FSPs currently include Eircom and UPC[38].

[36] Please note that the purpose of this section is to set out high-level retail trends only and any market shares or market references presented are not intended to necessarily represent ComReg's view as to the particular scope/definition of any retail market(s).

[37] Please note that the FSPs listed in this section are not intended as an exhaustive list of all active suppliers of retail voice services in Ireland at present but are rather included as examples.

[38] Note that, while UPC predominantly provides fixed voice call services to retail customers over its cable network, it also uses Eircom's access network (CPS and WLR inputs) to provide calls services to a small proportion of its overall voice customers.

- **Partially independent FSPs**: these operate a physical telephone/data switching platform and potentially other infrastructure, but also rely (to varying degrees) on third party wholesale network access to originate and/or terminate calls to their retail customers' premises. The extent of these providers' networks differs significantly. Examples of FSPs in this category include BT Ireland, Cable and Wireless, Colt, Magnet Networks, Digiweb (including Smart Telecom), Imagine and Blue Face.

- **FSPs with resale activities**: these are FSPs with retail fixed voice activities that do not involve use of their own physical network, although this may not always be the case and in some instances such FSPs may also be regarded as partially independent FSPs as described above. When acting in a resale capacity such FSPs purchase wholesale end-to-end voice calls services from a third party network operator and resell/re-package that service in the form of a retail market offer. Examples of FSPs active in this category since the 2007 Decision include: O2 Ireland and Vodafone Ireland[39] (although Vodafone has started providing retail voice services at a fixed location using mobile network inputs and thus partly overlaps with the previous category above[40]), Pure Telecom, IFA Telecom, Greencom Telecommunications, UTV internet[41].

3.3 Eircom is currently the largest provider of retail voice services at a fixed location in Ireland. It owns and operates a ubiquitous Public Switched Telephone Network ('**PSTN**'[42]), which it uses to provide retail voice calls at a fixed location, along with various other services, to its business and residential customers. Eircom had approximately **[✂…….]** retail fixed voice subscribers as of Q1 2012, which represents **[✂…..]** of total telephone subscribers at a fixed location[43] and its traffic accounted for just less than 52% of total retail call

[39] For example, the 2011 Decision (see footnote 34 above), page 14 noted that O2 Ireland and Vodafone Ireland use Wholesale SV services to offer fixed voice services to their retail customers.

[40] As noted under the One Net Express support on Vodafone Ireland's website for How does One Net Express work?, retrieved in August 2012. As further discussed below, this indicates the potential for traditional MSPs to use non-wired or wireless-based network inputs to also provide voice call services at a fixed location. As clarified in footnote 2 above, the reference to an FSP does not therefore automatically imply that the underlying network used is wired. For the purposes of this market review an FSP might also supply voice services at a fixed location using mobile technology.

[41] For example, see "How does UTV Talk work" on http://www.utvinternet.com/support.aspx.

[42] PSTN refers to the international telephone system based on copper wires and carrying analog voice data. This is in contrast to newer telephone networks based on digital technologies such as ISDN.

[43] ComReg Quarterly Data, Q1 2012. This estimate includes subscribers on PSTN, cable, fibre, fixed-wireless and DSL platforms. See footnote 22 above.

traffic volumes as of Q1 2012[44], which had declined from approximately 63% in Q4 2007[45]. The change in retail narrowband revenue market share has been a decrease from 76% in Q4 2007 to 67.8% in Q1 2012[46]. The extensive nature of Eircom's network means that Eircom is able to manage most of its call traffic independently, except where it must terminate calls on alternative Service Providers' networks.

3.4 Eircom has also traditionally been the predominant supplier of wholesale CO and Transit[47] services to Service Providers which do not possess a comprehensive network for the provision of retail voice services at a fixed location. In 2008, ComReg was also made aware of a new Wholesale SV service offered by Eircom which allowed alternative Service Providers, mainly mobile operators, to start providing retail voice services at a fixed location (and thus become FSPs) without the need to invest in their own interconnection infrastructure. Wholesale SV, sold as "White Label Voice" by Eircom, is a relatively new commercial wholesale service that allows alternative FSPs to purchase end-to-end wholesale voice services without the need to have their own interconnection infrastructure[48].

3.5 As described above, there are several FSPs active in Ireland. While Eircom's retail traffic and revenue market shares have declined gradually over a period of four years, they still remain high, with its fixed line traffic at just under 52% and its retail narrowband revenue market share at just under 68%. Furthermore, this decline in market share has been 'lost' to a number of FSPs rather than being transferred to just one FSP or a very limited number of FSPs.

3.6 Since the 2007 review Vodafone Ireland has emerged as a key retail provider of voice calls at a fixed location with a retail voice traffic market share of **[✂….]** as of Q1 2012[49]. Vodafone Ireland launched its branded 'Vodafone at Home' internet and voice service at a fixed location in 2008 having acquired

[44] Calculated based on incumbent fixed line traffic as a proportion of total (incumbent and alternative operators) fixed line traffic as published on http://www.comstat.ie/data/data.472.data.html

[45] Calculated based on incumbent fixed line traffic as a proportion of total (incumbent and alternative operators) fixed line traffic as published on http://www.comstat.ie/dataset/Database/Ireland/Quarterly%20Report%20Data/Quarterly%20Report%20Data.asp

[46] ComReg Quarterly Report Data, Q1 2012 (see footnote 22, page 17) and ComReg Quarterly Report Data, Q4 2007 (available from ComReg Document 08/22, Quarterly Key Data Report, Data as of Q4 2007, 18 March 2008 (page 12)).

[47] See footnotes 24 and 151 for details of the current regulatory status and forthcoming updated reviews of the CO and Transit markets.

[48] The key underlying wholesale inputs to the Wholesale SV service are currently regulated, including components in the markets of wholesale CO, Transit and FVCT. See paragraph 7.31 for a description of the 2011 Decision relating to Wholesale SV services.

[49] ComReg Quarterly Data, Q1 2012. See footnote 22 above.

Perlico (and its fixed line customer base) in 2007[50] and subsequently acquiring BT Ireland's residential and SME retail customer base (BT was previously the second largest provider) in 2009[51]. Vodafone Ireland mainly uses third party networks to originate, transit and terminate voice calls to and from end users at a fixed location on its behalf. It accesses these third party networks by purchasing wholesale switchless (end-to-end) voice services.

3.7 Some alternative FSPs operate network infrastructure that physically extends to some or all of their end-users' premises within the coverage of their respective networks, and can therefore supply retail calls without relying on access to wholesale CO services (though all alternative FSPs rely to some extent on wholesale access to third party networks) in those specific areas where they have a network presence.

3.8 For example, 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[52]. UPC started providing retail voice services at a fixed location for the first time in 2006 by offering a voice add-on to its television and broadband services. Since then it has steadily grown its number of voice subscribers. According to ComReg Quarterly Data for Q1 2012, UPC's retail voice traffic market share equated to approximately **[✂….]** of all retail fixed voice traffic minutes for that period. As of Q2 2012, UPC supplied (managed VOIP-based[53]) voice calls to 205,800 customers[54].

3.9 Another technology that can be used to provide voice services at a fixed location is Fixed Wireless Access ('**FWA**'). These services operate over a fixed core network, with the final link to a subscriber's premises provided over a wireless network. The take-up of FWA was growing until approximately the time of the last review in 2007, but since then it has fallen significantly[55].

3.10 Analysis of ComReg Quarterly Report Data indicates that the number of PSTN and ISDN copper-based connections has declined from just over 2 million to 1.79 million between Q1 2007 and Q1 2012. Meanwhile, alternative

[50] See "Vodafone Answers the Call with Complete Telecoms Portfolio" - http://www.vodafone.ie/aboutus/media/press/show/BAU004000.shtml?date=May+27%2c+2008

[51] See "BT and Vodafone Agreement Approved by the Competition Authority" - http://www.vodafone.ie/aboutus/media/press/show/BAU006036.shtml?date=August+24%2c+2009

[52] 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.

[53] For the purposes of this market review 'managed' means that the VoIP provider also provides and maintains the customers access path, either directly on its own network, or indirectly by renting the access path from a third party. This is discussed further in paragraph 3.29 below.

[54] 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.

[55] ComReg Quarterly Report Data, Q1 2012 indicates that FWA broadband subscriptions were at 69,566 representing a decline of 26% from 94,100 broadband subscriptions in Q1 2007.

technologies, with the exception of FWA, have been growing in terms of voice subscriptions since 2007. Cable is the fastest growing technology with UPC having increased the number of overall voice subscriptions from 600 in Q1 2007[56] to 205,800 as Q2 2012. Fibre connections have grown since 2007 but still represent less than 1% of total fixed connections.

3.11 Having described in general terms the structure of, and current participants in, the retail supply of voice services at a fixed location, the remainder of this section describes the headline trends and developments in respect of the provision of retail voice calls (both fixed and mobile).

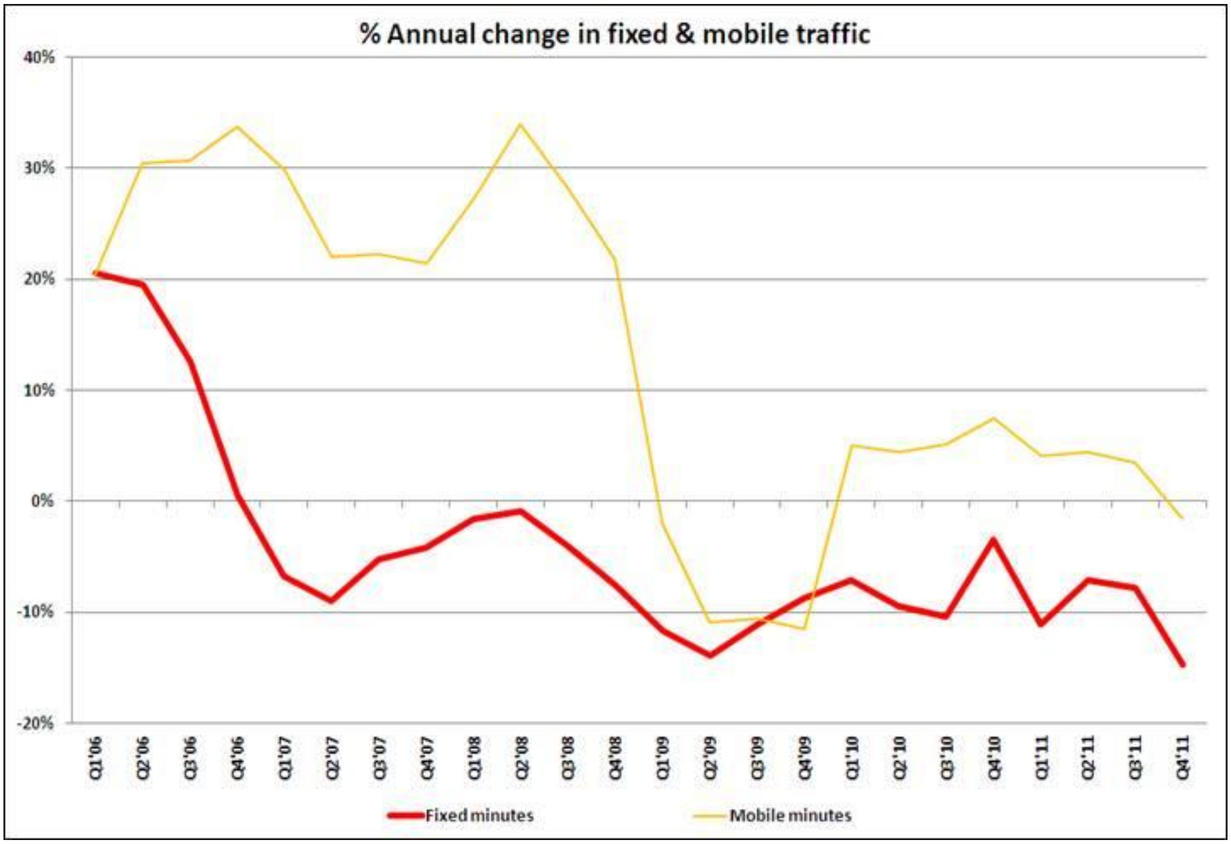
Decline in fixed retail voice traffic

3.12 The overarching trend since the last FVCT market review has been a steady decline in fixed retail traffic and revenues. Since 2007 fixed retail voice traffic has fallen from 2.4 billion minutes in Q1 2007 to 1.59 billion minutes in Q1 2012, a decrease of approximately a third.

3.13 The rate of decline of fixed traffic has been relatively steady since the last review as shown in Figure 2. Since 2009 the annual rate of decline has been approximately 10%.

[56] Liberty Global, "Liberty Global Reports First Quarter 2007 Results", press release available from: http://media.corporate-ir.net/media_files/irol/19/191835/news/Q107_press.pdf

Figure 2: **Rate of change for fixed and mobile traffic minutes**[57]

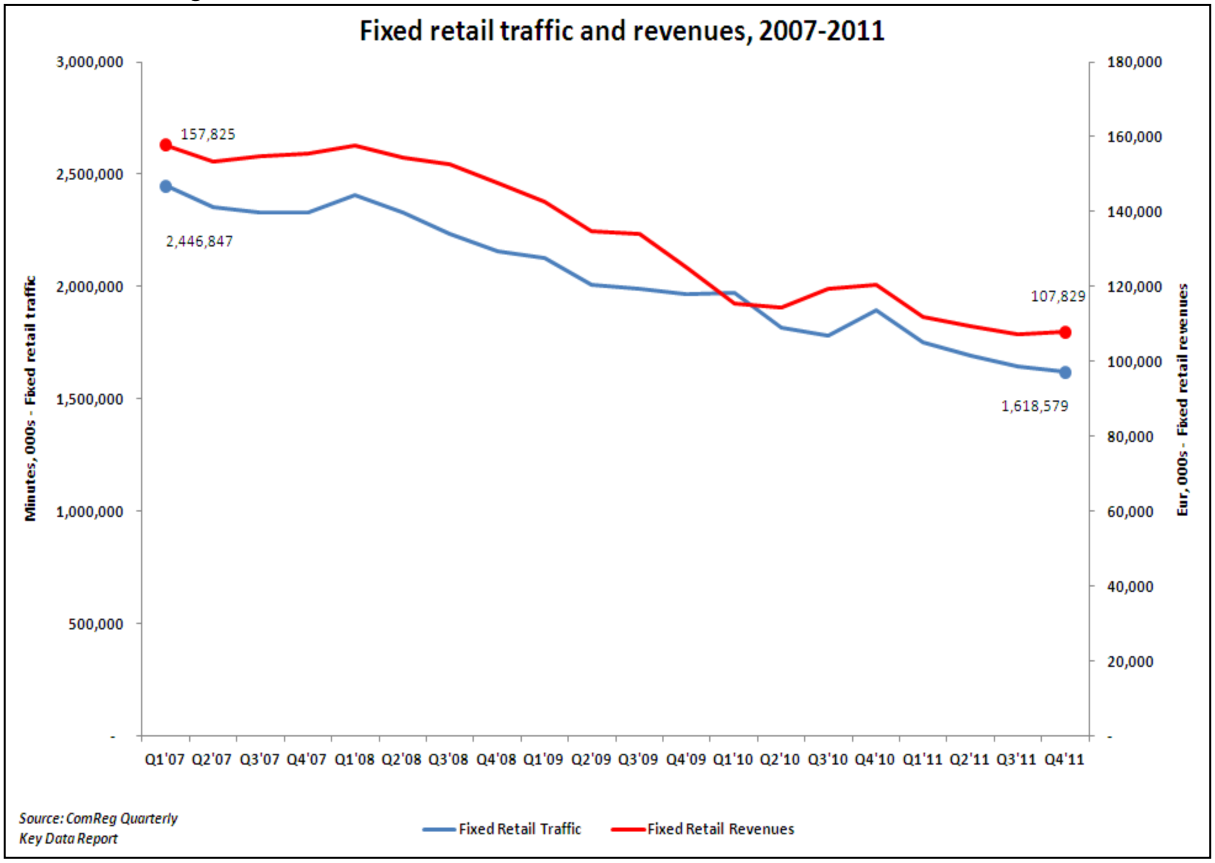


Source: ComReg Quarterly Report Data.

3.14 The relatively gradual pace of decline in both retail fixed voice traffic volumes and revenues is further demonstrated by Figure 3 below. This shows that over the five years illustrated by the graph, revenues attributable to voice traffic have fallen by 31.7% while traffic has fallen in line by 25.6%.

[57] Figure 2 reflects the annual rate of change between quarters. For example, for Q1’06 both fixed and mobile voice traffic has grown by 20% since Q1’05.

Figure 3: **Fixed traffic and revenues, 2007-2011**[58]



Source: ComReg Quarterly Report Data.

3.15 In addition to the above trend, there has also been a gradual decline in fixed voice access. According to consumer research carried out on behalf of ComReg in 2007, 68% of consumers surveyed indicated that they had an active fixed voice connection in their home[59]. Based on the 2012 Market Research the percentage of households with fixed voice connections is now estimated to be at 64%[60].

3.16 Overall, the aforementioned trends are illustrative of a gradually declining fixed voice market.

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[58] Relevant categories, as reported in ComReg's Quarterly Report, included in fixed retail voice revenues above are as follows: Advanced Voice Revenues, Basic Voice Revenues, VoIP Revs. Voice revenues illustrated in Figure 3 exclude installation and connection charges in order to specifically analyze revenues uniquely attributable to voice traffic.

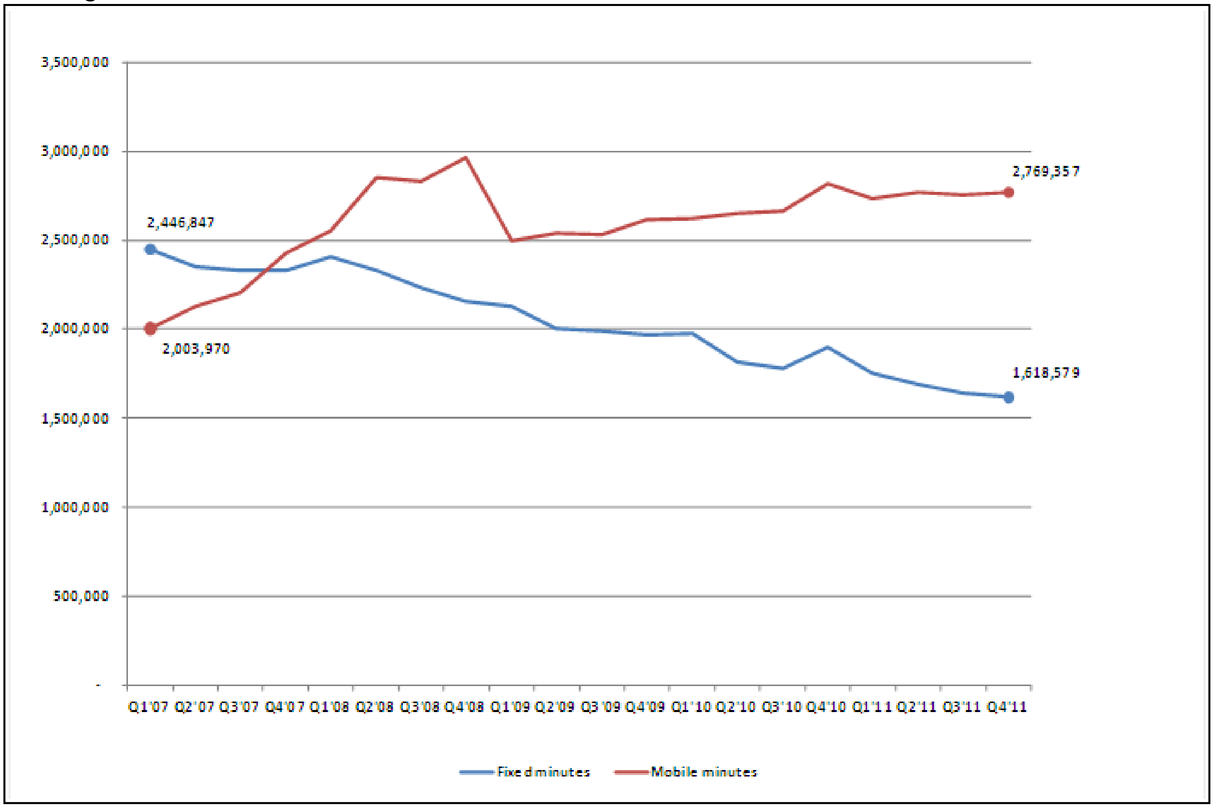
[59] Amárach, ComReg Trends Survey Wave 1 2007, June 2007, available from http://www.comreg.ie/_fileupload/publications/ComReg0732.pdf

[60] The 2012 Market Research, Appendix A: Slide 11. As underlying survey methodologies may differ between the 2007 and 2012 Market Research, these results may not be directly comparable but are used for indicative purposes.

Mobile voice traffic growth continues

3.17 In addition to the gradual decline in fixed voice traffic noted above, perhaps the most notable trend in relation to retail voice calls since the previous market review in 2007 is the growth of mobile call traffic volumes. Figure 4 shows the trend in mobile and fixed voice traffic since 2007.

Figure 4: **Fixed and mobile voice traffic trends, 2007–2011**



Source: ComReg Quarterly Report Data.

3.18 Mobile traffic grew most rapidly during 2007 and the start of 2008, until declining sharply at the start of 2009 — coinciding with the height of the recession. Since then mobile traffic has grown again but at a more gradual rate.

3.19 Over the same time period as that shown in Figure 4, the percentage of mobile-only households has risen and is now estimated to be in the range of 36% in 2012[61]. The mobile penetration rate (excluding mobile broadband) is also now at almost 108% (there are more mobile phones in Ireland than there are end-users)[62]. This trend indicates that a significant portion of residential end-users predominantly use a mobile phone to make and receive calls. However, the majority of households (64%) still retain a fixed line implying that

[61] The 2012 Market Research, Appendix A: Slide 11.

[62] ComReg Quarterly Report Data, Q1 2012 (see footnote 22, page 7 (summary) and page 51).

for many consumers fixed line telephony is still an important service. In addition, most household respondents to the 2012 Market Research (68%) still perceive mobile voice services to be more expensive than fixed voice services when used to call other local/national fixed numbers[63]. Furthermore, the 2012 Market Research identified a clear difference in usage between fixed and mobile voice telephony. In general, household respondents indicated that they used their fixed voice telephony service to make calls to other fixed numbers (66% of their usage), while mobiles were generally used to make calls to other mobile numbers (between 68% and 71% of their usage)[64].

3.20 In contrast to the proportion of households without a fixed line, only 5% of businesses do not have a fixed voice service[65]. This indicates that retail voice services provided at a fixed location are still important for the majority of businesses. Indeed, the 2012 Market Research conducted on behalf of ComReg indicated that businesses preferred to use a fixed voice service for all call types (e.g. calls to mobiles, local, calls, national calls etc)[66].

MSPs begin to supply retail voice services at a fixed location

3.21 It is also notable that a number of Service Providers participate in the provision of both fixed and mobile retail voice services in Ireland. Vodafone Ireland—despite being the largest MSP in Ireland—has taken significant steps to start providing retail voice services at a fixed location. Eircom has both fixed and mobile operations and O2, while predominantly an MSP, is also active in the provision of retail voice services at a fixed location to businesses.

3.22 The increased participation by MSPs in the provision of retail voice services at a fixed location is occurring through both the use of wholesale products provided over fixed (wired) network infrastructure and through offering retail voice services at a fixed location using mobile network inputs.

3.23 As noted above, Vodafone Ireland 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)[67]. The acquisition saw BT Ireland exit the residential market to focus on wholesale markets[68] and large corporate customers.

[63] The 2012 Market Research, Appendix A: Slide 36.

[64] The 2012 Market Research, Appendix A: Slide 25.

[65] The 2012 Market Research, Appendix A: Slide 84.

[66] The 2012 Market Research, Appendix A: Slide 106.

[67] 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

[68] 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.

3.24 Post acquisition of BT Ireland's residential and SME customer base, Vodafone Ireland became a significant competitor in the provision of retail voice services at a fixed location. However, the provision of Vodafone's retail voice services is still significantly dependent upon the use of wholesale inputs provided over Eircom's network.

3.25 As regards the use of mobile network inputs to supply retail voice services at a fixed location, 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[69].

Growth in managed voice over internet protocol (VoIP) services provided at a fixed location with cable as fastest-growing alternative technology

3.26 A key development since the 2007 Decision has been the growth of voice over internet protocol ('**VoIP**'). VoIP refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the transport of telephone calls over Internet Protocol ('**IP**') technology. 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 240,000 managed VoIP subscribers in Ireland as of Q1 2012 for that period[70].

3.27 The main reason for VoIP being used appears to be its cost-saving advantage for Service Providers. Routing phone calls over existing data (broadband) networks helps obviate the need for networks to operate separate voice and data networks and hence may permit cost savings through achieving economies of scope.

3.28 As VoIP-based services become more widespread, there is likely to be a change in the technologies deployed to deliver FVCT. Traditional voice services use current generation Time Division Multiplexing ('**TDM**') transmission and SS7 signalling switching technologies, while VoIP traffic uses IP-based and associated technologies. This could be used to facilitate FVCT handover at IP peering centres along with other IP traffic. Since Eircom remains the main FVCT traffic generator (and receiver), the major shift from

[69] 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

[70] ComReg Quarterly Report Data, Q1 2012 (see footnote 22, page 23). Note that these traffic and subscription figures refer to managed VOIP only and do not include unmanaged VoIP services such as Skype.

current to next generation voice interconnection on behalf of industry is likely to depend on the adoption of this new technology by Eircom.

3.29 For the purposes of this Consultation Paper, ComReg broadly considers VoIP services according to three main service types—managed, partially managed, and unmanaged. *Managed VoIP* means that the Service Provider 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 Physical Network Infrastructure Access ('**WPNIA**')[71] or Wholesale Broadband Access ('**WBA**')[72] inputs). A managed VoIP Service Provider will also have its own switching platform, interconnect(s) and numbering allocations. Managed VOIP providers 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 Service Provider 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 Service Provider's voice platform. *Unmanaged, or "Over the Top (OTT)" VoIP* means that the Service Provider 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.

Managed VOIP

3.30 A number of alternative FSPs have launched managed VoIP services over alternative network platforms. 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. Managed VOIP providers are typically allocated geographic number ranges or 076 number ranges. These FSPs provide FVCT services to other retail Service Providers.

3.31 Some examples include the following:

- As described in paragraph 3.8 above, UPC launched managed VoIP services as an optional add-on to broadband and pay-TV customers in 2006.

- Digiweb and Imagine offer managed VoIP services over wireless technologies where available[73].

[71] Wholesale (physical) network infrastructure access ('WPNIA') (including shared or fully unbundled access) at a fixed location, more commonly known as Local Loop Unbundling ('LLU'), refers to the regulatory process of allowing alternative Service Providers to use physical connections from the incumbent's exchanges to the customer's premises for the purposes of supplying voice and broadband internet access services.

[72] Wholesale Broadband Access is a non-physical or virtual wholesale input used in the provision of a range of retail products, which are used by consumers for broadband internet access.

[73] See: http://broadband.digiweb.ie/support/metro/introduction.asp?i=180&i2=181&i6=191 and http://www.imagine.ie/about_imagine.html

- Magnet Networks[74] and Smart Telecom[75] both offer managed VoIP services over fibre networks deployed in certain (typically suburban) residential developments.
- Managed VoIP is also available over Digital Subscriber Line ('**DSL**')[76], although this still only accounts for a very small portion of total fixed voice customers in Ireland[77].

3.32 This latter category may change more notably if some existing Service Providers launch new VoIP services in the near future. Currently, Eircom retail and wholesale voice offerings are provided predominantly via its PSTN platform largely delivered over its copper access network[78]. Eircom has announced that it intends to offer a retail Next Generation Access ('**NGA**') VoIP product[79], although no clear launch timeframes have been provided to date. It is also currently not possible to purchase a WBA product sold on a standalone basis without SB-WLR. As there is currently no standalone WBA (Bitstream) offering available), managed VoIP over DSL will likely only start to become commercially attractive for a number of retail FSPs without significant network infrastructure once such a standalone broadband offer becomes available at wholesale level.

Partially-managed VOIP

3.33 Partially-managed VOIP services are services where the Service Provider only has control over part of the infrastructure that is being used to provide the service.

3.34 Blue Face offers a partially-managed VoIP service. Its service relies on its VoIP customers having an existing broadband connection supplied by a third party. This means that Blue Face has its own switch and associated interconnects and can therefore manage that part of the service directly (including providing FVCT), but it does not control the access network over which the service is provided. For example, the end-user's broadband modem connected to a Blue Face VoIP telephone could be a DSL modem connected

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[74] See: https://www.magnet.ie/ftth

[75] As noted in footnote 31, since Digiweb has acquired control over Smart Telecom, Digiweb is deemed to include inter alia Smart Telecom which was previously covered by the 2007 Decision. See: http://media.digiweb.ie/quick-facts/ and http://media.digiweb.ie/category/news/

[76] Digital Subscriber Line technologies use traditional copper telephony networks to deliver digital broadband signals.

[77] ComReg Quarterly Data, Q1 2012 (see footnote 22).

[78] See ComReg Document 12/27, Next Generation Access ('NGA'): Proposed Remedies for Next Generation Access Markets, Response to Consultation, Further Consultation and Draft Decision, 4 April 2012, available from http://www.comreg.ie/_fileupload/publications/ComReg1227.pdf, page 30 and page 127.

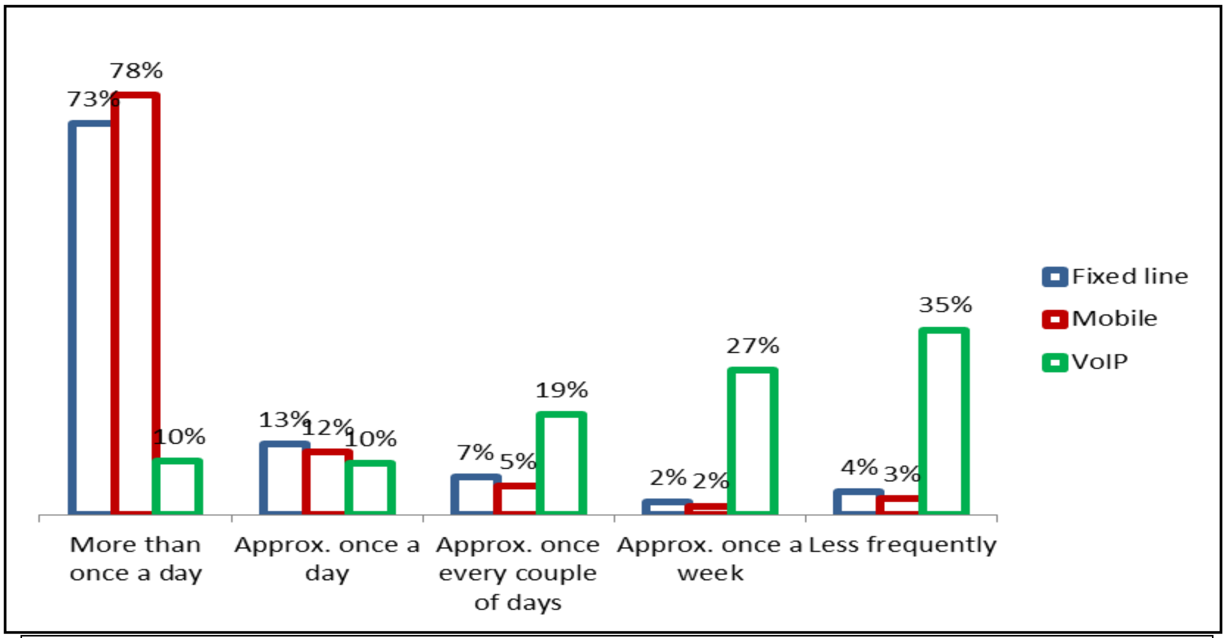
[79] ComReg Document 12/27, page 128.

to Eircom's copper network, or a modem connected to UPC's cable network, etc.[80]

Unmanaged VOIP

3.35 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. They include services from providers like Skype, Google and Viber. The 2012 Market Research indicated that 36% of households with a fixed broadband service in their home claimed to have used unmanaged VoIP services[81]. 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 5 below.

Figure 5: **Frequency of usage of fixed voice, mobile voice and unmanaged VoIP services**



SURVEY QUESTION: And how often do you use your fixed line telephone for making/receiving calls?
SURVEY QUESTION: And how often do you use your mobile phone for making/receiving calls in your home?
SURVEY QUESTION: And how often do you use Skype, internet calls or VoIP in your home?

Source: The 2012 Market Research, Appendix A: Slide 24

[80] According to the Blue Face website on 3 August 2012, the Blue Face telephone service requires 85 kbps to make a quality phone call.

[81] The 2012 Market Research Appendix A: Slide 16.

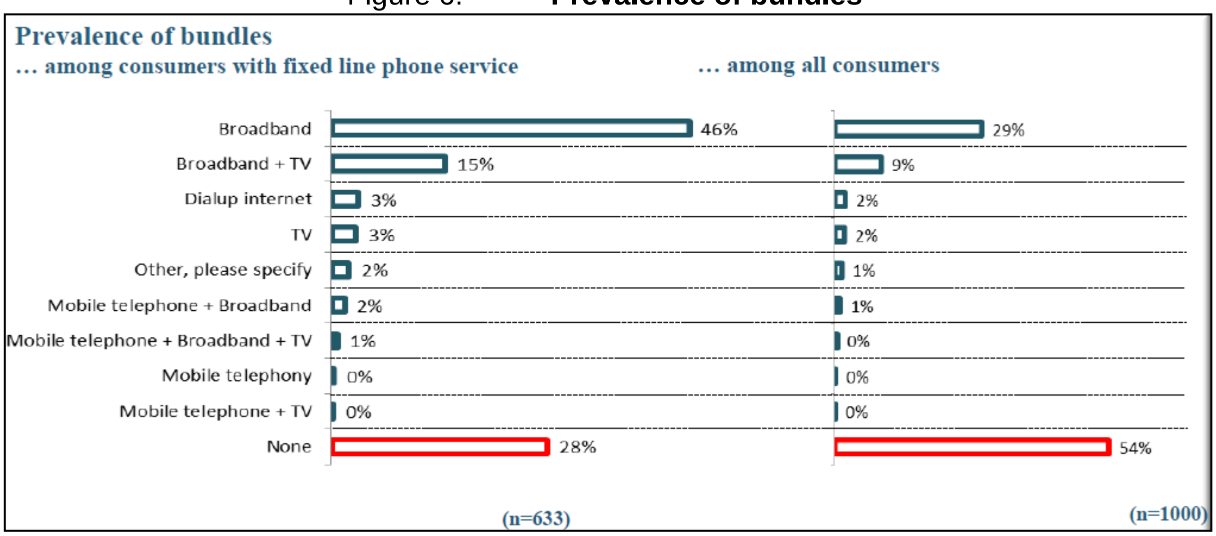
3.36 In addition to the above, residential respondents to the 2012 Market Research identified a clear difference in usage preferences between unmanaged VoIP services and other voice telephony services. For example, household respondents indicated a clear preference for using their fixed voice telephony 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)[82].

3.37 Distinctions between unmanaged VoIP services and other retail voice services provided at a fixed location are discussed in further detail at paragraph 5.69 of this Consultation Paper.

Increased take-up of packages and bundles

3.38 A further development since the 2007 Decision has been the growth of consumers purchasing fixed services as part of a package or bundle. As of February/March 2012, 72% of fixed voice consumers surveyed reported purchasing their product as part of a bundle (see Figure 6). The most commonly purchased bundle was broadband and fixed voice services (46% of all fixed voice telephony subscribers).

Figure 6: **Prevalence of bundles**



SURVEY QUESTION: Do you buy any of the following services as part of a bundle with your fixed line voice telephone service?

Source: The 2012 Market Research, Appendix A: Slide 19

[82] The 2012 Market Research, Appendix A: Slide 26.

3.39 As part of the 2012 Market Research, business respondents were presented with a series of reasons as to why they may have purchased voice services as part of a bundle. 54% of business respondents agreed that it was easier to manage one supplier. Other reasons included that they could ‘negotiate better discounts/best price’ (40% agreed) and ‘get a better service as a bundle’ (11% agreed)[83]. These indicate that packages/bundles can be perceived as being better value with a lower transaction cost associated with purchasing the two products together. In the case of the residential survey, ‘better value in the bundle price offered’ was given as the top reason (by 36%) for selecting a fixed voice provider when switching in the previous three years[84].

Preliminary conclusion on retail trends

3.40 Further to the above assessment of retail trends in the provision of retail voice services since the 2007 Decision, ComReg is of the preliminary view that the following key trends may be observed:

- While the number of retail FSP participants has increased, a gradual decline in retail voice traffic and subscriptions at a fixed location is evident. However a majority of households (64%) and businesses (95%) continue to have retail voice connections at a fixed location;
- Mobile voice traffic growth continues albeit at a more gradual rate. Consumers tend to use fixed and mobile voice services for different purposes and perceive price differences between the two services;
- MSPs are becoming increasingly active in the provision of retail voice services at a fixed location using both wholesale inputs from other FSPs as well as more recently using their mobile technology to deliver fixed voice services;
- Growth in managed VoIP services provided at a fixed location is evident, particularly in the case of bundled voice and broadband offerings *via* cable. While unmanaged VoIP services are used by a significant minority, the pattern of usage is much less frequent than for other voice telephony services and respondents still prefer to use their fixed and mobile voice telephony services for most call types.
- There is a clear trend towards take-up of bundles with 72% of residential survey respondents indicating that they purchase their retail fixed voice service as part of a bundle[85]. Fixed broadband is the service most commonly bundled with retail voice services provided at a fixed location.

[83] The 2012 Market Research, Appendix A: Slide 94

[84] The 2012 Market Research, Appendix A: Slide 42.

[85] The 2012 Market Research, Appendix A: Slide 19.

Q. 1. Do you agree that the above identifies the main relevant developments in the provision of retail voice services at a fixed location relevant for informing the assessment of the wholesale Relevant FVCT Markets since the previous review 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.

4 Assessment of the Retail Market

4.1 In this section, ComReg outlines some of the structural and behavioural characteristics in the provision of retail voice services at a fixed location, with a view to informing the subsequent definition and SMP analysis of the Relevant FVCT Market(s) at wholesale level in Sections 5 and 6 respectively.

Relationship between the Retail Calls and the Wholesale Relevant FVCT Market(s)

4.2 As noted in Section 1 above, the European Commission's 2007 Recommendation has already identified the markets for voice call termination on individual public telephone networks provided at a fixed location as relevant markets that are susceptible to *ex ante* regulation. In doing so, the European Commission's Explanatory Note to the 2007 Recommendation took, as its starting point, a characterisation of retail markets[86], followed by a description and definition of related wholesale markets. ComReg is not, therefore, obliged *per se* to conclude on a precise definition of the retail market for the purposes of its present FVCT assessment.

4.3 While the objective of this Consultation Paper is to define and analyse competition within the wholesale Relevant FVCT Markets, given wholesale demand for FCVT is largely derived from retail demand associated with the ability to make calls to fixed voice subscribers, it is necessary to consider the dynamics of the retail market and whether and how these dynamics impact at the wholesale level. The derived retail demand for FVCT is largely related to:

- fixed or mobile subscribers' requirements for making calls to fixed subscribers, i.e. Calling Party requirements; and
- fixed subscribers' requirements for receiving calls from other fixed or mobile subscribers, i.e. Called Party requirements.

4.4 In ultimately considering the definition of the wholesale Relevant FVCT Markets, it will be necessary to consider whether any effective demand-side and supply-side substitutes exist (at both the retail and wholesale level as appropriate) such that they would directly or indirectly constrain the FTR/price-setting behaviour of a hypothetical monopolist[87] ('**HM**') supplier of FVCT. To

[86] See section 4.2 on page 20 of the Explanatory Note to the 2007 Recommendation.

[87] 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.

the extent that such effective substitutes exist and constrain this behaviour, then a broader FVCT product definition may be appropriate.

4.5 The extent to which any retail substitutes could effectively constrain the FTR/price-setting behaviour of a HM supplier of FVCT depends on the:

- level and likelihood of pass-through of the FTR increase by originating Service Providers into their retail charges for calls to subscribers of the terminating FSP; and
- strength of any subsequent Calling Party reactions to the resulting retail price increase; and
- strength of any subsequent Called Party reactions to the resulting Calling Party's retail price increase.

4.6 In this section, ComReg considers potential impacts of FTR price changes on retail market behaviour. In particular, ComReg considers the likelihood of FTR price changes impacting on retail prices and the extent to which end users might change their behaviour or switch to alternative forms of communication. ComReg further considers whether such behavioural changes are likely to act as an effective constraint on the price-setting behaviour of a FVCT supplier by making it unprofitable for it to raise its FTRs by a small but significant amount above the competitive level[88]. This involves an implicit assessment of demand-side and supply-side substitutes at retail level.

4.7 The retail market characterisation set out in this section is, therefore, being carried out to the extent that it informs the definition and subsequent analysis of the recommended wholesale Relevant FVCT Markets.

4.8 For the purposes of the relevant wholesale assessment of FVCT services, it is not necessary to conclude on the boundaries of the downstream retail *outgoing calls* market(s). Please note that separate consultations will be published shortly on ComReg's preliminary assessment of the market(s) for Retail Access to the Public Telephone Network at a Fixed Location and Wholesale Call Origination and Transit Services at a Fixed Location[89]. These latter consultations will contain further analysis on the scope of the relevant retail call origination market(s). What is relevant for the purposes of the present market review is the need to ensure the successful completion of *incoming calls* from any network (fixed or mobile) to retail subscribers of calls services at a fixed location.

4.9 In setting out its analysis and views on consumer behaviour, ComReg has drawn on data from a number of sources, including:

[88] This is taken to be in the range of 5%-10%. See earlier footnote 87.

[89] See footnotes 24 and 151 for further details of these prospective consultations.

(a) Attitudinal surveys of retail consumer and business users of fixed voice services (the 2012 Market Research[90]);

(b) Attitudinal surveys of retail consumer and SME users of mobile voice services ('**the 2011 Market Research**'[91]);

(c) Information provided by Service Providers in response to detailed statutory information requests[92] issued by ComReg in which both quantitative and qualitative information on the retail fixed voice market and the Relevant FVCT Markets were sought ('**2011/2012 statutory information requests**');

(d) Information provided to ComReg in subsequent follow-up correspondence and discussions in relation to (c) above;

(e) Information provided to ComReg by Service Providers for the purpose of ComReg's publication of its Quarterly Reports; and

(f) Other information in the public domain.

4.10 As noted above, wholesale demand for FVCT is derived from the demand of fixed and mobile retail subscribers who make calls to fixed voice subscribers. There are a number of important subscriber (whether consumer or business users) behavioural, pricing and other characteristics which are relevant to the assessment as to whether, from a demand side perspective, any retail products exist which might constitute a substitute for making calls to the subscriber of a particular FSP and the extent to which any such substitutes might impact behaviour in the upstream wholesale Relevant FVCT Markets. Such characteristics are potentially relevant to both

- the retail demand-side substitution analysis; and
- the assessment as to whether the wholesale Relevant FVCT Markets and competition within those markets are impacted by any indirect constraints.

4.11 To inform this analysis, and as referred to in paragraph 4.9 above, ComReg commissioned The Research Perspective[93] to carry out two separate pieces of research in the Irish retail fixed voice market (the 2012 Market Research). The research field work took place in February-April 2012 with the results being presented to ComReg in April/May 2012.

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[90] Further details of this survey can be found at paragraphs 4.11 to 4.14 below.

[91] ComReg 12/46a, Market Review Voice Call Termination on Individual Mobile Networks, Appendix A, Market Research prepared by The Research Perspective Ltd on behalf of ComReg, June 2011, available at http://www.comreg.ie/_fileupload/publications/ComReg1246a.pdf

[92] ComReg issued a series of information requests to Service Providers in October 2011, July 2012 and August 2012 pursuant to its powers under section 13D(1) of the Communications Regulation Acts 2002 to 2011.

[93] See www.theresearchperspective.com

4.12 1000 residential households were surveyed through face-to face interviews. In addition, 550 businesses were surveyed *via* a computer aided telephone interview (CATI), with the person interviewed being the individual responsible for selecting the relevant business's telecommunications providers. Amongst the issues surveyed included:

- Prevalence and use of voice and other telecommunications services provided by FSPs;
- Prevalence and use of mobile voice and internet;
- Payment methods, price plan details, pricing awareness and choices;
- Switching behaviour and the criteria for choosing an FSP;
- Awareness of both the identity of the Called Party's FSP and the identity of the Calling Party's FSP;
- Reasons for not having fixed voice telephony amongst households/businesses with no fixed voice service;
- Price sensitivity to increases in the costs of calls; and
- Usage policies and the monitoring of these (Business only).

4.13 A copy of the research outputs is set out at Appendix A. ComReg will refer to these market research findings[94] throughout the remainder of the analysis in this section and elsewhere in the Consultation Paper.

4.14 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.

4.15 Similarly, as also noted in paragraph 4.9 above, this Consultation Paper draws on insights from market research also carried out by The Research Perspective on behalf of ComReg in March/April 2011 on the Irish retail mobile market (the 2011 Market Research) which is being used to inform ComReg's MVCT market review[95].

End-User Responses to Changes in Retail Call Prices

4.16 Under the Calling Party Pays or CPP principle adopted in Ireland (and throughout the EU), it is the retail fixed or mobile voice subscriber that bears

[94] It is important to highlight that the results of surveys carried out are not sufficient alone to draw definitive conclusions across all aspects of consumer preferences and frequently indicate stated consumer behaviour which may diverge from actual consumer behaviour in practice. Such results should be considered alongside other evidence, where available.

[95] See ComReg Document 12/46, Market Review: Voice Call Termination on Individual Mobile Networks, Consultation and Draft Decision, 23 May 2012 ('the **MVCT Consultation Paper**'). See also footnote 91 for reference to the 2011 Market Research.

the entire cost[96] of making a call to a fixed (or mobile) phone. As set out in paragraph 1.3, the FSP of the Called Party supplies wholesale FVCT to the Calling Party's originating Service Provider. The originating Service Provider pays a wholesale FTR to the terminating FSP. The FTR is a cost input for the originating Service Provider and is likely to be reflected in the retail call charges it levies on its subscribers.

4.17 So what are the implications of the CPP principle in the context of the retail market and the analysis of the Relevant FVCT Market(s)? Firstly, having regard to the degree to which any change in the wholesale FTR is passed through by the originating Service Provider to its subscribers *via* its retail call charges, the impact of FTRs is felt, not by the Called Party, but by the Calling Party. In view of this, the retail subscribers of the terminating FSP (i.e. the Called Parties) usually have no direct visibility of FTRs and are unlikely, therefore, to react significantly to changes in such FTRs (this is considered further below). Given the strong likelihood of an absence of direct FTR price signals to the subscribers of the recipient terminating FSP, it will likely impact the ability and the degree to which the terminating FSP can profitably sustain an increase its FTRs above the competitive level.

4.18 As the impact of any increase in wholesale FTRs (subject to the degree to which they are passed through into retail prices) may be felt by the subscriber of the originating Service Provider, it is possible that such a Calling Party could react to an increase in retail prices for off-net calls to fixed telephone numbers (driven by hypothetical FTR increases) in a variety of ways, including:

- Substituting a call to a fixed telephone with a viable alternative means of communication (e.g. a call to a mobile, sending an email or an SMS, etc.); and/or
- Reducing the number of overall calls made, principally resulting in reduced retail revenues for the originating Service Provider; and/or
- Reducing the number of calls made to the specific FSP that increased the FTR and gave rise to the retail call price increase; and/or
- Ceasing the use of the retail voice service altogether or switching service to a different Service Provider; and/or
- Changing patterns of use such as changes in how calls are made to subscribers of particular fixed networks.

4.19 The likelihood that the Calling Party would react in any of the above ways depends on a number of factors, in particular, their

- awareness of the identity of the Called Party's FSP; and

[96] There are certain exceptions associated with calls to specific non-geographic numbers such as freefone (1800) or low call (1850/1890) in which the Called Party will pay part or all of the cost associated with the call.

- awareness of the cost of calling a fixed voice telephone generally and the cost of calling subscribers of a particular fixed voice network; and
- sensitivity to call costs and changes in costs; and
- ability to change their calling behaviour and/or switch to viable substitute products, along with the frequency with which they would do this.

4.20 Each of the possibilities identified in the non-exhaustive list in paragraph 4.18 (dealing with how a Calling Party could change its calling behaviour) would, to varying degrees, primarily impact the retail revenues of the Calling Party's Service Provider.

4.21 Additionally, where subscriber changes in behaviour result in reductions in call volumes to the specific terminating FSP which levies the FTR, it could also result in a loss of wholesale termination (and other) revenues for such FSPs. However, such a loss could also potentially be offset if the Calling Party were to switch their subscription to the retail call services of the terminating FSP to avoid making off-net calls to that FSP (particularly if the Calling Party frequently calls subscribers of the terminating FSP's network).

4.22 A Called Party might be concerned that an increase in its FSP's FTRs could increase the retail price faced by others when calling their fixed number, which might in turn result in fewer people calling them[97] (as a result of the FTR pass-through to the retail call charges levied by originating Service Providers on their subscribers). If this were the case, Called Parties may change their behaviour accordingly. For example, a Called Party might react by:

- substituting the receipt of a call with a viable alternative means of communication (e.g. sending an email or an SMS etc.); and/or
- not taking the call and then phoning the Calling Party back; and/or
- cancelling the fixed voice subscription/switching Service Provider.

4.23 The likelihood that the Called Party would react in any of the above ways depends on a number of factors, in particular, their

- awareness of the particular Service Provider of the Calling Party; and
- awareness of the cost faced by the Calling Party when calling them; and
- sensitivity to the cost faced by the Calling Party; and

[97] Call externalities refer to the benefit the Called Party obtains from receiving a call. Call externalities arise where Calling Parties make too few (or too short) calls relative to the value of their calls to Called Parties which, according to the CPP principle, do not contribute towards the cost of the call.

- ability to change their call receiving behaviour and/or switch to viable products which may be substitutes to receiving a call on a fixed network, along with the frequency with which they would do this.

4.24 The strength of any indirect constraints from the retail market on wholesale pricing behaviour is considered in detail in paragraphs 4.81 to 4.163. In the next sections below we consider some of the factors which might impact the degree to which retail subscribers would be able/likely to react to changes in the retail price for calls to fixed voice subscribers (which might stem from an increase in wholesale FTRs above the competitive level), i.e. factors which are likely to affect retail demand side substitution.

Retail Pricing Structures for Voice Calls to Fixed Numbers

4.25 Retail pricing structures can influence consumer calling behaviour and accordingly some of the key features of retail fixed voice pricing structures are discussed below

4.26 The key trends in consumer retail fixed voice pricing structures can be identified as reflecting the following particular characteristics:

a) prices for fixed voice calls differ according to whether it is a call to a fixed or mobile phone[98];

b) FSPs do not generally differentiate[99] between the prices of local/national calls to other fixed phones

c) FSPs do not generally differentiate between local/national calls from/to subscribers on their own network (on-net) and local/national calls to other FSPs' subscribers (off-net)[100];

d) the cost of local/national calls often vary by the time of day/week the call is made but don't tend to vary based on the identity of the FSP called[101];

[98] Examples (pursuant to website checks in August 2012) include Vodafone which offers unlimited local and national fixed calls with their basic voice package and calls to off-net mobiles for 20.33c (http://www.vodafone.ie/df/homebroadband/homephoneonly/), Eircom offers out-of-package local and national calls at 5c per minute compared with 22c per minute for calls to off-net mobiles (https://secure.eircom.net/talktime/talktime-evolution-flow?execution=e1s1). UPC offers bundles of 'free' minutes to landlines, Irish mobile phones and selected international destinations, but out-of-package calls from a UPC telephone service to landlines are 4c compared with 20c for calls to mobiles (http://www.upc.ie/phone/tariffs/)

[99] See links provided in previous footnote. Eircom, UPC and Vodafone all bundle local and national call minutes under a combined monthly allowance in their retail call packages. Eircom and UPC both offer the same per minute price for out-of-package calls to both local and national landlines

[100] Eircom, UPC and Vodafone do not differentiate their pricing between off-net and on-net calls to landlines.

[101] Eircom and Vodafone both differentiate between the pricing of off-peak and peak-time calls. UPC's pricing does not differentiate between peak and off-peak calls.

e) a significant number of FSP plans offer call packages containing 'free' unlimited (anytime or off-peak) minutes or a set amount of inclusive minutes for local/national calls to other fixed phones[102];

f) a significant number of FSP plans offer call packages containing 'free' unlimited (anytime or off-peak) minutes or a set amount of inclusive minutes for calls to selected international destinations[103];

g) some inclusion within fixed voice plans of set amounts of designated inclusive minutes for calling mobiles, although the number of such inclusive minutes tends to be lower than the number of inclusive minutes for fixed numbers. When the FSP is also operating within the retail mobile market, it may offer favourable pricing terms for calls destined to mobile subscribers on the FSP's own mobile network[104]. This often includes free minutes to the associated fixed network.

4.27 The above trends also feature among FSPs' business pricing plans although the amount of inclusive minutes for calling mobiles is generally larger for business plans[105].

4.28 As for mobile retail pricing structures for calling phones at a fixed location, these generally tend to exhibit the following characteristics:

a) The price of mobile-to-fixed calls is typically uniform, and does not depend on the FSP called[106].

b) Allocations of 'any-network' minutes are typically included in mobile bill pay plans, and can be used to make calls to local or national landlines or mobile numbers[107].

[102] See examples provided above.

[103] See the examples provided above

[104] 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).

[105] For example, Eircom's website (pursuant to website checks in August 2012) presents different packages to residential and business customers. Eircom Talk Anytime plan, at €40 per month, includes unlimited any time calls to local and national numbers, plus 30 anytime minutes to Irish mobile operators. Meanwhile, Eircom value business plan package also includes unlimited any time calls to local and national landlines, but also includes 600 minutes to eMobile network and 60 any network mobile minutes. (http://business.eircom.net/broadband/products/)

[106] Pursuant to website checks in August 2012, Vodafone (http://www.vodafone.ie/planscosts/prepay/pricing/talk-text/), O2 (http://www.o2online.ie/o2/shop/sim-only/), Three Ireland (http://www.three.ie/products_services/priceplans/prepay/index.html) and Meteor (http://www.meteor.ie/pay-as-you-go/) all have a single charge for off-peak calls to Irish mobile and landline numbers (excluding non-geographic) irrespective of the network receiving the call.

c) While on-net mobile calls are typically free, off-net mobile calls are frequently charged at the same rate as off-net calls to FSP networks[108].

d) 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[109].

4.29 As noted and referenced above, prices offered for fixed or mobile calls to subscribers of different FSPs appear to be uniform in most cases. In addition, retail fixed voice packages that include unlimited or large inclusive on-net and off-net local and national call minutes are common, meaning that the identity of the Called Party's FSP is unlikely to impact on the behavior of the Calling Party. If calls to local/national numbers are free, or if there are very large numbers of inclusive minutes in the package, the cost of calling subscribers of specific FSPs is not likely to influence the number of calls made to one particular FSP over another.

4.30 Furthermore, the absence of differentiated pricing for local/national calls carried on the same network (on-net) and local/national calls to other networks (off-net) implies that fixed voice consumers may be less sensitive to the identity of the Called Party's FSP when selecting their own FSP (i.e. they would be less concerned whether their family and friends or business partners are subscribed to the same FSP since there is no obvious cost saving to be made by subscribing to the same FSP). When making calls to fixed telephone users, Calling Parties are also unlikely to be concerned about the distinction between local and national calls, since the geographic location of the destination landline within Ireland will not impact on the cost of the call.

Ability of End-Users to Identify the Network of the Called/Calling Party

4.31 In order for the Calling Party to be in a position to react to changes in the retail price for calls to subscribers of a particular FSP or to react to those retail price

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[107] Pursuant to website checks in August 2012, Three offer an allocation of flexi-units with mobile bill pay plans, which can be used to purchase calls, texts or mobile data (http://www.three.ie/products_services/priceplans/billpay/flex_plans.html). Meteor offer an allocation of free call minutes and text messages (http://www.meteor.ie/bill-pay/bill-pay-sim-only-plans/). Vodafone offer a bundle including free calls minutes and text messages (http://shop.vodafone.ie/shop/phonesAndPlans/phonesAndPlansHome.jsp?planType=paySim&subPage=plans). O2 also offers a package including an allocation of free call minutes and text messages (http://www.o2online.ie/o2/shop/sim-only/)

[108] This applies to the pricing plans of Vodafone, O2, Meteor and Hutchison 3G Ireland, as per the links provided above.

[109] For example, pursuant to website checks in August 2012, Eircom's base rates for Out-of-package local & national daytime calls charged are 5c per minute (https://secure.eircom.net/talktime/talktime-evolution-flow?execution=e1s2), compared to analogous rates of at least 25c for Meteor mobile customers on a basic plan (http://www.meteor.ie/bill-pay/bill-pay-sim-only-plans/)

increases stemming from an increase in wholesale FTRs (above the competitive level), they would at least need to be able to identify the FSP of the person they are calling (being the FSP, other than their own, which levies the FTR on the Calling Party's originating Service Provider).

4.32 Similarly, in order for a Called Party to react to retail price changes (stemming from an increase in wholesale FTRs), the Called Party must be able to determine the network from which the call is being received.

4.33 ComReg would expect that many consumers would be in a position to distinguish between whether they are calling a fixed line or a mobile phone by virtue of the differences in the type of number being called, in particular, given mobile number ranges commence with the prefix '08X'. Historically, the 'X' in the number range corresponded to a particular MSP (for example, Vodafone numbers commenced with 087 etc.). However, the advent of full mobile number portability ('**MNP**'), being the facility allowing consumers to retain their entire mobile number when they switch MSPs, has significantly blurred the ability for consumers to rely on the leading digits of a mobile phone number to ascertain the network to which the Called Party is connected.

4.34 By contrast, geographic numbers associated with fixed voice services have never given users the ability to distinguish between the fixed networks being called. Similarly 076 numbers do not reveal information regarding the subscriber's relevant FSP.

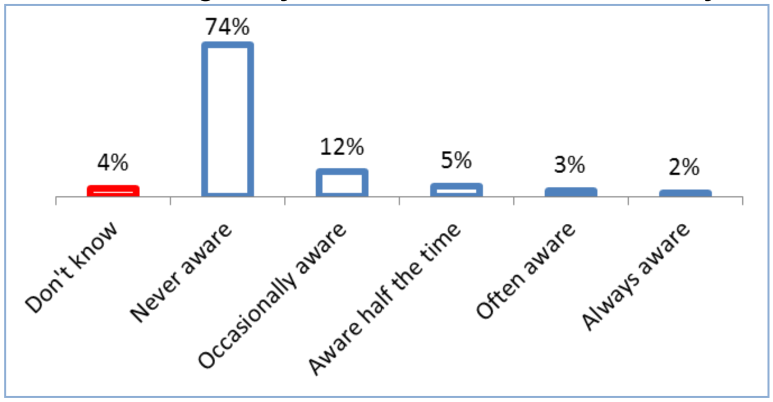
4.35 If end users cannot readily decipher between calls destined for specific FSP networks by virtue of the non-network specific numbers, this further limits the ability of Service Providers at retail level to differentiate their call prices to specific FSP networks. As discussed earlier, Service Providers' retail call prices do not tend to be differentiated depending on a particular FSP network being called. The absence of such differentiated pricing removes a mechanism for Service Providers to send clear pricing signals to end users regarding the cost of calling specific networks and thus limits end users' incentives to respond to FTR increases applied by specific FSPs.

4.36 Thus, if the Called Party cannot readily identify the FSP network on which the incoming call is originated, this limits its awareness of FTR increases applied by specific FSPs and its incentives to respond to any retail price increases (stemming from such FTR increases) accordingly.

Calling Party Awareness of the Destination Network

4.37 As part of the 2012 Market Research ComReg specifically asked fixed voice consumers to indicate when using their fixed phone to call another fixed phone, to what extent they are aware of the FSP network being called and how frequently they were aware with the results shown in Figure 7 below.

Figure 7: **Calling Party awareness of the Called Party's supplier**



SURVEY QUESTION: When you are calling from your fixed line phone to another fixed line phone, do you know the identity of the supplier that provides the phone that you are calling?

Source: The 2012 Market Research, Appendix A: Slide 46

4.38 The majority of residential respondents (74%) indicated that when calling from a fixed phone they were never aware of the FSP network being called. Only 5% of respondents were either always or often aware.

4.39 ComReg has also reviewed Service Providers' responses to statutory information requests[110] for information relating to Calling Parties' level of network awareness. Apart from reference to general awareness of whether the network being called is fixed or mobile, little additional evidence was provided as part of the responses which would indicate that Calling Parties are materially aware of the specific FSP network being called.

4.40 Having regard to the discussion at 4.31 to 4.39 above, ComReg takes the view that consumers tend to have relatively low levels of awareness of the identity of the Called Party's FSP. This is primarily driven by the fact that one cannot easily identify the Called Party's FSP on the basis of a fixed (geographic or 076) number. This inability to decipher the identity of particular FSPs through the fixed numbers associated with the Called Party is likely to significantly impact on the degree to which Calling Parties can react to changes in the retail price for calls to subscribers of specific FSPs or react to those retail price increases stemming from an increase in wholesale FTRs. This is further likely to lead to FSPs setting a uniform retail price for calls to fixed numbers at least within a specific number range or geographic area (e.g. a county). Retail call prices would therefore not reflect the specific FVCT charges on different FSP networks. Therefore, Calling Parties are unlikely to be aware of changes in FTRs and would be unlikely to change their calling behaviour accordingly.

Called Party Awareness of the Originating Network

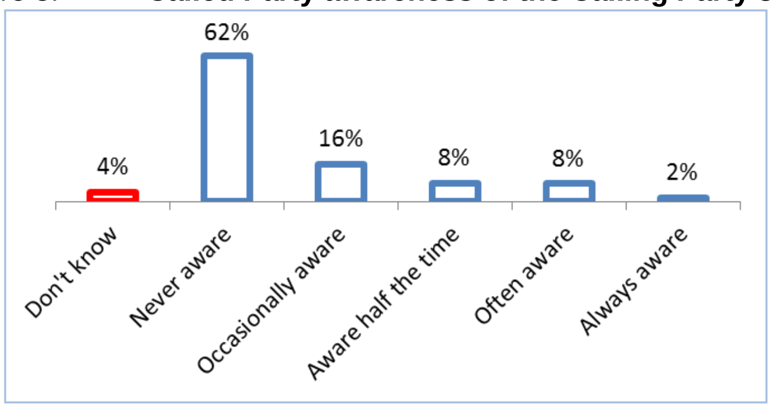
4.41 The inability to identify particular FSPs based on a fixed number remains relevant in this scenario and would also impact the Called Party's ability to

[110] See paragraphs 1.20 and 4.9.

identify the Calling Party's Service Provider. As part of the 2012 Market Research, ComReg also sought to ascertain residential and business network identity awareness from a Called Party perspective.

4.42 Residential respondents were asked if someone is calling them on their fixed phone, to what extent they would be aware of the fixed or mobile network from which the Calling Party is making the call. As shown in Figure 8 below, a majority of respondents (62%) indicated that they were never aware of the originating network (either fixed or mobile) from which the call was incoming with only 10% either always or often aware.

Figure 8: **Called Party awareness of the Calling Party's supplier**



SURVEY QUESTION: If someone is calling you on your fixed line phone from another fixed line or mobile phone, to what extent do you know what fixed line or mobile network they are calling from?

Source: The 2012 Market Research, Appendix A: Slide 46

4.43 ComReg has also reviewed Service Providers' responses to statutory information requests for information relating to Called Parties' level of network awareness. Little, if any, empirical evidence was provided as part of the Service Providers' responses which would materially inform ComReg's preliminary views on the Called Party awareness of the Calling Party's supplier.

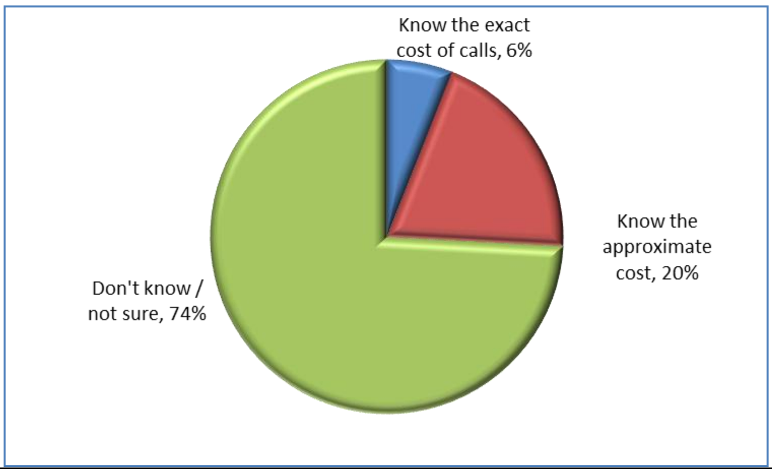
4.44 Having regard to the discussion at 4.41 to 4.43 above, ComReg takes the preliminary view that a large number of consumers tend to have low levels of awareness of the identity of the Calling Party's Service Provider. While some Called Parties will be aware of the Calling Party's Service Provider, particularly in the case of familial and social circle relationships, the overall level of awareness is likely to be low given fixed numbers do not provide a means for identifying a Calling Party's FSP. This low level of awareness of the Calling Party's FSP is likely to ultimately impact the degree to which Called Parties can react to any price effects faced by the Calling Party, in particular, those stemming from FTR increases by the terminating FSP (of the Called Party).

End User Awareness of Cost of Making Calls to Fixed Numbers

4.45 End users are only likely to change behaviour in response to an increase in retail prices if they are aware of: a) the retail call costs that they face when calling particular FSPs; and/or b) the retail call costs that other end users face when calling them.

4.46 As part of the 2012 Market Research, ComReg also specifically asked fixed voice consumers to indicate the extent to which they were aware of the costs of making calls from their fixed phones, with respondents' views set out in Figures 9 and 10 below. Most residential consumers stated that they did not know the costs of making calls to local fixed numbers (with 74% unaware or unsure) and to national fixed numbers (with 79% unaware or unsure), with the remainder of respondents stating they either knew the exact cost or approximate cost.

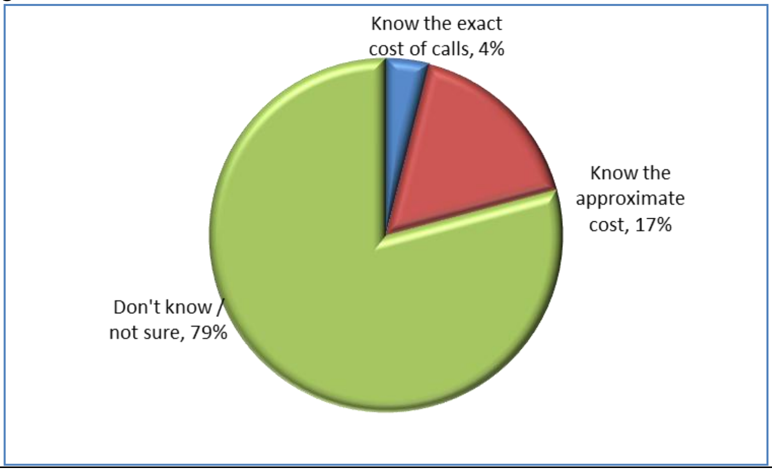
Figure 9: **Households' awareness of the cost of local call**



SURVEY QUESTION: Could you state whether you know the cost of making calls from your fixed line phone to other local fixed line phones in instances where you need to pay for the call?

Source: The 2012 Market Research, Appendix A: Slide 33

Figure 10: **Households' awareness of the cost of national call**

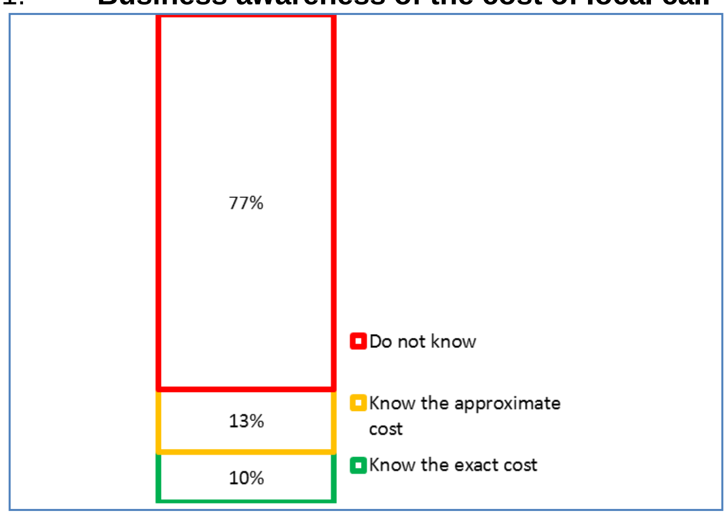


SURVEY QUESTION: Could you state whether you know the cost of making calls from your fixed line phone to other national fixed line phones in instances where you need to pay for the call?

Source: The 2012 Market Research, Appendix A: Slide 34

4.47 Business respondents expressed similar levels of cost awareness to residential consumers. Of those businesses which paid for some local/national fixed calls, 77% stated that they did not know or were unsure of the cost of calls to local fixed numbers and 76% stated that they did not know or were unsure of the cost to national fixed numbers.

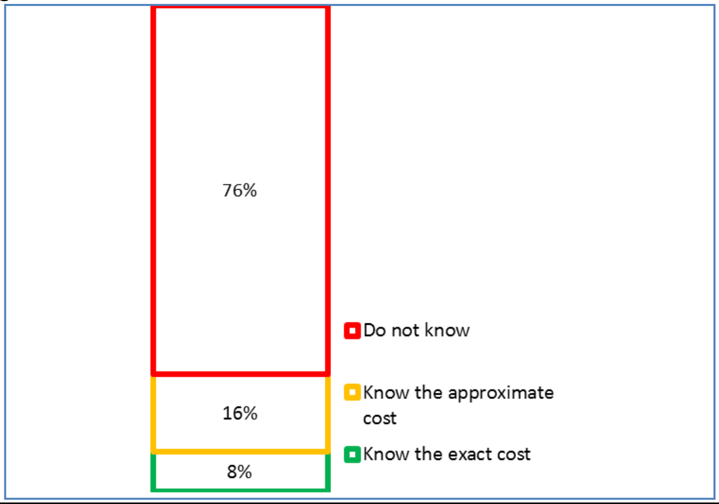
Figure 11: **Business awareness of the cost of local call**



SURVEY QUESTION: Could you state whether you know the cost of making calls from your business' fixed line phone to other local fixed line phones in instances where you need to pay for the call?

Source: The 2012 Market Research, Appendix A: Slide 116

Figure 12: **Business awareness of the cost of national call**



SURVEY QUESTION: Could you state whether you know the cost of making calls from your business' fixed line phone to national fixed line phones in instances where you need to pay for the call?

Source: The 2012 Market Research, Appendix A: Slide 117

4.48 ComReg suggests that, in general, Called Parties are also unlikely to have any meaningful level of knowledge of the costs faced by others calling them on their fixed phones. This is reflected in the relatively low sensitivity of Called Parties to the costs faced by the Calling Party when calling their fixed phones, as demonstrated in the next section below.

4.49 ComReg has also reviewed market research provided by Service Providers in response to statutory information requests[111]. Apart from reference to general pricing sensitivity amongst consumers, little additional evidence was provided which would materially inform ComReg's preliminary views on consumer/business levels of awareness of specific costs when making/receiving fixed voice calls. Consumer/business awareness of/sensitivity to cost in the context of selecting or switching FSPs is considered later in this Consultation Paper.

4.50 Having regard to issues set out in paragraphs 4.31 to 4.49, ComReg takes the preliminary view that consumers and businesses are likely to have low levels of specific awareness of the cost of making calls to fixed numbers. The low level of awareness of cost, rather than suggesting cost is not important to consumers/businesses, may be somewhat related to retail pricing structures (as noted in paragraphs 4.25 to 4.30 above) as, in circumstances where unlimited or large volumes of minutes to all local and national fixed numbers tend to be included in the relevant voice package (irrespective of the identity of the specific FSP being called) and prices for calls tend not to differ based on whether they are on-net or off-net, it may lessen the degree of importance that

[111] See paragraphs 1.20 and 4.9.

consumers attach to awareness of the unit cost of making calls to specific fixed numbers.

End User Sensitivity to the Cost of Making Calls to Fixed Numbers

4.51 Subscriber sensitivities to cost will undoubtedly differ based on individual preferences, calling patterns and the costs arising under particular retail price plans. Subscriber sensitivities to cost may also differ across time. For example, cost may be more to the forefront of consumer/business decision-making when they are switching Service Provider than when they are making specific calls once they have chosen a Service Provider or when changing price plans with an existing provider. This may be particularly the case where customers are locked in to a minimum term contract, where price plans allow unlimited calls to be made or where prices for all call types are homogeneous. It may also take time for consumers to react to price increases, having regard to their visibility of price changes.

4.52 As observed in the 2012 Market Research, a majority of respondents (55%) indicated that they had never switched FSP while 11% of consumer respondents indicated they had changed their FSP within the previous 12 months, 15% changed FSP between one and three years ago and 18% changed longer than three years ago[112].

4.53 In order for the Called Party or the Calling Party to be in a position to react to any retail price increases generally or from any retail price increases stemming from the pass through of a wholesale SSNIP in FVCT by a particular FSP to subscribers, consumers/businesses would need to be:

a) aware of the retail call costs;

b) aware of the Called Party's or Calling Party's FSP (as appropriate); and

c) sufficiently concerned about cost such that it warrants some change in behaviour.

4.54 As noted in paragraph 4.40 and 4.44 ComReg takes the preliminary view that consumers and businesses will have low levels of awareness of both the identity of the Called Party's FSP and the Calling Party's FSP. As part of the 2012 Market Research, ComReg asked business respondents whether there were any types of phone calls that they checked in particular when reviewing their fixed phone bills. The results (presented below in Table 1) indicate that (of those respondents which carry out a detailed check of their fixed phone bills) respondents were mostly more interested in the aggregate cost of the bill (90% check the total cost of the bill) while only 32% claimed to check the cost of local/national fixed calls.

[112] The 2012 Market Research, Appendix A: Slide 38.

Table 1: Business awareness/sensitivity for particular call types

Reviewed element of bill	%
The total amount	90%
If the amount is greater than the bundle price	40%
The cost of calls to mobile phone numbers	33%
The cost of calls to local or national phone numbers	32%
The cost of international phone calls	19%
The cost of premium rate numbers and calls to directory enquiries	18%
The cost of the line\connection	13%
None of these	0%

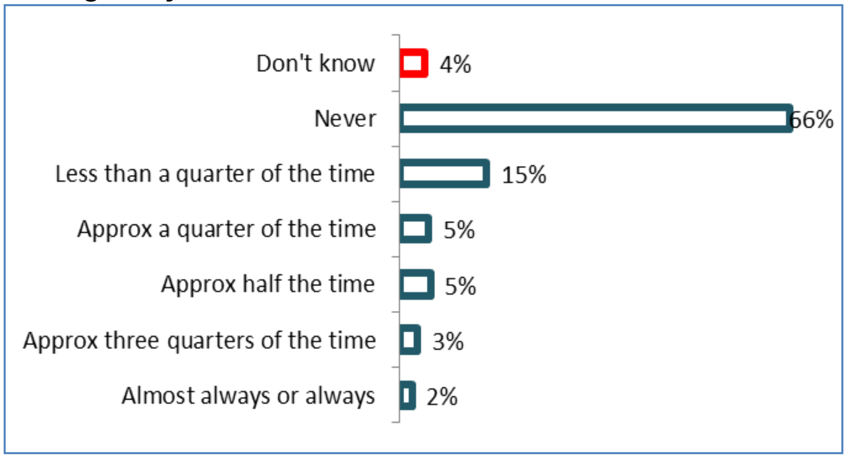
SURVEY QUESTION: Do you or does somebody else in your organisation check in detail the fixed phone bills that your business receives (either electronically or in the post)?
SURVEY QUESTION: Which of the following are checked on each bill?

Source: The 2012 Market Research, Appendix A: Slide 97

4.55 As part of the 2012 Market Research, ComReg also sought views from respondents as to their sensitivity to the costs faced by people calling them and what might be the frequency and nature of any behavioural response in view of any such concerns, i.e. whether as a Called Party they were concerned about the cost faced by the Calling Party and, if so what would they do and how often would they do it.

4.56 In terms of ascertaining the sensitivity of the Called Party to the cost faced by the Calling Party when making a call to the Called Party's fixed phone, the consumer respondents were asked whether, when they saw an incoming call on the fixed phone in their home, awareness of the cost to the Called Party caused them to change how they treat the call. The results are shown in Figure 13 below.

Figure 13: **Called Party awareness/sensitivity to costs faced by Calling Party**



SURVEY QUESTION: When you see an incoming call on the fixed line phone in your home, does awareness of the cost of the call to the person calling you cause you to change how you treat the calls?

Source: The 2012 Market Research, Appendix A: Slide 47

4.57 66% of respondents with a fixed phone claimed that they would never change how they treated incoming calls due to an awareness of the cost to the Calling Party. 30% of respondents claimed that they would sometimes change behaviour. Only 10% of respondents however claimed that they would change behaviour approximately half of the time or more.

4.58 Those respondents who claimed they would sometimes change behaviour were then asked to identify the specific behavioural change and how often they would do it. The results are shown in Table 2 below and illustrate a fragmented picture and a relatively low incidence of likely actions being taken to curb the incoming cost of a call. For example, only 2.5% (of the 30% of respondents who noted they would sometimes change behaviour when receiving a call on their fixed line phone) indicated that they would almost always not answer the incoming call.

Table 2: Frequency of any action taken by Called Party

	Almost always or always	Approx ¾ of the time	Approx half of the time	Approx ¼ of the time	< ¼ of the time	Never	Don't know
Don't answer the call at all	2.5%	3.1%	3.0%	1.6%	4.4%	14.6%	0.5%
Don't answer their call but phone them back from your fixed line phone	2.8%	3.4%	8.0%	3.7%	6.5%	4.6%	0.6%
Don't answer their call but phone them back from your mobile phone	0.9%	2.8%	6.2%	4.9%	6.8%	6.2%	1.9%
Don't answer their call but use some other method to contact them such as email, skype, or a text message	1.2%	3.4%	4.3%	3.7%	3.7%	12.4%	0.9%
Answer their call but shorten the length of the call	3.3%	4.4%	4.7%	4.2%	8.9%	3.3%	0.8%

SURVEY QUESTION: When you see an incoming call on the fixed line phone in your home, does awareness of the cost of the call to the person calling you cause you to change how you treat the calls?

Source: The 2012 Market Research, Appendix A: Slide 47

4.59 With a view to ascertaining the sensitivity of businesses to the costs faced by the Calling Party when calling their fixed numbers, survey respondents were asked whether their business provided any low call numbers for use by their customers and/or employees. The vast majority (93%) of respondents indicated that no low call numbers were provided by their business[113].

4.60 This suggests that, while businesses may be more sensitive to the costs of Calling Parties than in the case of residential users, the level of behavioural change amongst the business community to changes in the costs faced by others when calling their business is unlikely to be of a sufficiently immediate and pervasive scale to constrain retail price increases resulting from a SSNIP in wholesale FTRs.

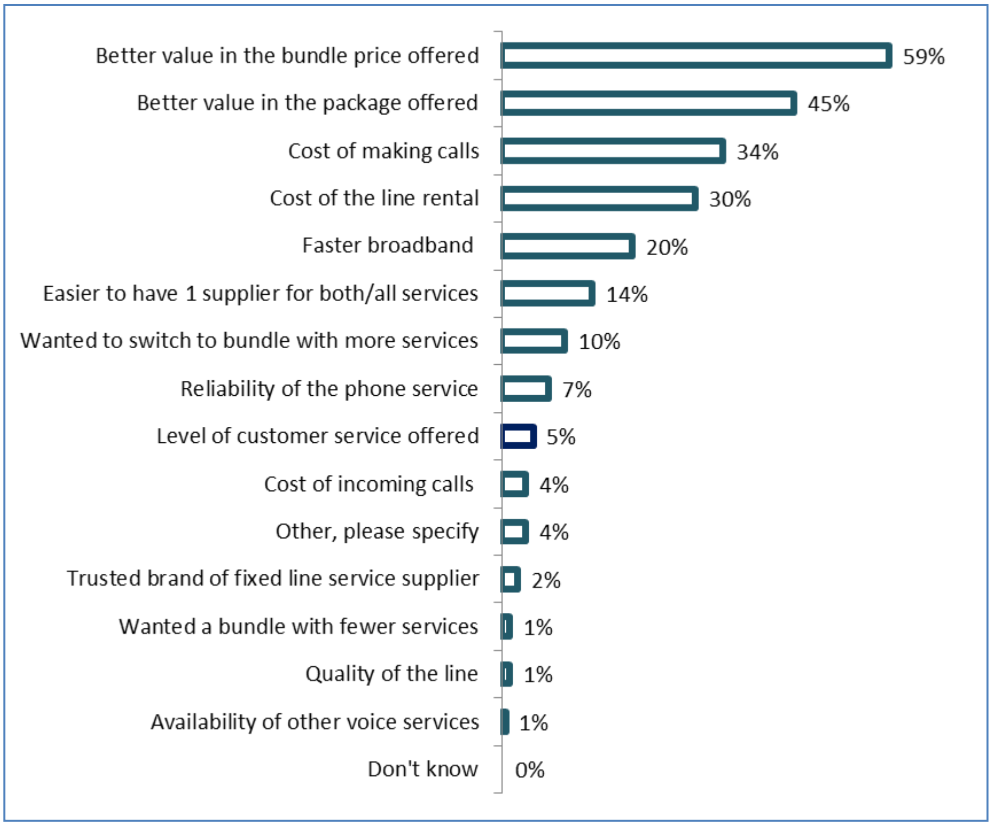
4.61 As noted earlier, consumer/business awareness of and sensitivity to cost may also differ across time. For example, cost awareness and sensitivity may be more to the forefront of consumer/business thoughts when they are switching FSP or switching price plans with the same FSP (rather than when they are making specific calls once they have chosen a FSP).

4.62 With the above in mind, ComReg asked consumer and business respondents what were their top three reasons for the selection of their current FSP. The

[113] The 2012 Market Research, Appendix A: Slide 91.

most commonly cited reasons (overall rank in brackets) amongst all consumer respondents that had switched were:

Figure 14: **Top 3 reasons for households switching fixed voice supplier**



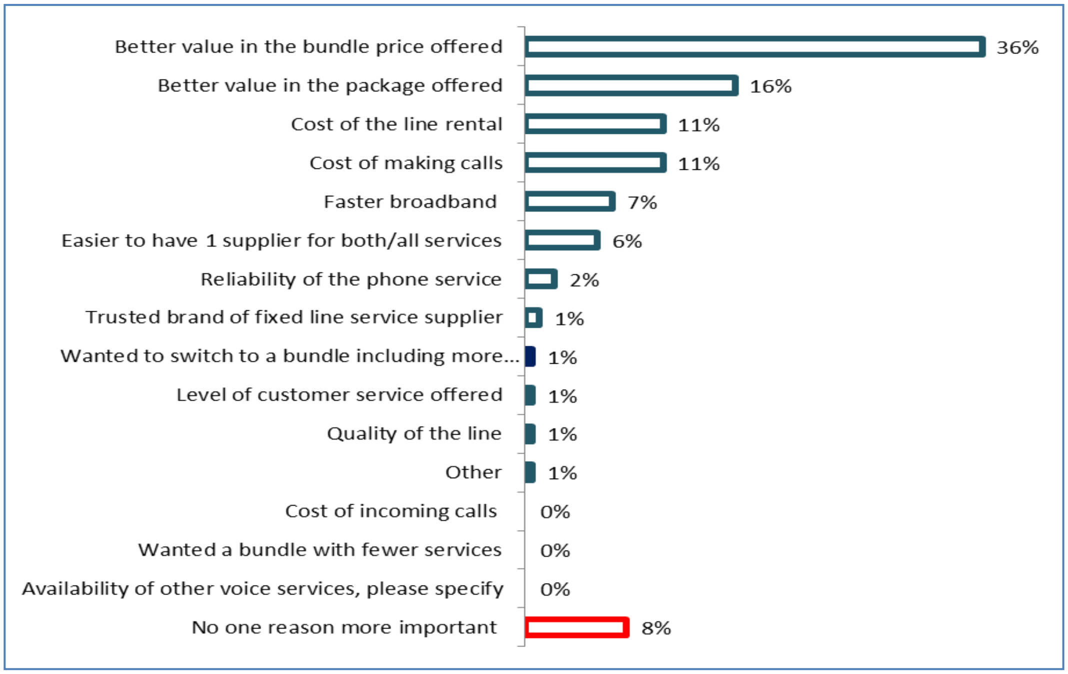
SURVEY QUESTION: Thinking about when you chose your current fixed line phone service supplier, please select the top three reasons out of the following set of possible reasons which were most important to your decision to choose your fixed line phone service supplier? Note that all of the reasons may be relevant to your particular service supplier

Source: The 2012 Market Research, Appendix A: Slide 41

4.63 Only 4% of respondents chose the cost of incoming calls as one of their top three reasons for choosing their current FSP.

4.64 Consumer respondents were also asked to select, from their cited top three reasons, the most important reason for the selection of their current FSP.

Figure 15: **Top reason for households switching fixed voice supplier**



SURVEY QUESTION: Out of those three you have selected which was the most important reason to your decision to choose your fixed line phone supplier?

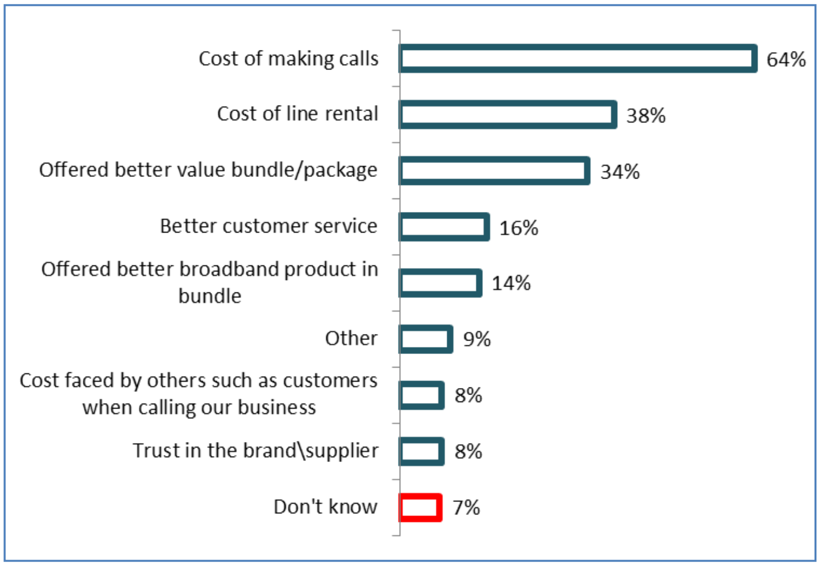
Source: The 2012 Market Research, Appendix A: Slide 42

4.65 No respondent chose the cost of incoming calls as their top reason for choosing their current FSP.

4.66 The above tables suggest that there is one reason common to all consumer segments and outweighs all other reasons chosen. All consumer respondents clearly identified “better value in the bundle price offered” for the purposes of making calls as being the most significant factor in the decision when selecting their current FSP. The CPP principle would appear to explain why consumers consider the cost of their bundle/package of (outgoing) fixed voice services to be most important (with 59% of respondents having it as one of their top three reasons) consumer respondents being much less concerned about the cost of incoming calls, i.e. because they do not bear these costs directly themselves.

4.67 Similar questions were also asked of business respondents who had switched FSP. The most commonly cited reasons (overall rank in brackets) amongst all business respondents that had switched were:

Figure 16: **Top 3 reasons for businesses switching fixed voice supplier**

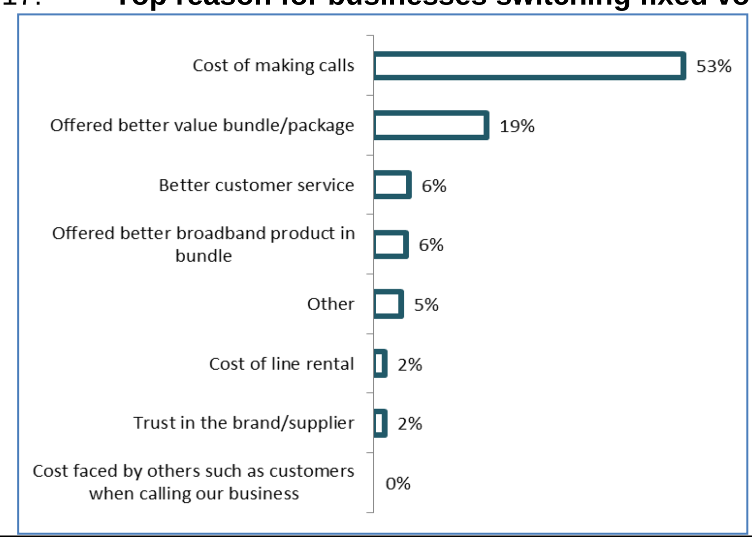


SURVEY QUESTION: Thinking about when you chose your current fixed line phone service supplier, please select the top three reasons out of the following set of possible reasons which were most important to your decision to choose your business' fixed line phone service supplier. Note that not all of the reasons may be relevant to your particular service supplier.

Source: The 2012 Market Research, Appendix A: Slide 101

4.68 Of businesses that have switched in the past, the cost faced by others when calling their business was only considered as part of their top three reasons for choosing their current FSP by 8% of respondents, while similar to the residential survey no business respondent considered this to be their top reason for selecting an FSP. When asked to select the single most important of the three reasons, business respondents indicated the following:

Figure 17: **Top reason for businesses switching fixed voice supplier**



SURVEY QUESTION: Out of those three you have selected which was the most important reason to your decision to choose your fixed line phone supplier?

Source: The 2012 Market Research, Appendix A: Slide 102

4.69 Similar to the residential survey, the CPP principle would again appear to explain why the cost of making calls was selected by the clear majority of business respondents (53%) as their top reason for choosing their current FSP compared to no respondents selecting the cost faced by others in instances where the business is the Called Party.

4.70 In its 2011/2012 statutory information requests, ComReg also asked Service Providers whether they had observed evidence suggesting that fixed voice customers are currently aware of, and sensitive to, the costs faced by others calling them from other networks. Apart from reference to general pricing sensitivity amongst consumers, particularly in relation to off-net calls to mobiles, little evidence was provided which would demonstrate actual awareness/sensitivity amongst Called Parties to the costs others face when making off-net calls to their fixed numbers. However, a respondent indicated an increasing trend on the part of fixed voice consumers who avail of a free calls component in their package to ring callers back on the basis that the call will be free, although only anecdotal evidence was provided in that regard.

4.71 As noted above, the 2012 Research suggests that any pricing sensitivities regarding specific call types generally relates to the costs of making outgoing calls with it featuring significantly in the top three reasons for both household and business respondents' choice of FSP (see Figures 14-17 above). ComReg has not observed material sensitivities on the part of Called Parties to the costs of incoming calls from other networks with only a very low segment indicating that it featured in their top three reasons for their current choice of FSP. As to the range of potential actions set out in Table 2 above, the 2012 Market Research also suggests that of the 30% of respondents that indicated they would sometimes change behaviour when receiving a call on a fixed line phone, only 14% of those indicated they would not answer the call and call the Calling Party back from their fixed phone approximately half of the time or more. Also, while fixed voice packages frequently include free minutes for local and national calls (although may potentially be restricted to particular times of the day/week), inclusive minutes tend to be more limited in the case of calls to mobile numbers which would further reduce the frequency with which such "call-back" behaviour is likely to materialise where the Calling Party is using a mobile phone.

4.72 Having regard to issues set out in paragraphs 4.51 to 4.71 ComReg takes the preliminary view that:

- Cost of the overall package for making outgoing calls is likely to be the one of the most important factors for consumers when selecting an FSP, primarily driven by the desire to minimise expenditure and obtain the best value for the services purchased. However, as the cost of local/national calls are not generally differentiated according to the FSP called, consumers do not appear significantly aware/sensitive to the cost of calling specific local/national fixed numbers. Furthermore, taking account of the general absence of any significant on-net/off-net retail price differentiation for calls to local/national fixed numbers and the prevalence of unlimited or large inclusive packages of minutes for local/national calls, the cost of making calls to particular FSP networks cannot be readily ascertained from the retail pricing structures. Hence, the individual cost of calling specific FSPs would therefore not appear to significantly influence consumers when choosing their FSP. This would also appear to accord with the generally low awareness of the individual cost of calls to local and national numbers as demonstrated by the 2012 Market Research.

- Two out of every three consumer respondents with a voice telephony service at a fixed location claimed that they would never change how they treated incoming calls due to an awareness of the cost to the Calling Party. For the remaining one-third of respondents with a voice telephony service at a fixed location which claimed they would sometime change behaviour in respect of incoming calls, any behavioural change as a result of Called Parties' concerns regarding the cost faced by Calling Parties was reported as likely to be low in frequency.
- Business users also did not express a significant level of engagement with the costs of making calls to specific FSPs' subscribers. Business respondents indicated a general concern with the overall cost of the telecommunications bill rather than any specific concern with individual call types. This would appear to accord with the retail pricing structures which do not generally differentiate depending on the particular fixed numbers/networks called. While the survey solicited the views of telecommunications decision-makers within the businesses, the level of general awareness/sensitivity across all employees in respect of specific call costs may be even lower, in particular due to the fact that the cost is borne by the business itself and not the individual employee. In addition, while businesses may be more concerned with the costs faced by others (e.g. customers) when calling their business, they are considered unlikely to react on a sufficiently immediate and widespread scale in response to small but significant price increases (stemming from a wholesale SSNIP in FTRs), in particular since such small price increases may not be directly observable to their customers when calling their business.

Summary of preliminary conclusions on relevant end user responses to changes in retail call prices

4.73 In summary, ComReg has set out above in paragraphs 4.51 to 4.72 its preliminary conclusions on a range of issues relating to retail pricing structures and consumer/business behaviour in the retail market. These behaviours, depending on their impact, are also relevant to the definition of the Relevant FVCT Markets (assessed further in paragraphs 4.81 to 4.163 below). In particular, the degree to which retail subscriber behaviour (either the Calling Party or the Called Party) and market characteristics may affect the FTR-setting behaviour of a HM supplier of wholesale FVCT is assessed further below.

4.74 Given the CPP principle, the Called Party does not pay for incoming calls to geographic or 076 numbers. Within this CPP environment and having regard to overall retail pricing structures/characteristics in the Irish market, ComReg has considered both Calling Party and Called Party behaviours, in particular, in relation to network awareness, cost awareness, sensitivity to cost and frequency of any associated behavioural change.

4.75 ComReg has identified the following ways in which end users might respond to an increase in the retail price of off-net calls to fixed telephones:

- By substituting a call to a fixed number with a viable alternative means of communication (e.g. a call to a mobile, sending an email or an SMS, requesting a call-back, etc.);
- By reducing the number and/or duration of calls made to the specific FSP that increased its FTR;
- By changing patterns of use such as changes in how/when calls are made to specific FSPs network.

4.76 These possible options for demand-side substitution are elaborated further below. However, ComReg's preliminary view is that the Called Party's propensity to respond to changes in retail call prices (stemming from an increase in wholesale FTRs) is mitigated by:

- low levels of awareness of the Calling Party's Service Provider;
- low levels of awareness of the retail costs faced by the Calling Party; and
- low sensitivity to/concern for the costs faced by the Calling Party.

4.77 These factors are likely to affect the degree to which the Called Party would change how it treats incoming calls, in particular, in response to concerns regarding the costs (and changes to them) faced by the Calling Party when calling a fixed voice subscriber.

4.78 Similarly, ComReg's preliminary view is that the Calling Party is likely to have:

- low levels of awareness of the Called Party's FSP (due largely to fixed geographic and 076 numbers being non-network specific);
- low levels of awareness of the cost of making calls (due largely to fixed voice pricing structures as discussed in the assessment of retail pricing structures above);

- reduced sensitivity to the cost of making calls to specific FSPs. While consumers/businesses are likely to be sensitive to the overall costs of the package for outgoing calls, price sensitivity to the cost of calling subscribers of one particular FSP over another is likely to be somewhat diminished given the nature and prevalence of any-network price plans offered by Service Providers for calls to fixed numbers.

4.79 These factors are also likely to affect the degree to which the Calling Party may change its calling behaviour, in particular, in response to concerns regarding the costs faced when calling a subscriber of a particular FSP.

4.80 In order to inform any constraints on FVCT behaviour, ComReg has identified *off-net calls to fixed telephone numbers* as its starting point in the retail assessment. ComReg then describes some potential alternative forms of communication that might be used instead of *off-net calls to fixed telephone numbers.* As ComReg is not required to define retail markets for the purpose of this market analysis, ComReg's main focus in this section is to determine the magnitude of any indirect retail constraints on the setting of FTRs at wholesale level. Retail substitutability is therefore examined below within the framework of a SSNIP applied in respect of FTRs at wholesale level.

Q. 2. Do you agree that ComReg has identified the retail consumer/business behaviours and retail market characteristics that are most relevant to the analysis of the Relevant FVCT 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.

Q. 3. Do you agree with ComReg's preliminary assessment of these retail consumer/business behaviours and retail market characteristics in terms of their potential to impact the Relevant FVCT 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.

Assessing the Impact of Retail Consumer Behaviour on the Relevant FVCT Markets

Overview

4.81 As noted in paragraph 1.12, the European Commission's 2007 Recommendation has already identified voice call termination on individual public telephone networks provided at a fixed location as a relevant wholesale market that is susceptible to *ex ante* regulation. ComReg is not, therefore, obliged *per se* to conclude on a precise definition of the retail market for the purposes of its present FVCT assessment. However, a characterisation of retail markets is being carried out to inform ComReg's subsequent definition of the wholesale Relevant FVCT Markets and, in particular, to inform ComReg's assessment of whether, through substitutability at the retail level, other forms of communication potentially exercise an indirect constraint on the provider of the Candidate Product[114] at wholesale level.

4.82 In line with the methodology recommended by the European Commission[115], ComReg begins its analysis by considering the narrowest Candidate Product at the wholesale level (FVCT to a particular fixed voice subscriber) and the corresponding narrowly defined retail service involving the ability to call a specific retail subscriber (at a fixed location) and examines whether this initial narrow product set (the Candidate Product) should be broadened to include other products or services, taking account of demand-side and supply-side substitutability considerations at the retail level[116].

4.83 If there was a strong awareness of the costs of making calls to particular networks and a sufficient risk of either the Calling Party or the Called Party employing alternative modes of communication so as to bypass calls being sent to a particular recipient FSP with sufficient frequency, this could potentially constrain the wholesale price-setting behaviour of the recipient FSP in respect of incoming calls. It is therefore important to start with an assessment of any potential retail substitution effects to understand their ability to constrain wholesale market behaviour (which could potentially imply a broader wholesale market) absent regulation.

4.84 Having regard to the above, we first consider whether, from the consumer demand-side perspective, there are any products which might act as an effective substitute for making a call to a subscriber of an FSP. We examine this from two perspectives.

- Firstly, whether the characteristics, prices and intended use of potential substitute products are sufficiently interchangeable with

[114] See footnote 87 for further details of the Candidate Product considered within the framework of the HM or SSNIP test.

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

[116] As noted in paragraph 13 of the European Commission's Notice on Market Definition, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a product, and paragraph 15 notes further that *"the assessment of demand substitution entails a determination of the range of products which are viewed as substitutes by the consumer".* For two products to be effective demand-side substitutes it is necessary that a sufficient number of customers are not only capable of switching between them, but would actually do so in response to a relative price change. As noted in paragraph 20 of the Commission's Notice on Market Definition, supply-side substitution may also be taken into account where *"suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and permanent changes in relative prices"*. When these conditions are met, the market may be broadened to include the products that those suppliers are already producing.

those attributes associated with making calls to a subscriber of a specific FSP.

- Secondly, having examined the characteristics, prices and intended use of any such potential substitutes, we also assess the likelihood that a sufficient number of consumers might switch to using these potential substitutes in circumstances where the price of making calls to a specific FSP were to increase as a result of a small but significant increase in wholesale FTRs.

4.85 An economic analytical mechanism for defining a relevant product through demand side substitution analysis consists of an examination of consumer behaviour in response to price increases and is known as the SSNIP test[117]. This SSNIP test consists of observing whether a small but significant non-transitory increase in price above the competitive level - taken to be in the range of 5 to 10% - of a Candidate Product supplied by a HM would provoke a sufficient number of consumers to switch to an alternative (substitute) product such that it would make the price increase unprofitable. If a sufficient number of subscribers switching to the alternative product makes the price increase unprofitable, then the alternative product is included in the relevant product market. The HM is carried out for any given number of alternative products which, by their characteristics, prices and intended use, may constitute an effective substitute to the Candidate Product. If switching to these alternative products is sufficient to also render the SSNIP (above the competitive level) of the Candidate Product unprofitable, then these are also included in the definition of the relevant product market.

4.86 In line with European Commission guidance[118] on the assessment of indirect retail substitution effects through a SSNIP by a HM at wholesale level, the following factors are considered relevant:

(a) the extent to which wholesale customers purchasing FVCT would be forced to pass a hypothetical wholesale price increase on to their consumers at retail level;

(b) the proportion of the wholesale price in the overall retail price;

(c) whether there would be sufficient demand substitution at the retail level such as to render the wholesale price increase unprofitable; and

(d) whether the retail customers would switch to the retail arm of the integrated HM, in particular if the latter does not raise its own retail prices.

4.87 As regards criterion (a) above, the extent to which access seekers would pass through a potential wholesale FTR price increase by a HM supplier of FVCT

[117] See footnote 87 for further details on the HM or SSNIP test framework used for market definition purposes.

[118] See, for example, cases NL/2005/281, UK/2007/0733, ES/2008/805, PT/2008/851.

into their own retail prices is not clear-cut. Assuming that all other elements of the retail service were provided at competitive prices, an increase in the price of the FVCT input could conceivably translate into a price increase at the retail level if access seekers were compelled through competitive forces to pass on the wholesale price increase into retail pricing.

4.88 If the retail market were not fully competitive, however, it may be that the access seekers would choose not to pass through all, or indeed any, of the wholesale price increase, but may rather choose to absorb the wholesale price increase. It has also been noted that, even in the case of competitive retail markets, there may not be an immediate pass through of an increase in the price of the wholesale input if fixed sunk investments are nontrivial[119].

4.89 As regards criterion (b) even where the FVCT access seeker is intending to pass through some or all of the wholesale FTR increase to the retail market, any wholesale price increase will still be diluted when passed through to the retail market. This is because the FVCT element is only one input to the eventual retail price, so an increase in the wholesale price would not translate directly into an equivalent increase at the retail level. This is illustrated in the following example.

4.90 Suppose a terminating FSP was levying an FTR of 1[120] cent per minute. Please note that this starting wholesale price level is chosen purely for illustrative purposes, and for the avoidance of doubt, this does not represent ComReg's view as to the FTR level in a competitive market. Indeed, the starting point for the application of a SSNIP is supposed to be applied on the assumption of a competitive price level. This estimate would however seem comparatively higher than the current average FTRs being charged by incumbent operators across Europe as benchmarked by BEREC[121].This assumption is thus taken purely with a view to employing a conservative and comprehensible estimate and to prevent any underestimation of any indirect retail constraints on the wholesale Relevant FVCT Markets arising from the pass-through of an FTR increase.

4.91 When a subscriber of an originating Service Provider calls a subscriber of the terminating FSP, at the wholesale level the originating Service Provider pays the terminating FSP an FTR of 1 cent per minute. The originating Service Provider then seeks to recover the FTR cost (and its own costs) through its

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[119] See Robert Lipschitz, Paul Anderson and Fatima Fiandeiro "Self-supply and indirect constraints within competition analysis", 22 May 2008.

[120] For the avoidance of doubt, this does not represent ComReg's view as to the FTR level in a competitive market.

[121]See "BEREC TR Snapshot as of January 2012, Integrated Report on MTR, SMS TR and FTR", 24 May 2012, BoR (12) 56, at http://berec.europa.eu/files/document_register/2012/8/bor_12_56_tr_integrated_snapshot_final.pdf According to this report, which benchmarks the effective weighted per minute interconnection rate for incumbents in the BEREC countries, the European average as of January 2012 for Layer 1 was reported to be 0.54€ cents per minute. Regarding layer 2 and 3, European average stood at 0.66€ cents per minute and 0.80€ cents per minute, respectively.

retail charges for calling a subscriber of the terminating FSP. If this retail charge for an out-of-bundle fixed-to-fixed call is 4 cent per minute[122], then the 1 cent FTR represents only 25% of the charge.

4.92 Taking the example set out in paragraph 4.90 above, if the terminating FSP increased its FTR from 1 cent to 1.1 cent (a 10% increase), the question arises as to whether this would in fact be passed through by the originating Service Provider in its retail prices. Assuming (again a conservative scenario for the purposes of this analysis) that it is entirely passed through[123], then the retail price for a call to the terminating FSP's subscriber would increase from 4 cent to 4.1 cent, representing only a 2.5% increase overall.

4.93 As regards criteria (c) and (d) set out in paragraph 4.86, ComReg considers the extent to which consumers would observe and react to a given price increase (resulting from a hypothetical wholesale price increase) at retail level[124]. The substitution assessment undertaken below draws on insights from the 2012 Market Research and information provided by Service Providers in response to the 2011/2012 statutory information requests, as well as other data available[125].

4.94 After considering demand-side substitution, ComReg considers supply-side substitution, in particular, whether any suppliers not currently within the retail fixed voice market would, within the short term, switch to supplying the Candidate Product without incurring significant additional costs or risks in response to a SSNIP in prices. Supply-side substitution is considered where:

> *"its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy"*[126].

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[122] This charge is an estimated average cost (excluding vat) of a fixed-to-fixed call based on Eircom's out-of-bundle Talktime call charges available at http://www.eircom.ie/bveircom/pdf/Pt_2.3.1.pdf. Weighted average calculation based on assumed 50% peak/25% off-peak/25% weekend traffic distribution.

[123] The review of the retail pricing structures set out above suggests however that this may be a somewhat unrealistic assumption as retail fixed voice providers have not differentiated their retail prices to date based on the identity of a particular FSP to which the call is destined. It is also worth noting that the pass-through of an FTR increase could be spread over the entire cost of a retail price plan as opposed to retail call prices alone. For example, the FTR increase could be recovered through a combination of price increases for access or across different call types.

[124] As noted above, the Service Provider purchasing FVCT may not necessarily choose to pass through all, or indeed any, of the wholesale price increase, but may rather choose to absorb the wholesale price increase itself, which would further limit the scope for end-user substitution to discipline the wholesale price increase.

[125] Such data includes information provided by Service Providers to ComReg to support its Quarterly Report publications (see footnote 22 above), publicly available information (including information on Service Providers' websites), as well as information gathered by ComReg as part of its general market monitoring role.

[126] See paragraph 20 of the European Commission's Notice on Market Definition.

Retail Demand Side Substitution

4.95 ComReg's starting point is to examine whether, instead of making a call to a subscriber of a specific FSP, the following are likely to be considered by consumers[127] as effective forms of substitute communication for making an off-net call to an end-user on their fixed telephone number.

- Make a fixed-to-mobile call instead of an off-net fixed-to-fixed call;
- Make a mobile-to-mobile call instead of an off-net fixed-to-fixed call or off-net mobile-to-fixed call;
- Make an on-net fixed-to-fixed call instead of an off-net fixed-to-fixed call;
- Make an unmanaged VoIP call instead of a call to a fixed number;
- Send an SMS instead of an off-net call to a fixed number;
- Send an email or use social-networking/instant messaging instead of an off-net call to a fixed number;
- Shorten an off-net call to a fixed number and/or request a call back;
- Delay making the off-net call to a fixed number to a time when it is cheaper to phone.

4.96 These potential substitutes are considered across the range of relevant substitutability criteria set out in the European Commission's Notice on Market Definition, according to which a relevant product market:

"….. comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use"[128.]

4.97 This retail market analysis therefore covers an assessment of the technical characteristics (functionality), price, and any available data regarding consumer usage trends/behaviour. It also considers whether a sufficient number of users are likely to switch to using any such potential substitutes in response to an increase in the retail price of calling the terminating FSP, with this retail price increase driven by the assumed pass-through of a 5-10% increase in the terminating FSP's wholesale FTRs.

4.98 In the example set out at paragraph 4.90 above, the estimated magnitude of a retail price increase (based on conservative assumptions) resulting from a 10% wholesale SSNIP raises significant doubt that such a price increase would be even readily observable to Calling Parties, let alone induce them to change their behaviour to such an extent as to subsequently impact on Called Parties' behaviour.

[127] Unless otherwise stated, consumers refers to both private consumers and business consumers.

[128] See paragraph 7 of the European Commission's Notice on Market Definition.

4.99 As noted in paragraph 4.44, ComReg's preliminary view is that, given the CPP principle, the Called Party is likely to have low levels of awareness of network identity and sensitivity to the cost faced by the Calling Party. In view of this, ComReg's preliminary view is that Called Party reactions to the impact of FTR increases (on Calling Parties' retail prices for calling subscribers of a particular FSP) are unlikely to be sufficient to make an FTR increase unprofitable.

4.100 Similarly, it is ComReg's preliminary view that the Calling Party is likely to have low levels of awareness of the Called Party's FSP and the cost of calling subscribers of particular FSPs. As a number of call packages offered at a fixed location now include substantial numbers of bundled minutes to local and national fixed numbers which are not typically differentiated by the identity of the FSP being called, it is even less clear how any wholesale SSNIP would in turn be passed through and rendered visible to retail subscribers. These factors are likely to affect the degree to which the Calling Party or the Called Party can change its call making/receiving behaviour in response to wholesale cost concerns.

4.101 The effect of an increase in FTRs above the competitive level on the magnitude of the percentage increase in the retail price will obviously be dependent on the level of the FTR (and the increase) as a proportion of the overall retail price. As a consequence (assuming a lower FTR, a higher retail price as well as varying assumptions regarding the likelihood of pass-through) the effects of an FTR increase on pricing for the retail customer are likely to be significantly less than the illustrative example presented in paragraph 4.90 above, with associated implications for any behavioural response.

4.102 However, in order to avoid under-estimation of any potential indirect constraints, ComReg assumes a pass-through of FTRs into retail prices and further considers below how potential behavioural changes by consumers and businesses might impact on their outbound communications mix, along with any potential substitution to specific potential alternative retail products.

4.103 In terms of analysing possible behavioural changes by consumers and businesses, ComReg considers each of the possible options for replacing a retail call to a fixed (geographic or 076) number with alternative forms of communication as set out at paragraph 4.95 above.

Make a fixed-to-mobile call instead of an off-net fixed-to-fixed call

4.104 An increase in FTRs by a HM might be unprofitable if, in response, a sufficient number of consumers switched to making a call from a fixed phone to a mobile number ('**F2M**') instead of an off-net fixed-to-fixed ('**F2F**') call. This behaviour would only be a rational means of avoiding the effect of the increased FTR if the overall cost to the Calling Party of the F2M call would be lower than the off-net F2F call.

4.105 As noted in the discussion of retail pricing structures, most fixed voice services are sold as part of a package or bundle including varying amounts of inclusive minutes with typically the majority of such inclusive minutes being for calls to other local and national fixed numbers and traditionally much lower amounts of inclusive minutes for calls to mobile numbers. While there is some inclusion within fixed voice plans of set amounts of designated inclusive minutes for calling mobiles, the number of such inclusive minutes tends to be low. When the FSP is also operating within the retail mobile market, the volume of such minutes tends to be slightly higher, albeit still generally lower than the number of inclusive minutes for local/national calls and restricted to calling mobile subscribers on the Service Provider's own mobile network.

4.106 Furthermore, as noted in the analysis of retail pricing structures above, the evidence suggests that out-of-bundle minutes for F2F voice calls are frequently cheaper than for F2M services. If such common pricing approaches in respect of F2F and F2M calls were to persist, then these would likely limit a consumer's rationale for switching to an F2M call since the number of bundled minutes are generally far greater for F2F calls than for F2M calls and the costs in terms of out-of-bundle minutes are also generally lower for an F2F call.

4.107 The 2012 Market Research also shows[129] that most respondents with a fixed phone believe fixed voice charges are lower than calls from mobile phones for most call categories, except for F2M (on-net) calls. The 2012 Market Research also demonstrates a clear preference amongst respondents for F2F and M2M communications respectively. For those categories of calls which they make from their home, respondents were asked[130] what their preferred telecommunications service would be for each call type. 77% and 80% of respondents indicated their preference for using their fixed voice service for calling other local and national fixed numbers respectively. In terms of calling mobile numbers, 78% of respondents indicated a preference for using a mobile phone for calling other on-net mobile numbers while 62% indicated a preference for using a mobile phone for calling off-net mobile numbers. This suggests that substitution of a F2M call instead of a F2F call is not likely to be significant in response to small but significant FTR increases.

Preliminary Conclusion on M2F calls

4.108 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, a sufficient number of consumers are unlikely likely to switch to making a F2M call such that it would make the FTR increase unprofitable. A F2M call is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on the price of an F2F call.

Make a mobile-to-mobile call instead of an off-net fixed-to-fixed call or off-net mobile-to-fixed call

4.109 An increase in FTRs by a HM might be unprofitable if, in response, a sufficient number of consumers substituted making an off-net F2F call or off-net M2F call with a mobile-to-mobile ('**M2M**') call. This behaviour would only be a rational means of avoiding the effect of the increased FTR if the overall cost to

[129] The 2012 Market Research, Appendix A: Slide 36.

[130] The 2012 Market Research, Appendix A: Slide 26.

the Calling Party of calling the specific FSP were directly observable and if the cost of the M2M call would be lower than the F2F call or the M2F call.

4.110 This scenario is similar to the scenario outlined above and the same issues in respect of the economic rationality of such conduct arise. As noted in the analysis of retail pricing structures most fixed and mobile voice services are sold as part of a package or bundle including varying amounts of bundled minutes which can be used for calls to any network. A subscriber using in-bundle minutes to call a fixed number will have no material incentive to alter their behaviour regardless of the level of the FTR being charged by the Called Party's network. The fact that retail pricing plans for fixed voice calls currently do not differentiate according to the destination FSP being called further limits any incentives to replace an F2F call with an M2M call.

4.111 A review of mobile pricing structures in the MVCT Consultation Paper also found the cost of M2F calls does not tend to vary based on the identity of the FSP called unless the Service Provider has both fixed and mobile operations, i.e. the (off-net) retail prices which mobile subscribers face when calling different FSPs are typically the same irrespective of the identity of the FSP concerned. Furthermore, the prices charged for calling other mobiles (i.e. off-net M2M) and other FSP networks (i.e. off-net M2F) typically do not vary. The absence of any clear pricing distinctions between an off-net M2F call and an off-net M2M call would further limit incentives to switch an off-net M2F with an off-net M2M call.

4.112 In the event that the Calling Party has a mobile on the same network as the Called Party, there may be an incentive for the Calling Party to make an on-net M2M call instead of a F2F call or a F2M call. This possibility only exists for a limited band of potential callers as F2F calls generally involve unlimited or large packages of inclusive minutes and for those packages it is unlikely that a significant volume of F2F call minutes would be consumed out-of-bundle. Furthermore, evidence presented in the MVCT Consultation Paper shows a low level of knowledge amongst mobile subscribers of the Called Party's MSP. ComReg took the preliminary view in the MVCT Consultation Paper that both consumers and businesses tend to have relatively low levels of awareness of the identity of the Called Party's MSP driven in large part by the advent of full MNP[131]. This is likely to impact the degree to which Calling Parties can react to an increase in wholesale FTRs by substituting an on-net M2M call for an off-net F2F or off-net M2F call.

4.113 In addition, the characteristics of fixed and mobile telephony are different. Fixed phones are associated with fixed locations such as households and businesses, whereas mobile phones are typically associated with individual people, frequently on the move. This means that where the Called Party is, for example, a business, administrative body or other entity/person which is not a friend or family member of the Calling Party, contacting the Called Party on

[131] The MVCT Consultation Paper (footnote 95), Page 47.

their mobile phone may not be a viable alternative to contacting the Called Party's fixed number. Furthermore, there appears to be a general perception from the 2012 Market Research that making calls from fixed phones is cheaper for most call types (with the exception of on-net mobile) and when respondents were asked to rate a range of potential reasons as being like/unlike their reasons for keeping a fixed voice phone, 73% of respondents noted that "It is cheaper for making some types of calls" as very like their reason[132]. It is difficult to see how a retail price increase of the magnitude suggested in paragraph 4.91 above, would significantly alter this perception of fixed voice calls to such an extent as to induce a sufficiently strong shift away from calling fixed numbers to impact on the Called Party's choice of FSP.

Preliminary Conclusion on M2M calls

4.114 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, a sufficient number of consumers are unlikely to switch to making a M2M call such that it would make the FTR increase unprofitable. A M2M call is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on FTRs.

Make an on-net fixed-to-fixed call instead of an off-net fixed-to-fixed call

4.115 An increase in FTRs by a HM might be unprofitable if, in response, a sufficient number of consumers switched to making an on-net F2F call instead of an off-net F2F call. The motivation for making an on-net F2F call instead of an off-net F2F call might be to take advantage of any lower retail prices for an on-net F2F call which would presumably not involve any wholesale FTRs, since the Calling Party and Called Party would be located on the same network.

4.116 In practice, however, retail fixed voice pricing structures do not tend to reflect differentiated tariffs for on-net and off-net fixed voice calls. As discussed in the analysis of retail voice pricing structures above, FSPs don't generally differentiate between local/national calls from/to subscribers on their own network (on-net) and local/national calls to other FSPs' subscribers (off-net). Any retail price (of the magnitude referred to in paragraph 4.91 above) resulting from an increase in wholesale FTRs is unlikely to materialise in differentiated retail tariff structures for on-net and off-net local and national calls to fixed numbers. Thus, consumers would not have pricing incentives to alter their behaviour in respect of on-net and off-net calls to fixed numbers.

4.117 Furthermore, as noted in paragraph 4.40 above, ComReg takes the view that consumers tend to have relatively low levels of awareness of the identity of the Called Party's FSP. This is primarily driven by the fact that it is impossible to identify the Called Party's FSP where fixed (geographic or 076[133]) numbers are used by the Called Party. This inability to decipher the identity of particular

[132] The 2012 Market Research, Appendix A: Slide 43.

[133] See Section 5 for an explanation of why fixed numbers are defined as geographic and 076 numbers for the purposes of this Consultation Paper.

FSPs through the fixed numbers used is likely to impact the degree to which Calling Parties can react to changes in the retail price for calls to subscribers of specific FSPs by diverting their calls to other fixed numbers.

4.118 In addition, even if the above retail pricing structure and Calling Party network awareness issues did not arise, in order for on-net F2F calls to be a viable substitute to reaching a particular Called Party, it would still be necessary for either the Calling Party or the Called Party to have multiple (at least two) fixed voice subscriptions, one of which must be on the same network for both parties. Given the costs involved in maintaining two or more fixed voice subscriptions, ComReg considers that it is unlikely to be a viable alternative for a significant number of consumers. This was borne out by the 2012 Market Research which noted that of the 1000 households surveyed only one household had more than one fixed voice phone line connection[134].

4.119 In any case the widespread use of retail pricing structures which do not differentiate between on-net and off-net fixed voice calls as well as the fact that both residential and business users tend to have low levels of awareness of the FSP being called are key factors in undermining the effective use of on-net F2F substitution.

Preliminary Conclusion on on-net F2F calls

4.120 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, a sufficient number of consumers are unlikely to switch to making an on-net F2F call such that it would make the FTR increase unprofitable. An on-net F2F call is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on a wholesale SSNIP in FTRs.

Make a VoIP-to-VoIP call instead of a call to a fixed number

4.121 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase being passed through into the retail price, a sufficient number of consumers were to switch to making a VoIP-to-VoIP call instead of a traditional call to a fixed number.

4.122 As is discussed further in paragraphs 3.26 to 0 above, for the purposes of this Consultation Paper, ComReg considers VoIP according to three broad categories as follows: managed VoIP services, partially-managed VoIP services, and unmanaged, or "Over the Top (OTT)" VoIP services.

4.123 At retail level managed VoIP services are frequently sold as part of a package with broadband and television services. Switching to making a managed VoIP call instead of a F2F using other technologies (e.g. PSTN) would thus require a broader decision regarding a suite of bundled services. Furthermore, any such switching decision would not in any case obviate or constrain an FTR being applied in the case of off-net calls as a wholesale FTR would still be applied by the Called Party's FSP regardless of whether the Calling Party or Called Party was using managed VoIP telephony. Similarly, using a partially-

[134] The 2012 Market Research, Appendix A: Slide 11.

managed VoIP service would not avoid the incurrence of an FTR in the case of off-net calls, as partially-managed VoIP FSPs typically charge an FTR to the Calling Party's Service Provider.

4.124 Unmanaged VoIP services are typically free when calling other unmanaged VOIP users, but invoke a cost when calling a traditional numbered line. As noted in paragraph 3.35 above, unmanaged VoIP services are frequently used by consumers *via* a personal computer, laptop computer, smart phone or tablet in order to communicate with other users on these devices, although, as discussed in paragraph 5.69, voice handsets which do not require the use of a computer are now available. For an unmanaged VoIP-to-VoIP call to be a potential alternative to a traditional call to a fixed number (and thus be capable of bypassing the FTR charged by the FSP to whom the fixed numbers are allocated), both the Calling Party and the Called Party would need to have a data/broadband subscription[135]. While an unmanaged VoIP-to-VoIP call could be free (and therefore avoid an FTR), both the Calling Party and Called Party would incur costs of the data/broadband subscription. As not all households have internet access at home in Ireland, making an unmanaged VoIP-to-VoIP call could only be a possibility for the 65% of households which were reported to have some form of (fixed or mobile) broadband (at the end of 2011) compared to 31% of households in 2007[136].

4.125 There are also other considerations as to whether the quality of an unmanaged VoIP-to-VoIP call would be sufficiently similar to a traditional voice call to a fixed number such that consumers would use them interchangeably. There can be quality of service issues when using VoIP services on an unmanaged data network as, unlike web browsing, voice communication on VoIP services occurs in real-time and bit rate error and latency issues can degrade call quality. Were this to occur this may undermine frequent consumer usage of unmanaged VoIP-to-VoIP calls as a replacement to F2F and M2F calls using other technologies. Further distinctions between unmanaged VoIP services and other retail voice services provided at a fixed location are discussed at paragraph 5.69.

4.126 The 2012 Market Research indicated that 36% of households with a fixed broadband service in their home claimed to have used unmanaged VoIP services[137]. However, of those respondents with a fixed broadband connection, the vast majority (approx. 74%) still also had a retail fixed voice service subscription[138]. Furthermore, as noted at paragraph 3.35, reported usage

[135] It is possible to make a call originating on VoIP technology directly to a fixed number without the Called Party having a broadband subscription; however, this would not bypass the terminating network's termination charge. The use of such VoIP calls is not, therefore, likely to place sufficient constraint on the FTR price-setting behaviour of a HM.

[136] ComReg Quarterly Report Data, available from ComReg Document 12/20, Quarterly Key Data Report, Data as of Q4 2011, 13 March 2012, page 41.

[137] The 2012 Market Research, Appendix A: Slide 16.

[138] The 2012 Market Research Appendix A: Slide 11. Out of 660 respondents with a fixed broadband connection, 490 (or 74%) had a retail fixed voice service subscription.

levels for unmanaged VOIP services were much lower than for mobile and fixed voice services with only 10% of respondents using unmanaged VoIP services more than once a day (compared to 73% for fixed voice and 78% for mobile voice telephony)[139].

4.127 In the case of the businesses surveyed, only 12% used unmanaged VoIP within their business and this was predominantly used to contact other unmanaged VoIP users[140]. This low level of usage of unmanaged VoIP services implies that it is unlikely to be perceived as an effective substitute by Calling Parties for a sufficient volume of calls, particularly in response to a retail call price increase stemming from a SSNIP in FTRs. In addition, the CPP principle and low awareness/sensitivity of the Called Party to the Calling Party's retail charge implies that the Called Party is even less likely to be incentivised to significantly adapt their behaviour for the receipt of a significant volume of their voice calls to their broadband/data network. There would likely be enhanced coordination required from both parties for the diversion of a significant portion of calls to unmanaged VoIP-to-VoIP calls. Even leaving the functional differences of the voice *se*rvices aside and the fact that one-third of households still have no broadband service, the CPP principle would also diminish the incentives of the Called Party to actively engage in coordinating the receipt of a significant volume of their calls *via* an unmanaged VoIP service over their broadband/data network.

4.128 The MVCT Consultation Paper has already addressed the reasons why an unmanaged VoIP service *via* a smartphone is not an effective alternative to making a mobile call. ComReg is of the preliminary view that the same considerations apply to limit the effectiveness of unmanaged VoIP *via* a mobile phone as an alternative to making a call to a specific fixed number.

Preliminary Conclusion on VoIP calls

4.129 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, switching to making an unmanaged VoIP-to-VoIP call instead of an off-net call to a fixed number using other technologies is unlikely to act as an effective constraint on the level of the wholesale FTR.

4.130 Furthermore, a sufficient number of consumers are unlikely to switch to making an unmanaged VoIP-to-VoIP call instead of an off-net call to a fixed number such as to render an FTR SSNIP unprofitable. An unmanaged VoIP-to-VoIP call is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on a SSNIP in FTRs.

Send an SMS instead of an off-net call to a fixed number

4.131 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase being passed through into the retail price, a

[139] The 2012 Market Research, Appendix A: Slide 24.

[140] The 2012 Market Research, Appendix A: Slide 110.

sufficient number of consumers were to switch to sending an SMS instead of making an off-net F2F or M2F call.

4.132 In response to statutory information requests for the ongoing review of the Relevant MVCT Markets in Ireland, data was provided by FSPs which shows that, the level of fixed-originated SMS is virtually non-existent and that this is not likely to change within the short to medium term[141]. ComReg does not therefore consider fixed SMS in this analysis given its impact is likely to be extremely low.

4.133 Alternatively, a Calling Party could send an SMS to a mobile instead of making an off-net call to a fixed number.

4.134 Similar to the MVCT Consultation Paper, ComReg's preliminary view is that there are sufficient functional differences between making an off-net call to a fixed number and sending an SMS text message to a mobile. Firstly, there is a restriction on how much a detail a person can communicate in a SMS as a maximum of 160 characters can be sent in an individual SMS. This means that a consumer may not be able to transfer in one message all of the information that could be imparted through a call. However, this could be overcome by sending multiple SMS messages - although a charge would be incurred[142] for each SMS message. Furthermore, SMS messages that are sent on a 'store and forward' basis implies that there may be a delay in the recipient receiving a text, i.e. it is not a real-time communication. In contrast, a voice conversation is immediate and occurs at the point at which the call recipient answers the incoming call. These functional differences suggest that an SMS is not likely to be considered by a sufficient number of people to be a close substitute to an off-net call to a fixed number (although it is recognised that some people may consider them to be, particularly for short calls or where real-time communication is not important).

4.135 In the 2012 Market Research consumers were also asked how they would change their call receipt behaviour if they were concerned about the cost faced by people when calling them. Of the 30% of respondents in households with fixed voice telephony services who stated that they were somewhat aware of the cost of an incoming call to their fixed phone, only 9% indicated they would not answer the call but would use some other method to contact the Calling Party back such as email, Skype or a text message approx. half of the time or more[143]. Also in the call price sensitivity tests carried out, of those respondents which thought about the cost of line rental and calls separately and which indicated that they would likely reduce their spending on fixed voice calls in

[141] The MVCT Consultation Paper (see footnote 95), page 82.

[142] In the MVCT Consultation Paper it was noted (page 82) that a typical out-of-bundle retail charge for sending an SMS on the vast majority of price plans is in the range 10 cent to 13 cent.

[143] The 2012 Market Research Appendix A: Slide 47.

response to a 10% price increase, 22% (i.e. 7 respondents) indicated that they would use their mobile phone more for both calls and texts[144].

Preliminary Conclusion on sending an SMS/Text

4.136 Having regard to the above, ComReg's preliminary view is that, in response to a SSNIP in FTRs, a sufficient number of consumers are unlikely to switch to making an off-net SMS such that it would make the FTR increase unprofitable. An off-net SMS is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on FTRs.

Send an email or use social networking/instant messaging instead of an off-net call to a fixed number

4.137 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase being passed through into the retail price, a sufficient number of consumers were to switch to social networking/instant messaging or sending an email instead of making an off-net call to a fixed number. The rationale for sending an email or using social networking/instant messaging would be to avoid the retail cost associated with making an off-net call to a fixed number.

4.138 Email has similar functional characteristics to a text message in that it is not a real-time application. There are, however, a number of differences. Firstly, in order for a Called Party to receive an email it would need to have either access *via* a personal computer, laptop computer, smart phone or tablet in order to communicate with other users on these devices. Secondly, there is no limitation in the number of characters that can be sent in an email.

4.139 While some consumers may find email to be a close substitute to making a call to a fixed number, particularly for short calls or where immediacy of contact is not a priority, ComReg's preliminary view is that it is not likely to be the case for a significant number of consumers. Cost/network awareness issues discussed earlier are also likely to impact the degree to which consumers would utilise an email as a potential substitute for a call to a fixed number.

4.140 In the call price sensitivity tests carried out in the 2012 Market Research, of those respondents which thought about the cost of line rental and calls separately and which indicated that they would likely reduce their spending on fixed voice calls in response to a 10% price increase, 17% (i.e. 6 respondents) indicated that they would use email and social networking more[145]. At the same time, for those respondents which did not have a fixed line, 49% agreed that being able to use email/social networking/instant messaging was a reason for not having a fixed line phone (although multiple responses were possible)[146].

[144] The 2012 Market Research Appendix A: Slide 62.

[145] The 2012 Market Research Appendix A: Slide 62.

[146] The 2012 Market Research Appendix A: Slide 50.

4.141 While some consumers may find email or social networking/instant messaging to be a close substitute to making a call to a fixed number, particularly for short calls or where immediacy of contact is not a priority, ComReg's preliminary view is that it is not likely to be the case for a significant number of consumers/calls in response to a SSNIP in FTRs. Furthermore, the CPP principle is likely to further limit the incentives of the Called Party to engage in more active coordination in respect of diverting its incoming voice communications to increased data communication. Of the 30% of respondents in households with fixed voice telephony services who stated that they were somewhat aware of the cost of an incoming call to their fixed phone, only 9% indicated they would not answer the call but use some other method to contact the Calling Party back such as email, Skype or a text message approximately half of the time or more[147].

Preliminary Conclusion on Email/Social Networking/Instant Messaging

4.142 Having regard to the above, ComReg's preliminary view is that, in response to a SSNIP in FTRs, a sufficient number of consumers are unlikely to switch to sending an email or social networking/instant messaging such that it would make the FTR increase unprofitable. Neither email nor social networking/instant messaging is therefore likely to pose an effective or sufficiently immediate competitive constraint on FTRs.

Shorten calls or request a call back instead of an off-net call to a fixed number

4.143 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase being passed through into the retail price, a sufficient number of consumers were to make shorter calls or request a call back (say by leaving a voicemail). The intention behind using either of these alternatives would be to reduce the length of communication and, consequently, lower costs.

4.144 A person could keep their calls deliberately short resulting in a lower overall retail charge for the call (given the call duration is reduced). A person could also phone directly through to a Called Party's voice mailbox with the express intention of shortening a voice call and with a view to getting the voice mail recipient to call them back.

4.145 The practices of shortening a call or leaving a voice mail still involve the payment of an FTR by the originating Service Provider to the call/voicemail recipient's FSP, although termination revenues would be lower. The question is whether, in response to the pass-through of an FTR increase into off-net fixed call charges, a sufficient number of callers would engage in this practice such that it would make the FTR increase unprofitable (when also considering the FTR revenue accruing from those callers whose calling patterns remained unchanged).

[147] The 2012 Market Research Appendix A: Slide 47.

4.146 Shortening a call may be an option for some Calling Parties, however, this will depend on whether or not it is convenient in light of the information that is to be discussed and also the extent to which the FTR price increase applied by that specific FSP is in fact directly visible to the Calling Party at retail level.

4.147 For call back (either in response to a voice mail or through a specific service offered by Service Providers) to be successful it is necessary that there is agreement between the Calling Party and the Called Party that a return call will be made. The success of call back requires that the Called Party is willing to become the Calling Party and pay the cost of making the call, including the termination charges. The existence of the CPP principle means that the Called Party does not pay any contribution towards the cost of the call and thus may have less overall awareness/sensitivity towards the cost faced by the Calling Party. Furthermore, this call-back option would not obviate the FTR as this would still be paid by whoever originates the call. It is thus not considered as an effective bypass mechanism capable of constraining FTRs to a material degree.

4.148 In the 2012 Market Research of the 30% of respondents in households with voice telephony services at a fixed location who stated that they were somewhat aware of the cost of an incoming call to their fixed phone, only 12% indicated they would shorten the length of the call approximately half of the time or more (see Table 2).

Preliminary Conclusion on Call Shortening/Call-Back

4.149 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, a sufficient number of consumers are unlikely to switch to shortening call length and/or requesting a call back such that it would make the an FTR increase unprofitable. Shortening call length and/or requesting call backs are not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on FTRs.

Delay making the off-net call to a fixed number to a time of day/week when the cost is cheaper

4.150 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase being passed through into the retail price, a sufficient number of consumers were to switch to making calls at a time of day when the cost of a call may be cheaper.

4.151 Delaying the making of an off-net call to a fixed number to a time of day when it is cheaper may be a viable alternative for some consumers, particularly where immediacy of contact is not a priority. As noted in the discussion of retail pricing structures above, there are a number of fixed voice packages according to which more favourable tariffs are available in off-peak and weekend periods. However, these packages tend to offer unlimited or large inclusive local/national call minutes to fixed numbers. Thus, while Calling Parties might defer some of their voice calls to cheaper times of the day/week, the availability of unlimited or very large inclusive packages for such periods could result in even longer calls being made during these periods thus impacting positively on the termination revenues accrued. Furthermore, whether Calling and Called Parties would be sufficiently incentivised to coordinate their calling behaviour in this way would also depend on their awareness of, and sensitivity to, small retail price changes (stemming from a SSNIP in the FTRs of a specific FSP).

Preliminary Conclusion on Delaying Call to Cheaper Time of Day/Week

4.152 Having regard to the above, ComReg's preliminary view is that, in response to an increase in FTRs, the scope for consumers to switch to making an off-net call to a fixed number at a cheaper time is unlikely to impact to the extent that it would make an FTR increase unprofitable. Delaying calls is not, therefore, likely to pose an effective or sufficiently immediate competitive constraint on a SSNIP in FTRs.

Preliminary conclusion on retail demand-side substitution

4.153 Having regard to the factors likely to affect the impact of retail consumer behaviour on the Relevant FVCT Market(s), ComReg has considered whether the following are likely to be effective retail demand-side substitutes for an off-net call to a subscriber of an FSP:

- Making a F2M call
- Making a M2M call
- Making an on-net F2F call
- Making a VoIP call
- Sending an off-net SMS/Text
- Sending an email or social networking/instant messaging
- Shortening calls or requesting a call back
- Delay making the off-net call to a fixed number to a time of day/week when the cost is cheaper

4.154 ComReg has reached the preliminary view that substitution of the above alternative forms of communication, either individually or collectively, is unlikely to pose an effective or sufficiently immediate competitive constraint on a SSNIP in FTRs.

4.155 Having regard to the information available, it is also ComReg's preliminary view that this position is not likely to change sufficiently (in the immediate to medium term) such that it would give rise to a different view within the lifetime of this review (typically three years).

Retail supply-side substitution

4.156 A HM might be constrained in setting its FTR above the competitive level if, in response to the FTR increase, a Service Provider (e.g. a MSP) that does not currently offer retail calls to fixed numbers switched to doing so (say by switching existing production) and supplied retail calls to fixed numbers. Such supply side substitution[148] would only pose an effective constraint if it were to make the HM's FTR increase (above the competitive level) unprofitable.

4.157 In order to do this, the Service Provider would have to have the ability to provide a voice call service which could enable the Calling Party to contact the Called Party on a fixed number which was not reliant on the provision of termination by the Called Party's FSP (and to do so in a timely manner, without incurring significant costs). Currently, it is the Called Party's terminating FSP network which controls the final routing and termination of calls to such fixed numbers and, as a consequence retail supply side substitution is not possible.

4.158 ComReg is not aware of any technologies in development or in existence that would, within the immediate to medium term, allow an originating Service Provider to bypass the Called Party's FSP to terminate a call to a subscriber's fixed number.

4.159 Alternatively such new entry could potentially constrain the FTR level if a sufficient number of Called Parties were to switch to the new Service Provider due to the cost faced by Calling Parties when making calls to their networks. However, as discussed above, due to the CPP principle there is a low awareness/sensitivity among Called Parties in respect of the costs of incoming calls to their respective networks. Furthermore, the 2012 Market Research indicated that only a very low number of respondents cited the costs that others face when calling their networks as a reason for choosing a particular Service Provider. It was given as a top three reason for switching fixed voice telephony provider by 4% of residential respondents and 8% of business respondents who had switched within the last three years. It was furthermore not given as the top reason by any residential or business respondent[149].

Preliminary conclusion on retail supply-side substitution

4.160 Retail supply-side substitution is not likely to be sufficiently immediate or pervasive to pose an effective or sufficiently immediate constraint on the ability of a HM supplier to apply SSNIP in respect of call termination services for calls incoming to subscribers on its fixed network.

Retail geographic market assessment

4.161 Since this retail market assessment is being undertaken with a view to understanding the influence of indirect constraints resulting from retail demand substitution on the level of wholesale FTRs, it is not considered necessary to conclude on a precise definition of the relevant retail geographic market. This is because there is no direct corollary of the wholesale termination service at retail level and a complete assessment of the geographic scope of that service/market will be considered in the wholesale market assessment.

[148] As noted in paragraph 4.94 in order for supply side substitution to effectively constrain an FTR price above the competitive level, its effects would need to be likely to be equivalent to those of demand substitution in terms of effectiveness and immediacy.

[149] The 2012 Market Research Appendix A: Slides 41, 42, 101, 102.

Overall Preliminary Conclusions on the Retail Fixed Voice Market Assessment

4.162 Having regard to the above analysis, it is ComReg's preliminary view that there are not likely to be any effective retail demand-side or retail supply-side substitutes which would, within the timeframe of this market analysis, indirectly constrain a SSNIP in FTRs by a HM FSP supplying FVCT to its subscribers.

4.163 The geographic scope of the FVCT service will be considered in the wholesale market assessment.

Q. 4. Do you agree with ComReg's preliminary conclusions on the retail product and geographic market assessment to the extent that it informs the analysis of the Relevant FVCT Markets? 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 views.

5 Wholesale Market Assessment

Approach to Assessment of the FVCT Product Market

5.1 As noted in paragraph 1.12, the European Commission has established that the wholesale fixed termination market is susceptible to *ex ante* regulation and, in doing so, refers to the market as:

> *"Call termination on individual public telephone networks provided at a fixed location."*

5.2 In line with the "modified Greenfield approach" set out in the Explanatory Note to the European Commission's 2007 Recommendation[150], ComReg's assessment starts from the assumption that regulation is not present in the market under consideration, i.e. no regulation in the specific Relevant FVCT Market being considered. However, regulation present in other related markets or through the general regulatory framework is considered. This is to avoid drawing conclusions regarding the competitive structure of a particular market which may be influenced by, or indeed premised on, existing regulation on that market. Considering how the Relevant FVCT Market(s) may function absent regulation helps to ensure that regulation is only applied (or withdrawn) in those circumstances where it is truly justified and proportionate.

5.3 Before considering the detailed definition of the Relevant FVCT Market(s), ComReg sets out to address some preliminary issues which could have a bearing on its approach to market definition, in particular, the starting Candidate Product against which a substitutability analysis is carried out. While some of these issues may appear rudimentary in nature, they are discussed for completeness purposes and given their potential to impact on the definition of the Relevant FVCT Market(s).

Relationship between Wholesale Call Origination, Call Transit and Call Termination Services

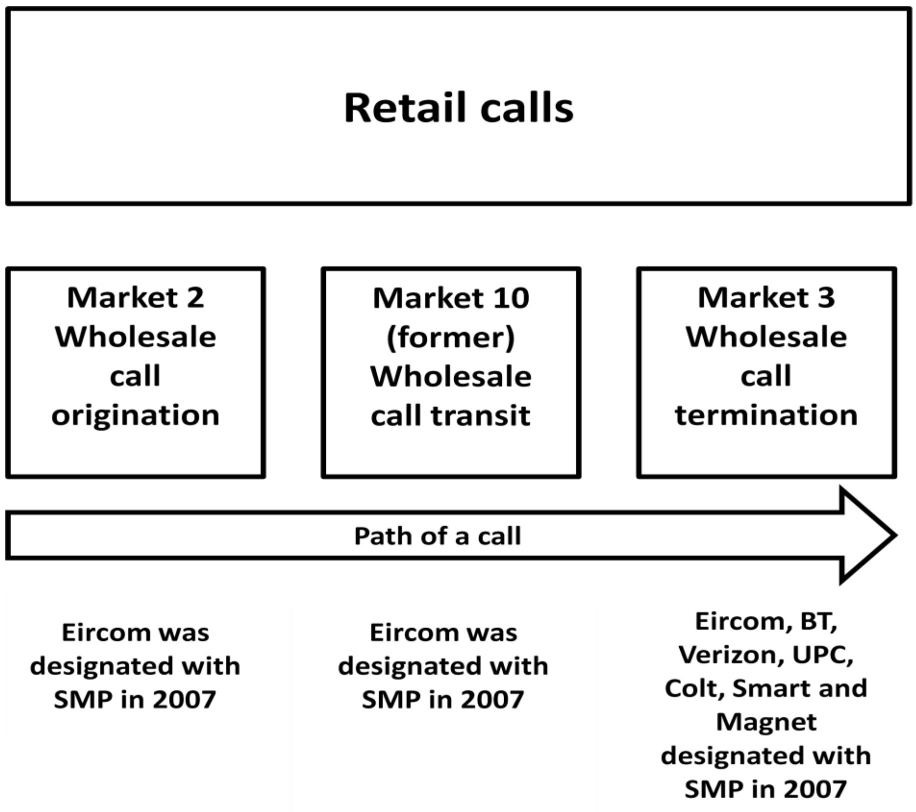
5.4 As is clear from the 2007 Recommendation (and its accompanying Explanatory Note), the European Regulatory Framework aims at identifying potential bottlenecks that may lead to competition problems in one or more related markets. While this Consultation Paper is concerned with the provision of FVCT services, these services can form part of a set of complementary wholesale inputs (collectively referred to as '**interconnection services**'), also including wholesale fixed call origination ('CO') and wholesale fixed call transit ('Transit') services, used to support end-to-end provision of retail voice calls to end-users at a fixed location[151]. The CO and Transit markets will be analysed in

[150] Explanatory Note to the 2007 Recommendation, p. 13.

[151] In addition to the SMP designations for FVCT rendered in the 2007 Market Review (as discussed in paragraph 1.18 above), ComReg also designated Eircom with SMP in the markets for CO and Transit services in 2007. (See ComReg Document No. 07/80, Decision No. 04/07, Market Analysis – Interconnection Market Review: Wholesale Call Origination & Transit Services, 5 October 2007)).

a separate consultation, due to be published also in H2 2012. As illustrated by the diagram below, the markets of CO, Transit and FVCT are aligned. These interconnection services combine origination, conveyance and switching functionality to enable an operator to deliver a retail call from a Calling Party to a Called Party.

Figure 18: **Retail call path and underlying interconnection services**



A technical and functional description of FVCT

5.5 As is illustrated by the diagram above, FVCT represents the final step in the active process involved in switching a voice call to a device connected to an

As a result, Eircom is currently required by regulation to provide access to these interconnection services. These products are published by Eircom in the Reference Interconnect Offer ('RIO') and the Switched Transit and Routing Price List ('**STRPL**') (available from http://www.eircomwholesale.ie/Reference-Offers/RIO/). A parallel consultation process will take place shortly on the updated review of the CO and Transit markets. In particular, as the Transit market is no longer included in the 2007 Recommendation, ComReg must apply the three-criteria test (set out in recital 5 of the 2007 Recommendation) to determine whether or not it remains susceptible to *ex-ante* regulation. On this basis it is currently being examined whether Transit still meets the three cumulative criteria required for determining susceptibility to ex ante regulation – i) the presence of high and non-transitory barriers to entry; ii) market structure does not tend towards competition over a relevant time horizon; and iii) competition law alone would not adequately address the market failures identified.

assigned fixed number. In the 2007 Decision, the Relevant FVCT Markets were defined in such a way as to include the following services[152]:

> *Termination services provide primary switching/routing functionality at the terminating end of a call. The primary switching/routing stage is the final point in the network where call routing is done on a call-by-call basis. It incorporates carriage from the end of the previous stage in the call routing (either CO or Transit), through the primary switching/routing stage (including, where appropriate, traffic concentration and/or non-call-by-call routing subsequent to the primary switching/routing stage), to the end user's local loop, including the subscriber's line card or equivalent, in its entirety.*

5.6 There are a number of FSPs in Ireland that operate different interconnected networks and have been allocated specific fixed number ranges, which can then be assigned to retail voice customers. In some cases, retail customers make telephone calls to numbers that are connected to the same network to that which they themselves are connected. These are called 'on-net' calls. The completion of on-net calls involves the 'self-supply' of FVCT by the originating FSP.

5.7 In other cases, calls are made to numbers that are assigned to customers connected to other networks. These are called 'off-net' calls. In order to complete an off-net call on behalf of a customer, the originating FSP must deliver this call to the network associated with the recipient's fixed telephone number (or to a Transit Service Provider for onward delivery of the call to the fixed number of the terminating FSP).

FVCT on Eircom's network

5.8 Unlike most alternative FSPs, which operate networks with a flat structure, Eircom operates a hierarchical network comprised of three levels. Calls can be terminated on Eircom's network at each of these levels: the double-tandem switch, the tandem switch, or at the local switch level.

5.9 The previous FVCT market definition refers to the primary switch as the suitable point of hand-over and implicitly reflects the boundary between the FVCT and Transit markets. The primary switch is effectively the last point in the network at which those signals can be accessed by another Service Provider. The service involves the switching of the call at the primary exchange through to the line card at the end-user side of the exchange (or concentrator unit).

5.10 This definition of FVCT is specific to the service provided by Eircom over its hierarchical PSTN network, in an environment where a number of adjacent wholesale markets were defined in parallel. For example, in 2007 ComReg designated Eircom with SMP and imposed obligations in the adjacent market

[152] See ComReg Document 07/03, Market Analysis - Interconnection Markets Wholesale Call Termination Services, Consultation, 19 January 2007, p. 11 ('**the 2007 FVCT Consultation'**).

for Transit. The call termination service was also considered distinct from the provision of access to the local loop, which was defined separately as wholesale line rental and retail narrowband access). There the FVCT service only included the active switching process, which ended at the line card at the end-user side of the local exchange or concentrator. It was implicit, however, that Eircom's FVCT service includes the delivery of the call over the local loop to the network termination point ('**NTP**').

5.11 However, retail FSPs have varying degrees of network coverage. Some alternative FSPs are interconnected to many other Service Providers and most of Eircom's primary, tandem, and double-tandem exchanges, while others may have only a single interconnect at an Eircom double-tandem exchange. This variation in network coverage and level of reliance on Eircom results in demand for different combinations of interconnection services. For this reason, Eircom offers various bundles and permutations of FVCT services that cater for the varying needs of access seekers. The pricing of Eircom's FVCT (and similarly CO) products reflects the number of stages in the transmission path (set out in Service Schedule 102 of Eircom's RIO price list) and thus may include elements of Transit.· For example, here is a list of interconnection services offered by Eircom that involve an FVCT component:

- Double-tandem call termination – FVCT from the double-tandem exchange to the Called Party (includes Transit)
- Tandem call termination –FVCT from the tandem exchange to the Called Party (includes Transit)
- Primary call termination – FVCT from the primary (local) exchange to the Called Party (pure termination)

5.12 Primary call termination involves a Service Provider handing over call traffic for call termination at the local exchange (which means only a local call transmission for Eircom) and therefore is priced lower than double-tandem call termination (which involves Eircom carrying a call all the way from the tertiary exchange for delivery to the end-user). Some alternative Service Providers (typically those with greater call traffic volumes) deploy more extensive interconnect networks in order to carry their own traffic and lessen their reliance on Eircom's transit products.

5.13 A retail FSP's choice of interconnection service therefore depends on the depth at which it is interconnected with Eircom's network. On the one hand, interconnecting with Eircom and other operators extensively (i.e. at the primary exchange level) can involve significant upfront capital expenditure for alternative FSPs. On the other hand, FSPs typically prefer to use their own infrastructure to carry calls as far as possible, in order to reduce the ongoing bills that they receive from Eircom for transit (and CO or FVCT). A deeply interconnected operator (interconnected at all levels of Eircom's network) would hand over calls at the local exchange of the Called Party where possible. An alternative FSP with only a single interconnect will rely on Eircom, or a third party transit provider, to route their call over a larger part of the network between their point-of-presence and the Called Party's primary switch.

FVCT provided by alternative FSPs

5.14 In contrast to Eircom's diversified FVCT service, alternative FSPs usually have a flat network structure and offer fewer points of interconnect for the purpose of FVCT. Alternative FSPs typically charge a uniform price for call termination provided at any point of interconnection. FVCT provided by alternative FSPs may differ from a technological and geographic standpoint from the service provided by Eircom. This is because different networks deploy alternative technologies to perform the function of switching calls, and have different geographic footprints.

5.15 However, the FVCT service provided by alternative FSPs is functionally the same, in that the service enables the access seeker to deliver a call to a fixed number connected to the FVCT provider's network.

ComReg's proposed service description

5.16 For the purpose of this review, ComReg considers that a technologically neutral description is appropriate for FVCT. However, ComReg acknowledges that it is useful to also provide guidance as to the scope of the service as it applies across relevant technologies.

5.17 In general, ComReg proposes that FVCT should include the switching and conveyance of all signals (including relevant control signals) required to terminate calls on an end-user's NTP from the last point in the network where those signals can be accessed by another Service Provider. In practice, this point will differ depending on the structure and facilities associated with different networks. Determining the relevant scope of the service involves taking account of the following considerations:

1. The boundary between non-replicable network inputs and those network inputs where actual replication and service provisioning over alternative networks is feasible over the market review timeframe;
2. The precise scope of the service typically required by the access seeker (for example, at what location does the access seeker typically require access from a practical, technical and commercial perspective); and
3. Need to take network architecture of different FVCT suppliers into account and to ensure that the market definition is forward-looking, considering the potential demand for IP interconnect over the period of this market review.

5.18 In terms of the first consideration identified above, ComReg notes that the degree of replication of Eircom's Transit and FVCT inputs varies significantly between access seekers. This reflects the distribution of traffic volumes generated by various retail call providers, and the economies of scale involved in deploying network infrastructure. However, the network inputs between the primary exchange and the end-user line appears to exhibit distinct economic conditions that represent higher barriers to entry. This has led to a lesser degree of replication of the end-user's line, relative to the core network infrastructure that exists between primary, secondary, and tertiary exchanges.

5.19 In relation to the second consideration, ComReg has observed that a significant proportion of calls terminated on Eircom's PSTN network are handed over at the last potential point of interconnection (i.e. the primary exchange or equivalent). Information supplied in the course of the 2011/2012 statutory information requests indicates that demand for Eircom's FVCT service primarily occurs at the primary exchange level of Eircom's PSTN network, which is the nearest point to the end-user at which calls can be handed over for termination.

5.20 For calls terminating on an IP network with a flat network topology and fewer switches, the closest hand-over point to the end-user may be a central IP interconnect. In this case, ComReg considers it appropriate to define the scope of the FVCT service from the last available point on the network at which the call can be physically handed over by the originating Service Provider, or its third-party transit provider, to the FVCT supplier for completion to the relevant Called Party. This implies that the appropriate handover point for FVCT reflects the final point on the network at which the originating Service Provider can interconnect with the terminating FSP, and beyond which only the terminating FSP can complete the call to the Called Party's fixed number.

5.21 FVCT is provisionally defined as the nearest point (to the end user) or level on the terminating network at which calls can be handed over for termination (i.e. on a traditional PSTN network this would be at the primary exchange) of the fixed number for which the call is destined.

What is a Fixed Voice Call Termination (FVCT) Supplier?

5.22 By way of the 2007 Decision, ComReg considered that the Relevant FVCT Market was the provision of wholesale termination of calls to end users at a fixed location.

5.23 In the context of identifying an FVCT Candidate Product for the purposes of the present market review, it is first necessary to consider what constitutes an FVCT supplier.

- *Firstly*, an FVCT supplier is an FSP[153] that must be capable of providing voice call termination for the purpose of completing calls to its subscribers at fixed (i.e. not mobile) locations[154]. Calls to users at a fixed location are routed to fixed numbers with final routing/switching of the call effectively based on individual subscribers' fixed

[153] Please note the technology neutral definition of an FSP referred to in footnote 2 above.

[154] Mobile call termination is already being considered as part of a separate market review (see the MVCT Consultation Paper – footnote 95) which is intended to cover the termination of calls to end users using mobile numbers. Hence, the purpose of this present market review is to address the termination of calls to end users when using fixed numbers, i.e. at a fixed location typically a home or business premises.

numbers[155]. In doing so, the terminating FSP will need to ascertain the location of the fixed user through the digit structure of the fixed number and route the call to the end-user terminal. FSPs, in providing call termination, will therefore control access to end user Called Parties through their allocation of fixed numbers (either through a primary or secondary allocation of such numbers[156]).

- *Secondly*, in order to provide call termination services an FVCT supplier must be interconnected with at least one other network. Absent this, all calls would effectively be on-net (a closed network) and no wholesale fixed call termination service would be provided. Given FVCT is essentially a wholesale interconnect service, it also follows that the supplier of FVCT should have the ability to set/control the associated charges (FTRs) for the relevant service. *Independent FSPs* (i.e. those Service Providers providing voice calls services to fixed subscribers using their own network infrastructure (either fixed or mobile) and which are generally not reliant on any other operator) will likely have the ability to set the level of the FTR for terminating calls to their subscribers. *Partially independent FSPs* which operate a physical telephone/data switch and potentially other infrastructure, but also rely (to varying degrees) on third party network access, may be defined as suppliers of FVCT for the purposes of this market review depending on their ability to set the terms and conditions of access (including the level of the FTR) for terminating calls to their fixed subscribers. *FSPs with resale activities* are FSPs that frequently do not use their own physical network for provision of voice services to end users at a fixed location (although where own network inputs are used they may be considered as partially independent FSPs described above), but instead purchase wholesale end-to-end voice calls services from a third party Service Provider. As those FSPs involved in resale activities do not generally determine/control the level of the FTR in respect of such activities, they are generally not considered FVCT suppliers for the purposes of this review. Those FSPs providing FVCT services for calls incoming to fixed numbers offered by such resellers are considered relevant FVCT suppliers for the purposes of this market review exercise. However, should this situation change, e.g. should FSPs involved in resale activities prospectively control the fixed number and have the ability to directly control/set the FTRs for FVCT to such fixed numbers then they would

[155] In paragraphs 5.34 to 5.59 below the precise meaning of a fixed number for the purposes of the present Consultation Paper is considered in further detail.

[156] Telephone number allocation from within the Irish numbering scheme can occur in two stages: Primary Allocation means the direct allocation or reservation of numbers by the Numbering Plan Management to individual network operators, service providers or users. Secondary Allocation refers to the allocation or reservation of numbers to a downstream undertaking or to an end user, by an undertaking to whom a primary allocation or reservation has already been made.

also be considered as relevant FVCT suppliers for the purposes of this market review.

- *Thirdly*, a technologically neutral approach to defining a FVCT supplier is considered which is elaborated further below.

5.24 ComReg's preliminary view is that the starting point for the FVCT product market definition is such that it has the following characteristics:

- it involves the provision of call completion services in respect of end users who receive the calls at a fixed location which implies control of the subscriber's fixed telephone number that has been allocated (through a primary or secondary allocation) to an individual FSP;
- it involves interconnection between networks and the supplier of FVCT should have the ability to set/control the associated charges (FTRs) for the relevant wholesale service; and
- it is technologically neutral (elaborated further below).

5.25 There has been a notable increase (since the 2007 Decision) in the number of FSPs which are currently considered to meet the above criteria for offering FVCT services (such FSPs may be classified as **Group A** (see Appendix F) for the purposes of this Consultation Paper). ComReg is of the preliminary view that these Group A FSPs fall for consideration within the Relevant FVCT Market(s) as discussed further below. ComReg has also identified two further groups of FSPs which are prospectively active in FVCT. Magrathea Telecommunications, the FSP in **Group B** (see Appendix F), has fixed number allocations and has negotiated interconnection with Eircom, including the applicable FTR. It furthermore has plans for commencing wholesale activity within the period of this market review. At the time of publication of ComReg's Consultation Paper, Magrathea Telecommunications planned to directly provide/charge for wholesale termination services for calls incoming to its allocated fixed numbers within the following six-month period. ComReg is of the preliminary view that the FSP in Group B, i.e. Magrathea Telecommunications, thus falls for explicit consideration within the Relevant FVCT Market(s) in view of the credibility of its entry programme over the timeframe of this market review[157].

[157] See case PL/2011/1260 where the Polish regulator, UKE, justified its decision not to carry out a market analysis or SMP designation for a new mobile entrant (AERO2) on the basis that AERO2 did not yet provide such services. However, in its serious doubts on the case, the European Commission criticised UKE's proposal indicating that this does not ensure regulatory predictability for market players. In BEREC's opinion on case PL/2011/1260, BEREC also noted that *ex ante* regulation differed from *ex post* competition law in the need to take a prospective approach. BEREC noted further that NRAs could consider an operator as active in the market (for the purposes of *ex ante* market analysis) when there is clear evidence that it will enter the market in the time horizon of analysis. The request of numbering resources or the initiation of interconnection agreements can be taken as indicators of such evidence. In this case, and from a forward-looking perspective, the market definition and SMP designation could be possible even in the absence of activity at the retail level.

5.26 The FSPs in **Group C** (see Appendix F) have fixed number allocations and have indicated an intention to start supplying/charging for FVCT for calls to those fixed numbers within the next three years but do not yet have formal plans for commencing prospective wholesale and/or retail activity. ComReg is of the preliminary view that as the FSPs in Group C do not yet have formalized plans (including timing) regarding FVCT provision to third party Service Providers, their entry is not yet sufficiently credible for explicit consideration within the Relevant FVCT Market(s) at this time. However, were such plans to materialize, then ComReg considers that there is a strong case to be made that such Group C FSPs would fall within the definition of the Relevant FVCT Market over the period of this market review.

5.27 In a dynamic sector it is recognised that the FSPs that supply FVCT may vary further over the lifetime of the present market review. ComReg proposes, however, to monitor any such developments and to consider those changes on a case-by-case basis where they arise. In doing so, ComReg proposes to rely substantively on the current detailed assessment to identify whether any new-entrant FVCT suppliers meet the criteria, as proposed in the present Consultation Paper, for consideration in the Relevant FVCT Market(s), and thus whether a competition assessment should be carried out accordingly.

5.28 It should also be noted in respect of the Relevant FVCT Markets that in each case the listed FSP is deemed to include any undertaking which it owns or controls and any undertaking which owns or controls it. The listed party also includes its successors, affiliates and assigns. This means that consolidation of companies by acquisition, creation of a subsidiary or any other changes of control should not affect the list. Where there is market entry or exit the list of FSPs will however require consideration.

Should FVCT be defined at the network or individual subscriber level?

5.29 In taking the above starting point, ComReg could seek to define a narrow product market based on each individual fixed number on a FSP network constituting its own product market. However, given the homogeneous[158] conditions of competition and the presence of a common pricing constraint[159] for call termination to all subscribers of a particular FSP, ComReg's preliminary view is that the starting point for the definition of the Relevant FVCT Market(s)

[158] In terms of calls to end users the current conditions relating to the supply of FVCT by an FSP do not differ (nor are they likely to) on the basis of the particular number/subscriber called. In terms of calls to value-added service providers ('VASPs') the conditions relating to the supply of FVCT by an FSP may differ according to the number type and this is considered further in paragraphs 5.34 to 5.46 below.

[159] FSPs supplying FVCT in respect of calls to end users do not currently differentiate (nor are they likely to) their FTRs on the basis of the particular fixed number/subscriber called. The FTR is the same irrespective of the fixed number/subscriber called and to alter this position would likely involve substantial investment in billing systems and potential technical difficulties. The situation in respect of calls incoming to value-added service providers ('VASPs') is somewhat different and is considered further below.

should include the provision of voice call termination to all subscribers of an individual FSP where such incoming calls are received at a fixed location[160].

5.30 This is consistent with the 2007 Recommendation which defines the relevant market as wide as each network operator. This was based on the fact that undertakings that supply wholesale call termination to other undertakings wishing to terminate calls did not price discriminate between termination charges to different subscribers or locations on their network.

Is FVCT part of a wider fixed services market?

5.31 ComReg considers it appropriate to take as its starting point that there are separate markets for wholesale voice call termination on individual FSP fixed number ranges distinct from other services provided by such FSPs. However, it may be argued that consumers purchase the ability to both make outbound/originating calls and to receive incoming/terminating calls as a package and that retail subscription/purchase decisions are therefore based on the cost of that overall package (i.e. that termination could form part of a cluster market incorporating all fixed voice services where FSPs compete on the overall price of the bundle)[161]. If this were to be the case, an FSP would be unable to raise the price of wholesale termination without reducing the price of other services in the bundle (e.g. retail originating calls).

5.32 However, as discussed above, due in large part to the CPP principle, there is no evidence of significant price awareness/sensitivity to the cost of incoming calls at the retail level or that the level of the wholesale termination rates applied by a particular FSP is a factor which consumers take into account when making their retail subscription/purchase decisions. The 2012 Market Research indicates that the cost of making outgoing calls is the most important factor for respondents when selecting a FSP and very few respondents indicated the cost of incoming calls as a key driver for their choice of FSP. Furthermore, respondents indicated a generally low awareness of the cost of calling specific FSPs due to retail pricing structures not generally differentiating retail prices according to the FVCT charges levied by individual FSPs. In addition, there is little, if any, dissemination of information at retail level that would make end users materially aware of FVCT charges.

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[160] Note that this does not mean that the supply of FVCT for one subscriber/fixed number is a substitute for the supply of FVCT to another subscriber/fixed number as neither will constrain each other's FTRs.

[161] See an independent expert report prepared by Martin Cave, Ulrich Stumpf and Tommaso Valletti on behalf of the European Commission "A Review of certain markets included in the European Commission's Recommendation on Relevant Markets subject to ex-ante Regulation", July 2006, ('**the 2006 Expert Report'**) available from: http://ec.europa.eu/information_society/policy/ecomm/doc/library/ext_studies/review_experts/review_regulation.pdf. The authors note that the bundle of fixed narrowband services does not constitute a cluster market and that incoming off-net calls should not be analysed together with access/ outgoing calls/incoming on-net calls.

5.33 As a result, ComReg is of the preliminary view that outgoing/originating and incoming/terminating calls at a fixed location do not form part of a broader cluster market. ComReg therefore proposes that the provision of FVCT services for incoming calls to fixed numbers should be analysed separately for the purposes of this market review.

What range of numbers should be included in the Relevant FVCT Market(s) for calls to end users at a fixed location[162]?

5.34 In considering the scope of the FVCT Product Market, ComReg has considered the range of numbers associated with the provision of FVCT.

5.35 Calls to geographic numbers typically involve calls to end users and are terminated by the FSP controlling the termination point with which the called geographic number is associated. Call termination to geographic numbers is currently priced on a Calling Party Network Pays ('**CPNP**') basis. According to the CPNP principle the FTR is levied by the terminating FSP on the originating Service Provider (whose subscriber initiated the call to the geographic number in question). A CPNP wholesale charging arrangement typically results in a Calling Party Pays ('CPP') retail charging arrangement. As noted in Section 4, the operation of the CPP principle in the case of calls to geographic numbers contributes to a disconnect between the choice of making/paying for a call (including the associated FTR) which is determined by the Calling Party and the choice of the FVCT supplier which is determined by the Called Party. This removes an important source of pricing constraint on the FVCT supplier in question. Since the 2007 Recommendation defines the relevant market as call termination on individual public telephone networks provided at a fixed location, ComReg takes the number range most frequently involved in supplying call services to end users at a fixed location (i.e. geographic numbers) as its starting point (Candidate Product) for the definition of the Relevant FVCT Market and identifies whether calls to other number ranges should form part of this relevant wholesale market.

5.36 In ComReg's 2007 Decision, ComReg proposed that the wholesale termination of calls to value-added service providers ('**VASPs**') (such as commercial and public organisations which provide information/content/interactive services, e.g. directory enquiry services, telephone banking services, customer advice services, after-sales support, tele-voting services, etc.)[163] was not in the same

[162] Numbers for use at a fixed location (fixed numbers) are broadly defined in the National Numbering Conventions, as may be amended from time to time, as encompassing geographic and non-geographic numbers. The current meaning of a geographic number in the National Numbering Conventions is a number from the national numbering scheme where part of its digit structure contains geographic significance used for routing calls to the physical location where the call is terminated on the network. The current meaning of a non-geographic number in the National Numbering Conventions is a number from one of the ranges listed in the table of Section 10.7.3 of that document.

[163] For the purposes of this Consultation Paper, the definition of 'VASPs' in the above context is distinct to the definition of 'Service Provider' referred to in paragraph 1.2 above. The term 'VASPs' is intended to refer to the fact that the ultimate recipient of the incoming voice call is not an end-user but is rather a commercial or public entity such as a business, financial institution, helpline or

Relevant FVCT Market(s) as termination of calls to end users. This section considers whether this distinction is still relevant for the purposes of the present market review.

5.37 Calls to non-geographic numbers typically involve calls to VASPs such as commercial or public organisations providing information/content/interactive services (although some involve calls to end users (i.e. 076 numbers) which will be discussed further below) and are terminated by the FSP routing the call to the termination point associated with the relevant non-geographic number. Across the EU, in view of the different substitution possibilities, calls to VASPs are generally excluded from the Relevant FVCT Market(s). Call termination to certain non-geographic numbers (frequently used for emergency or public interest services) have, however, been included in the Relevant FVCT Market definition in some cases where they are subject to the similar supply and demand conditions as call termination to standard geographic numbers[164].

5.38 In Ireland there are a number of different types of non-geographic numbers used for voice/data traffic, including Freephone, Shared Cost, Universal Access, Premium Rate, Internet Access, IP-Based/076 numbers and Emergency numbers. Depending on the type of call, different charging mechanisms apply. Retail charging mechanisms for various (non-exhaustive) categories of non-geographic numbers are further described below as follows[165]:

- Freephone (1800) numbers – allow the Called Party to be reached at no charge to the Calling Party. The costs of a call to a freephone number (e.g. 1850/1890) are borne entirely by the Called Party (i.e. the Receiving Party Pays ('**RPP**') principle and are, accordingly, not subject to the CPP principle);
- Shared Cost (18X0) numbers – allow the Calling Party to be charged for only part of the cost of the call, with the Called Party being

government agency which use the numbers to provide information/content/interactive services to enable customers/citizens to receive information and/or to make payments for services. By contrast the term 'Service Provider', as outlined in paragraph 1.2 above, is intended as a more generic term referring to all FSPs and MSPs which may be actively providing voice calls services to end users and/or commercial entities.

[164] Examples can be found in cases AT/2009/0909, FR/2008/0784, NL/2008/0830, RO/2008/0774. For example, the Romanian regulator included call termination to national short numbers for services of general public interest services such as citizen safety services (e.g., police), medical assistance services, public utilities' faults complaint services, citizen assistance (consumer protection) services, assistance for subscribers of electronic communications services (customer relations, service guides, etc).

[165] The description of the retail charging arrangements for non-geographic numbers is in line with that set out in ComReg's National Numbering Conventions. For the purposes of the present Consultation Paper, calls to short code numbers (such as to 19XX customer support short codes and to telecommunications directory enquiry access codes (118XX)) are also considered to constitute calls to a non-geographic number. Call termination to emergency numbers is however analysed separately from paragraph 5.51 below.

charged for the remainder (i.e. they are subject to both the CPP and the RPP principles);

- Universal Access (e.g. 0818) numbers – allow calls to be made to a central (typically corporate) number for re-routing to the most appropriate response point. The costs of calls to universal access numbers are paid by the Calling Party at a rate not exceeding the national tariff rate of the operator concerned (i.e. mainly CPP principle) and the Called Party is charged any additional retail charges involved in providing the universal access service;

- Premium Rate (15XX) numbers – the Calling Party pays a premium charged by his or her operator for access to premium rate (information or other added value content) services (i.e. CPP principle). A shared revenue model then applies whereby this premium is shared by commercial agreement between the various providers in the value chain;

- Internet Access (189X) numbers – the costs of calls to such numbers can be based on different models: separate charges for call (charged at or below the standard local call rate) and service subscription (1891); a (Pay As You Go) call charge only and no service subscription charge (1892); or partial or full flat rate whereby a fixed charge is applied to cover both the call and the internet service (1893). Internet access numbers were used for the purpose of providing dial-up internet services and are therefore of declining significance;

- IP-Based (076) numbers – these are numbers allocated to VoIP providers. The characteristics of calls to 076 numbers (e.g. the application of CPP principle) are broadly in line with those of fixed geographic numbers (according to the National Numbering Conventions the cost of calling such numbers shall in no case exceed the retail charge for a call of the same duration calculated at the originating undertaking's standard rate for calling Irish geographic numbers).

5.39 As discussed above, the RPP principle is applied to some type of calls to VASPs. Under the RPP principle the Called Party's FSP bills the Called Party for all or part of the cost of termination of the call. Hence, the RPP approach internalises the call externality[166] as the Called Party would be more likely to take FTRs into consideration when choosing between services of different FSPs. For example, the RPP principle applies to Freephone (1800) calls where the VASP buys the call from the terminating operator on a wholesale basis.

[166] See footnote 97 for a definition of call externalities.

5.40 By contrast, in the case of calls to geographic numbers, the CPP contributes to a disconnect between the choice of making/paying for a call (including the associated FTR) which is determined by the Calling Party and the choice of the FVCT supplier which is determined by the Called Party.

5.41 However, in the case of calls to certain types of non-geographic numbers, the operation of the CPP or RPP principle at retail level can have a less influential role in terms of relevant wholesale pricing constraints on the FVCT supplier. For example, even in instances where the CPP principle applies, VASPs using some of the above non-geographic number categories as a means for customers/clients to contact them may have an incentive to switch to an alternative terminating FSP for hosting the service platform if the termination fee were raised significantly. VASPs attract revenues from customers through telephone calls to their services and therefore have an incentive to take into the account the cost of FVCT when selecting the platform operator since the cost of termination affects the revenue accruing to the VASP. This is distinct from the situation with wholesale termination of calls to geographic numbers where the end users do not face the same competitive constraints and revenue incentives as VASPs and are thus less sensitive to termination charges set by their own FSP.

5.42 A distinguishing feature of calls to non-geographic numbers used for the purposes of providing a hosted value-added service (for example, a Premium Rate Service number) is thus that an important part of the revenue stream accrues to the hosting (i.e. terminating) operator from the VASP (for example, the Premium Rate Service operator). In this case the business model for the hosting FSP is that it receives payment from the VASP for hosting the service, or shares retail revenues with it in some way, or a combination of both. This is unlike a normal geographic call where the only revenue received by the terminating FSP is that from the termination charge itself.

5.43 Examples of the flow of revenues between parties involved in the origination, transit and termination of calls to non-geographic numbers are illustrated in Figures 19 and 20 below. For illustrative purposes, Figure 19 depicts a situation where the Calling Party pays for the non-geographic call and Figure 20 depicts a situation where the Called Party pays for the non-geographic call.

Figure 19: **Revenue arrangements for calls to non-geographic numbers where Calling Party Pays**

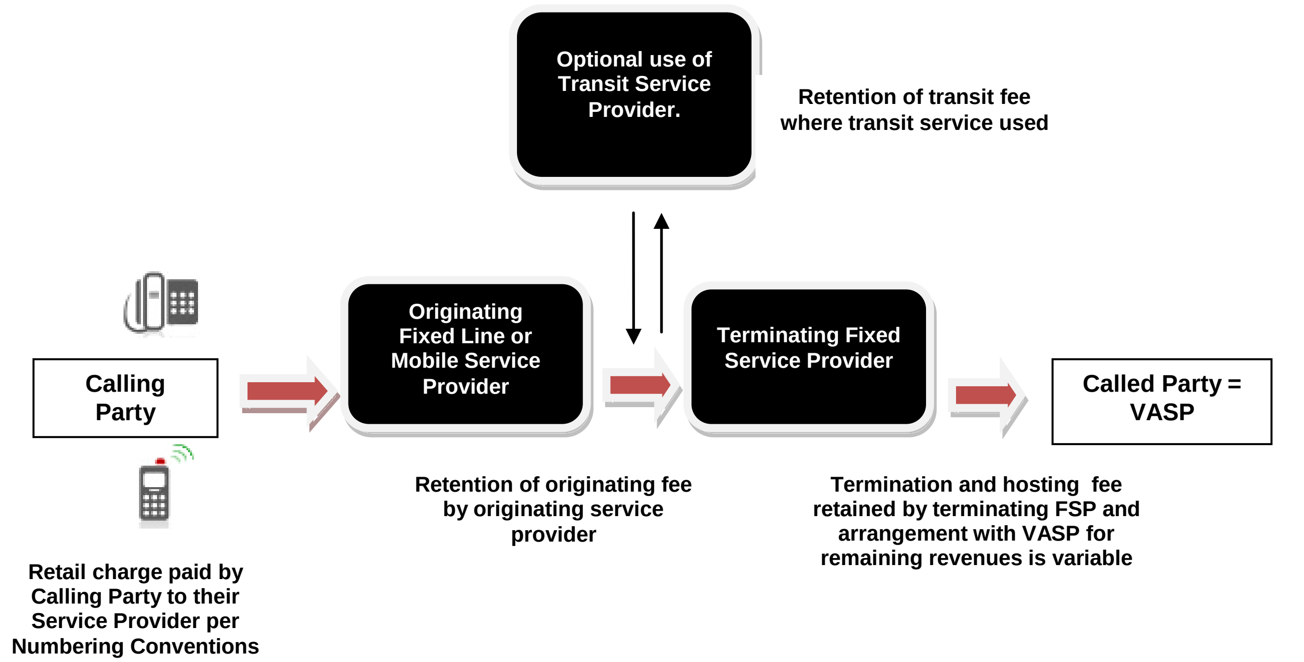
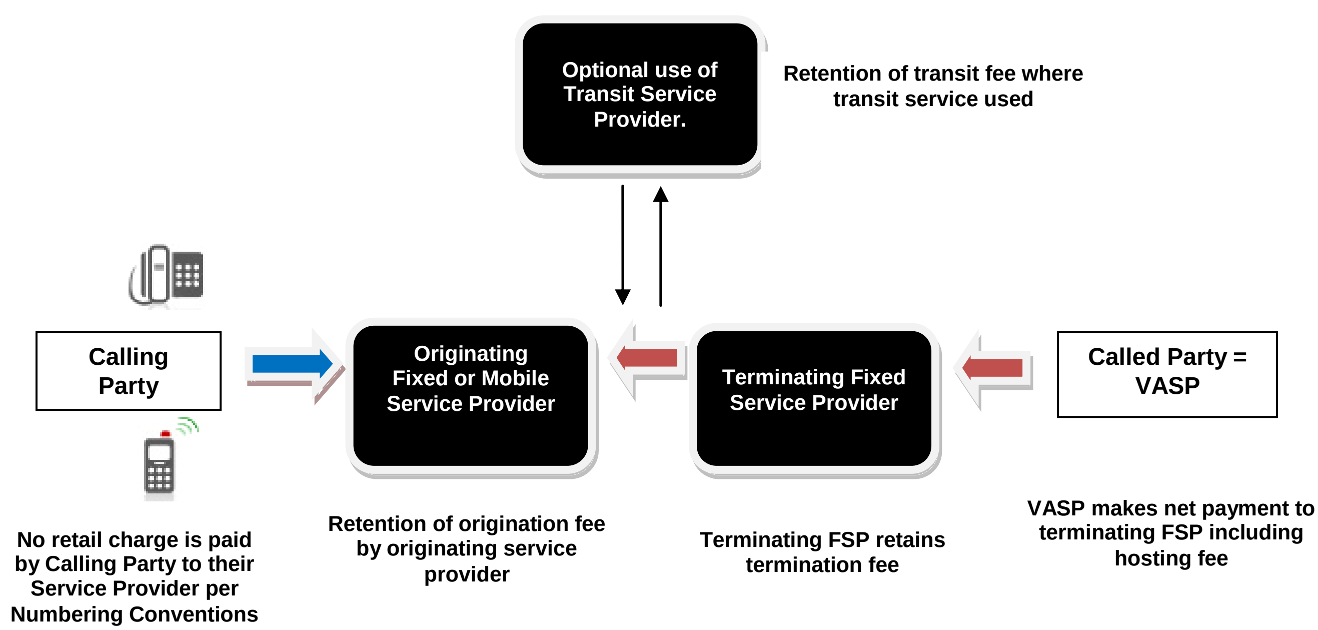


Figure 20: **Revenue arrangements for calls to non-geographic numbers where Called Party Pays**



5.44 Figure 19 shows how, in the case of a Calling Party Pays arrangement, a proportion of the retail charge paid by the Calling Party is retained by each party in the value chain with the originating (and where appropriate transit) Service Provider taking a share and the form of revenue arrangement between the terminating FSP and the VASP varying from case to case (e.g. the terminating FSP may pay the VASP as part of a revenue share agreement whilst the VASP may pay the termination FSP for services such as hosting).

5.45 Figure 20 shows how, in the case of a Called Party Pays arrangement, a proportion of the VASP payment is retained by each party in the value chain with the terminating FSP typically passing revenue onwards to a transit or originating Service Provider after retaining a share.

5.46 The revenue flows between the terminating FSP and the VASP change the incentives to the hosting (terminating) operator in that in order to provide an appropriate hosting service it will need to achieve interconnection with other Service Providers. Furthermore, originating Service Providers have a greater degree of control in this context since the practice in Ireland is that the originating Service Providers collect the retail call revenue and remit this (less an origination retention) to the hosting (terminating) operator. It would not generally make sense for the hosting (terminating) operator to refuse or compromise completion of the call since in doing so it would deny itself and its VASP their share of retail call revenues. It is therefore less likely that a hosting (terminating) operator would be able to act entirely independently of competitive constraints. For these reasons, ComReg is of the preliminary view that calls to non-geographic numbers for the purposes of availing of value-added services are not in the relevant market for FVCT.

Is FVCT to IP-based (076) numbers part of the Relevant FVCT Market(s)?

5.47 There is however a distinct category of non-geographic numbers which shares, in terms of its underlying wholesale arrangements, similar competitive characteristics to the provision of FVCT to geographic numbers. IP-based numbers and services[167] (076 range) are mainly used for the purposes of VoIP services but are available also for use by other suitable IP-based services and/or services with nomadic characteristics[168]. Unlike geographic ranges, these numbers may be assigned to individuals as well as to termination points and, unlike most non-geographic numbers, there is no need for number translation[169] with the '076' range. However, '076' numbers tend to be

[167] IP-based numbers are designated for use with services in which termination to the user normally occurs using IP-related protocols but where an E.164 number is required for that termination or to reach a gateway between the PSTN (including ISDN and public mobile networks) and another network.

[168] The other number range that is most associated with VoIP is the geographic range which is used for the provision of wholesale termination services of calls to end users at a fixed location.

[169] Number translation is required when non-geographic numbers have no physical destination of their own but can reach real destinations and/or real services once they are converted into geographic/mobile numbers.

understood and used by consumers in much the same way as geographic numbers. Furthermore, the National Numbering Conventions state that the retail tariffs of calls to '076' numbers should not exceed the retail call of the same duration to Irish geographic numbers, thus further increasing the similarity between '076' numbers and geographic numbering ranges. However, similarities in retail usage and prices for geographic and 076 numbers respectively are not the decisive criteria. Rather ComReg's preliminary view that both call types share similar competitive characteristics at wholesale level is based on similarities in end user awareness/incentives in respect of the level of the FTRs applied, as well as similarities in the revenue opportunities which accrue to terminating FSPs in respect of calls incoming to such numbers.

5.48 In most cases '076' numbers (which are mostly associated with managed/partly managed VoIP services) are used for calls to end users at a fixed location[170] rather than for calls to VASPs. Therefore, the revenue flows and resulting competitive conditions in the wholesale termination of calls to '076' numbers would be more likely to resemble the revenue flows and competitive conditions in the wholesale termination of calls to geographic numbers. It is unlikely that an end user of 076 numbers would be as sensitive to the termination charges applied as an VASP which is seeking to attract revenues from its Calling Parties (i.e. customers) and thus looking for the platform operator which charges the lowest FTRs. As for geographic calls, the terminating leg of calls to 076 numbers generally presents fewer revenue opportunities for the terminating FSP than in the case of calls to numbers used by VASPs for which hosting revenues may also accrue. This removes a further source of possible pricing constraint on the terminating FSP.

5.49 There is also no available evidence to suggest that there are any available demand/supply-side substitutes for call termination to '076' numbers or that there exists technical alternatives by which a call to an '076' number could be successfully terminated without co-operation of the terminating FSP. This is reinforced by the fact that the CPP principle applies for calls to '076' numbers and the Called Parties (who choose the terminating FSP) thus have fewer incentives to react to the cost of FVCT. While the National Numbering Conventions limit the retail cost of a call to '076' numbers, they do not extend to the wholesale FTRs charged by the terminating FSP.

5.50 On this basis, it is ComReg's preliminary view that FVCT to '076' numbers is subject to similar competitive characteristics as FVCT to geographic numbers and should be included in the same Relevant FVCT Market(s) as call termination to end users with geographic numbers.

[170] As noted in the National Numbering Conventions, VoIP services are considered in principle to be services offered at a fixed location (i.e. the contracted place of service). Terminals connected elsewhere in nomadic use do not change this; they are regarded as being temporarily not at that fixed location.

Is FVCT to emergency (i.e. 112 and 999) numbers part of the Relevant FVCT Market(s)?

5.51 As noted above, a few NRAs have included call termination to certain non-geographic numbers (frequently for emergency or public interest services) in their Relevant FVCT Market definition where they are subject to the same supply and demand conditions as call termination to standard geographic numbers. ComReg has thus considered the provision of FVCT in respect of calls to emergency numbers (i.e. 112 and 999) in further detail below.

5.52 The Emergency Call Answering Service ('**ECAS**') is currently provided by BT Ireland which was selected as the provider of ECAS through a public procurement process in 2009. In order to recover the cost of running the ECAS operation, BT Ireland charges a Call Handling Fee ('**CHF**') to Service Providers for calls which originate on their networks.

5.53 Under Section 58D (1) of the Communications Regulation (Amendment) Act 2007, each year, ComReg is required to review the maximum CHF that may be charged. ComReg may confirm the existing maximum CHF or, following consultation with the ECAS provider, ComReg may raise or lower the existing maximum CHF. Section 58D states that, when reviewing the CHF ComReg ''*shall have regard to – the need for the ECAS operator to cover the reasonable costs likely to be incurred by it in operating the service.*'' ComReg has clarified the meaning of ''reasonable costs'' and stated that ''*in assessing whether costs are reasonable, ComReg will have regard to similar operations in other countries and international best practice. Incurred costs which are clearly unnecessary, excessive or avoidable may not be deemed reasonable, and may have an impact on the 'Call Handling Fee' for the period following any review*''.

5.54 As the cost of termination/completion of the initial leg of an emergency call to BT's ECAS call centre (before being forwarded onwards to its ultimate destination, i.e. to the emergency service provider in question) is included in the calculation of the maximum CHF, this initial call completion service is thus subject to annual review by ComReg.

5.55 In respect of the final leg of the emergency call (i.e. whereby BT Ireland forwards it onwards for termination to the emergency call service provider in question), FTRs are paid to the terminating FSPs in question for connected calls from BT's ECAS centres to the relevant emergency service providers. These costs are included in the calculation of the CHF and are thus also reviewed on an annual basis. However, if interconnection costs in respect of this final leg of the emergency call are charged above efficient cost, only the part of the costs that would be considered as 'reasonable' would be recovered *via* the CHF. In such a case, any unreasonable portion of the costs would have to be absorbed by BT Ireland. Thus, there are no regulatory or contractual constraints arising from the revision of the CHF on the level of FTRs charged by the ultimate terminating FSPs for calls to the providers of emergency services.

5.56 Emergency service providers also do not have the same revenue/commercial incentives (as the VASPs discussed above) to constrain the level of the FTRs charged by their terminating FSPs to BT Ireland. Emergency service providers are more likely to behave like end users and do not have sufficient incentives to switch terminating FSP in case of small but significant non-transitory increases in FTRs.

5.57 It is thus ComReg's preliminary view that FVCT for calls to emergency numbers are in the same Relevant FVCT Market(s) as call termination services to end users. As the emergency service providers currently use geographic numbers, termination of calls to such numbers would in any case be covered by the broad proposal to define the market as termination of calls to geographic numbers and 076 numbers used for the purposes of providing services to end users at a fixed location. If it is the case that calls to such emergency service providers are terminated on non-geographic number ranges in the future, it is also proposed on a forward-looking basis that such non-geographic ranges would likely be included in the Relevant FVCT Market.

Preliminary Conclusion on the Number Ranges included in the Relevant FVCT Market(s)

5.58 On the basis of this analysis, ComReg takes the preliminary view that the Relevant FVCT Market includes the provision of FCVT services to all geographic numbers and to 076 numbers. Currently there are 29 authorised assignees[171] with allocated geographic number ranges and 43 assignees[172] with allocated '076' numbers in Ireland.

5.59 For the purposes of this Consultation Paper, the term '**fixed numbers**' is hereinafter used to collectively refer to all geographic and 076 numbers allocated to FSPs over the period of this market review.

[171] ''3 Play Plus'', ''Imagine'', ''Airspeed Telecom'', ''Blue Chip Telecom'', ''Blue Face'', ''BT Ireland'', ''Cable & Wireless'', ''Colt'', ''Conduit Europe'', ''Digiweb'', ''Dome Telecom'', ''Eircom'', ''envi'', ''Equant Network Systems'', ''Finarea'', ''Hutchison 3G Ireland'', ''In2tel'', ''Interfusion Networks'', ''Magnet Networks'', ''Magrathea Telecommunications'', ''Verizon Business'', ''Modeva'', ''UPC'', ''Regional Broadband'', ''Smart Telecom'', ''Swiftcall'', ''Voxbone SA'', ''webtalk'', ''Yac'' as retrieved from ComReg's number database on 27 August 2012, available from http://www.comreg.ie/numbering/numbering_search.599.numbering.html.

[172] ''A1 Technologies'', ''Imagine'', ''Airspeed Telecom'', ''Blue Chip Telecom'', ''Blue Face'', ''BT Ireland'', ''Cable & Wireless'', ''Callidus Telecom'', ''Colt'', ''Darkernet'', ''Digiweb'', ''Eircom'', ''Equant Network Systems'', ''Fastcom Broadband'', ''Finarea'', ''G2TEL'', ''Government Networks'', ''Interfusion Networks'', ''Intime Solutions'', ''Irish Broadband'', ''Jerry White'', ''Keena Consulting'', ''Magnet Networks'', ''Magrathea Telecommunications'', ''Verizon Business'', ''Michael Twomey'', ''Modeva'', ''net1'', ''New Concepts Tech'', ''NextGen Mobile'', ''UPC'', ''Procom Voice Solutions'', ''Red Squared'', ''Regional Broadband'', ''Skytel Networks'', ''Smart Telecom'', ''SpeakFree'', ''Talk Talk Ireland'', ''Temetel'', ''VoIP Ireland'', ''Voxbone SA'', ''webtalk'', ''Wireless Projects'' as retrieved from ComReg's number database on 27 August 2012, available from http://www.comreg.ie/numbering/numbering_search.599.numbering.html.

Is the Relevant FVCT Market technology neutral?

5.60 Across the EU, the FVCT market has frequently been defined independently of the underlying technology over which the service is delivered. Thus, termination of calls at fixed locations using VoIP has been included in the Relevant FVCT Market by a number of Member States[173].

5.61 ComReg adopts a technology neutral approach to defining the Relevant FVCT Market[174] and will include in the relevant market all FVCT termination services which share similar economic and functional characteristics regardless of the underlying technology on which such call termination is based.

Is FVCT delivered over Voice over Internet Protocol ('VoIP') technology in the same Relevant FVCT Market as FVCT using traditional PSTN voice technology?

5.62 As noted in paragraphs 3.26 to 0 above, a key development since the last review has been the growth of VoIP. As also noted in those paragraphs, for the purposes of this Consultation Paper ComReg considers VoIP services according to three broad categories: Managed VoIP, Partly-Managed VoIP and Unmanaged VoIP services.

(i) Managed and Partially-Managed VoIP Services

5.63 Having regard to the increasing uptake of VoIP services and the fact that a number of (managed and partially managed) VoIP-based FSPs have to date been allocated with fixed numbers, ComReg goes on to consider whether FVCT to fixed numbers using VoIP technology forms part of the Relevant FVCT Market(s). In this section ComReg assesses whether the competitive characteristics underpinning the wholesale supply of FVCT to fixed numbers over both (managed and partially managed) VoIP and PSTN technology respectively are sufficiently similar/different that would justify their inclusion/exclusion in the same Relevant FVCT market(s).

5.64 On the demand side, given the nature of FVCT, an originating FSP/MSP does not currently have any viable alternatives for terminating a voice call to a subscriber of an individual FSP with fixed numbers irrespective of the underlying technology used. It is not possible for an originating (or transiting) Service Provider to terminate a call to a specific fixed number (where a VoIP service is used) by purchasing termination on another FSP's network. The CPP principle applies in respect of FVCT to fixed numbers irrespective of the underlying technology (i.e. VoIP or PSTN). The same low awareness/sensitivity of the Called Party would thus apply in respect of FVCT services offered in respect of calls to such fixed numbers independently of the underlying technology used.

5.65 Looking ahead to the immediate to medium term, based on the evidence available to ComReg there do not appear to be any technological or other

[173] See, for example, cases DE/2008/0843, LV/2009/0889 and IT/2008/0777.

[174] In accordance with Regulation 16(1)(a) of the Framework Regulations.

changes that would lead to the emergence of alternatives which would allow Service Providers to bypass FVCT from any FSP to which fixed numbers have been allocated even where the underlying technology is based on managed/partially managed VoIP technology. This is discussed in more detail below.

5.66 On the supply side, potential supply-side substitutes for FVCT to a fixed number would require a parallel access path to the end customer. This requirement applies irrespective of whether or not that fixed number is allocated to an FSP that operates based on PSTN and/or VOIP technology. The end customer would also have to be willing and able to receive calls on this parallel access path. Given the limited awareness and sensitivity of end users to the costs faced by others calling them, it is unlikely that a Called Party would have sufficient incentives to seek the parallel access path from an alternative FSP in the case of SSNIP of FVCT charged by their FSP.

5.67 This low awareness/sensitivity on the part of the Called Party was borne out by the 2012 Market Research which noted that of the 1000 households surveyed only one household had more than one fixed voice phone line connection[175]. Furthermore, a very low number of residential and business respondents who had switched providers in the past three years cited costs faced by others when calling them as a top three reason for choosing their FSP and no-one cited it as their main reason for switching FSP.

5.68 On the basis of the above analysis, ComReg is of the preliminary view that the competitive conditions underlying the provision of FVCT using (managed/partially managed) VoIP technologies are similar to those underlying the provision of FVCT services using traditional (e.g. PSTN) voice technology. It is therefore proposed that FVCT provided over managed and partially managed VoIP technology would be included in the Relevant FVCT Markets.

(ii) Unmanaged VoIP Services

5.69 Unmanaged VoIP Service Providers can be distinguished from the other PSTN and (managed/partially managed) VoIP Service Providers discussed above on the basis of the following characteristics:

- Unmanaged VoIP Service Providers typically have no control over the quality of voice services provided. This is because they rely entirely on third party Service Providers to supply the supporting broadband connection and access path to the end user.

[175] The 2012 Market Research Appendix A: Slide 11.

- As unmanaged VoIP calls predominantly involve the use of the internet, low-cost retail pricing structures have evolved in respect of such services, particularly in respect of VoIP-to-VoIP calls[176].
- Unmanaged VoIP communications have traditionally taken place predominantly *via* computer-based devices. However, voice handsets are now available for the purposes of making/receiving calls over unmanaged VoIP technology which do not require the use of a computer[177].
- As noted in paragraph 3.35, the 2012 Market Research indicated a different trend in end user preferences and usage of unmanaged VoIP services compared to the more traditional fixed voice telephony methods referred to above.
- Unmanaged VoIP communications have also traditionally not involved the widespread use of fixed numbers. However, this distinction is becoming less relevant where unmanaged VoIP operators, such as Skype, can obtain secondary geographic number allocations from third party FSPs and terminate incoming calls (e.g. *via* third party FVCT suppliers or otherwise) to subscribers using such fixed numbers. In such instances, it is provisionally considered that FVCT services to such fixed numbers would share similar characteristics to FVCT services employing PSTN or managed/partially managed VoIP technology (i.e. due to industry-wide application of the CPP principle for calls to such fixed numbers).

5.70 Having regard to the above, it is ComReg's preliminary view that FVCT in respect of calls to subscribers of unmanaged VoIP services are excluded from the Relevant FVCT Market(s) insofar as they do not involve the use of a fixed number. However, in the event that unmanaged VoIP Service Providers allocate fixed numbers to their end users (through either a primary or secondary assignment) and charge FTRs (or have the ability to charge them) for calls incoming to such fixed numbers, then ComReg considers that such services would likely fall within the definition of the Relevant FVCT Market(s). Where such FVCT services to fixed numbers are carried out on behalf of the unmanaged VoIP Service Provider by a third party FVCT supplier then it is the FVCT services of the third party FVCT supplier which would likely fall within the Relevant FVCT market(s).

Preliminary Conclusion on VoIP technology

5.71 ComReg's preliminary view is that:

- FVCT services in respect of calls to fixed numbers using managed or partially managed VoIP technology share similar competitive characteristics to FVCT services provided for calls to fixed numbers

[176] Further to a review of Skype's website on 15 July 2012, Skype-to-Skype calls were free and calls to mobiles or landlines, anywhere in the world, were advertised from just 1.9c per minute (2.2c incl. VAT) with Skype Credit or even cheaper with a subscription.

[177] See: http://www.skype.com/intl/en/get-skype/home-phone/cordless-phone/

using traditional (e.g. PSTN technology) and should thus be considered as part of FVCT Relevant Markets; and

- To the extent that FVCT services are provided in respect of calls to fixed numbers using unmanaged VoIP technology, such FVCT services (where either the unmanaged VoIP Service Provider or a host Service Provider has the ability to set the level of the FTR) are provisionally considered to share similar characteristics to FVCT services employing PSTN technology. It is thus ComReg's preliminary view that, under such circumstances, FVCT services to fixed numbers using unmanaged VoIP technology would likely form part of the Relevant FVCT Market(s).

Is FVCT using mobile technology in the same relevant market as FVCT using traditional PSTN technology?

5.72 As noted in Section 3 above, another key development since ComReg's previous market review in 2007 has been the appearance of voice services which are delivered at a fixed location using mobile network inputs.

5.73 Call termination services delivered *via* mobile technology in respect of calls to end users at a fixed location have been increasingly identified by NRAs in other Member States as part of their Relevant FVCT Market(s). The rationale for their inclusion in the Relevant FVCT Market(s) has been as a result of these services sharing similar functionality (more limited mobility) characteristics and similar pricing structures as (retail and wholesale) voice calls services delivered *via* traditional (e.g. PSTN) technology to end users at a fixed location[178].

5.74 Voice call termination services to integrated fixed-mobile offers which involve the termination of calls to end users using fixed numbers are similar to voice call termination services provided to fixed numbers delivered over traditional (e.g. PSTN) technology. This is because use of the fixed numbers in question implies that the end-user in question is receiving voice calls to such numbers at a fixed location and that service mobility is consequently limited. In the case of Vodafone's One Net Express product (see paragraph 3.25), there are contractual obligations that prevent the use of a One Net Express telephone device outside of the area associated with the geographic number allocated to the device and the SIM does not permit roaming.

[178] See, for example, cases RO 2008/0774, PL 2008/0762 and IT/2008/0777. In the latter case the European Commission commented on the fact that although AGCOM included voice call termination services to integrated fixed/mobile offers in the Relevant FVCT Market (and regardless of the use of different technology these convergent services seemed to have economic and functional characteristics similar to traditional fixed telephony services) AGCOM had proposed to defer the definition of obligations for these services until its assessment of the market for voice call termination (MVCT) on individual mobile networks. In view of its inclusion in the Relevant FVCT Market, however, the European Commission called on AGCOM to impose FVCT remedies accordingly.

5.75 Furthermore, as identified in other NRAs' decisions (referred to in footnote 178 below), the fact that call services to fixed numbers are delivered using mobile network inputs does not alter the fact that the CPP principle would still apply in respect of FVCT to such fixed numbers. In such instances, it is provisionally considered that FVCT services to fixed numbers using mobile technology would share similar characteristics to FVCT services employing traditional (e.g. PSTN) technology. It is thus ComReg's preliminary view that Service Providers in such circumstances (i.e. where they supply FVCT to fixed numbers and have the ability to set/control the associated FTRs), even when using mobile technology, should be considered as FSPs falling within the Relevant FVCT Market(s) for the purposes of the present market review.

5.76 In the case of the One Net Express offer, calls to geographic numbers used by subscribers of this offer are currently terminated by [✂**…..**

].

Preliminary Conclusion on mobile technology

5.77 Further to the above assessment, it is ComReg's preliminary view that FVCT services for calls to fixed numbers delivered *via* mobile technology are in the same Relevant FVCT Market as FVCT for calls to fixed numbers delivered over traditional PSTN voice technology. On a forward-looking basis this preliminary view applies irrespective of whether the FVCT services are provided and charged directly by the FSP which has the relationship with the end user of the fixed numbers or whether the FVCT services are provided by a host FSP.

Preliminary Conclusion on Candidate FVCT Product Market

5.78 Having regard to the above, ComReg's preliminary view is that the Candidate FVCT Product market, being the starting point from which the question as to the existence of any effective wholesale substitutes is considered, is one which:

- involves the provision of a wholesale voice call termination service for the purpose of completing voice calls to subscribers with fixed numbers that have been allocated (through a primary or secondary allocation) to an individual FSP; and
- involves interconnection between networks and is provided by an FSP who has the ability to set/control the FTR for calls to fixed numbers; and

- is technology neutral (i.e. includes FVCT services for calls to all fixed numbers irrespective of whether the underlying technology is mobile or fixed).

5.79 It is ComReg's preliminary view that the candidate FVCT product market consists of:

> *"the provision by an FSP of a wholesale FVCT service to other Service Providers from the nearest point (to the end user) or level on that terminating FSP's network at which calls can be handed over for termination to fixed numbers and in respect of which that FSP is able to set the FTR"*

5.80 ComReg considers that the product market features proposed above capture the essential characteristics of the FVCT Candidate Product market. ComReg now goes on to consider whether this definition should be expanded in light of the availability of any effective wholesale demand-side and wholesale supply-side substitutes.

Wholesale Demand-Side Substitution

5.81 Demand-side substitution at the wholesale level[179] measures the extent to which a purchaser of FVCT would, in response to a SSNIP in FTRs above the competitive level, switch to purchasing available alternative substitute products such that it would render the FTR increase unprofitable. If the level of switching to alternative products is sufficient to render the FTR increase unprofitable (say because of the resulting loss of sales) then the alternative products are included in the relevant wholesale product market.

5.82 As noted in paragraph 13 of the European Commission's Notice on Market Definition, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a product, and paragraph 15 notes further that

> *"…the assessment of demand substitution entails a determination of the range of products which are viewed as substitutes by the consumer".*

5.83 For two products to be effective demand-side substitutes it is necessary that a sufficient number of customers are not only capable of switching between them, but would actually do so in the short term in response to a relative price change.

5.84 In this regard, the European Commission's Notice on Market Definition states (in paragraph 16) that demand-side substitution

[179] Given the demand for FVCT is derived from the retail market, ComReg also considered in Section 4 whether there are or were likely to be (within the timeframe of this review) any indirect demand-side constraints coming from the retail market that could impact upon the Relevant FVCT Markets. ComReg's preliminary view was that such constraints were unlikely to have a material impact on the Relevant FVCT Markets.

> *"…. means that, starting from the type of products that the undertakings involved sell and the area in which they sell them, additional products and areas will be included in, or excluded from, the market definition depending on whether competition from these other products and areas affect or restrain sufficiently the pricing of the parties' products in the short term."*

5.85 Demand-side responses should be both immediate and be capable or occurring relatively promptly such as to constrain small but significant price increases over the lifetime of this market analysis.

Consideration of Demand-Side Substitutes

5.86 Given the nature of FVCT, a purchaser does not currently have any viable alternatives for terminating a voice call to a subscriber using a particular fixed number, i.e. it is not possible for an originating (or transiting) Service Provider to terminate a call to that subscriber (using a fixed number) by purchasing termination on another FSP's/MSP's network.

5.87 Looking ahead to the immediate to medium term, based on the evidence available to ComReg there do not appear to be any technological or other changes that would lead to the emergence of alternatives which would allow Service Providers to purchase FVCT from one FSP/MSP for the purpose of terminating a call on another FSP's network.

5.88 In the 2011/2012 statutory information requests issued to Service Providers, ComReg sought views and evidence on whether there were any actual or potential effective wholesale FVCT demand-side substitutes.

5.89 The majority of respondents either considered that no effective alternatives exist or did not express concrete views on the existence of any alternatives to purchasing FVCT to a subscriber of a particular FSP's network. However, certain respondents noted the possibility of routing an incoming call to an alternative device (e.g. a mobile phone or a VoIP terminal) or that opportunities for VoIP peering might arise in the future.

5.90 As regards the possibility of re-routing calls to alternative devices, ComReg considers the possibility for such re-routing to constrain FVCT to a particular FSP's network to depend on the willingness and incentives of the FVCT supplier itself to re-route the call to the device with most cost effective underlying wholesale termination arrangements. For the reasons discussed above, in view of the CPNP and associated CPP arrangements, ComReg considers that the FVCT supplier is unlikely to be incentivised to impose pricing constraints on itself in this way since its retail subscribers do not pay for the cost of terminating the incoming call. As also noted in the retail assessment in Section 4 above, due in large part to the CPP principle and a generally low awareness and sensitivity to the cost of FVCT charged for incoming calls, Called Parties are also unlikely to be sufficiently incentivised to coordinate the frequent re-routing of their incoming calls to fixed numbers across multiple devices in this way.

5.91 As regards the possibility of VoIP peering, ComReg proposes to monitor any trend towards IP interconnection over the lifetime of this market review and whether existing interconnect charging mechanisms materially change as a result. While, as noted in Section 3 above, there has been a manifest increase in the number of VoIP technology users over alternative platforms (predominantly cable), ComReg has noted that, in the short to medium term, it is likely that voice services continue to be offered over copper to customers availing of next generation services with the possibility of VoIP services being gradually made available over time[180]. In the case of existing VoIP-based FSPs, current FTR-charging arrangements still apply when terminating calls to fixed numbers allocated to their subscribers. Even in the event of a more widespread industry move to IP-based interconnection of voice calls over the lifetime of this market review, the question remains as to whether such interconnection would be based on the Internet (data) model[181], on the switched TDM (voice) model, or some other model[182]. Where the CPNP and CPP principles persist in an environment of IP interconnection, it is considered likely that FVCT suppliers will still have the ability and incentives apply a wholesale SSNIP in respect of FTRs for FVCT to their own fixed numbers and that termination to an individual FSP's fixed number ranges would thus still constitute a separate relevant market.

Preliminary View on Wholesale Demand-Side Substitution

5.92 Having regard to the above, it is ComReg's preliminary view that there are currently no effective or sufficiently immediate demand-side substitutes for FVCT for market definition purposes and this position is not likely to change within the timeframe of this market analysis.

Wholesale Supply-Side Substitution

5.93 Supply-side substitution at the wholesale level[183] measures the extent to which a producer not currently active in supplying FVCT would, in response to a HM's SSNIP (above the competitive level) in FTRs, switch production in the immediate to short term without incurring significant costs and start supplying an FVCT service of equivalent characteristics and, as a consequence of such provision, render the HM's FTR increase unprofitable[184].

[180] ComReg 12/27(see footnote 78), page 130.

[181] Generally, IP-based interconnection (data traffic) is currently implemented by a mixture of peering and transit. With peering, two Internet Service Providers ('**ISPs**') agree to exchange traffic solely among their respective customers, sometimes without payment. With transit, one ISP agrees to carry the traffic of another ISP to third parties typically for a fee.

[182] See the Explanatory Note to the European Commission's 2009 Termination Rates Recommendation, page 32.

[183] Given that the demand for FVCT is derived from the retail market, ComReg also considered in Section 4, whether there are or were likely to be any indirect supply-side constraints coming from the retail market that could impact upon the Relevant FVCT Markets. ComReg's preliminary view was that such constraints were unlikely to have a material impact on the Relevant FVCT Markets

[184] See paragraph 39 of the SMP Guidelines.

5.94 If the level of supply-side substitution were likely to be sufficient to render the HM's FTR increase unprofitable (say because of the resulting loss of sales through switching to the alternative producers' FVCT product) then the substitutes are included in the relevant wholesale FVCT product market.

5.95 As noted in paragraph 20 of the European Commission's Notice on Market Definition, supply-side substitution may also be taken into account in defining markets

> *"…in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. This means that suppliers are able to switch production to the relevant products and market them in the short term[185] without incurring significant additional costs or risks in response to small and permanent changes in relative prices. When these conditions are met, the additional production that is put on the market will have a disciplinary effect on the competitive behaviour of the companies involved. Such an impact in terms of effectiveness and immediacy is equivalent to the demand substitution effect.*

5.96 It is also worth reiterating that, in order for supply-side substitutes to be taken into account when defining the wholesale FVCT product market, its effects should be equivalent to those of demand substitution in terms of effectiveness and immediacy.

5.97 Paragraph 23 of the European Commission's Notice on Market Definition also notes that:

> *When supply-side substitutability would entail the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays, it will not be considered at the stage of market definition ... In these cases, the effects of supply-side substitutability and other forms of potential competition would then be examined at a later stage.*

5.98 Having regard to the above, along with general competition law considerations, it is ComReg's view that any relevant supply-side substitutes should be sufficiently imminent to be capable of constraining small but significant wholesale price increases[186].

5.99 ComReg examines below other potential sources of FVCT supply. In doing so, ComReg has considered Service Providers' responses to the 2011/2012

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[185] "That is such a period that does not entail a significant adjustment of existing tangible and intangible assets".

[186] Paragraph 23 of the European Commission's Notice on Market Definition also notes that "When supply-side substitutability would entail the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays, it will not be considered at the stage of market definition". In this regard, supply-side substitution in the FVCT market would likely involve additional investment in networks and associated billing systems as well as the associated time delay in doing so.

statutory information requests[187] issued, in particular, views and evidence on whether there were any actual or potentially effective wholesale FVCT supply-side substitutes.

5.100 ComReg also has had regard to the analysis in Section 4 regarding fixed pricing structures and consumer/business behaviour in the retail market and the preliminary conclusions on the impact of such behaviours on the Relevant FVCT Market(s).

5.101 The majority of respondents to the 2011/2012 statutory information requests either considered that no effective alternatives exist or did not express concrete views on the existence or not of any alternatives to purchasing FVCT to a subscriber of a particular FSP's network. However, certain respondents noted the possibility of routing a call to an alternative device (e.g. a mobile phone or a VoIP terminal) or that opportunities for VoIP peering might arise in the future. These points are discussed and addressed in the assessment of Wholesale Demand-Side Substitution above.

Service Providers Other Than the Called Party's FSP

5.102 Supply-side substitution could potentially come from existing or new entrant Service Providers that have the necessary infrastructure, resources and expertise associated with the supply of FVCT. However, in order for such Service Providers to terminate calls to another FSP's subscriber (i.e. not FVCT to their own subscriber), termination of calls on a Called Party's fixed number would need to be capable of automatically moving from the Called Party's home network to the network of the Service Provider now supplying the FVCT alternative. To do this, the originating Service Provider would need to be able to take control of the routing of the call so as to control the network on which it will terminate. This would also require terminating Service Provider to provide the technical capability to do so on their networks, along with any necessary other systems developments (e.g. billing systems etc.). The Called Party would also need to be sensitive to the cost faced by the Calling Party when calling them, and for the reasons set out in Section 4 ComReg considers that this awareness/sensitivity is likely to be low.

5.103 It is ComReg's preliminary view that the current inability of an originating Service Provider of a call to a fixed number to switch the terminating network from the home network of the Called Party to another network is likely to mean that such supply-side substitution would not pose an effective constraint on the price-setting behaviour of a HM FVCT supplier. ComReg considers that it is unlikely that an FSP terminating calls to fixed numbers over the timeframe of this market review would face sufficient incentives for it to engage in the necessary network and other technical developments and to co-operate with potential competitors in order to facilitate the development of effective supply-side substitutes with a view to bypassing its network. Furthermore, as noted discussion of end user awareness and sensitivity in section 4 above, Called

[187] See paragraph 4.9.

Parties are unlikely to be sufficiently aware of/sensitive to the costs others face when calling them to maintain multiple fixed voice subscriptions with different FSPs for the purposes of availing of the most cost effective wholesale termination arrangement.

5.104 ComReg is not aware of any technology or market developments over the short to medium term which would lead it to alter its preliminary view above.

Preliminary View on Supply-Side Substitution

5.105 Having regard to the above, it is ComReg's preliminary view that there are currently no effective or sufficiently immediate supply-side substitutes for FVCT for market definition purposes and this position is not likely to change within the lifetime of this market analysis.

Other Considerations

5.106 ComReg sets out and analyses below a number of other considerations relevant to the definition of the FVCT product market.

Self Supply of FVCT

5.107 The question arises as to whether the self-supply of a vertically integrated supplier of FVCT should be included in the relevant market, in particular, whether such self-supply is likely to constrain a HM supplier of FVCT from setting its FTRs above the competitive level.

5.108 In summary, it is ComReg's preliminary view that an FSP's self-supply of FVCT does not fall within the Relevant FVCT Market given that the conditions of competition associated with self-supply differ from those associated with the supply of FVCT to other undertakings and the technical infeasibility of one Service Provider being able to terminate calls to subscribers (using fixed numbers) of a particular FSP. As a result, self-supply is unlikely to constrain a HM's FTR-setting behaviour in supplying FVCT in respect of calls to fixed numbers.

5.109 In the consideration of wholesale supply-side substitution described above, ComReg has already considered whether potential sources of self-supply from existing/new-entrant Service Providers other than the HM FVCT supplier would act as an effective constraint in respect of calls to fixed numbers for market definition purposes and has found that it would not.

5.110 The question also arises whether a HM's FTR-setting behaviour in supplying FVCT to other Service Providers would be constrained by its own supply of termination in providing 'on-net' calls. Such a HM is unlikely to raise the price[188] of self-supplied 'on-net' termination given that it would likely result in an

[188] In paragraph 5.29, ComReg already noted the existence of homogeneous conditions of competition and a common pricing constraint in the supply of FVCT by FSPs. In view of this, FSPs do not generally differentiate their FTRs according to the subscriber/fixed number called. One divergence to this approach relates to wholesale FTRs for 'on-net' calls, i.e. an FSPs self-supply of termination for the purpose of facilitating on-net calls.

increase to its retail prices and potentially make its own services less attractive when compared to those of competitor Service Providers. Because of this, the FSP's incentives regarding the price of 'on-net' self-supplied termination are different to those in relation to the price of 'off-net' FVCT provided to other Service Providers. In the latter case, wholesale purchasers of FVCT services to fixed numbers may in turn be direct competitors of the FVCT supplier at retail level. Hence, the FVCT supplier does not, in the case of calls to fixed numbers, have the same commercial incentives to minimise the costs of 'off-net' FVCT.

5.111 In view of the above, it is ComReg's preliminary position that, having regard to the circumstances of this particular market analysis, the self-supply of FVCT to fixed numbers should be excluded from the Relevant FVCT Market definition.

Preliminary Conclusion on Wholesale FVCT Product Market

5.112 In light of the above analysis, it is ComReg's preliminary view that there are not likely to be any effective demand-side or supply-side substitutes to FVCT by individual FSPs within the timeframe of this market analysis. ComReg has also considered the strength of any indirect constraints from the retail market on FVCT and has set out its preliminary view that they are insufficient to act an effective competitive constraint.

5.113 It is ComReg's preliminary view that the wholesale FVCT product market therefore consists of:

> *"the provision by an FSP of a wholesale FVCT service to other Service Providers from the nearest point (to the end user) or level on that terminating FSP's network at which calls can be handed over for termination to fixed numbers and in respect of which that FSP is able to set the FTR"*

5.114 ComReg considers that the above definition is sufficiently clear enough to identify the Relevant FVCT Market over the timeframe of the current review.

5.115 As noted above, this definition is independent of the underlying technology and encompasses all network technologies which facilitate (existing and/or future) offers by suppliers of FVCT for incoming calls to subscribers utilising fixed numbers and where they have the ability to determine FTRs in respect of such FVCT services within the lifetime of this market review.

5.116 In terms of its technical description, FVCT is provisionally defined as the nearest point (to the end user) or level on the terminating network at which calls can be handed over for termination (i.e. on a traditional PSTN network this would be at the primary exchange) of the fixed number for which the call is destined.

5.117 As a consequence, it is ComReg's preliminary view that the FVCT services offered by the existing Group A and Group B FSPs listed in Annex F fall within the above description and their networks are consequently each considered to form a Relevant FVCT Market for the purposes of this market review[189].

5.118 Furthermore, it is recognised that the FSPs that supply FVCT may vary over the lifetime of this market review. Where any new-entrant FVCT suppliers (e.g. such as the Group C FSPs listed in Annex F) indicate formal plans (including relevant timelines) to provide/charge for FVCT over the current review period, while the particulars of each case will be considered, ComReg proposes to rely substantially on the current detailed assessment in coming to a view on whether such new-entrant FVCT suppliers meet the above criteria for consideration as a Relevant FVCT Market in their own right and thus whether a competition assessment should be carried out accordingly.

Q. 5. Do you agree with ComReg's preliminary conclusions on the wholesale FVCT product market assessment? 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 views.

Wholesale FVCT Geographic Market

5.119 In this section ComReg now considers the geographic scope of the wholesale Relevant FVCT Markets.

5.120 The European Commission has noted that the relevant geographic market is

> *"…….. an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different."*[190]

5.121 It has been proposed in the preceding sections to define the voice call termination services provided by each individual FVCT supplier in respect of calls to fixed numbers as a Relevant FVCT Market in its own right. The rationale for defining the Relevant FVCT Market(s) according to the scope of each individual FSP's fixed numbers builds on the approach taken in the 2007 Decision that individual markets exist corresponding to the scope of each individual FSP's termination network while recognising at the same time that the scope of an FSP's overall physical network may not completely correspond

[189] As noted in paragraph 5.28, in respect of the list of existing Service Providers identified as providing FVCT for the purposes of this review this includes any of the listed Service Provider's subsidiaries and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns.

[190] European Commission Notice on Market Definition, paragraph 8.

to the precise scope of control over FVCT to the allocated number ranges. For the purposes of the present market review, “voice call termination on individual public telephone networks at a fixed location” is taken to mean the scope of all FVCT services provided by each FSP in respect of fixed numbers utilised by their respective subscribers. Hence this “number-based” definition of FVCT also inherently reflects the geographic dimension of those services (i.e. the geographic market corresponds to the (combined) locations of all subscribers using fixed numbers and in respect of which the FVCT supplier can set the terms and conditions of wholesale access).

5.122 Defining the relevant market according to the scope of an FSP’s FVCT services to fixed numbers further recognises the homogeneous conditions of competition and the presence of a common pricing constraint underpinning the delivery of FVCT by each FSP in respect of calls to fixed numbers. In terms of calls to end users the current conditions relating to the supply of FVCT by an FSP do not differ (nor are they likely to) on the basis of the particular fixed number or location of the subscriber called. FSPs supplying FVCT in respect of calls to end users do not generally differentiate their FTRs on the basis of the particular fixed number/subscriber called. The FTR is the same irrespective of the fixed number/subscriber called and to alter this position would likely involve substantial investment in billing systems and potential technical difficulties.

5.123 On the basis of the above analysis the geographic scope of each Relevant FVCT Market is thus defined by the scope of each FSP’s FVCT offering in respect of calls to its fixed numbers.

5.124 It is ComReg’s preliminary view that the geographic scope of the wholesale Relevant FVCT Markets is thus consistent with each FSP’s (combined) FVCT offering to fixed numbers utilised by subscribers at their respective fixed locations.

Q. 6. Do you agree with ComReg’s preliminary conclusions on the wholesale FVCT geographic market 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.

Overall Preliminary Conclusion on the Wholesale Relevant FVCT Markets

5.125 Having regard to the above analysis, it is ComReg’s preliminary view that the Relevant FVCT Markets consist of:

> *“the provision by an FSP of a wholesale fixed voice call termination service to other Service Providers from the nearest point (to the end user) or level on that terminating FSP’s network at which calls can be*

handed over for termination to fixed numbers[191] *and in respect of which that FSP is able to set the FTR"*

The geographic scope of the Relevant FVCT Market(s) corresponds to the geographic coverage of each individual FSP's FVCT offering to fixed numbers".

5.126 For the avoidance of doubt, this is a technology neutral market definition and the use of the term 'FSP' in the above context is intended to refer to any undertaking supplying the FVCT services concerned, irrespective of the underlying technology (i.e. wired or wireless).

5.127 For the avoidance of doubt, 'other Service Provider' above includes any authorised undertaking[192], whether this be an undertaking located in the Republic of Ireland or in another jurisdiction.

5.128 Having regard to the above market definition, and to the methodology set out in Appendix F, it is ComReg's preliminary view that the following separate markets exist for the purposes of the present FVCT market review:

- Wholesale FVCT supplied by Eircom Limited
- Wholesale FVCT supplied by Imagine Communications Group Limited
- Wholesale FVCT supplied by Blue Face Limited
- Wholesale FVCT supplied by BT Communications Ireland Limited
- Wholesale FVCT supplied by Cable & Wireless (Ireland) Limited
- Wholesale FVCT supplied by Colt Technology Services Limited
- Wholesale FVCT supplied by Digiweb Limited[193]
- Wholesale FVCT supplied by Magnet Networks Limited
- Wholesale FVCT supplied by UPC Communications Ireland Limited
- Wholesale FVCT supplied by Verizon Ireland Limited
- Wholesale FVCT supplied by In2com Limited
- Wholesale FVCT supplied by Voxbone SA

[191] As noted above, for the purposes of this Consultation Paper, the term "fixed number" includes a geographic or 076 number which is the subject of a "primary allocation/reservation" and a "secondary allocation/reservation", within the meaning set out in the National Numbering Conventions.

[192] Pursuant to Regulation 4 of the Authorisation Regulations (European Communities (Electronic Communications Network and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011).

[193] For the avoidance of doubt and in line with footnote 31 this includes wholesale FVCT supplied by Digiweb and any undertaking which it owns or controls and any undertaking which owns or controls it. The listed party also includes its successors, affiliates and assigns. As Digiweb has acquired control over Smart Telecom, Digiweb is deemed to include inter alia Smart Telecom which was previously covered by the 2007 Decision. See: http://media.digiweb.ie/quick-facts/

- Wholesale FVCT supplied by Airspeed Communications Limited
- Wholesale FVCT supplied by Equant Network Systems Limited
- Wholesale FVCT supplied by Finarea SA
- Wholesale FVCT supplied by Modeva Networks
- Wholesale FVCT supplied by 3Play Plus Limited
- Wholesale FVCT supplied by Magrathea Telecommunications Limited

5.129 As noted in paragraph 5.27, ComReg intends to keep the Relevant FVCT Markets under review, following the adoption of the proposed Decision Instruments, having regard to technological and other developments which may lead to the emergence of any potentially effective demand-side and/or supply-side substitutes.

Q. 7. Do you agree with ComReg's preliminary conclusions on the wholesale FVCT 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 or other evidence supporting your views.

6 Competition Analysis and Assessment of Significant Market Power

Framework for Assessing SMP

6.1 Having defined separate wholesale Relevant FVCT Markets, ComReg is required to determine whether each market is effectively competitive having regard to whether or not any of the FSPs operating within them has Significant Market Power ('SMP').

6.2 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*[194]:

> *"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."*

6.3 Regulation 25(1) of the Framework Regulations effectively mirrors this definition of dominance and states that:

> *"An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers".*

6.4 Arising from this definition, ComReg assesses whether SMP exists in accordance with the framework established by the European Commission.

6.5 The European Commission's SMP Guidelines, of which ComReg is required to take utmost account[195], 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.

6.6 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.

[194] Case 27/76 United Brands v European Commission [1978] ECR 207, Paragraph 65.

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

> *"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"[196].*

6.7 Market shares in excess of 50% give rise to a strong presumption of SMP. However, the SMP Guidelines also state[197] 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;
- 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.

6.8 The SMP Guidelines also state that that:

> *"A dominant position can derive from a combination of the above criteria, which taken separately may not necessarily be determinative"[198].*

Approach to Assessing SMP in the Relevant FVCT Markets

6.9 ComReg's approach to assessing whether an undertaking has SMP in the Relevant FVCT Markets is to carry out a forward-looking analysis on the basis

[196] Paragraph 75 of the SMP Guidelines.

[197] Paragraphs 78 of the SMP Guidelines.

[198] Paragraph 78 of the SMP Guidelines.

of existing and likely future market conditions[199] and to consider a range of factors that are relevant to these markets. Many of the factors identified in paragraphs 6.6 and 6.7 above, while presented separately, may in fact be interrelated and all available evidence is considered as a whole before a determination on SMP is made.

Relevant SMP Criteria

6.10 For the purposes of the analysis of the Relevant FVCT Markets, ComReg considers that the following criteria are of most relevance to the assessment of SMP:

- Market shares;
- Control of infrastructure not easily duplicated;
- Absence of potential competition; and
- Absence of or low countervailing buying power.

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

6.12 Other factors identified in paragraph 6.7 above which could be used to indicate the potential market power of an undertaking have been considered but, for the reasons set out in Appendix E, are considered of limited relevance for the purposes of the SMP assessment in these Relevant FVCT Markets.

Approach to Existing Regulation

6.13 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. In the context of an SMP assessment in the Relevant FVCT Markets, the key hypothetical questions to be assessed are:

- 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

[199] 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."

- 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 FVCT Market.

6.14 ComReg's SMP analysis also considers these issues referred to in the preceding paragraph above.

Assessment of SMP

6.15 Each of the relevant factors identified above are considered in detail below. Given an inherent degree of overlap, ComReg proposes to combine its assessment of these factors under the following three broad headings:

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

Existing Competition in the Relevant FVCT Markets

6.16 In this section ComReg considers such factors as relative strength of any existing competitors, market shares, and pricing.

Existing Competition

6.17 In Section 5, the Relevant FVCT Markets were defined such that each FSP identified is the sole supplier of FVCT to its subscribers' fixed numbers and, in view of this, FSPs do not face existing competition within such markets. In Section 4, ComReg also considered that the strength of any indirect constraints coming from the retail market were not likely to be to sufficient to result in the development of effective competition in the Relevant FVCT Markets. ComReg considers that these conditions are likely to remain broadly the same over the medium term (i.e. within the lifetime of this market analysis).

Market Shares

6.18 Given the market definition, each of the 18 individual FSPs identified in paragraph 5.128 have 100% market share, irrespective of whether this is measured by call termination volumes or call termination revenues. These high market shares have been maintained over time[200]. There are currently no

[200] In the last review of these markets in 2007 Eircom, BT Ireland, Colt, Magnet Networks, UPC, Smart Telecom (now part of Digiweb) and Verizon were also found to hold a 100% market share.

competitors in the Relevant FVCT Markets, and this position is likely to be maintained over at least the medium term (e.g. at least three years following the completion of this market analysis process and the adoption of a new decision) in view of the barriers to entry identified in the next section below.

Pricing Behaviour

6.19 In the absence of any existing (or, as discussed in the next section, any potential) competitors in the Relevant FVCT Markets, ComReg proposes to conduct its analysis of FVCT pricing behaviour in the CBP section below. In the absence of any existing or potential competitive constraints, the purpose of this pricing analysis is to assess whether any strong buyers have been in a position to constrain the FTRs set by the individual FSPs in their Relevant FVCT Markets since the 2007 Decision.

Preliminary conclusion on impact of existing competition

6.20 Having regard to the market definition in Section 5, it is ComReg's preliminary view that, absent regulation, over the medium term following the completion of this market analysis process and the adoption of a new decision:

- the high market share positions in the Relevant FVCT Markets are likely to persist; and
- the threat from existing wholesale competition or retail constraints are not likely to pose an effective competitive constraint in the Relevant FVCT Markets; and
- FSPs supplying FVCT have, and are likely to continue to have, the power to set their FTRs independently of each other.

6.21 As noted earlier, high and persistent market shares, while a strong indicator of SMP, are not, in themselves, solely determinative as to whether or not an undertaking has SMP. ComReg's preliminary view is that the high market shares and absence of existing competition for FVCT to date are strongly suggestive that, individually, each of the FSPs listed in paragraph 5.128 above has SMP on their Relevant FVCT Markets. However, ComReg now considers whether other relevant factors might potentially diminish or undermine this presumptive SMP position.

Potential Competition in the Relevant FVCT Markets

6.22 ComReg's assessment of potential competition in the Relevant FVCT Markets considers whether entry is likely over the medium term[201] to such an extent that it would constrain an FSP's ability to act, to an appreciable extent, independently of its competitors, customers or consumers. 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 the Relevant FVCT Markets.

[201] See paragraph 74 of the European Commission's SMP Guidelines.

6.23 In considering the potential for entry into the Relevant FVCT Markets, ComReg has assessed current market conditions and, in this context, assessed whether entry to the Relevant FVCT Markets could potentially come from a number of sources, including:

- Entry from FSPs other than the Called Party's FSP
- Entry of new FSPs
- Entry through other technologies

6.24 The analysis in Section 5 concerning the definition of the Relevant FVCT Markets considers the possibility of these options emerging as supply-side substitutes in a shorter timeframe, and at negligible cost, and concluded that such entry was unlikely within the immediate to medium term following the completion of this market analysis process and the adoption of a new decision. Demand-side substitutes and indirect constraints from the retail market were also considered to be insufficiently strong to impact the Relevant FVCT Markets.

6.25 ComReg has revisited the above analysis, in particular, having regard to the impact of possible developments over the medium term (e.g. over at least the next three years following the completion of this market analysis process and the adoption of a new decision) which could impact the SMP position. ComReg remains of the preliminary view that, given the significant high and non-transitory barriers to entry in each of the Relevant FVCT Markets, the emergence of potential competition within this time horizon is unlikely and, therefore, is not likely to constrain SMP.

Preliminary conclusion on potential competition in the Relevant FVCT Markets

6.26 ComReg's preliminary view is that potential competition in each of the Relevant FVCT Markets is unlikely to provide an effective competitive constraint on FSPs and, consequently, does not undermine the strong indication that individually each of the FSPs listed in paragraph 5.128 has the power to behave, to an appreciate extent, independently of any potential competition.

Countervailing Buyer Power

6.27 In this section ComReg considers whether bargaining power on the buyer side of the Relevant FVCT Markets is likely to impose a sufficient competitive constraint on the FTR-setting behaviour of FVCT suppliers, such that it would credibly offset their power to behave, to an appreciable extent, independently of competitors[202], customers and ultimately consumers.

[202] As noted above, there are no actual or potential competitor suppliers of FVCT in each Relevant FVCT Market.

6.28 In so doing, ComReg examines whether sufficient[203] CBP exists such that it results in FVCT suppliers not being able to sustain FTRs that are above the competitive level (i.e. the effective exercise of CBP is one which results in FTRs being constrained to levels that would be achieved in a competitive market outcome).

6.29 In this regard, the Explanatory Note to the 2007 Recommendation notes[204] with respect to markets for call termination on individual networks:

> *"…, such a market definition - call termination on individual networks - does not automatically mean that every network operator has significant market power; this depends on the degree of any countervailing buyer power and other factors potentially limiting that market power. Networks, in exchanging traffic in the absence of regulation, will normally face some degree of buyer power that could limit their associated market power…. The existence of buyer power and the ability of network operators to raise termination rates above the competitive level should be examined on a case-by-case basis in the context of the SMP assessment on this market. Accordingly, one should examine the ability of network operators to raise termination rates not only vis-à-vis the incumbent fixed network operator but also vis-à-vis other operators that may have less buying power."*

6.30 The effectiveness of CBP is likely to be significantly dependent on the strength of the bargaining power of the purchaser in its FTR negotiations.

6.31 The European Commission's 2009 enforcement priorities in applying Article 102 of the Treaty of the Functioning of the European Union to abusive exclusionary conduct by dominant undertakings[205] (the '**2009 Enforcement Priorities**') are also informative on the issue of CBP in competition assessments. These state[206] 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*

[203] The existence of some level CBP is not, in itself, a sufficient indicator. Rather, it must be sufficiently strong such that it results in an FTR being prevented from rising above a level that would pertain in a competitive market outcome.

[204] Page 25 of Explanatory Note to the 2007 Recommendation.

[205] 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.

[206] Paragraph 18 of the 2009 Enforcement Priorities.

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."

6.32 In light of the above, it is ComReg's view that effective CBP is that which results from customers being of sufficient size or importance to the seller and having the ability to credibly switch to alternative sources of supply such that it deters the seller 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.

Framework for CBP Assessment

6.33 ComReg outlines below the framework within which it considers the impact of CBP on its assessment of SMP. To support this analysis, ComReg has relied on information requested as part of the 2011/2012 statutory information requests from FVCT suppliers to examine the history and extent of any negotiations regarding FVCT and the level of FTRs applied.

6.34 The framework under which ComReg considers CBP includes:

- the regulatory context for CBP assessment; and
- the economic framework for CBP assessment.

Regulatory Context for CBP Assessment

6.35 In carrying out an assessment of CBP it is also necessary to consider the impacts of existing or future potential regulation. In this regard, ComReg sets out below its approach to the treatment of:

- existing SMP regulation in each of the Relevant FVCT Markets now being assessed;
- existing SMP regulation in markets other than the specific Relevant FVCT Market being assessed; and
- other non-SMP regulation and the role of dispute resolution.

Approach to existing SMP regulation in the Relevant FVCT Markets when considering CBP

6.36 Insofar as existing SMP regulation in the Relevant FVCT Markets is concerned, ComReg has already noted that it adopts the European Commission's 'modified Greenfield approach'[207] whereby SMP regulation in the market under consideration is discounted when considering the prospective

[207] Explanatory Note to the 2007 Recommendation, p. 13.

SMP analysis of the Relevant FVCT Markets. In its assessment of each Relevant FVCT Market, ComReg thus considers potential bargaining outcomes in the absence of the FVCT supplier in question being designated with SMP and absent SMP obligations being imposed on them. This is to avoid drawing conclusions regarding the competitive structure of a particular market which may be influenced by, or indeed premised on, existing or potential regulation on that market. Considering how the Relevant FVCT Markets may function absent regulation helps to ensure that regulation is only applied (or withdrawn) in those circumstances where it is truly justified and proportionate. To do otherwise could result in a circularity of argument whereby, for example, a Relevant FVCT Market is found to be effectively competitive (or not) only by virtue of constraints arising from existing or potential SMP obligations. Once found then to be effectively competitive, SMP obligations would be withdrawn in the Relevant FVCT Market, thereby undermining the original finding of effective competition within that market.

Approach to existing SMP regulation outside the Relevant FVCT Markets

6.37 SMP regulation in markets outside the Relevant FVCT Markets is considered and, in this regard, the 2006 Expert Report prepared on behalf of the European Commission notes[208]:

> *"..it should also be noted that an operator requiring fixed call termination loses any power to counteract with an increase in its own termination rate if it is subject to SMP regulation and its call termination rate is set by the regulator on an ex ante basis. When applying the modified Greenfield approach to fixed termination, we assume that mobile operators are subject to SMP regulation and their termination rate is set by the regulator".*

6.38 What is clear from the above statement is that the bargaining position of an SMP MSP will likely be somewhat weakened in any FTR negotiations with a FVCT supplier, in particular, where its supply of MVCT is subject to SMP price regulation, as well as other SMP obligations governing the requirement to meet reasonable requests for access and not to discriminate. For example, Vodafone, O2, Meteor and H3GI are currently designated with SMP in a number of MVCT markets and their provision of MVCT services is subject to price regulation. In these circumstances, Vodafone, O2, Meteor and H3GI, in their FTR negotiations with an FSP, are unable to credibly threaten to retaliate with an increase in their mobile termination rates ('**MTRs**') and, as such, their bargaining power relative to FVCT suppliers is likely to be lessened. ComReg's preliminary view is that the bargaining position of an SMP MSP (such as Vodafone, O2, Meteor and H3GI) in their FTR negotiations with an FVCT supplier is likely to be weakened given their SMP obligations.

[208] Footnote 161, page 57.

Approach to other non-SMP regulatory obligations and the role of dispute resolution

6.39 ComReg has also considered the role of dispute resolution (and own initiative investigations) when applied in the context of general interconnection obligations/requirements, in particular, as to how this might impact on the bargaining dynamic between parties in FTR negotiations and CBP. Regulation 31[209] of the Framework Regulations empowers ComReg to resolve disputes between authorised undertakings not only in relation to specific SMP obligations, but also with respect to general obligations, including those governing interconnection. Furthermore, Section 10 of the Communications Regulation Acts 2002-2011 provides ComReg with the power to carry out investigations into the matters relating to the supply of access, either on its own initiative or as a result of a complaint of an undertaking.

6.40 The question arises as to whether ComReg's ability to actually or potentially exercise its dispute resolution powers (or to initiate investigations on its own initiative) is a relevant factor which should be taken into account in the assessment of CBP. If so, the next question relates to whether the impact of such dispute resolution intervention is likely to have a sufficient impact on the bargaining dynamic of the negotiating parties, such that the strength of any CBP exercised by a purchaser of FVCT is likely to offset an FVCT supplier's ability to set the level of its FTRs above the competitive level. These questions must also be addressed against the backdrop of the 'modified Greenfield approach' whereby SMP regulation in the specific Relevant FVCT Market being analysed is discounted, but other SMP regulation outside the Relevant FVCT Market is considered alongside other general non-SMP type obligations.

6.41 The European Regulatory Framework provides that SMP obligations (including a price control obligation of cost orientation) may only be imposed on a Service Provider that actually has SMP. The exception is that under Regulation 6 of the Access Regulations, such obligations may be imposed on operators that do not have SMP. However, that itself is subject to the proviso set out in Regulation 6(2), in that such obligations should only be imposed *"to the extent that it is necessary to ensure end-to-end connectivity"* and to ensure "*interoperability*"*.* Whenever ComReg is exercising its dispute resolution powers or its powers to initiate investigations on its own initiative, it must also do so having regard to its objectives under Section 12 of the Communication Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations.

6.42 In the event that Service Providers were unable to come to a commercially negotiated arrangement regarding the interconnection of their respective networks, including in relation to the level of the FTR being levied or proposed to be levied by a FVCT supplier (absent SMP), it would potentially[210] be open to

[209] This transposes Article 20 of the Framework Directive (Directive 2002/21/EC as amended by Directive 2009/140/EC).

[210] Having regard to ComReg's statutory functions and objectives in relation to interconnection.

one of the parties to seek to have the matter resolved by ComReg through the dispute resolution process provided for under Regulation 31 of the Framework Regulations.

6.43 It could also be open to ComReg to carry out an investigation in relation to a Service Providers' general obligations to, for example, meet requirements to comply with certain aspects of the National Numbering Conventions, including, those relating to the opening up of access to numbers on their networks to ensure their subscribers can access and use services using numbers[211]. Compliance with the obligations relating to access to number as contained in Regulation 23 (1) of the Universal Service Regulations[212] might also be taken into consideration.

6.44 As has been ComReg's position to date[213], ComReg does not accept that the existence of its dispute resolution function, and its resulting power to determine FTRs in the context of an interconnection dispute, is something which would negate any FVCT supplier's potential SMP position. Dispute resolution is a regulatory function which operates in parallel to, rather than as a substitute for, market analysis functions. Were ComReg to accept that the potential for regulatory intervention through the exercise of its dispute resolution functions negates the existence of an SMP position, it would then be faced with a scenario whereby no undertaking could ever be designated with SMP. ComReg also does not consider that such a scenario was contemplated in the European Regulatory Framework and this has been borne out in a number of recent decisions by the European Commission under Article 7 of the Framework Directive concerning the imposition of SMP-type obligations pursuant to the exercise of dispute resolution functions. Recent serious doubts decisions from the European Commission on such cases[214] clearly highlight its view that regulatory intervention in relation to the level of termination rates set by non-SMP Service Providers through dispute resolution, while appropriate in certain scenarios as a short term measure, is no substitute for the conduct of a market analysis and, where appropriate, the imposition of permanent price control remedies.

6.45 The UK's Competition Appeal Tribunal ('**CAT**') 2005 judgement[215] (the '**2005 CAT Judgement**') regarding an appeal by Hutchison 3G (UK) Limited ('**H3GUK**') is also informative. H3GUK had appealed a decision by the Office of Communications ('**Ofcom**') to designate it with SMP. The CAT, in considering the effects of a regulator's dispute resolution role under clause 13

[211] See Condition 3.2.2 (4) of the National Numbering Conventions.

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

[213] See, for example, paragraphs 4.66 to 4.72 of the 2007 FVCT Consultation.

[214] See for example cases PL/2011/1260 (also referenced in footnote 157) and PL/2011/1273.

[215] Case No: 1047/3/3/04, [2005] CAT 39. Available on www.cattribunal.org.uk.

of the BT/H3GUK interconnect agreement and its potential impact on the analysis of CBP, found that it falls to be disregarded as a matter of principle:

> *"….. The sort of dispute that clause 13 contemplates is a form of interconnection dispute, which OFCOM would resolve as regulator, not as a third party dispute resolver. Its intervention would therefore be as regulator, and would be a form of regulation. It therefore falls to be disregarded, as a matter of principle, just as OFCOM's general presence as a regulator with a potential effect on the conduct of the putatively regulated person falls to be disregarded, for the reasons given above. ……"*[216].

6.46 In further considering the role of dispute resolution and its impact on the assessment of CBP, a regulatory dispute determination governing the FTR of a non-SMP undertaking may not necessarily result in a form of price control that that would prevail in a competitive market. Given that the particular circumstances of each dispute can vary, it is difficult to be definitive as to precisely how ComReg would approach a particular interconnection dispute concerning the level of a non-SMP FSP's FTR. ComReg's view is that the imposition of any price control on non-SMP Service Providers would potentially be such as to ensure end-to-end connectivity or interoperability between the networks pursuant to Regulation 6(2) of the Access Regulations. Such an approach is not, therefore, necessarily tantamount to the imposition of a cost-oriented price. Furthermore, any such type of price control arising from a dispute determination would only be relevant insofar as it applied to the parties to the dispute itself, would not have a general market application, and would not, in ComReg's view be an efficient or effective means of resolving broader competition problems associated with the potential exercise of market power[217].

6.47 Overall, for the reasons outlined above, ComReg considers that the actual or potential impact of dispute resolution is not a factor for consideration in terms of the bargaining dynamic between parties and ultimately CBP.

Economic Framework for CBP Assessment

6.48 The assessment as to the existence or otherwise of effective CBP involves an examination as to whether sufficient buyer power may be exercised such that the FVCT supplier does not have the power to behave independently of its wholesale customers, thereby not being able to sustain an FTR above the level that would pertain in a competitive market. As noted earlier, the concept

[216] See paragraph 138(b) of the 2005 CAT Judgement.

[217] See final determination in dispute between H3GI and TMI, ComReg Document 09/98, December 2009 concerning a dispute raised by H3GI regarding, *inter alia*, the alleged failure by TMI to negotiate its MTR ('**the TMI Dispute Determination**'). As noted in the MVCT Consultation Paper (page 128), the regulatory analysis set out in the TMI Dispute Determination clearly shows that ComReg's intervention in relation to the MTRs of non-SMP MSPs was in the context of ensuring end-to-end connectivity and was a much lighter approach than that which would result from SMP regulatory price control intervention in relation to an MSP designated with SMP.

of CBP is not an absolute one[218], and it is more likely than not that some degree of CBP will be present in FTR negotiations between parties. Given that FTR negotiations between Service Providers are usually bilateral in nature, it is also reasonable to assume that the level of any CBP exercised will differ between parties, having regard to their particular circumstances.

6.49 While there are a potential range of economic models/approaches which provide a context for the assessment of the exercise of CBP between interconnecting parties[219], ComReg's current review considers a series of bilateral bargaining scenarios involving one supplier of FVCT and one buyer of FVCT. ComReg recognises that in all circumstances, this may not in fact be the case in Ireland as there are a number of purchasers of FVCT who do so on the basis of interconnection through a transit provider. For example, Eircom, given its traditional SMP position in wholesale origination and transit interconnection markets, purchases FVCT not just on its own behalf, but also on behalf of a number of other Service Providers. Such dynamics are considered in the CBP analysis. Accordingly, when considering a Service Provider's buyer power, ComReg also has regard, not only to purchases of FVCT on their own behalf, but also those purchases of FVCT on behalf of other parties.

6.50 ComReg also considers a number of other factors which are relevant to setting out the appropriate economic framework according to which ComReg measures relevant bargaining dynamics and positions in the demand and supply of FVCT. Such factors include:

- The degree to which a purchaser of FVCT represents an important outlet for the seller – analysed below under "*Size of the buyer and its relative importance to the seller*";
- The degree to which a purchaser of FVCT has alternative supply options and is a well-informed and price sensitive buyer – analysed below under "*Credible alternative sources of FVCT supply for the buyer*" and "*The price sensitivity of the buyer*"; and
- Evidence of CBP through analysing price-setting behaviour and actual negotiations – analysed below under "*Evidence of price-setting behaviour and negotiations between Service Providers*".

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[218] Rather than being merely a question of whether CBP has been exercised or not, the question to be addressed relates more to the strength of CBP exercised and whether this is sufficient to constrain the exercise of SMP, in particular, preventing an FVCT supplier from pricing its FTRs above the competitive level.

[219] See, for example, the discussion in previous ComReg documents such as Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 07/01, January 2007 (paragraphs 4.16 to 4.28) and Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/06, Response to Consultation and Draft Decision, January 2008 (paragraphs 4.22 to 4.34).

6.51 The above factors are considered in the CBP assessments of the specific Relevant FVCT Markets below[220].

(i) Size of the buyer and its relative importance to the seller

6.52 The strength of CBP can be influenced by the relative size of the buyer, with this being measured according to the buyer's share of FVCT purchased from an FSP relative to total purchases of FVCT from the same FSP. The degree to which a high share of FVCT purchases is concentrated amongst one or more buyers may be relevant.

6.53 In addition, the size of the buyer's subscriber base may also influence its buyer power as it may be important for the FVCT supplier to have interconnection with the buyer to ensure the FVCT supplier's subscribers can receive calls from and make calls to the buyer's subscribers[221]. However, the same may also be said of the buyer given that it would, for reputational and other reasons, also wish to ensure that its subscribers can receive calls from and make calls to an FVCT supplier.

6.54 The size of the buyer and its relative importance to the seller has the potential to be dynamic over time, particularly having regard to the growth in the subscriber bases of the respective parties and the growth and trends in actual or potential termination traffic purchased by a buyer. For example, as an FVCT supplier's retail customer base grows, it may become somewhat more difficult for a FVCT purchaser to refuse or delay interconnection with that FSP given that it will likely have both an increasing need for its subscribers to be able to contact the FSP's subscribers, as well an increase in the potential volume of incoming traffic from the FSP in question.

6.55 Arising from the above, it is possible that a new-entrant FSP relative to an established FSP would find it more important to ensure that it had obtained interconnection to other Service Providers that have a significant customer base. In the knowledge of this, the bargaining power of larger networks supplying/purchasing FVCT in interconnection negotiations with new-entrant FSPs could potentially be enhanced.

6.56 Overall, ComReg has taken into account the largest buyers of an FSP's FVCT service and their relative importance to the FVCT supplier over the life-time of this market review.

(ii) Credible alternative sources of FVCT supply for the buyer

6.57 The strength of buyer power in FVCT negotiations can also be influenced by the degree to which it can credibly refuse to purchase or delay in purchasing

[220] The 2006 Expert Report (footnote 161) stated that CBP may take the following forms: refusal to interconnect, refusal to buy termination services and/or a reciprocal increase in the termination rate (see page 56 of that Report). These issues are explored below in the context of the Relevant FVCT Markets.

[221] Such interconnection can occur directly between the respective networks, or indirectly with the purchaser interconnecting with that FVCT supplier through a third-party transit arrangement.

FVCT. ComReg considers that such a strategy, in order to be credible, would likely be affected by a number of factors, including whether there are alternative sources of supply of FVCT (existing sources or potential sources, e.g. through new market entry), and the degree to which the buyer can switch within a reasonable timeframe to such alternative supply sources without incurring significant unrecoverable (sunk) costs. ComReg has already considered these points in Section 5 (dealing with demand and supply-side substitution) and earlier in Section 6 above, and has expressed its preliminary view that there are no alternative sources of FVCT supply given the Relevant FVCT Market is defined at the individual FSP level.

6.58 However, were the FVCT supplier to seek to refuse or delay direct interconnection, the buyer may have an alternative means of indirectly[222] interconnecting to the FSP through a third-party transit provider that already has achieved interconnection with the FSP at an agreed FTR. For example, Eircom is directly interconnected with all of the FSPs and can, through its transit service, provide an alternative indirect means for an undertaking to achieve termination with a particular FSP. An FSP could also potentially avail of indirect interconnection to Eircom *via* a third-party transit arrangement (such as through BT Ireland). Utilisation of such indirect interconnection alternatives is however not a cost-free exercise (say due to the need to invest in new interconnect paths and that existing investments in direct interconnection maybe be sunk and largely irrecoverable etc.). As noted by the European Commission in its expression of serious doubts to the Latvian NRA, in the event that direct interconnection is impeded, access seekers to the FVCT service in question would be forced to interconnect indirectly bearing additional costs resulting from transit services[223]. Thus the availability of transit services does not solve the problem of a denial of, or delayed, access. It is also important to note that such indirect interconnection options would not necessarily undermine the ability and incentives of the FVCT supplier to charge FTRs above the efficient level to those third-party transit providers, which would in turn presumably be passed through (indirectly) to all FVCT

[222] In communications markets it may not be commercially viable for all Service Providers to interconnect directly with each other. In the context of establishing direct interconnection with an FVCT supplier, an undertaking is likely to consider the trade-off between cost of establishing such direct interconnection, the likely current and future volumes of traffic to be exchanged with the FVCT supplier, the FTR to be charged under a direct interconnection agreement against the cost of using transit services of a third party to provide indirect interconnection and the FTRs being charged by the FVCT supplier to this third party transit provider.

[223] See case LV/2012/1296: Voice call termination on individual mobile networks, Opening of Phase II investigation pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC, 13/03/2012, concerning the non-imposition of an access obligation on Telekom Baltjia and 12 MVNOs in the relevant MVCT markets. As also noted in a BEREC opinion on the Latvian case, indirect interconnection may raise the costs of access and thus transit services are not a substitute for the availability of direct interconnection. See BEREC opinion on European Commission's serious doubts on asymmetric treatment of mobile operators in mobile call termination markets in Latvia (case LV/2012/1296) http://erg.eu.int/doc/opinion_1296.pdf

purchasers thereby still impacting on their ability to compete in downstream markets.

(iii) The price sensitivity of the buyer

6.59 It is likely that most individual FVCT buyers will be well informed about the price of FVCT, in particular, having regard to the existing arrangements for publication of FTRs *via* Eircom's RIO and STRPL as well as through buyers being informed through contractual price notification arrangements.

6.60 Other factors that may impact the degree of price sensitivity of buyers include:

- The level of the FTR and its proportion to the overall cost faced by the originating Service Provider in providing a retail call to a fixed phone. If the level of the FTR accounts for a reasonably large proportion of a Service Provider's cost in offering a call to a fixed number, it is more likely to be sensitive to any movements in the level of the FTRs given the likelihood that such costs would need to be reflected in retail prices (either call prices or other elements of the associated retail service).
- The degree of any differences in the level of termination rates charged between interconnecting Service Providers. For example, where termination rates are asymmetric (for reasons other than underlying cost differences), all other things being equal, interconnecting parties face cost differences in exchanging terminating traffic.
- The degree to which the volume of traffic exchanged between Service Providers is asymmetric, i.e. if one Service Provider purchases more termination from an alternative Service Provider than the alternative Service Provider purchases from it, all things being equal, its price sensitivity, having regard to objective cost differences, may be higher given there are net revenue outflows.

6.61 ComReg takes the preliminary view that, having regard to differences in the relative exchange of termination traffic between individual FSPs, FVCT purchasers could be expected to be somewhat sensitive to FTRs charged by different FSPs. However, FTRs represent only a portion of the overall cost of a retail call (which as shown by the illustrative example in paragraphs 4.90 to 4.92 may be quite a low portion in practice). In such circumstances, the degree of price sensitivity of FVCT purchasers to the level of the FTRs may be relatively limited in practice. The extent to which this is borne out by the evidence from actual negotiations to date is discussed further below.

(iv) Evidence of price-setting behaviour and negotiations between operators

6.62 Eircom publishes its FTRs as part of its RIO. The respective FTRs of each of the alternative FSPs are published in Eircom's STRPL[224].

6.63 As part of the 2011/2012 statutory information requests issued to Service Providers, ComReg sought details of all negotiations that took place regarding

[224] See footnote 151 above for reference to the RIO and STRPL.

the setting of wholesale FTRs since the 2007 Decision. Little material evidence was provided which would indicate any effective exercise of CBP in such FVCT negotiations.

6.64 The price-setting behaviour of FVCT suppliers, as reflected in Eircom's published RIO and STRPL documents, since the 2007 Decision and the extent, if any, to which this is indicative of any CBP is analysed in further detail in the next section below.

Assessment of Effectiveness of CBP in Practice

6.65 In the following paragraphs, ComReg assesses whether there is evidence that a purchaser of FVCT has exercised effective CBP having regard to the factors and range of criteria set out in paragraphs 6.48 to 6.64 above. This assessment will be carried out in two steps:

1. **An assessment of CBP when Eircom is the FVCT supplier**: As part of this analysis, ComReg examines whether or not alternative Service Providers are in a position to exercise sufficient CBP over Eircom to prevent Eircom from acting to an appreciable extent independently of its wholesale customers in its Relevant FVCT Market.

2. **An assessment of CBP when alternative FSPs are the FVCT suppliers**: As part of this analysis, ComReg examines whether or not Eircom is in a position to exercise sufficient CBP over individual alternative FSPs so as to prevent such alternative FSPs from acting to an appreciable extent independently of their wholesale customers in their Relevant FVCT markets.

1) Analysis of whether Eircom has experienced or could experience effective CBP in its Relevant FVCT Market

6.66 In this subsection ComReg considers whether, absent regulation, there would be sufficient CBP exerted by any alternative Service Providers to prevent Eircom from acting to an appreciable extent independently of its wholesale customers in its own Relevant FVCT market over the timeframe of this market analysis.

(i) Size of the buyer and its relative importance to the seller

6.67 If an alternative FSP decided to stop terminating calls to Eircom this would then damage their own subscribers as they would no longer be ensured end-to-end interconnectivity with Eircom's large base of subscribers. In view of the need to ensure that their retail subscribers can avail of network externalities[225] and make and receive calls to and from Eircom's large established base of retail subscribers, it is likely that alternative FSPs would be reluctant not to

[225] Network externalities occur when, as the number of users on a network increases, the value of that network to other users increases.

terminate calls to and from Eircom's network as a possible retaliatory mechanism for any high FTRs proposed by Eircom.

6.68 As noted in paragraph 6.55 above, it is possible that newer-entrant FSPs would find it more important to ensure that they had obtained interconnection to other more established Service Providers that have a significant customer base. In the knowledge of this, the relative bargaining power of larger networks vis-à-vis new-entrant FSPs could potentially be enhanced.

6.69 Taking account *inter alia* of information provided in response to the 2011/2012 statutory information requests, **[✂….**

] it is unlikely that any one Service Provider could be of sufficient importance to Eircom to sufficiently constrain its ability to delay or impede FVCT access or to set FTRs above an efficient level absent regulation.

6.70 Furthermore, as Eircom is a vertically integrated operator with both wholesale and retail operations, it is likely to be in a position to trade off the risk of losing upstream revenues with certain FVCT purchasers (who may also be its rivals in downstream markets), against the possibility of higher profits being gained downstream due to these downstream rivals potentially have a more restricted or higher cost retail service (due to an inability to call Eircom's subscribers or to only be able to do so at an inefficiently high price).

6.71 ComReg is, therefore, of the preliminary view that Eircom's ability to delay or impede access or to set FTRs at an inefficiently high level would not be constrained to an appreciable extent by any individual buyer of its FVCT service.

(ii) <u>Credible alternative sources of FVCT supply for the buyer</u>

6.72 ComReg has examined whether an alternative Service Provider could credibly threaten not to buy FVCT from Eircom. This threat would be most credible where there would be no (or only minimal) disturbances to outgoing (and incoming) connections for the FVCT purchaser and its customers.

6.73 In reality it is unlikely that an alternative Service Provider could credibly cease interconnection with Eircom. Eircom originates and terminates a greater proportion of total fixed voice traffic than any other FSP (as noted in paragraph 3.3 above), so it is likely that an alternative Service Provider would experience greater disturbance to its customers than Eircom would. It is considered unlikely that alternative Service Providers could credibly cut off interconnection with Eircom in the event of its FTRs being set above efficient cost.

6.74 Multiple networks coexist and these networks need to connect to facilitate off-net calling. This means that Service Providers are often unable to provide a full service unless they purchase FVCT from other Service Providers. Both alternative FSPs and MSPs would likely face pressure from their own customers if they discovered they were not able to make calls to all FSP networks. This would be particularly true in respect of the networks of larger Service Providers such as Eircom.

6.75 Eircom's ubiquitous access network implies that alternative Service Providers are unlikely to be able to credibly threaten to rely solely on interconnection with other FVCT suppliers. While indirect interconnection to Eircom's network *via* third-party transit providers with established interconnects might somewhat constrain Eircom's ability to refuse or delay interconnection to such FVCT purchasers, it would not however necessarily constrain Eircom's ability and incentives as the FVCT supplier to set FTRs above an efficient level for those third-party transit providers absent regulation, which would in turn presumably be passed through (indirectly) to relevant FVCT purchasers.

6.76 Accordingly, ComReg's preliminary conclusion is that neither alternative FSPs nor MSPs could credibly threaten not to purchase from/interconnect with Eircom for FVCT services and would be unlikely to attempt to exercise CBP in this way.

(iii) The price sensitivity of the buyer

6.77 As noted above, given that FTRs account for only a portion of the overall cost of a retail call, the degree of price sensitivity of FVCT purchasers to the level of the FTRs may be somewhat limited in practice.

6.78 Furthermore, as their retail subscribers would have a general expectation of end-to-end connectivity with all available networks, including Eircom's large installed base of users, any price sensitivity on the part of the FVCT purchasers is likely to be constrained by the need to build a fully comprehensive retail offer which meets the general expectation of interoperability and accessibility to other networks.

(iv) Evidence of price-setting behaviour and negotiations between operators

6.79 Eircom is distinct from the other Service Providers in that Eircom's FTRs have been subject to price regulation pursuant to the 2007 Decision. As such, it has been constrained through the presence of regulation when negotiating in respect of the level at which it sets its FTRs.

6.80 Eircom's FTRs have been reduced on a number of occasions since the 2007 Decision as a result of regulatory obligations imposed by ComReg in that decision, rather than necessarily as a result of CBP being exercised by alternative Service Providers over Eircom.

6.81 Accordingly, an examination of Eircom's price-setting behaviour would not be a useful means of assessing the nature of any CBP exercised over it to date. ComReg has instead analysed above the credibility of the ways in which alternative Service Providers could potentially exert CBP over Eircom if *ex ante* regulation were removed.

Preliminary Conclusion on whether Eircom faces effective CBP

6.82 Based on the analytical framework as outlined above, it is unlikely that any alternative Service Provider would, absent regulation, be capable of exercising a material constraint on Eircom's ability to impede effective FVCT access or to set its FTRs above what would constitute a competitive market outcome.

6.83 ComReg is of the preliminary view that, in the absence of regulation, alternative Service Providers would lack credible outside options to purchasing FVCT from Eircom. This is reinforced by the fact that Eircom still originates and terminates the majority of fixed voice traffic in the State and the need for Service Providers to build comprehensive retail offers ensuring end-to-end connectivity for subscribers.

2) Analysis of whether alternative FSPs have experienced or could experience effective CBP in their relevant FVCT markets

6.84 In this subsection ComReg considers whether any alternative FSPs would face a sufficient degree of CBP which could prevent them acting to an appreciable extent independently of their wholesale customers in their Relevant FVCT Markets.

(i) Size of the buyer and its relative importance to the seller

6.85 In terms of important wholesale customers, Eircom can be distinguished from other Service Providers because it is the largest supplier of retail calls services at a fixed location in Ireland with its traffic accounting for almost 52% of fixed retail voice traffic as of Q1 2012[226] and it is thus the largest potential interconnect partner. Eircom is furthermore an important buyer of FVCT on behalf of other networks (due also to its capacity as a provider of transit services). **[✂….**

]. It would be important for any new FSP to have an agreement with any originating Service Provider of significant size, in this case Eircom, so that their customers can make and receive calls to and from Eircom's large installed base of subscribers.

6.86 While Eircom is clearly a very important wholesale customer to all FVCT suppliers, the extent to which it can credibly threaten to pursue alternative sources of FVCT when sending calls to subscribers of other FSPs (even considerably smaller FSPs) is questionable and is discussed further in the next section below. The availability of alternative sources of supply is a key factor in understanding the extent of Eircom's ability, as the most important FVCT customer, to effectively constrain the level of FTRs set by other FSPs absent regulation.

6.87 ComReg's preliminary view is that Eircom is likely to be an important buyer for an FVCT supplier but that it is essential for all originating operators, including

[226] See paragraph 3.3 above.

Eircom, to provide their customers with the ability to make calls to all other Service Providers, fixed or mobile.

6.88 Arising from this assessment of Eircom as the largest purchaser of FVCT, the remainder of the assessment below specifically considers the extent to which Eircom has previously, or could potentially, exert sufficient CBP such as to appreciably constrain the ability of alternative FSPs to set FTRs above efficient cost. Paragraphs 6.100 to 6.117 below in particular assess the pricing behaviour of the alternative FSPs since the 2007 Decision.

(ii) <u>Credible alternative sources of FVCT supply for the buyer</u>

6.89 In respect of an option not to purchase, ComReg has considered whether Eircom could credibly threaten not to buy FVCT from a particular FSP. This threat would be more credible where there would be no disturbances to outgoing connections for the FVCT purchaser (Eircom in this instance) and its retail customers. In theory, Eircom, because it has a larger subscriber base, could potentially manage more easily without interconnection to the other FSPs. As noted in paragraph 3.3 above, Eircom accounts for a greater proportion of total fixed voice call traffic than any other FSP and so it is likely that an alternative FSP would experience greater disturbance in respect of its customers than Eircom would in return. **[✂….**

]

6.90 Multiple networks coexist and these networks need to connect to facilitate off-net calling. This means that Service Providers are often not able to provide a full service unless they purchase FVCT (either directly or indirectly) from other networks. Eircom would likely face pressure from its own retail customers if they discovered they were not able to make calls to specific networks. This is particularly true of the more established FSPs as, the more subscribers held by a particular FSP, the greater the disturbance Eircom's subscribers would experience in the event that Eircom chose not to purchase FVCT or to delay renewal of an FVCT agreement with such an FSP. Such disruptions to the end user experience and associated reputational effects render the threat of Eircom ceasing its purchase of FVCT from certain FSPs less credible.

6.91 ComReg's preliminary conclusion is that Eircom would be unlikely to credibly threaten not to purchase and would thus be unlikely to exercise its CBP in this way.

6.92 In theory, Eircom's buyer power could also be enhanced if there was the possibility that it could leverage from other markets in which it operates, by developing obstruction strategies in other markets on which it is dominant.

6.93 However, these strategies are not currently open to Eircom. Since Eircom is regulated for the provision of services in other areas, its ability to restrict access to regulated wholesale inputs in other markets is curtailed and is not likely to provide Eircom with significant bargaining strength in the FVCT negotiations.

6.94 In a situation absent SMP regulation, Eircom could potentially retaliate by raising its own FTRs. However, all Service Providers, irrespective of their SMP status have a general regulatory requirement to interconnect in order to ensure end-to-end interconnectivity and interoperability of service where economically and technically feasible. Furthermore, the European Commission clarified in its 2005 veto decision[227] regarding the German NRA's proposal not to designate 53 alternative FSPs with SMP that, from a methodological viewpoint, it is not appropriate to exclude regulatory obligations that exist independently of an SMP finding on the market under consideration but that can have an impact on the SMP finding on the market under consideration. In that case, the European Commission noted that any existing/proposed SMP regulation on the Relevant FVCT Market of the incumbent FSP, together with any other regulatory obligation imposed on a market other than the one for which the SMP assessment is being conducted, must be taken into account when carrying out the competition assessment for the alternative FSPs. Hence, taking into account the proposed range of regulatory obligations for Eircom's Relevant FVCT Market over the period of this market review, Eircom would not be able to credibly retaliate in its FVCT negotiations with other suppliers by threatening not to interconnect and/or by raising its own FTRs.

6.95 In addition, the scope for any such retaliatory behaviour to materialise in the case of smaller or new-entrant Service Providers is also considered to be diminished by their commercial need to obtain access from a range of FVCT suppliers in order to build a viable retail offer with sufficient connectivity for consumers.

6.96 ComReg is of the preliminary view that potential retaliatory mechanisms such as refusing to interconnect, refusing to buy termination and/or increasing FTRs are not likely to be sufficiently credible in the Relevant FVCT Markets as to effectively constrain the FVCT suppliers over the period of this market review. As such, ComReg is of the preliminary view that the commercial and regulatory environment supports the argument that Eircom has insufficient CBP to off-set the ability of alternative FSPs to price independently in their Relevant FVCT Markets.

[227] For example, in its first round review of the fixed termination markets (case DE/2005/0144) the German NRA considered that 53 alternative FSPs did not have SMP for FVCT on their respective networks, despite their 100% market share. In the NRA's view, the fixed incumbent Deutsche Telekom AG had countervailing buyer power which did not allow the alternative FSPs to behave independently to an appreciable extent. The European Commission concluded, however, that the evidence provided by the German NRA did not support its finding of an absence of SMP for each alternative FSP and therefore vetoed the NRA's notified draft measures relating to the 53 alternative FSPs. In a subsequent notification (case DE/2005/0239) the German NRA designated all alternative FSPs with SMP on the market for call termination on their individual networks. This SMP finding has been confirmed again in recent notifications - in case DE/2008/0843 where the German NRA proposed to find 58 FSPs with SMP in their Relevant FVCT Markets and case DE/2012/1359 where it again proposed to find 57 FSPs with SMP.

(iii) ***The price sensitivity of the buyer***

6.97 As noted above, given that FTRs account for only a portion of the overall cost of a retail call, the degree of price sensitivity of FVCT purchasers to the level of the FTRs may be somewhat limited in practice.

6.98 Furthermore, as their retail subscribers would have a general expectation of end-to-end connectivity with all available networks, any price sensitivity on the part of the FVCT purchasers, Eircom in this instance, is likely to be constrained by the need to build a fully comprehensive retail offer which meets the general end user expectation of interoperability and availability.

6.99 The extent to which any FVCT price sensitivity has manifested or is likely to mainfest in a concrete impact on the price-setting behaviour of the relevant parties is considered further below from the evidence of actual price-setting behaviour to date.

(iv) ***Evidence of price-setting behaviour and negotiations between operators***

6.100 The objective of this sub-section is to examine actual FTRs charged by each of the alternative FSPs identified as Relevant FVCT Markets in Section 5 in order to determine whether such FSPs are able to behave, to an appreciable extent, independently of their wholesale customers.

6.101 The data submitted by Service Providers pursuant to ComReg's 2011/2012 statutory information requests provided little material evidence of any effective exercise of CBP in negotiations over FTRs since the 2007 Decision.

6.102 The development and extent of CBP in a market over time may be observed by reference to historical pricing trends. In an SMP assessment context, the ability of an FSP to determine its pricing behaviour, to an appreciable extent, independently of its wholesale customers and consumers may be suggestive (but not necessarily determinative in itself) of SMP when considered alongside other factors. In view of this, ComReg has examined the trends in the FTR pricing behaviour of FSPs since the 2007 Decision.

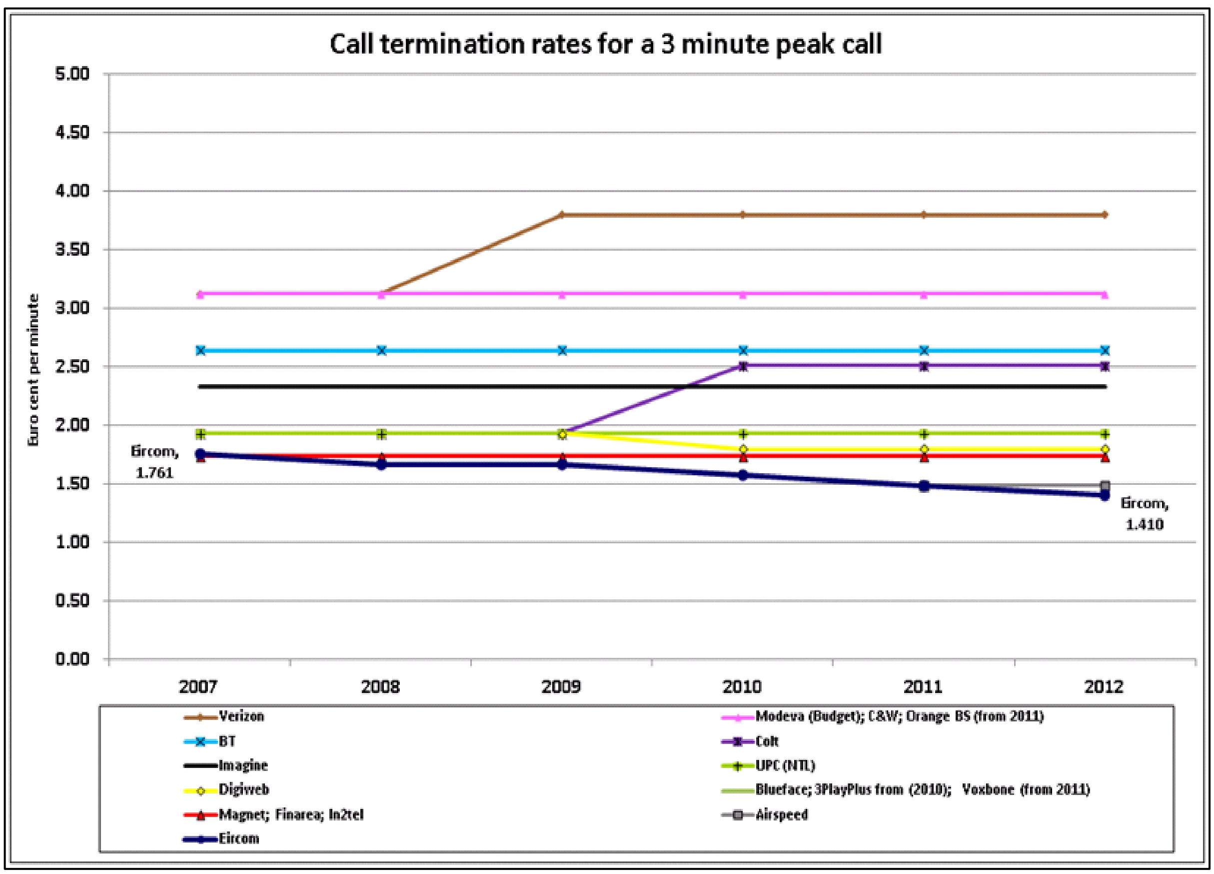
6.103 Figures 21 and 22 below set out the movement in individual FSPs' FTRs over the period since 2007[228]. When comparing FTRs for a representative call, any such comparison should be approached with caution due to a fixed per-call charge element being included by some FSPs (including Eircom) but not by all FSPs, in addition to the usual per-minute termination fee which is applied by all FSPs. A more complete picture of relative FTRs can therefore be illustrated by a comparison of such overall charges across a number of call durations. An

[228] Please note that, while Magrathea Telecommunications has an FTR published in Eircom's STRPL, this is only listed as being effective from 01/09/2012 and it has not yet commenced wholesale activity. Magrathea Telecommunications' FTRs are not therefore presented in the Figures representing pricing trends over time but are discussed further in paragraph 6.114 below. Per Eircom's STRPL as of August 2012, Magrathea Telecommunications' FTRs were listed as 1.04 cent per min peak/ 0.52 cent per min off peak/ 0.41 cent per min weekend.

OECD note[229] which reports average call durations across a number of countries by call type for the purposes of constructing representative telecommunications price baskets indicates that averaging across day/evening/weekend and across the countries considered would yield a general (non-weighted) range for fixed voice calls to other (local/national) fixed numbers of approximately 2.4 to 6.1 minutes in duration. Drawing on insights from this indicative OECD range, it is thus proposed to compare overall wholesale FTRs applied by all relevant FSPs for fixed voice calls under two scenarios – for a 3-minute peak call and for a 6-minute peak call respectively.

6.104 In cases where an FSP charges a fixed fee per call (i.e. a per-call fee) as well as per-minute charge, this fixed per-call fee is included in addition to the per-minute fee in the calculated cost of a 3 and 6-minute peak call. It should also be noted that Eircom's FTRs charged at primary level are taken for the purposes of comparing the FTRs charged by Eircom and the other FSPs respectively. The data used in the graphs below are based on data published in Eircom's RIO and its STRPL.

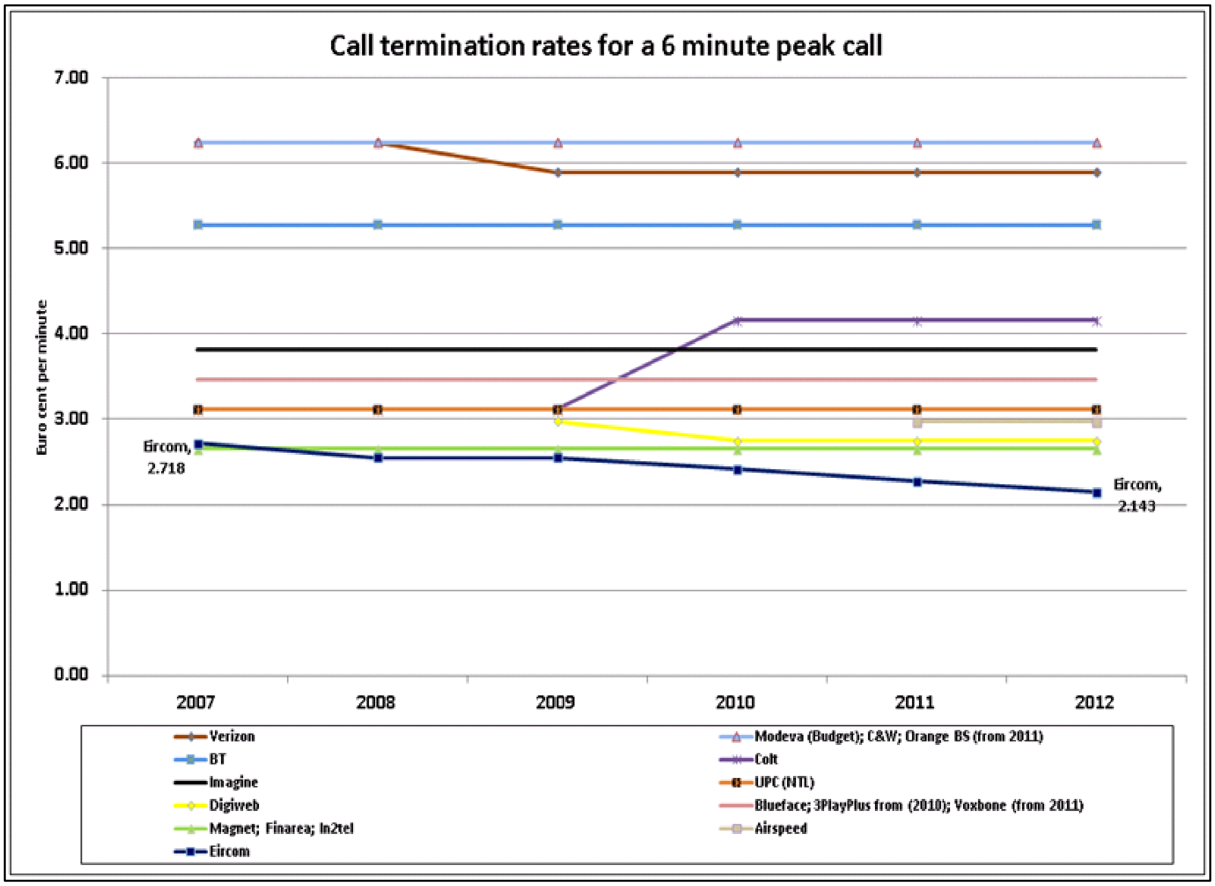
Figure 21: **FTR Pricing for a 3-minute peak call from 2007 to present (expressed in cent)**



Source: Eircom's RIO and STRPL

[229] OECD Working Party on Communication Infrastructures and Services Policy, "Revision of the Methodology for Constructing Telecommunication Price Baskets", 18 March 2010.

Figure 22: **FTR Pricing for a 6-minute peak call from 2007 to present (expressed in cent)**



Source: Eircom's RIO and STRPL

6.105 Table 3 below shows the relative movement in each individual FSP's FTRs over the period since 2007.

Table 3: % Change in FTRs between 2007 to present

FSP	% Change in FTRs (3 minute call)	% Change in FTRs (6 minute call)
Verizon	21.66%	-5.56%
Modeva (Budget)	0%	0%
Cable & Wireless	0%	0%
Orange Business Services	0%	0%
BT Ireland	0%	0%
Colt	30.14%	33.62%
Imagine	0%	0%
UPC (NTL)	0%	0%
Digiweb	-6.84%	-7.85%
Blue Face	0%	0%
3Play Plus	0%	0%

Voxbone	0%	0%
Magnet	0%	0%
Finarea	0%	0%
In2tel	0%	0%
Airspeed	0%	0%
Eircom	-19.93%	-21.16%

Source: Eircom's RIO and STRPL

6.106 The following points should be borne in mind when interpreting the FTR trends in respect of **Eircom, BT Ireland, UPC**[230]**, Verizon, Colt, and Magnet Networks,** i.e. the FSPs which were the subject of the 2007 Decision[231]:

(a) Eircom has been subject to a regulatory price control obligation since the 2007 Decision and the FTR changes above should be considered in this context, in particular:

- In the 2007 Decision, ComReg obliged Eircom to set cost-orientated FTRs based on a forward-looking long run incremental cost ('**FL-LRIC**') pricing model.
- Following ComReg's 2007 Decision, Eircom reduced its FTRs in April 2010, January 2011 and in July 2012[232].

(b) BT Ireland, Verizon, UPC, Colt, Smart Telecom (now part of Digiweb) and Magnet Networks were found to have SMP in the 2007 Decision. However, price control obligations were deferred for these FSPs due to certain thresholds not being met[233]. None of these alternative FSPs has to date been subject to wholesale price control regulation. Hence FTRs have been determined commercially as follows:

- In April 2009, Verizon decreased its varying (per minute) charges, but introduced a fixed (per call) charge. As a result, the total charge for the short duration calls increased while the charge for long duration calls decreased as is evident from Table 3. It can be seen from Table 4 below, however, that Verizon's FTRs are still significantly higher than

[230] See footnote 19 above.

[231] Smart Telecom was also subject to the 2007 Decision but has been since acquired by Digiweb (see footnote 31) and is thus considered as part of the assessment of Digiweb for the purposes of this Consultation Paper.

[232] ComReg Information Notice No 10/14: Reduction of Call Origination and Call Termination Rates by Eircom, 19 February 2010. ComReg Information Notice No 11/99: Reduction of Call Origination and Call Termination rates by Eircom, 15 December 2011.

[233] See paragraphs 8.81 to 8.85 below. In its comments on the draft measure, the European Commission (in case IE/2007/0701 - see footnote 240 below) noted that *"[alternative network operators] are able to charge termination rates significantly above the rates of Eircom and that in general the level of fixed termination rates in Ireland seems to be high",* and called on ComReg to impose a price control obligation also on these alternative FSPs at the time of the 2007 Decision.

Eircom's cost-oriented FTRs (currently in excess of 160% for both a 3 and 6 minute peak call).

- In June 2010, Colt increased the prices for both varying and fixed elements of its FTRs, thus resulting in higher overall prices charged to other Service Providers.
- The other FSPs previously covered by the 2007 Decision have not changed their FTRs since 2007.

6.107 **Blue Face, Modeva (Budget Telecom), Cable & Wireless, Finarea, Imagine Group Telecom, In2tel** were not defined as Relevant FVCT Markets or designated with SMP at the time of the 2007 Decision (see pages 18 and 19 of the 2007 FVCT Consultation). Thus, price control obligations were not imposed on them. These FSPs have not changed their FTRs since the date of implementation.

6.108 **Digiweb, 3Play Plus, Equant Network Systems (trading as Orange Business Services), Airspeed Telecom, Voxbone and Magrathea Telecommunications** are relatively new entrants and were not providing FVCT services at the time of the 2007 Decision. Hence, none of these FSPs has to date been subject to price control regulations.

- In November 2009 Digiweb decreased the prices for both varying and fixed elements of its FTRs, thus resulting in lower overall FTRs although still notably higher (currently 28% higher for both a 3 and 6-minute peak call – see Table 11 below) than Eircom's current cost-oriented FTRs.
- The other FSPs have not changed their FTRs since the date of implementation.

6.109 In assessing whether an FSP has SMP, and noting the preliminary view reached in Section 5 that there are no actual or potential competitors in the Relevant FVCT Markets, ComReg considers how FVCT may be priced absent SMP regulatory controls and whether resultant FTRs would approximate those which would arise in a competitive market by virtue of strong CBP. In the case of Eircom this is a difficult task as Eircom's FTRs have been set in the presence of regulation. In the case of the other FSPs providing FVCT which have not be subject to *ex ante* price controls to date, it is possible that they may have perceived a potential threat of regulation in their FTR-setting behaviour. Nevertheless, in the context of trying to understand the extent to which any CBP could or would be exercised in the Relevant FVCT Markets absent regulation, ComReg has considered trends in the alternative FSPs' pricing behaviour since the 2007 Market Review.

6.110 Tables 4 to 16 below compare the FTRs of the alternative FSPs for a 3 and 6-minute peak call respectively with the FTRs of Eircom which has been the only FSP subject to *ex ante* price controls to date. As for Tables 2 and 3, the source of this pricing information is Eircom's published RIO and STRPL.

Table 4: % Difference in Verizon's FTRs compared to Eircom's FTRs

Verizon – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	77%	87%	128%	141%	156%	169%
% above Eircom (6 minute call)	130%	145%	131%	144%	160%	175%

Table 5: % Difference in Modeva's (Budget's) and Cable & Wireless' FTRs compared to Eircom's FTRs

Modeva (Budget), Cable & Wireless – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	77%	87%	87%	98%	110%	122%
% above Eircom (6 minute call)	130%	145%	145%	159%	175%	192%

Table 6: % Difference in Orange Business Services' FTRs compared to Eircom's FTRs

Orange Business Services – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	N/A	N/A	N/A	N/A	110%	122%
% above Eircom (6 minute call)	N/A	N/A	N/A	N/A	175%	192%

Table 7: % Difference in BT's FTRs compared to Eircom's FTRs

BT – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	50%	58%	58%	67%	78%	87%
% above Eircom (6 minute call)	94%	107%	107%	119%	132%	146%

Table 8: % Difference in Colt's FTRs compared to Eircom's FTRs

Colt – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	10%	16%	16%	59%	69%	78%
% above Eircom (6 minute call)	15%	22%	22%	72%	83%	94%

Table 9: % Difference in Imagine's FTRs compared to Eircom's FTRs

Imagine – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	32%	40%	40%	48%	57%	65%
% above Eircom (6 minute call)	40%	49%	49%	58%	68%	78%

Table 10: % Difference in UPC's (NTL's) FTRs compared to Eircom's FTRs

UPC (NTL) – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	10%	16%	16%	22%	30%	37%
% above Eircom (6 minute call)	15%	22%	22%	29%	37%	45%

Table 11: % Difference in Digiweb's FTRs compared to Eircom's FTRs

Digiweb – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	N/A	N/A	16%	14%	21%	28%
% above Eircom (6 minute call)	N/A	N/A	17%	14%	21%	28%

Table 12: % Difference in Blue Face's FTRs compared to Eircom's FTRs

Blue Face – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	-1%	4%	4%	10%	17%	23%
% above Eircom (6 minute call)	28%	36%	36%	44%	53%	62%

Table 13: % Difference in 3Play Plus's FTRs compared to Eircom's FTRs

3PlayPlus – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	N/A	N/A	N/A	10%	17%	23%
% above Eircom (6 minute call)	N/A	N/A	N/A	44%	53%	62%

Table 14: % Difference in Voxbone's FTRs compared to Eircom's FTRs

Voxbone – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	N/A	N/A	N/A	N/A	17%	23%
% above Eircom (6 minute call)	N/A	N/A	N/A	N/A	53%	62%

Table 15: % Difference in Magnet's, Finarea's and In2tel's FTRs compared to Eircom's FTRs

Magnet, Finarea, In2tel – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	-1%	4%	4%	10%	17%	23%
% above Eircom (6 minute call)	-2%	4%	4%	10%	17%	24%

Table 16: % Difference in Airspeed's FTRs compared to Eircom's FTRs

Airspeed – FTR Differences						
	2007	2008	2009	2010	2011	Current
% above Eircom (3 minute call)	N/A	N/A	N/A	N/A	0%	5%
% above Eircom (6 minute call)	N/A	N/A	N/A	N/A	0%	39%

Source for Tables 4 to 16: Eircom's RIO and STRPL

6.111 Tables 4, 7, 8, 10 and 15 show that the difference between FTRs charged by the alternative FSPs designated with SMP in the 2007 Decision (but were not subsequently subject to *ex ante* price controls) and FTRs charged by Eircom (which is the only FSP currently subject to *ex ante* price controls) has widened since 2007. The FTRs of these alternative FSPs are currently on average between 23% and 169% higher than Eircom's FTRs for a 3-minute peak call. As noted in paragraphs 6.79 and 6.80, Eircom is the only FSP that has been subject to *ex ante* price control and it has reduced its FTRs three times since ComReg's 2007 Decision. None of the other FSPs designated with SMP in 2007 have significantly decreased their FTRs since the 2007 Decision. Colt increased its FTRs, thus considerably increasing the difference between its FTRs and those charged by Eircom. Verizon decreased its varying (per-minute) charges, but introduced a fixed (per-call) charge which resulted in higher total FTRs for the short duration call and lower total FTRs for the long duration call modelled above (albeit both still significantly in excess of Eircom's FTRs for the same call durations).

6.112 It is ComReg's preliminary view that the historical pricing behaviour of BT Ireland, Verizon, UPC, Colt and Magnet Networks is suggestive that they have the power to behave, to an appreciable extent, independently of their wholesale customers when setting their FTRs.

6.113 All other FSPs (Blue Face, Modeva, Cable & Wireless, Finarea, Imagine, In2com (trading as In2tel), Digiweb, 3Play Plus, Equant Network Systems (trading as Orange Business Services), Airspeed Telecom, Voxbone) with published FTRs have generally not changed their initial FTRs. The only exception is Digiweb which reduced its FTRs in 2009. However, as Digiweb has not made further reductions to its FTRs, the difference between their FTRs and the FTRs charged by Eircom has increased and is currently significant at 28% for both a 3 and 6-minute peak call.

6.114 Magrathea Telecommunications is the latest FVCT supplier to have its FTRs published in Eircom's STRPL. Although it has not yet commenced wholesale activity, it has plans to do so over the forthcoming six-month period. It has set its FTRs (currently listed in Eircom's STRPL) at a level similar to the FTRs currently charged by Modeva, Cable & Wireless and Equant Network Systems (trading as Orange Business Services) (see Tables 5 and 6 above). As a result, the differences between Magrathea Telecommunications' and Eircom's FTRs are also similar to the differences between the FTRs of the aforementioned FSPs and those of Eircom (i.e. with the FTRs of these alternative FSPs currently in excess of 120% higher than Eircom's for both a 3 and 6 minute peak call).

6.115 Hence, it is ComReg's preliminary view that the historical and recent pricing behaviour of all other FSPs with published FTRs and which have not been subject to *ex ante* price controls to date is suggestive that they have the power to behave, to an appreciable extent, independently of all other FSPs and their relevant wholesale customers, including Eircom, when setting their FTRs.

6.116 In general, Tables 4 to 16 show that some new-entrant FSPs set their FTRs at a level that is initially similar to Eircom's FTRs when entering the Relevant FVCT Market. However, as their FTRs are not currently subject to price control, there is no tendency for these FTRs to be reduced towards an efficient cost-orientated level in the years following their entrance to the market. Thus, the difference between FTRs charged by FSPs not subject to price control and FTRs charged by Eircom is increasing over time.

6.117 The analysis in paragraphs 6.100 to 6.116 above shows that there have been wide variations between the FTRs charged by each of the FSPs for calls to fixed geographic numbers since the 2007 Decision. Alternative FSPs have charged (often) substantially higher FTRs than Eircom's regulated FTRs, with the difference frequently increasing over time as Eircom has reduced its cost-oriented FTRs. In light of this analysis and having regard to the definition of the Relevant FVCT Markets (which is based on the scope of each individual FSP's FVCT services), it is ComReg's preliminary view that, absent SMP regulation, all FSPs individually have the power to set their FTRs for calls to fixed numbers, to an appreciable extent, independently of their wholesale customers.

Preliminary Conclusion on whether alternative FSPs face effective CBP

6.118 Based on the analytical framework as outlined above, it is unlikely that even Eircom, as the largest retail provider of voice call services at a fixed location in the State, would be capable of exercising a material constraint on the ability of the alternative FSPs to set their FTRs above efficient cost absent regulation.

6.119 ComReg is of the preliminary view that even Eircom would lack credible outside options to purchasing FVCT from alternative FSPs due to a general end user expectation of end-to-end connectivity with all available networks.

6.120 The review of actual FTR-pricing behaviour since the 2007 Decision, coupled with the economic assessment of other relevant factors influencing the respective bargaining dynamics and positions of the parties on a forward-looking basis, provides strong evidence for a preliminary finding of ineffective CBP in all of the Relevant FVCT Markets of the alternative FSPs for the purposes of the present market review. As noted above, this preliminary finding is also in line with EU experience according to which all NRAs continue to define each individual fixed and mobile network operator as a distinct relevant market for call termination and have also consistently found SMP[234].

SMP Designation

6.121 In this Section 6 and Appendix E, ComReg has considered a wide range of factors to identify whether any FSP enjoys a position of SMP in each of the Relevant FVCT Markets identified in paragraph 5.128. These factors have included

- existing competition in the Relevant FVCT Markets;
- potential competition in the Relevant FVCT Markets; and

[234] European Commission, 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 ('**Communication on Market Reviews'**), COM(2010) 271 final, 1.6.2010, page 7. See also European Commisssion, Accompanying document to the Communication on Market Reviews, SEC(2010) 659, 1.6.10, page 11.

See also discussion in footnote 227 above regarding the European Commission veto decision in the case of a 2005 notification whereby the German NRA had proposed not to find alternative FSPs with SMP in their Relevant FVCT Markets. In its latest review in case DE/2012/1359, the German NRA proposed to find 57 FSPs with SMP in their Relevant FVCT Markets.

- the strength of any Countervailing Buyer Power

6.122 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.

6.123 On the basis of its assessment, ComReg's preliminary view is that each of the Relevant FVCT Markets is not effectively competitive and the FSP operating in each Relevant FVCT Market, as identified below, should be designated as having SMP:

- Wholesale FVCT supplied by Eircom Limited
- Wholesale FVCT supplied by Imagine Communications Group Limited
- Wholesale FVCT supplied by Blue Face Limited to fixed numbers
- Wholesale FVCT supplied by BT Communications Ireland Limited
- Wholesale FVCT supplied by Cable & Wireless (Ireland) Limited
- Wholesale FVCT supplied by Colt Technology Services Limited
- Wholesale FVCT supplied by Digiweb Limited[235]
- Wholesale FVCT supplied by Magnet Networks Limited
- Wholesale FVCT supplied by UPC Communications Ireland Limited
- Wholesale FVCT supplied by Verizon Ireland Limited
- Wholesale FVCT supplied by In2com Limited
- Wholesale FVCT supplied by Voxbone SA
- Wholesale FVCT supplied by Airspeed Communications Limited
- Wholesale FVCT supplied by Equant Network Systems Limited
- Wholesale FVCT supplied by Finarea SA
- Wholesale FVCT supplied by Modeva Networks
- Wholesale FVCT supplied by 3Play Plus Limited
- Wholesale FVCT supplied by Magrathea Telecommunications Limited

[235] For the avoidance of doubt and in line with footnote 31 this includes wholesale FVCT supplied by Digiweb Limted and any undertaking which it owns or controls and any undertaking which owns or controls it. The listed party also includes its successors, affiliates and assigns. As Digiweb has acquired control over Smart Telecom, Digiweb is deemed to include inter alia Smart Telecom which was previously covered by the 2007 Decision. See: http://media.digiweb.ie/quick-facts/

6.124 Having established this, ComReg now goes on to consider competition problems in the Relevant FVCT Markets.

Q. 8. Do you agree with ComReg's assessment of SMP and the associated SMP designations above? 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 views.

7 Competition Problems and Impacts on Competition and Consumers

Overview

7.1 In this section ComReg seeks to identify those competition problems which, absent regulation, could potentially arise in the relevant FVCT Markets and, having done so, ComReg then goes on in Section 8 to consider the imposition of appropriate remedies in order to address such identified competition issues.

7.2 In Section 5 ComReg identified 18 separate Relevant FVCT Markets. In Section 6, ComReg set out its view that in accordance with Regulation 27(4) of the Framework Regulations, none of the Relevant FVCT Markets is effectively competitive and has proposed to designate 18 separate FSPs as having SMP, thereby meaning that each such FSP has the ability to act independently of its competitors and its customers.

7.3 In accordance with Regulation 27(4) of the Framework Regulations, where an undertaking is designated as having SMP on a relevant market, ComReg is required to impose on that undertaking such of the obligations (or remedies) set out in Regulations 9 to 13 of the Access Regulations as ComReg considers appropriate.

7.4 As noted in the European Commission's Explanatory Note to the 2007 Recommendation, the underlying purpose of the *ex ante* regulatory framework is to deal with predictable competition problems that have their origin in structural factors in the industry. For example, the finding of an absence of effective competition in the relevant FVCT Markets indicates the potential for competition problems to arise over the review period in question, thereby justifying the imposition of *ex ante* regulation. In the absence of regulation in the Relevant FVCT Market, a dominant undertaking 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.

7.5 ComReg would note that it is neither necessary to catalogue examples of actual abuse, nor to provide exhaustive examples of potential abuse. Rather, ComReg notes that the purpose of *ex ante* regulation is to prevent the possibility of abuses materialising given that FSPs have been identified on a preliminary basis with SMP in the Relevant FVCT Markets, and thus have both the ability and incentives to engage in exploitative and exclusionary behaviour to the detriment of competition and end-users.

Types of Competition Problems

7.6 In determining what form of *ex ante* regulatory remedies are warranted in the Relevant FVCT Markets, ComReg has carried out an assessment of potential competition problems that are likely to arise, assuming SMP regulation is absent and taking account of the structure and characteristics of the Relevant FVCT Markets (and adjacent markets).

7.7 There are a number of types of competition problems which may arise involving conduct by an SMP undertaking that is aimed at:

- exploiting customers or consumers by virtue of its SMP position in the Relevant FVCT Market;
- leveraging its market power into adjacent vertically and/or horizontally related markets by engaging in exclusionary practices.

7.8 In considering the types of competition problems which could arise, ComReg has also been guided by experience in the markets, as well as by the particular structure of the markets in question which was outlined in Sections 5 and 6.[236]

Exploitative practices

Risk of Excessive Pricing – All 18 FSPs, including Eircom and the 17 Alternative FSPs

7.9 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. It is ComReg's preliminary view that all FSPs having SMP in the Relevant FVCT Markets would have the ability and incentives to engage in exploitative practices, such as excessive pricing.

7.10 According to EU competition case law, excessive pricing refers to a situation where the prices charged by a dominant undertaking are not closely related to the value of the relevant service to the consumer and/or the cost of producing or providing the relative service[237]. In its 2009 Termination Rates Recommendation, the European Commission also noted that in case of call termination "*excessive pricing is the main competition concern of regulatory authorities*". High termination prices are ultimately recovered through higher call charges for end-users. The 2009 Termination Rates Recommendation notes further that:

> *Termination markets represent a situation of two-way access where both interconnecting operators are presumed to benefit from the arrangement but, as these operators are also in competition with each other for subscribers, termination rates can have important strategic and competitive implications. Where termination rates are*

[236] Although it is not necessary *per se* to demonstrate actual abuse, examples of competition problems which have previously arisen, even in the presence of existing regulation, can help ground the analysis in actual experience.

[237] Case C 27/76 United Brands v. Commission [1978] ECR 207, [1978] 1 CMLR 429, para. 250. In United Brands the Court of Justice of the European Union held that: "… *charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied would be… an abuse*".

set above efficient costs, this creates substantial transfers between fixed and mobile markets and consumers. In addition, in markets where operators have asymmetric market shares, this can result in significant payments from smaller to larger competitors.

7.11 Accordingly, a key concern behind the 2009 Termination Rates Recommendation is that *"[s]ignificant divergences in the regulatory treatment of fixed and mobile termination rates create fundamental competitive distortions"* and the European Commission underlines the EU-wide importance of regulating fixed and mobile termination rates effectively and in a consistent manner

7.12 The Relevant FVCT Markets are characterised by 100% market share, an absence of existing competition, high and non-transitory barriers to entry associated with control over infrastructure not easily replicated, little or no scope for potential competition and insufficient CBP. Thus, there is insufficient pressure to constrain an FSP from behaving, to an appreciable extent, independently of its competitors and customers in its FVCT pricing behaviour. Therefore, in the absence of regulation, it is ComReg's preliminary view that each FSP with SMP would have an ability to charge excessive prices for its termination services in its own Relevant FVCT Market.

7.13 The ability for the FSPs to charge excessive prices is derived largely from the high and non-transitory barriers to entry associated with control over resources[238] not easily replicated, little or no scope for potential competition and insufficient countervailing buyer power over the timeframe of the review.

7.14 In addition, the FSPs have incentives to maximise profits through charging excessive prices. Additional strategic benefits would also be accrued from excessive prices because the terminating FSPs' wholesale customers are also their competitors in retail calls markets. Thus, charging high prices for FVCT could also restrict competition by raising rivals' costs in downstream calls markets, thereby enabling the terminating FSPs' retail arms to gain market share and profits at the expense of their rivals. This possibility is considered further in the section dealing with exclusionary practices below.

7.15 To address the potential for excessive pricing in the Relevant FVCT Markets, ComReg considers that *ex ante* regulation is required. ComReg considers that *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[239], 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 FVCT Markets, which are

[238] As number ranges are allocated to individual FSPs, replicating an FSP's network would not alleviate the competition bottleneck associated with termination of calls to specific numbers.

[239] This includes reasons associated with the complexity and time involved in resolving such issues *ex post*, along with the competitive harm that could occur in the interim. Excessive pricing cases also require a detailed knowledge of the cost structures and levels of the dominant firm.

characterised by an absence of actual or potential competition, 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. Furthermore, it would not be conducive with contributing to a consistent and coherent pan-European regulatory enivironment, as foreseen by the European Commission in paragraphs 7.10 and 7.11 above. The 2009 Termination Rates Recommendation further notes (recital 7) that *“in the light of the ability and incentives of terminating operators to raise prices substantially above cost, cost orientation is considered the most appropriate intervention to address this concern over the medium term”.*

7.16 As noted earlier in paragraph 6.106, the FTRs of Eircom are currently regulated whereas the FTRs of the other alternative FSPs have not been regulated to date. Similarly, no access obligation has been imposed on the alternative FSPs to date. ComReg’s analysis has however indicated that each of the proposed FSPs with SMP has the ability and incentive to engage in excessive pricing absent regulation. ComReg thus sees no objective reason to distinguish its approach for alternative FSPs from the approach which applies to Eircom, particularly given the same exploitative competition problem has been identified in each case. This is reinforced by the European Commission’s comments on the 2007 Decision that appropriate access and price control remedies should have been imposed on all FSPs[240]. Furthermore, the European Commission has reiterated these views in numerous comments and serious doubts letters, including a serious doubts letter to the Latvian NRA in March 2012 where it noted - *“Every termination market is likely to be characterised by similar competition problems i.e. incentives to refuse to provide access and to charge excessive* prices” and *”the different treatment of operators having monopoly positions in the respective termination markets, which are characterised by the same competition problems…. does not appear to be compatible with EU law”*[241].

7.17 The analysis in paragraphs 6.100 to 6.117 furthermore shows that there have been wide variations between the FTRs charged by each of the FSPs since the 2007 Decision. Non-regulated FSPs have charged (often) substantially higher FTRs than Eircom’s regulated FTRs, with the difference increasing over time as Eircom has reduced its cost-oriented FTRs.

[240] Case IE/2007/0701: Call termination on individual public telephone networks provided at a fixed location in Ireland - Comments pursuant to Article 7(3) of Directive 2002/21/EC.

[241] See Commission Decision concerning Case LV/2012/1296 (referenced in footnote 223 above).

7.18 ComReg therefore considers that obligations of access[242], transparency, non discrimination and price control[243] are justified for all FSPs to ensure appropriate FTRs are set at levels that mimic what a competitive price would be, and that there is no unjustified variation in the FTRs that are charged to different wholesale customers.

7.19 As noted in paragraph 1.24 above, the FTRs and MTRs Consultation Paper has considered the appropriate methodology for applying FVCT price control obligations and further proposes to determine the maximum FTRs of those 7 FSPs designated as having SMP arising from the 2007 Decision. As will be further discussed in paragraphs 8.86 to 8.106 below, the draft principles elaborated in the FTRs and MTRs Consultation Paper are also provisionally considered to apply to all FSPs provisionally designated as having SMP in this current market review. To that end respondents to this Consultation Paper, and in particular those 11 FSPs not previously designated with SMP by the 2007 Decision, may also respond to the FTRs and MTRs Consultation Paper, only insofar as it relates to FTRs, until the closing date for responses set out in paragraph 1.26 above. The interrelationship between this current Consultation Paper and the FTRs and MTRs Consultation Paper respectively is further clarified by paragraphs 8.86 to 8.106 below.

Risk of Inefficiency/Inertia - All 18 FSPs, including Eircom and the 17 Alternative FSPs

7.20 A firm with SMP in a relevant market may also, by virtue of the lack of effective competitive pressure in that market, 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[244].

7.21 In terms of any concerns regarding exploitative behaviour associated with inefficiency/inertia in the provisioning of FVCT, it is recognised that the network used to provide FVCT is also generally that used to deliver retail services. Hence, the degree of competition in the retail market and the extent to which this drives cost efficiency on the network overall should also presumably impact on the cost efficiency of inputs used to deliver wholesale termination. Notwithstanding this, ComReg proposes to monitor any possible concerns with inefficiency/interia over the timeframe of this market review. Furthermore, it is

[242] Paragraphs 8.22 to 8.26 explain further why it is now proposed to apply the same access obligation on all FSPs.

[243] Paragraphs 8.95 to 8.104 explain further why it is now proposed to apply the same price control to all FSPs.

[244] For example, in *Merci* Convenzionali *Porto di Genova v. Siderurgica Gabrielli* the refusal of dock workers (who had a monopoly for the loading and discharging of cargo on behalf of third parties in the port of Genoa) to use modern technology for the unloading of vessels meant that operations were more expensive than they would otherwise be. This failure to use new technology was found to constitute an abuse of dominance under competition law (Article 102(2)(b) of the TFEU). [See Case C-179/90 [1991] ECR I-5889].

recognised that, absent regulation, retail competitive distortions resulting from FTRs set above efficient cost could over time also contribute to a degree of inefficiency/inertia and costlier methods of production at both wholesale and retail levels.

Vertical and Horizontal Leveraging/Exclusionary Practices

7.22 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. In such circumstances, the SMP operator may attempt to transfer (leverage) its market power to such horizontally or vertically related markets. This could enable the SMP operator to strengthen its position in those related markets and potentially also reinforce its existing market power in the SMP market in question.

7.23 Given the close relationship between the Relevant FVCT Markets and other relevant upstream (e.g. CO and Transit[245]) and downstream (e.g. Wholesale SV services[246] and Retail Calls) markets, competition problems with both vertical and horizontal leveraging are likely. Horizontal leveraging arises where an operator with SMP at one level in the production or distribution chain engages in exclusionary or other conduct which aims to extend that market power into closely related markets at a similar level in the value chain. Vertical leveraging arises where a vertically integrated operator has SMP at one level in the production or distribution chain and can potentially use this market power to affect competitive conditions in downstream (and potentially competitive) markets in which it is also active. Both types of behaviour may raise rivals' costs, reduce competitive pressures on related wholesale/retail services and enable the SMP FSPs to extract additional revenues. This could also have the effect of protecting/reinforcing market power in the SMP market in question (defensive leveraging), although in view of the high and non-transitory entry barriers and resulting low threat of entry in the Relevant FVCT Markets, defensive leveraging may be less of a concern.

7.24 As is clear from Sections 5 and 6, originating Service Providers require effective access to FVCT to enable their retail customers to contact subscribers of all other FSPs thereby providing them with a full service offering. In addition, as noted in Sections 5 and 6, there is currently no effective alternative to terminating on the specific fixed number on which the Called Party is located. Therefore, a terminating FSP controls an important input for downstream retail

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[245] For example, as noted in paragraph 5.4 above, while this Consultation Paper is concerned with the provision of FVCT services, these services can form part of a set of complementary wholesale interconnection inputs, also including wholesale CO and Transit services, used to support end-to-end provision of retail voice calls to end-users at a fixed location. See footnote 151 above for further details of the current regulatory status of these markets. For the purpose of this discussion, the three interconnection markets underlying the carriage of a call (CO, Transit, FVCT) are deemed to be at a similar (horizontal) level in the production or value chain.

[246] See footnote 34 for further description of Wholesale SV services.

markets, giving it significant scope and ability to influence competitive conditions on those downstream markets. In this case, ComReg must therefore consider whether, absent regulation, SMP providers of FVCT would have the ability and incentives to leverage market power into: (a) any adjacent wholesale markets related to the provision of retail voice calls, e.g. Transit, and/or (b) downstream wholesale and/or retail voice markets (which are located downstream of the Relevant FVCT Markets), e.g Wholesale SV and/or Retail Calls services.

Risk of Leveraging - Eircom

7.25 As the majority of calls terminate on Eircom's network, and it historically has a relatively strong position on downstream retail calls markets, the ability and incentives to engage in vertical leveraging and any consequential competition impacts would seem particularly strong in the case of Eircom[247]. In view of its position in a number of key input markets (Eircom is significiantly active across a number of (horizontally) related wholesale interconnection services markets, e.g. CO, Transit and FVCT), its provisioning of downstream wholesale end-to-end (Wholesale SV) services, as well as its established position in the downstream retail calls markets, Eircom has the ability and incentives to impede downstream competitors through price and/or non-price means. It could thus potentially use its SMP in some of those upstream input markets to leverage its market power both horizontally into adjacent wholesale input markets, and/or vertically into downstream markets.

7.26 Examples of non-price vertical leveraging could involve restricting and/or delaying access to the key FVCT input and any relevant associated facilities to downstream competitors in attempt to extract excessive FTRs and/or dampen the competitive conditions in retail calls markets. Any raising of rivals' cost and related distortion of, or reduction in, competition in these retail markets could result in harm to consumers, potentially in the form of higher prices, lower output/sales, reduced quality or consumer choice as well as further delaying investment and entry into upstream wholesale markets.

7.27 A refusal to deal/denial of access to FVCT 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 access to FVCT or associated facilities (e.g. in the case of new FVCT products/features such as the introduction of VoIP), and/or seeking unreasonable terms and conditions associated with such access. It could also include unwarranted withdrawal of access already granted. As noted in the CBP section, while indirect interconnection to Eircom's network *via* third-party transit providers with established interconnects might somewhat constrain

[247] The "vertical arithmetic" approach provides a framework for assessing incentives to foreclose (upstream or downstream). This effectively involves looking at the trade-offs in a strategy of foreclosure between the cost of any lost wholesale profits due to the foreclosure of downstream rivals against the benefit of higher downstream profits due to rivals' customers now purchasing from the SMP operator, possibly at a higher price.

Eircom's ability to refuse or delay interconnection to FVCT purchasers, it would not however necessarily constrain Eircom's ability and incentives as the FVCT supplier to set FTRs above an efficient level for those third-party transit providers absent regulation, which would in turn presumably be passed through (indirectly) to all FVCT purchasers still impacting on their ability to compete in downstream markets. Furthermore, the availability of transit services does not solve the problem of a denial of, or delayed, access. As noted by the European Commission in its expression of serious doubts to the Latvian NRA, in the event that direct interconnection is impeded, access seekers to the FVCT service in question would be forced to interconnect indirectly bearing additional costs resulting from transit services[248].

7.28 Absent regulation in the Relevant FVCT Markets, other possible competition problems may arise with respect to the discriminatory use of, or withholding of, information and discrimination on quality and pricing parameters. In this regard, in order to facilitate interconnection with the FSP with SMP and ensure access to FVCT, purchasers of FVCT must also provide information to the (SMP) FSP on matters such as their own network configuration and/or call traffic patterns. In these situations, the FSP may have the power to use such information about downstream competitors' networks and/or traffic patterns in the design of their own retail services. SMP FSPs may also discriminate in the quality treatment of a competitor's traffic terminating with the SMP FSP relative to the SMP operator's treatment of its own on-net traffic. Information asymmetries may also apply to future planning. For example, changes by Eircom to its network topography such as migration to VoIP traffic switching/routing may have significant implications for Service Providers using FVCT and a lack of information and associated uncertainty may impact on their downstream operations.

7.29 Exclusionary conduct may also be apparent in the use of other pricing behaviour. A vertically integrated operator such as Eircom which provides a wholesale input on which other operators rely to compete in downstream markets coupled with its own significant presence in downstream markets could price in such a way as to impede effective downstream competition. This would be due to an insufficient margin between the upstream and downstream prices, i.e. a margin squeeze or insufficient economic space may exist. For example, absent regulation, the level of the FTR charged by an FSP to FVCT wholesale customers may be such that the margin between the FTR charged to those wholesale customers and the FSP's retail price for a call may, having regard to objective cost differences, be insufficient to cover the downstream retail costs faced by efficient retail competitors[249].

[248] See the European Commission's serious doubts and BEREC's opinion in case LV/2012/1296 referred to in footnote 223 above concerning non-imposition of an access obligation in MVCT markets. The BEREC opinion noted that indirect interconnection may raise the costs of access and thus transit services are not a substitute for the availability of direct interconnection.

[249] As stated in the Explanatory Note to the 2007 Recommendation, for the assessment of a margin squeeze it is irrelevant whether both wholesale and retail prices are regulated or only one of the

7.30 As regards Eircom's position across several horizontally related markets, Eircom could have the ability and incentives to set an insufficient economic space between its relative pricing of FVCT sold on a standalone basis and FVCT packaged with adjacent inputs such as Transit services (i.e. tandem and double-tandem termination)[250]. A squeeze in Eircom's relative pricing of standalone FVCT and FVCT packaged with Transit could prevent an efficient competitor relying on standalone FVCT from profitably replicating Eircom's packaged FVCT/Transit (i.e. tandem and double-tandem termination) offer. An insufficient economic space between standalone and packaged FVCT inputs could consequently impede competition in the horizontally adjacent market of Transit and deter further network investment (potentially delaying entry into other key input markets such as the CO market).

7.31 Eircom could also use its integrated position at horizontal and vertical levels of the supply chain to undermine infrastructure investments that could potentially pose a longer-term competitive risk to its business. In its 2011 Decision amending the price control and withdrawing and further specifying the transparency obligations of the 2007 Decision[251], ComReg's view was that, absent regulation, Eircom would have the ability and incentive to price key inputs at successive levels of the value chain in such a way that could dissuade market participants from engaging in efficient infrastructural investments in interconnection. This could be achieved, for example, through setting an insufficient space between the relative prices for FVCT when sold on a stand-alone basis to interconnected operators and FVCT when sold as part of an (end-to-end) Wholesale SV package to non-interconnected operators. In this regard, the 2011 Decision notes the following:

> *"ComReg believes that it would be possible for Eircom, because of its scale and because of the legacy advantage of incumbency, to price call origination and call termination within its provision of Wholesale SV at a level that could unfairly impact on interconnected OAOs. OAOs that have made infrastructure investment in interconnection to avail of the applicable cost oriented rates, such as lower primary rates, associated with that level of interconnection might not be able to compete profitably over the medium to long term".*

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two. The relevant questions in this context are (i) whether the spread between wholesale and retail prices cover the costs of the dominant firm and (ii) whether the dominant firm is free to avoid the margin squeeze on its own initiative.

[250] As noted in footnote 151, a consultation will issue also in H2 2012 on whether the Transit market remains susceptible to ex-ante regulation. However, the above concerns regarding potential leveraging apply regardless of whether or not the Transit market is subject to *ex ante* regulation on a forward-looking basis as, for the purposes of this Consultation Paper, these concerns stem from Eircom's position of SMP in its Relevant FVCT Market. In particular, it relates to its ability to package complementary interconnection services in such a way as to squeeze those access seekers which rely on Eircom's FVCT inputs when offering competing packages of complementary interconnection services.

[251] See footnote 34 above.

Risk of Leveraging - The 17 Alternative FSPs

7.32 While smaller or new-entrant FSPs are more likely to have greater incentives to interconnect with the more established networks, alternative FSPs may still have incentives to engage in discriminatory tactics as a means of extracting an excessive termination tariff as part of those negotiations. As noted in the CBP section above, by virtue of their control over access to their subscribers' fixed numbers, non-regulated FSPs have charged (often substantially) higher FTRs than Eircom's regulated FTRs, with the difference increasing over time as Eircom has reduced its cost-oriented FTRs. It is conceivable that such alternative FSPs might invoke delaying tactics such as protracted negotiations in respect of the provision/renewal of access to FVCT or associated facilities with a view to extracting an FTR which is above what would otherwise arise in a competitive market outcome.

7.33 While it is recognised that a new entrant or smaller FSP would want to maximise its returns by offering its subscribers comprehensive end-to-end connectivity with all other established Service Providers, the risk remains that delayed or ineffective access by any of the FSPs with SMP could still raise rivals' costs and contribute to enhanced barriers to entry in the retail market for new entrants with fewer subscribers. Any raising of rivals' cost and related distortion of, or reduction in, competition in these retail markets could result in harm to consumers, potentially in the form of higher prices, lower output/sales, and reduced quality or consumer choice. While, as noted in the 2007 Decision, there may be less incentive for new entrant or smaller FSPs to deny access in relation to the more established Service Providers with a larger customer base, there could still be an incentive for smaller FSPs to deny access to other small-scale Service Providers[252]. Alternative FSPs with SMP in FVCT might also potentially have the ability and incentives to discriminate/refuse the supply of FVCT to operators of a comparable size and/or potential new entrants in the downstream markets[253]. Thus, the alternative FSPs also have the ability and incentives to impede downstream competitors through price (e.g. excessive and/or discriminatory pricing) and/or non-price means (e.g. delaying negotiations or by not facilitating calls from the customers of rival Service Providers which may be relatively new entrants in the calls markets). In line with recent European Commission guidance, ComReg takes a forward-looking perspective to assessing the scope for alternative FSPs to deny or delay FVCT access to new entrants or to FSPs of a comparable size and notes that such opportunities could arise over the period of the current market review. This risk

[252] See case LV/2012/1296 referenced in footnote 223 above.

[253] See BEREC opinion in case LV/2012/1296 referenced in footnote 223 above.

may become even more pronounced over the period of the present market review where alternative FSPs become more established on retail markets[254].

7.34 Further to the above risk of price and non-price leveraging strategies, ComReg considers that obligations relating to access, transparency, non-discrimination and price control are appropriate also in the case of the alternative FSPs.

7.35 ComReg's preliminary analysis has indicated that each of the FSPs in the Relevant FVCT Markets has SMP. ComReg's analysis furthermore suggests that each FSP, as a vertically-integrated undertaking, would have the ability and incentive to engage in price and non-price leveraging strategies through using its control over FVCT inputs to raise rivals' costs in related downstream markets. Any such raising of entry barriers/lessening of competition in downstream markets would ultimately be to the detriment of consumers in terms of higher prices and lower choice and innovation. Under these circumstances, robust obligations of access, transparency, non-discrimination, and price control are justified.

7.36 At the time of the 2007 Decision, in addition to not imposing an access obligation, ComReg also imposed a delayed price control obligation subject to a trigger mechanism for late entrants in recognition of their initially less efficient economies of scale and scope and early stage of market development. In this respect, the European Commission's Explanatory Note to the 2009 Recommendation on Termination Rates notes that rewarding an operator for its smaller size can give inappropriate investment signals and risks promoting inefficient entry. The Explanatory Note states further (page 19) that economies of scale would not seem an appropriate argument for asymmetric price controls in the case of FSPs:

> *"As regards the extent to which new entrants might be expected to have higher unit costs than incumbents, it has been argued that this consideration is more relevant for mobile than for fixed operators. Fixed operators have the opportunity to build their networks in a particular geographic area and focus on higher-density routes. Furthermore, they can lease relevant network services from the incumbent to reduce the fixed costs of network build and thereby reduce the impact of economies of scale".*

7.37 At the time of the 2007 Decision ComReg also noted (page 16) some indications of possible convergence between the alternative FSPs' rates with those of Eircom. In the current Consultation Paper (in paragraphs 6.100 to 6.120 above), however, ComReg has observed significant and persistent variations in the level of FTRs applied by the alternative FSPs, and has noted

[254] At the time of the 2007 Decision, the European Commission was of the view that any general interconnection obligation that might stem from Irish legislation would not resolve swiftly eventual access problems such as delaying tactics compared to a more specific access obligation imposed as a result of a market analysis. Therefore the European Commission invited ComReg to impose effective access obligations also on alternative FSPs. See paragraph 8.20 below.

the gap between alternative FSPs' unregulated FTRs and Eircom's regulated FTRs widening over time as Eircom has reduced its cost-oriented FTRs.

7.38 In view of the foregoing assessment, ComReg thus considers that robust obligations of access, transparency, non-discrimination, and price control are justified to protect against possible exploitative and leveraging/exclusionary behaviour in the case of all SMP FSPs.

7.39 However, mindful of the need to ensure that regulation is still proportionate to the competition problem that has been identified in the current market review, ComReg takes into account the lesser ability of the alternative FSPs (relative to Eircom) to leverage off their position across multiple related markets. In this regard, ComReg proposes to impose a cost accounting and accounting separation obligation only on Eircom (which is also significantly active in the related provision of services such as wholesale CO and Transit) and not on the alternative FSPs at this stage.

7.40 In the case of Eircom, ComReg's preliminary analysis has shown that, in addition to the problems identified for all (SMP) FSPs, Eircom's position across a number of related upstream (e.g. CO and Transit) and downstream (Wholesale SV and Retail Calls) markets confers it with additional ability and incentives to distort competition through its relative pricing of key strategic inputs at upstream and downstream supply levels. Hence additional protection is needed to ensure an appropriate economic space is maintained in Eircom's relative pricing of FVCT and other horizontally and vertically-related input services. In addition to the proposed obligations of access, transparency, non-discrimination and price control, it is thus further proposed to impose obligations of cost accounting and accounting separation on Eircom to address these inter-market competition risks. It is further proposed to maintain some of the obligations previously imposed on Eircom in the 2011 Decision (see Section 8 below).

Impacts of Competition Problems on Competition and Consumers

7.41 Having considered the general type of competition problems which have the potential to occur in the Relevant FVCT Markets in the case of both Eircom and the 17 alternative FSPs, ComReg further discusses the potential impact of such issues on competition and consumers. These impacts are further elaborated in the FTRs and MTRs Consultation Paper.

7.42 In this respect, the 2009 Recommendation on Termination Rates aims to address competition and consumer impacts where it notes:

- Where termination rates are set above efficient costs, substantial transfers between fixed and mobile markets and consumers, and significant payments from smaller to larger competitors can result *(Recital (3) in the 2009 Recommendation on Termination Rates)*;

- High termination rates tend to lead to high retail prices for originating calls and correspondingly lower usage rates, thus decreasing consumer welfare *(Recital (3) in the 2009 Recommendation on Termination Rates)*;
- A lack of harmonisation in the application of cost accounting principles for setting termination rates to date impacts on the regulatory burden on operators active in several countries *(Recital (4) in the 2009 Recommendation on Termination Rates)*.

Impacts on Competition

7.43 Competition concerns in relation to excessive termination charges are not limited to the issue of excess profits (arising from excessive FTRs) for FSPs. As call termination is a situation of *two-way access*, where termination rates are both revenue and an expense for operators, the level of FTRs can have important competitive and distributional implications for those Service Providers which make more outgoing termination payments than they receive. The level and structure of FTRs can also lead to inefficient retail pricing structures which, in turn, can distort consumer choice/demand.

7.44 FTRs above efficient cost can result in substantial financial payments and competitive distortions for Service Providers (and their consumers) with significant (off-net) traffic outflows to the SMP FSPs. For example, FTRs set above an efficient level of costs could have important competitive and distributional impacts for smaller FSPs with large traffic outflows to other more established FSPs. The further FTRs deviate from efficient costs, the larger the financial outflows from such smaller FSPs to their larger, more established rivals. Financial and competitive distortions generated by high inter-operator wholesale payments further implies that consumers as a group will ultimately pay more in terms of reduced competition, innovation and higher prices[255].

Furthermore, where off-net FTRs exceed efficient cost, on-net/off-net retail price discrimination[256] could potentially result. This could lead to increased use of on-net calls to subscribers at a fixed location, as well as consumers being generally deterred from making off-net calls to subscribers at a fixed location due a comparatively higher retail price being applied for such calls[257]. Since

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[255] Section 5.3 of the FTRs and MTRs Consultation Paper sets out the Impacts on Competition in further detail.

[256] While currently it is not a widely observed retail pricing practice in respect of fixed voice services, the potential for on-net/off-net retail price discrimination and associated tariff-mediated network externalities remains, absent regulation.

[257] The pass-through of any wholesale termination profits into lower retail call prices for certain consumers (e.g. on-net calls) is known as a 'waterbed' effect, the magnitude of which is disputed and is further discussed in the MVCT Consultation Paper at paragraph 7.25. However, even if there is full pass-through of termination profits into lower on-net retail prices, the above financial and competitive distortions can still result from the structure of FVCT prices. Depending on the intensity of retail competition and/or the ability to successfully price discriminate at the retail level, FSPs may however decide to retain the excessive profit earned and not cross-subsidise retail services at all.

subscribers to a small network make a larger proportion of off-net calls than subscribers to a large network, the impact of on-net/off-net retail price differentiation is likely to be more pronounced for these networks and their subscribers. Tariff-mediated network externalities stemming from on-net/off-net price differentiation strategies (with high retail off-net call prices being further facilitated by high off-net wholesale termination charges) put smaller networks at a disadvantage while benefitting those FSPs with a larger customer base[258].

FTRs above efficient cost may also reduce the flexibility for retail pricing innovations to occur (such as, in the offering of more inclusive any network minute bundles or unlimited call offerings)[259]. High per-minute termination rates effectively create a floor to retail pricing and tend to make it difficult for Service Providers to offer innovative calling plans due to uncertainty regarding customer take-up.

Impacts on Efficiency

7.45 There are three types of efficiency which are considered from the point of view of maximising economic welfare. These are summarised briefly below and further elaborated in the FTRs and MTRs Consultation Paper.

7.46 Impacts of FVCT on ***allocative efficiency*** (i.e. the promotion of efficient production and consumption decisions), depend on the respective size of network externalities[260] and call externalities[261.] For example, the existence of strong network externalities, on the one hand, might imply FTRs above efficient cost to subsidise initial take-up of voice subscriptions at a fixed location. However, evidence points to take-up of fixed voice services being relatively mature[262]. Furthermore, financial and competitive distortions generated by high inter-operator wholesale payments imply a potential trade-off for consumers arising from any mark-up above the efficient cost of FVCT in in terms of prices and innovation overall.

7.47 Call externalities, on the other hand, recognise that both parties involved in a phone call (i.e. the Calling Party and the Called Party) can derive some utility from the interaction. If this two-sided aspect to calling relationships is not taken into account then externalities can arise, and FTRs set above efficient costs could result in the Calling Party initiating an inefficiently low number of calls

[258] The FTRs and MTRs Consultation Paper and accompanying Analysys Mason Report discusses further the scope for retail price discrimination, with low on-net and high off-net charges, to generate "tariff-mediated externalities" resulting in a competitive advantage for larger Service Providers and a potential reduction in the degree of competition that can be brought to bear by smaller Service Providers.

[259] It is recognised however that retail pricing flexibility is not solely determined by FTRs, but would also be impacted by retail costs and other network costs associated with the provision of the services (such as call origination etc.).

[260] See footnote 225 for a definition of network externalities.

[261] See footnote 97 for a definition of call externalities.

[262] See paragraphs 5.13-5.15 of the FTRs and MTRs Consultation Paper.

from the Called Party's perspective. As recognised in the FTRs and MTRs Consultation Paper, the existence of receiver benefits can have important implications for the way in which FTRs are set to maximise efficiency and overall welfare.

7.48 In terms of ***productive efficiency*** (i.e. whereby firms minimise their total costs with respect to production technology), pricing above efficient cost can also reduce FSPs' incentives to innovate and increase efficiency, as inefficient FTRs are paid for by competitors and, in turn, by their rivals' consumers. It is important to note, however, that cost minimisation incentives also depend on the strength of retail competition. As noted in paragraphs 7.20 to 7.21 above, the network used to provide FVCT is also generally the same as that used to deliver retail services. Hence, the degree of competition in the retail market and the extent to which this drives cost efficiency on the network overall should also presumably impact on the cost efficiency of inputs used to deliver wholesale termination.

7.49 As noted in the FTRs and MTRs Consultation Paper, if the retail market alone does not provide sufficient incentives for efficient service operation, however, low wholesale costs and an FTR based on the efficient cost of FVCT would be likely to provide some encouragement to FSPs to be efficient.

7.50 As to ***dynamic efficiency*** (i.e. the optimal rate of innovation and investment such that productive efficiency improves over time), the European Commission recognises that that efficient investment and innovation should be encouraged sustainably across all telecoms markets e.g. by ensuring FTRs and MTRs do not distort or restrict competition. As noted in the FTRs and MTRs Consultation Paper, if FTRs are set are in line with efficient costs, this would create the correct economic environment for dynamic efficiency as it would lower financial barriers to entry/expansion faced by late entrants with large off-net traffic outflows. Rivalries amongst suppliers would in turn encourage innovation and cost efficiency over time.

7.51 The FTRs and MTRs Consultation Paper also discusses how regulatory stability impacts on Service Providers' incentives to invest and innovate and can thereby impact on dynamic efficiency. As also noted by the European Commission[263], inconsistencies in the methodologies and practices applied when regulating termination rates across the Member States contribute to a lack of transparency and legal uncertainty for the regulated Service Providers. Furthermore, it can increase the regulatory burden of existing operators active on a number of different termination markets across the EU. As a result, Service Providers have to package their services in different ways in order to satisfy diverging regulatory requirements in different Member States. According to the European Commission: *"This can affect operators' incentives to enter certain national markets and thus distort cross-border competition and*

[263] European Commission Staff Working Document accompanying the European Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, Implications for Industry, Competition and Consumers, 9 May 2009.

investment". Hence, a coherent pan-European approach to regulating FVCT is desirable for facilitating efficient investment and entry decisions and overall dynamic efficiency over time.

Preliminary Conclusion on Competition Problems

7.52 In summary, ComReg's preliminary view is that, absent regulation, there is the potential and incentive for an FSP with SMP in the Relevant FVCT 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. 9. Do you agree that the competition problems and the associated impacts on competition and consumers identified are those which could potentially arise in the Relevant FVCT Markets? 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.

8 Remedies

Approach to Specifying and Implementing Remedies

8.1 In Section 7, ComReg identified a range of competition problems and competition or consumer impacts that, absent regulation, could arise in the Relevant FVCT Markets by virtue of an FSP having SMP. In this section, ComReg now goes on to consider the imposition of appropriate and proportionate remedies to mitigate such competition problems.

8.2 In accordance with Regulation 8(1) of the Access Regulations, where an operator is designated as having a position of SMP on a relevant market, ComReg is required to impose on such an operator such of the obligations set out in Regulations 9 to 13 as ComReg considers appropriate. In this regard, the obligations that may be imposed by ComReg on SMP undertakings are those relating to:

(a) Access;

(b) Transparency;

(c) Non-Discrimination;

(d) Price Control and Cost Accounting; and

(c) Accounting Separation.

8.3 In addition, Regulation 8(6) of the Access Regulations provides that any of the above obligations imposed must:

(a) be based on the nature of the problem identified;

(b) be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations[264];

(c) only be imposed following public consultation and notification of the draft measures to the European Commission, BEREC and other NRAs in accordance with Regulation 12 of the Framework Regulations.

8.4 Regulations 12(1) and 12(4) of the Access Regulations also provide statutory criteria that ComReg must take into account before imposing access obligations on an SMP undertaking. These criteria include, *inter alia,* examining the technical and economic viability of using or installing competing facilities; the feasibility of providing access; the initial outlay of investment by the undertaking; and the need to safeguard competition in the long term.

[264] Pursuant to section 12 of the Communications Regulation Acts 2002 to 2011, ComReg's relevant objectives in relation to the provision of electronic communications networks and services are: (i) to promote competition, (ii) to contribute to the development of the internal market, and (iii) to promote the interests of users within the Community. Regulation 16 of the Framework Regulations further specifies ComReg's obligations.

8.5 Regulation 13 (2) and Regulation 13 (3) of the Access Regulations provide that ComReg is also required to take into account (i) the investment made by the SMP operator which ComReg considers relevant and allow such operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project[265]; and (ii) ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits[266].

8.6 The considerations set out in paragraphs 8.2 to 8.5 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 Regulatory Impact Assessment found in Section 9.

8.7 Apart from the above, in considering the imposition of remedies on SMP FSPs, 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];
- 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;
- the European Commission's **2009 Termination Rates Recommendation**[269]
- the European Commission's **2005 Accounting Separation and Cost Accounting Recommendation**[270].

8.8 ComReg sets out below its proposed approach to regulation within the Relevant FVCT Markets.

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[265] Pursuant to Regulation 13(2) of the Access Regulations.

[266] Pursuant to Regulation 13(3) of the Access Regulations.

[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

[269] See footnote 9.

[270] European Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC).

Option of No Regulation

8.9 ComReg has considered whether the option of de-regulation or regulatory forbearance is appropriate in the Relevant FVCT Markets.

8.10 Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated as having SMP. In Section 6, ComReg set out its view that none of the Relevant FVCT markets is effectively competitive (or likely to become effectively competitive within the timeframe covered by this review). In Section 7, ComReg identified a range of competition problems that could occur in these markets, absent regulation.

8.11 In view of this, absent the imposition of any remedies within the Relevant FVCT Markets, it is ComReg's view that such markets would not likely function effectively. For example, in the context of interconnection negotiations between the SMP FSPs and other Service Providers (including other FSPs), access could be denied or effectively refused, (resulting in subscribers of one Service Provider not being able to contact the subscribers of another). Furthermore, FTRs could be set at an excessive or inefficient level (even where commercial agreement on interconnection has been reached).

8.12 It is ComReg's preliminary view that the option of regulatory forbearance in each of the Relevant FVCT Markets is not, therefore, appropriate or justified. The relevant issue to be considered, therefore, relates to what form of regulation is appropriate, in particular, which of the remedies identified in paragraph 8.2 above are appropriate having regard to the particular circumstances of the Relevant FVCT Markets and the associated competition problems. ComReg sets out its preliminary views on these issues below.

Proposed Remedies for the Relevant FVCT Markets

8.13 As noted in the Executive Summary and in paragraph 6.106, Eircom, BT Ireland, Verizon, UPC, Colt, Smart Telecom (now part of Digiweb) and Magnet Networks have been subject to SMP regulation in the Relevant FVCT Markets pursuant to the 2007 Decision and, as a consequence, have been subject to resultant regulatory obligations, specifically:

- in the case of Eircom, obligations in respect of: access to and use of specific network facilities; transparency; non-discrimination; price control and cost accounting; and accounting separation;
- in the case of BT Ireland, Verizon, UPC, Colt, Smart Telecom (now part of Digiweb) and Magnet Networks obligations in respect of: transparency; non-discrimination and price control (with the latter obligation subject to a trigger mechanism).

8.14 The following 11 FSPs - Imagine, Blue Face, Cable & Wireless, Airspeed Telecom, In2com (trading as In2tel), Voxbone, Finarea, Equant Network Systems (trading as Orange Business Services), 3Play Plus, Modeva, Magrathea Telecommunications - have not to date been subject to SMP regulation and are not currently subject to SMP remedies. Digiweb was also not formally designated with SMP in the 2007 Decision. However, Digiweb acquired Smart Telecom in December 2009[271] (which was designated with SMP pursuant to the 2007 Decision). Hence it is not entirely a new SMP designation for Digiweb.

8.15 ComReg sets out below its preliminary views on the imposition of regulatory obligations in each of the Relevant FVCT Markets.

Access Remedies

Overview

8.16 Regulation 12(1) of the Access Regulations provides that ComReg may, in accordance with Regulation 8 of the Access Regulations, impose on an operator obligations to meet reasonable requests for access to, and use of, specific network elements and associated facilities where ComReg considers that the denial of such access, or the imposition by operators of unreasonable terms and conditions having a similar effect, would:

- hinder the emergence of a sustainable competitive retail market,
- would not be in the interests of end-users and
- would otherwise hinder the objectives set out in Section 12 of the Communications Regulation Acts 2002 to 2011.

8.17 Regulation 12(2)(a) to 12(2)(j) and Regulation 12(3) of the Access Regulations provide that ComReg can impose, where appropriate, additional access obligations and may attach conditions covering fairness, reasonableness and timeliness to those proposed access obligations.

8.18 Pursuant to Regulation 12(4) of the Access Regulations, when considering whether to impose obligations referred to in paragraphs (1) and (2) of Regulation 12 and, in particular, when assessing whether such obligations would be proportionate to the objectives set out in Section 12 of the Communications Regulation Acts 2002 to 2011, ComReg has to take the following factors into account:

(a) the technical and economic viability of using or installing competing facilities, in light of the rate of market development, taking into account the nature and type of interconnection and access involved;

(b) the feasibility of providing the access proposed, in relation to the capacity available;

(c) the initial investment by the facility owner, bearing in mind the risks involved in making the investment;

(d) the need to safeguard competition in the long-term;

(e) where appropriate, any relevant intellectual property rights; and

[271] See http://media.digiweb.ie/quick-facts/

(f) the provision of pan-European services.

Existing Access Remedies

8.19 Eircom has a range of access obligations currently imposed upon it by virtue of its existing designation with SMP as set out in the 2007 Decision. These include obligations to:

- negotiate in good faith with undertakings requesting access;
- not withdraw access to facilities already granted and continue to provide such facilities in accordance with existing terms and conditions and specifications;
- meet reasonable requests for access to specified network elements, facilities or both such elements and facilities;
- ensure that all reasonable requests for access are expedited in a fair, reasonable and timely manner;
- grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;
- provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services; and
- interconnect networks or network facilities.

8.20 Alternative FSPs have not, to date, had an obligation to provide access imposed upon them. The six alternative FSPs identified in the 2007 Decision as having SMP[272] did not have any access obligation imposed on them. At the time of the 2007 Decision, the European Commission commented[273] on ComReg's proposal not to impose an access obligation on alternative FSPs. The European Commission was of the view that any general interconnection obligation that might stem from Irish legislation would not swiftly resolve eventual access problems such as delaying tactics compared to a more specific access obligation imposed as a result of a market analysis. Therefore, the European Commission invited ComReg to impose effective access obligations also on alternative FSPs.

8.21 None of the other alternative FSPs[274] currently active in the Relevant FVCT Markets (and not previously subject to the 2007 Decision) has been

[272] BT Ireland, Verizon, UPC, Colt, Smart Telecom and Magnet Networks.

[273] See footnote 240.

[274] Imagine, Blue Face, Cable & Wireless, Digiweb (although its subsidiary Smart Telecom was previously subject to the 2007 Decision), Airspeed Telecom, In2com (trading as In2tel), Voxbone, Finarea, Equant Network Systems (trading as Orange Business Services), 3Play Plus, Modeva, Magrathea Telecommunications.

designated with SMP to date and, consequently none of them has had access (or other) SMP-related obligations imposed upon them.

Proposed Access Remedies

8.22 As identified in Section 6, other undertakings are wholly dependent on having access to FVCT and associated facilities supplied by SMP FSPs in order that that their subscribers can make calls to voice subscribers at a fixed location. In Section 7, ComReg identified that an SMP FSP has the ability and incentive to refuse or effectively refuse to provide interconnection and access to FVCT and associated facilities to its downstream competitors or to provide these services on discriminatory or unreasonable terms and conditions (including in relation to price). In markets such as the Relevant FVCT Markets, it is ComReg's view that there are (and will continue to be over the period intended to be covered by this review) differences in negotiating power[275] between SMP FSPs and buyers of FVCT, particularly given factors such as the absence of credible alternative sources of supply of FVCT.

8.23 A denial of interconnection and access to FVCT and associated facilities, or the imposition of unreasonable terms and conditions having a similar effect, would, in ComReg's view, hinder the emergence of sustainable competitive retail markets in which FSPs and other Service Providers purchasing FVCT compete. Such behaviours concerning actual or constructive denial of access would ultimately be detrimental to the interests of end-users and would also otherwise hinder the objectives set out in Section 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations.

8.24 ComReg notes that smaller or new entrant FSPs providing FVCT (which have lower subscriber numbers or relative traffic flows than other Service Providers) may face fewer incentives (than larger and more established FSPs) to refuse or delay access, principally arising from the need to ensure their subscribers can receive calls from subscribers of other Service Providers to ensure the growth of their subscriber base. However, such smaller or new entrant FSPs may effectively refuse or delay access (by extending negotiations or imposing unreasonable terms and conditions) with a view to extracting an inefficient FTR. In particular they may engage in such behaviour with respect to undertakings of a similar size and/or those with which they are directly competing in the downstream retail market.

8.25 In the above circumstances, absent an obligation to provide access, the matter would fall to be considered by ComReg through its complaint or dispute resolution or compliance functions. Such a process would occur after the fact, take time to resolve[276], be specific to the bilateral circumstances between the

[275] ComReg has considered the impact of CBP in Section 6.

[276] Including time for ComReg to consider the matter, along with possible public consultation and possible notification to the European Commission.

relevant parties and would not thereby contribute to regulatory certainty amongst market players. Such regulatory uncertainty would, as a consequence, be damaging to downstream competition and ultimately consumers. Case-by-case interventions by ComReg would also be inefficient and ineffective in resolving the broader competition problem of denial or delayed access by an SMP FSP. In this regard, it is worth noting that the European Commission has made several comments[277], under Article 7/7a of the Framework Directive, on the imposition by NRAs of SMP-type obligations pursuant to the exercise of dispute resolution functions. Such European Commission decisions clearly highlight the need for effective remedies imposed through a formal market analysis process, including the imposition of access (and other) obligations on all Service Providers found to have SMP.

8.26 ComReg considers that the access obligations set out below should, therefore, be imposed upon all SMP FSPs as these obligations will promote regulatory predictability and ensure that SMP FSPs operating in similar market circumstances are treated, from a regulatory perspective, in an equivalent fashion, thereby contributing to consistency.

8.27 The specific access remedies which ComReg proposes to impose on SMP FSPs are discussed below.

Requirement to provide access to FVCT and Associated Facilities

8.28 ComReg considers that a requirement on the SMP FSPs to provide FVCT access is needed to facilitate competition in downstream markets. ComReg proposes that SMP FSPs will be required to meet all reasonable requests from other undertakings for the provision of access and, in so doing, shall provide, access to FVCT[278] and access to associated facilities necessary to support such FVCT access, irrespective of the underlying technology.

8.29 As part of the above obligations, it is expressly foreseen that Eircom shall provide and grant access to interconnect paths as a form of associated facility to FVCT services and facilities. An interconnect path means the physical transmission connection which allows for the carriage of calls between networks. This obligation is needed to support Eircom's general access obligation because Eircom could potentially impede/raise the costs of effective handover of calls for call termination to fixed numbers on its network and thus undermine the effectiveness of the general access obligation. As Eircom terminates the largest volume of retail voice calls and has ubiquitous network coverage, the provision of interconnection paths by Eircom is required to provide other FSPs with a mechanism for reaching all the points in the Eircom network to which they need to interconnect in order to efficiently use the FVCT

[277] See European Commission serious doubts/comments and BEREC Opinions (where made) on Polish cases PL/2010/1127, PL/2011/1273, PL/2011/1255-1258 and Latvian case LV/2012/1296.

[278] FVCT shall have the meaning as set out in Section 5 of this Consultation Paper and as defined in the Draft Decision Instrument in Appendix C.

services provided by Eircom. As other FSPs do not have the same scale of network, ComReg does not propose to expressly require the 17 alternative FSPs to provide interconnection paths as part of the current market review.

8.30 Different collocation mechanisms exist for Service Providers availing of such interconnection paths as follows:

- In-Building Handover ('**IBH**') which means the connection from the Eircom network to the alternative Service Provider's equipment within the Eircom Exchange, or equivalent facility.
- In-Span Handover ('**ISH**') which means the connection between the Eircom Exchange and the alternative Service Provider's nominated Point of Handover.

  Customer-Sited Handover ('**CSH'**) does not require any infrastructure build by the Service Provider as Eircom builds to the Service Provider's site.

8.31 Recognising the differing levels of infrastructure deployments by Service Providers availing of FVCT, ComReg provisionally considers that all three collocation mechanisms should be made available by Eircom as part of its general obligation to provide interconnect paths. For example, not all Service Providers have sufficient network deployments to avail of IBH or ISH. Conversely, if only CSH were available then larger Service Providers would not be able to take advantage of any deeper infrastructure deployments. The availability of these three specific mechanisms also means that Service Providers can request Access to these Associated Facilities in a manner that ensures they are not required to pay for facilities which are unnecessary for the FVCT service requested. Thus, when availing of Eircom's FVCT service, it is proposed that Service Providers can demand any of the above three collocation mechanisms in order to efficiently implement interconnect paths to Eircom.

8.32 In view of the broader scope of Eircom's access obligations, it is also proposed to expressly provide for Eircom to conclude legally binding Service Level Agreements ('SLAs') with Service Providers availing of such FVCT products and services (including associated facilities) necessary to terminate calls to fixed numbers on Eircom's network.

8.33 ComReg has set out below its consideration of all factors listed in paragraph 8.18 above in respect of the proposed access obligations.

- *Technical and economic viability of using or installing competing facilities*: In Sections 5 and 6, ComReg has identified the Relevant FVCT Markets and set out its preliminary view that existing competition, potential competition and CBP are unlikely to result in effective competition. In light of this, and having regard to the presence of significant barriers to entry in the Relevant FVCT Markets (related to control of infrastructure/resources not easily duplicated), using or installing competing facilities to provide FVCT is not likely to be technically or economically feasible. Each of the FSPs proposed to be designated with SMP (arising from this review) provide or have offered to provide interconnection and access to FVCT (albeit in some cases in the presence of regulation), as well as to associated facilities necessary to ensure end-to-end interoperability of the services. It is therefore technically feasible for these FSPs to provide these services.

- *Feasibility of providing access in relation to capacity available*: Access to FVCT and access to associated facilities are currently provided by FSPs, whether on foot of existing regulatory obligations or commercially, where such obligations do not exist. On a forward-looking basis, ComReg is not aware that there would be any material capacity constraints that would give rise to the SMP FSPs facing material difficulties in meeting the proposed access obligations.

- *The initial investment of the facility owner:* Having regard to Regulation 12(4)(c) and Regulation 13(2) of the Access Regulations[279], ComReg's approach to imposing access remedies is based on principles that, *inter alia*, allow a reasonable rate of return on adequate capital employed, taking into account the risks involved. When applying price control remedies (see paragraphs 8.77 to 8.109), ComReg will be mindful of facilitating the development of effective and sustainable competition to the benefit of consumers without compromising efficient entry and investment decisions of undertakings over time. As noted in Section 6 above, ComReg is also mindful of the role of regulatory transparency and consistency in contributing to a more predictable environment conducive to long-run investment decisions being made.

- *The need to safeguard competition*: In Sections 6 and 7, ComReg has highlighted the impacts on downstream competition and consumers that could arise from SMP FSPs engaging in exploitative or exclusionary behaviours in the Relevant FVCT Markets (absent regulation). These include, *inter alia*, excessive pricing and other behaviours which would give rise to distortions in downstream competition amongst FSPs or between FSPs and MSPs. ComReg considers that imposing access (and other obligations) in the Relevant FVCT Markets will safeguard the long term development of competition in retail markets, to the benefit of consumers.

- *Intellectual property rights:* ComReg's preliminary view is that intellectual property rights are not a significant concern in the context

[279] According to Regulation 13(2) of the Access Regulations "To encourage investments by the operator, including in next generation networks, the Regulator shall, when considering the imposition of obligations under paragraph (1), take into account the investment made by the operator which the Regulator considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project".

of the provision of access to FVCT and access to associated facilities in the Relevant FVCT Markets.

- *Pan-European Services:* ComReg is of the preliminary view that its proposed approach will facilitate the provision of pan-European services since its proposed approach is consistent with the policies of the European Commission and other NRAs. Consistent regulation of FVCT across the EU will help support a seamless provision of pan-European services by allowing Service Providers in other Member States to provide electronic communications services in Ireland. For example, calls originating outside Ireland but destined for an Irish fixed subscriber will require access to FVCT.

8.34 In view of the above, ComReg's preliminary view is that obligations to provide access to FVCT and access to associated facilities are both proportionate and justified. ComReg has considered whether obligations other than those relating to access would in themselves resolve the competition problems identified. For the reasons set out in the discussion of the proposed remedies below, ComReg does not consider this to be the case. The imposition of access obligations on their own also would not resolve issues such as excessive pricing, discrimination (on price or quality grounds) or ensure transparency of terms and conditions of access.

Requirement to negotiate in good faith

8.35 Pursuant to Regulation 12(2)(b) of the Access Regulations, ComReg proposes to impose an obligation on all SMP FSPs to negotiate in good faith with undertakings requesting access to FVCT and access to associated facilities in the Relevant FVCT Markets. Having regard to the competition problems identified in Section 7, ComReg considers this measure to be proportionate and justified in order to ensure that genuine *bona fide* negotiations take place between SMP FSPs and other undertakings in relation to access, particularly given the identified competition problem that SMP FSPs have the ability and incentive to expressly or constructively refuse to provide FVCT to an undertaking requesting access. It will also somewhat address imbalances between the bargaining powers of the respective parties in the negotiation process by reducing incentives to unnecessarily prolong negotiations and will facilitate a more efficient and effective consideration of reasonable requests for access and provision of such access. Overall, an obligation to negotiate in good faith will support the provision of efficient and effective access to FVCT and associated facilities, thereby promoting the development of downstream competition, to the benefit of consumers.

8.36 ComReg also notes that the obligation to negotiate in good faith implies that the responsibility rests with an SMP FSP to demonstrate that its approach to negotiation with undertakings was in good faith and that any unmet access requests can be shown to be unreasonable by reference to objective criteria. In this regard, with respect to access requests to undertakings designated with SMP, recital 19 of the Access Directive states that,:

> *"…such requests should only be refused on the basis of objective criteria such as technical feasibility or the need to maintain network integrity."*

8.37 ComReg, therefore, proposes that should an access request be refused, the objective criteria for refusing same should be provided by the SMP FSP to the requesting undertaking at the time of refusal (see further discussion starting at paragraph 8.43 below). This will also improve regulatory effectiveness and efficiency should any complaint or dispute be raised with ComReg, as it will provide a useful audit trail for compliance-monitoring purposes.

8.38 In ComReg's view, this remedy does not impose any significant additional burden on SMP FSPs beyond that which would normally be expected to occur in circumstances involving fair commercial negotiations between parties.

Requirement not to withdraw access to facilities already granted

8.39 Pursuant to Regulation 12(2)(c) of the Access Regulations, ComReg proposes to impose an obligation on all SMP FSPs not, without the prior approval of ComReg, to withdraw access to facilities already granted. For the avoidance of doubt, this does not mean there are no objectively justified circumstances for withdrawing access, for example, to ensure network integrity and security.

8.40 Having regard to the competition problems identified in Section 7, ComReg has identified that an SMP FSP would have the ability and incentive to delay or refuse access to FVCT and access to associated facilities, resulting in restrictions and/or distortions in competition to the detriment of consumers. As networks develop, this could also result in changes to points of interconnection or types of interconnection by SMP FSPs. ComReg recognises that a balance needs to be struck between the investments of SMP FSPs in providing FVCT and the investments made by buyers of FVCT in availing of it. However, ComReg considers that the proposed remedy, requiring that SMP FSPs seek ComReg's approval prior to any withdrawal of access, will promote regulatory certainty for all parties without unduly restricting investment incentives.

Requirement to grant open access to technical interfaces, protocols and other key technologies

8.41 Pursuant to Regulation 12(2)(e) of the Access Regulations, ComReg proposes to impose an obligation on all SMP FSPs to grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of services. Having regard to the competition problems identified in Section 7, ComReg considers that this remedy is both justified and proportionate in order to ensure that, in the context of the provision of access to FVCT and access to associated facilities, interoperability of networks and services is ensured.

8.42 In so doing, ComReg considers that this remedy will contribute to the development of effective downstream competition to the ultimate benefit of consumers.

Requirements governing fairness, reasonableness and timeliness of access

8.43 Pursuant to Regulation 12(3) of the Access Regulations, ComReg proposes to impose an obligation on all SMP FSPs that access to FVCT and access to associated facilities should be provided in a fair, reasonable and timely manner.

8.44 In this regard, and as noted in paragraphs 8.36 and 8.37 above, ComReg is also proposing to impose an obligation on all SMP FSPs that, where a request for access from an undertaking is refused or only partially met, the objective reasons for such should be provided in detail to the undertaking which has made the request, and to do so in a timely fashion (having regard to the nature of the request).

8.45 The proposed remedies above are intended to address competition problems associated with the potential denial (actual or constructive) of access to FVCT, as well as to minimise the scope for discriminatory treatment of undertakings by ensuring a consistency in the treatment of requests for access.

8.46 ComReg considers that this remedy will contribute to the development of effective downstream competition, to the ultimate benefit of consumers.

> **Q. 10. Do you agree with ComReg's approach to imposing access remedies? 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.**

Proposed Non-Discrimination Remedies

Overview

8.47 As noted in the Access Directive[280], the principle of non-discrimination is designed to ensure that undertakings with market power do not distort competition, in particular, where they are vertically integrated undertakings that supply services to undertakings with whom they compete on downstream markets.

8.48 Regulation 10 of the Access Regulations provides that ComReg can impose non-discrimination remedies in relation to access or interconnection on an undertaking designated with SMP, in particular to ensure it behaves in such a way that it:

- applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services; and

[280] Recital 17 of the Access Directive.

- provides services and information to others under the same conditions and of the same quality as it provides for its own services or those of its subsidiaries or partners.

8.49 Non-discrimination obligations can be standalone, but can also support other obligations such those relating to access, transparency and price control.

Existing non-discrimination remedies

8.50 Eircom currently has an obligation of non-discrimination with respect to the provision of wholesale access products, features and additional associated facilities. In particular, Eircom is required to:

- apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provide services and information to others under the same conditions and of the same quality as Eircom provides for its own services or those of its subsidiaries or partners; and

- ensure that information and services are provided, to undertakings according to timescales, on a basis, and of a quality, which are at least equivalent to those provided by Eircom to its retail arms and its associates.

8.51 Those alternative FSPs designated as having SMP by the 2007 Decision[281] have an obligation to apply similar terms and conditions to undertakings that obtain, or seek to obtain from them, call termination services, products, services and facilities.

8.52 Those alternative FSPs which were not covered by the 2007 Decision[282] currently have no SMP obligations, including no non-discrimination obligations, imposed upon them.

Proposed non-discrimination remedies

8.53 The application of an *ex ante* non-discrimination remedy seeks to prevent a dominant, vertically-integrated operator from engaging in discriminatory (price or non-price) behaviour which would hinder the development of sustainable and effective competition in downstream retail markets. In Section 7, ComReg identified that an SMP FSP has the ability and incentive to engage in such behaviours irrespective of the underlying technology which can impact upon downstream competition and consumers. For example, SMP FSPs could offer different FTRs, terms and conditions and service quality, to different buyers (whether other FSPs or MSPs). Equally so, an SMP FSP could degrade inbound traffic from other undertakings relative to its own terminating traffic. In Section 7, ComReg considered the ability and incentives to engage in such behaviour were particularly strong in the case of Eircom in view of its

[281] See footnote 272 above.

[282] See footnote 274 above.

significant position across a number of related markets. However, as also noted in Section 7 and in paragraph 8.24 above, smaller or new entrant FSPs may effectively impede access with respect to undertakings of a similar size and/or those with which they are directly competing in the downstream retail market.

8.54 As a consequence, ComReg is proposing to require that all SMP FSPs:

(a) apply equivalent conditions, including in respect of FTRs or other charges, in equivalent circumstances to other undertakings requesting or being provided with access (including access to FVCT and associated facilities); and

(b) ensure that access (including access to FVCT and associated facilities) and information are provided to all other undertakings under the same conditions and of the same quality as the SMP FSP provides to itself or to its subsidiaries, affiliates or partners.

8.55 Additionally, for the avoidance of doubt, the non-discrimination obligations above are to apply irrespective of whether or not a specific request for services or information has been made by an undertaking to the relevant SMP FSP. For example, if information or a service is provided by an SMP FSP following a request from one undertaking, the SMP FSP is obliged to offer this to other undertakings, notwithstanding that such other undertakings have not made a request for it. This is to ensure fair treatment of all undertakings. In this regard, it is possible that new forms of interconnection could begin to emerge over the period of this market review (such as IP interconnection), particularly with the development of next generation networks, and ComReg considers that where new forms of interconnection or information in relation to this are provided by an SMP FSP to one undertaking (including by the SMP FSP to itself or to its subsidiaries, affiliates or partners) in respect of FVCT access and associated facilities, the SMP FSP should treat other undertakings in a similar manner.

8.56 ComReg has considered whether the non-discrimination obligations should specifically require the SMP FSP to apply the same FTRs to other undertakings as those applied to self-supplied termination, particularly in light of the potential competition problem of excessive and discriminatory pricing. In the context of the specific circumstances of the Relevant FVCT Markets, it is ComReg's view that this issue is more appropriately and proportionately dealt with in the context of an appropriate price control obligation. In particular, having regard to the need not to unduly fetter retail price competition, where a price control obligation results in the effective alignment of FTRs with the efficient costs of the service in question, then the risks of competition problems arising as a consequence of FTR differences between self-supplied termination and FVCT supplied to other undertakings, and the impact of such FTR differences on downstream competition through any possible differences in on-net or off-net pricing emerging in the future, would appear to be reduced.

8.57 ComReg has also considered whether non-discrimination obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, excessive pricing, constructive denial of access problems or poor service quality issues could still remain in the presence of a non-discrimination obligation.

8.58 ComReg considers that the imposition of the above non-discrimination obligations are both proportionate and justified having regard to the competition problems identified. It is proposed that all currently designated SMP FSPs should have non-discrimination obligations imposed upon them, and it is ComReg's preliminary view that it would not be objectively justified to adopt an alternate approach for the alternative FSPs.

Q. 11. Do you agree with ComReg's approach to imposing non-discrimination remedies? 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.

Proposed Transparency Remedies

Overview

8.59 Regulation 9 of the Access Regulations provides that ComReg may, *inter alia*, specify obligations to ensure transparency in relation to access or interconnection requiring an SMP undertaking to make public specified information such as accounting information, technical specifications, network characteristics, prices, and terms and conditions for supply and use, including any conditions limiting access to or use of services and applications where such conditions are permitted by law.

8.60 Transparency obligations can be standalone but can also support other obligations being imposed and, as evidenced from the above, usually relate to requirements to make specified information publicly available.

Existing transparency remedies

8.61 Eircom is currently subject to transparency obligations whereby it is required to be transparent in relation to interconnection and access. This includes specific obligations on Eircom to:

- publish on its wholesale website, and keep updated, a Reference Interconnect Offer ('RIO') in respect of wholesale access products, features or additional associated facilities;
- ensure that the RIO is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested;

- ensure that the RIO includes a description of the relevant offerings broken down into components according to market needs and a description of the associated terms and conditions, including prices[283];
- ensure that the RIO contains details of the terms and conditions of access in respect of facilities already granted;
- make public such information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices, in respect of wholesale access products, features or additional associated facilities, as specified by ComReg from time to time; and
- comply with the processes developed in accordance with ComReg Decision Notice D10/02[284], including publishing any proposed textual changes to the RIO on its website for the purpose of notifying all interested parties of such changes, with a period of 21 calendar days for comments to be submitted to ComReg and a further period of up to three weeks for ComReg to approve or amend the proposed changes[285].

8.62 The subsequent 2011 Decision further amending the price control obligation and withdrawing and further specifying the transparency obligations of the 2007 Decision specifically requires Eircom to publish detailed documentation on all terms (other than price), conditions, service level agreements, guarantees and other product-related assurances associated with its provision of wholesale CO and FVCT within its Wholesale SV Services[286]. In addition, the requirement to publish minimum price floors for CO and FVCT provided within Wholesale SV Services was removed from the existing transparency obligation established by the 2007 Decision. The 2011 Decision amends the price control obligation to require Eircom to submit this information in confidence to ComReg in order to demonstrate compliance with the obligation not to Margin Squeeze.

8.63 Those alternative FSPs designated as having SMP by the 2007 Decision[287] have an obligation to apply similar terms and conditions to undertakings that

[283] Eircom was also required to continue to publish the call termination schedules, prices, product descriptions and inter-operator process manuals contained in "Core RIO document Version 3.14" (as amended from time to time) and Eircom RIO Price List Version 1.64 (as amended from time to time);

[284] ODTR D10/02, Document 02/55, Decision Notice Eircom's Reference Interconnect Offer, 26 June 2002 ('**the 2002 Decision**').

[285] The 2002 Decision, page 49.

[286] See the 2011 Decision for further details of the "Margin Squeeze" test which concerned the relative pricing by Eircom of its wholesale CO product and wholesale FVCT product sold within its Wholesale SV Service and the relative price of its wholesale CO product and wholesale FVCT product sold on a standalone basis.

[287] See footnote 272 above.

obtain, or seek to obtain from them, call termination services, products, services and facilities. This includes obligations to:

- publish on their websites (or make public in an easily accessible manner where no website exists), their prices and associated terms and conditions (and any amendments thereto) in respect of the relevant wholesale call termination services.
- give a minimum of 21 calendar days notice of a change in their termination rate to other operators.

8.64 Those alternative FSPs which were not covered by the 2007 Decision[288] currently have no transparency obligations imposed upon them.

Proposed transparency remedies

8.65 In Section 7, ComReg identified that an SMP FSP has the ability and incentive to engage in a range of exploitative and exclusionary behaviours which can impact upon downstream competition and consumers. The potential for leveraging of market power into related markets can occur through informational asymmetries, delaying tactics such as protracted negotiations in respect of the provision of access to FVCT or associated facilities and/or seeking unreasonable terms and conditions associated with such access. The ability and incentives to engage in such leveraging behaviour were identified to be particularly strong in the case of Eircom by virtue of its significant position across a number of related markets. However, it was also noted that smaller or new entrant FSPs may effectively impede access with respect to undertakings of a similar size and/or those with which they are directly competing in the downstream retail market.

8.66 A transparency obligation is thus necessary in order to monitor and ensure the effectiveness of any access, non-discrimination, (and other obligations such as price control) as it allows ComReg to monitor the compliance of an SMP FSP's pricing and other behaviour (such as with respect to terms and conditions of use, quality or technical parameters) with non-discrimination and access obligations, and to address potential competition problems relating to price or quality discrimination.

8.67 As noted in the Access Directive[289], transparency of terms and conditions for access and interconnection, including prices, serve to speed-up negotiation, avoid disputes and give confidence to market players that a service is not being provided on discriminatory terms. Openness and transparency of technical interfaces can also be particularly important in ensuring interoperability. Transparency on prices (and changes to them) provides the necessary clarity to buyers of FVCT in order that they can consider impacts on the structure or level of retail prices. Transparency also provides the means to demonstrate that access is provided in a non-discriminatory manner.

[288] See footnote 274 above.

[289] Recital 16 of the Access Directive.

8.68 ComReg considers that all SMP FSPs should be required to comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate effective access to FVCT and promote effective competition in downstream markets.

8.69 In line with the 2011 Decision, ComReg also maintains the view for the period of the present market review that, absent regulation, Eircom would still have the ability and incentive to price key inputs at successive levels of the value chain in such a way that could dissuade efficient infrastructural investments in interconnection. As noted in paragraph 7.31 above, this could be achieved, for example, through setting an insufficient space between the relative prices for FVCT when sold on a stand-alone basis to interconnected operators and FVCT when sold as part of (end-to-end) Wholesale SV Services. The extent to which the application of the proposed price control methodology discussed at paragraphs 8.86 to 8.106 would serve to mitigate this margin squeeze risk in respect of the FVCT component of Eircom's Wholesale SV Service is further set out in paragraphs 8.108 to 8.109 below. Notwithstanding this, ComReg is of the preliminary view that the present transparency obligation should continue to ensure visibility of Eircom's non-price behaviour in respect of the FVCT component of its Wholesale SV Service to help safeguard against possible discrimination on non-price parameters which was also identified as a competition risk in Section 7 above.

8.70 In this regard, ComReg is proposing that, in addition to a general transparency obligation pursuant to Regulation 9 of the Access Regulations, all SMP FSPs should be required to do the following:

(a) to make publicly available and keep updated on its website a RIO which is the standard offer of contract for access to FVCT and associated facilities;

(b) to ensure that the RIO is sufficiently unbundled in order that Service Providers availing of access are not required to pay for services or facilities which are not necessary for the access requested;

(c) to make FTRs publicly available and publish such FTRs in an easily accessible manner on its publicly available website. In so doing, it shall publish a notice of its intention to amend its FTRs not less than 35 calendar days in advance of the date on which any such amendment comes into effect. Such notice shall at least include a statement of the existing FTRs, a description of the proposed new FTRs and the date on which such new FTRs are proposed to come into effect;

(d) to provide directly to undertakings with which it has entered into a contract in respect of access to FVCT and access to associated facilities, written notification of its intention to amend its FTRs. Such written notification is to be provided not less than 35 calendar days in advance of the date on which any such FTR amendment comes into effect. Such notice is also to at least include a statement of the existing FTRs, a description of the proposed new FTRs and the date on which such new FTRs are proposed to come into effect.;

(e) to pre-notify ComReg of its intention to amend its published FTRs, not less than 2 months in advance of the date on which any such amendments come into effect, unless otherwise agreed by ComReg;

8.71 In addition to the above, **Eircom** shall also be required to do the following:

(f) to publish detailed documentation on all terms (other than price), conditions, service level agreements, guarantees and other product-related assurances associated with its provision of call origination and call termination within its Wholesale SV Services (i.e. Eircom shall continue to comply with its transparency obligations in the 2011 Decision); and

(g) comply with the processes developed in accordance with the 2002 Decision to the extent that the obligations contained therein do not conflict with the obligations proposed under this consultation i.e. written notification is to be provided not less than 35 calendar days (as proposed above) rather than allowing a period of 21 calendar days for comments on proposed changes (as contained in the 2002 Decision). While noting that the 2002 Decision (which relates to Eircom's Reference Interconnect Offer) will also be considered in the upcoming market reviews of CO and Transit, ComReg welcomes respondents' views, as part of this consultation, on the continued application of the 2002 Decision to FVCT.

8.72 While three-week (or 21 calendar days) advance notification periods were generally foreseen in the 2002 Decision and the 2007 Decision, ComReg now considers that the 35 calendar day timeframe for advance notification of FTR changes to industry (and 2-month timeframe, unless otherwise agreed, for advance notification of FTR changes to ComReg) is appropriate to ensure FVCT purchasers have sufficient time to amend billing systems that run on a monthly cycle and can therefore avail of the price changes in the next calendar month. It is envisaged that this 35 calendar day timeframe should achieve an appropriate balance between the need for SMP FSPs to be able to make changes speedily, while also recognising the requirements for FVCT purchasers to factor such changes into retail and wholesale pricing decisions and any related billing system changes or developments. In particular, given many FVCT purchasers do so *via* indirect interconnection through third party wholesale transit or carriage arrangements, the wholesale billing systems of such third parties will require amendment to give effect to FTR changes. This may also involve such third parties providing notification to their wholesale customers.

8.73 The above transparency obligations will need to be implemented by SMP FSPs in a manner that is consistent with other obligations such as those relating to access, non-discrimination and price control.

8.74 In view of current notification arrangements (both arising from SMP obligations or commercial practice) in relation to existing FTR publication arrangements, ComReg does not consider that the implementation of the above obligations would place a disproportionate burden on the SMP FSPs. ComReg does recognise that the obligation to publish a RIO require some greater level of implementation than say publication of prices on websites. As Eircom is already subject to RIO obligations, by virtue of the 2007 Decision, the level of incremental burden for it is likely to be relatively contained. Furthermore, Eircom's significant ability and incentives to engage in leveraging behaviour with potentially serious competitive consequences for adjacent markets implies that the level of transparency afforded by a RIO is proportionate and justified by the competition problems identified.

8.75 In the case of the alternative FSPs, the requirement to publish a RIO is also considered to represent the minimum regulatory obligation consistent with their position of SMP and their ability to engage in exploitative and discriminatory behaviour. While the 6 alternative FSPs previously covered by the 2007 Decision were required to publish their prices and terms and conditions of supply on their websites, this would be a completely new obligation for the 11 alternative FSPs not previously covered by the 2007 Decision. At the same time, the FTRs of all FVCT supplier are currently published in Eircom's STRPL. In this regard the level of additional burden for these FSPs to publish future FTR changes in an easily accessible manner on their own publicly available websites would likely be relatively low. Such a requirement to publish FTRs is proportionate and justified to help ensure certainty and transparency in any future interconnect negotiations with such alternative FSPs. Furthermore, since the RIO is effectively the standard offer of contract for access to FVCT and associated facilities, the additional burden involved in publishing this standard contract would also likely be relatively contained. As a proportionate measure, ComReg has furthermore proposed for these 17 alternative FSPs that the RIO be published within 3 months following the effective date of ComReg's decision on the FVCT market analysis to allow such FSPs sufficient time to adapt their publication processes accordingly.

8.76 ComReg has considered whether transparency obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, excessive pricing, discriminatory behaviour (on price or non-price grounds) or denial of access problems would not be capable of being adequately addressed through transparency obligations alone.

Q. 12. Do you agree with ComReg's approach to imposing transparency remedies? 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.

Price Control and Cost Accounting Remedies

Overview

8.77 Regulation 13 of the Access Regulations provides that ComReg may, *inter alia*, impose on an operator obligations relating to cost recovery and price controls. These include obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of access or interconnection in situations where a market analysis indicates that a lack of effective competition means that the operator concerned may sustain prices at an excessively high level or may apply a price squeeze to the detriment of end-users[290].

8.78 In imposing any such obligations, ComReg is also required to:

- take into account the investment made by the SMP operator which ComReg considers relevant and allow such operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project[291].
- ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits[292].

8.79 Based on the above, the purpose of price control and cost accounting obligations are to ensure that prices charged are not excessive (or cause a margin squeeze) and promote efficiency and sustainable retail competition while maximising consumer benefits.

8.80 The European Commission's 2009 Termination Rates Recommendation provides guidance to NRAs regarding the regulatory treatment of FTRs (and MTRs), and ComReg is required to take the utmost account of this when establishing price control remedies.

Regulation to date

8.81 Pursuant to the 2007 Decision, Eircom is currently subject to a price control obligation of cost orientation, as well as to cost accounting obligations.

8.82 The 2011 Decision imposes an additional obligation on Eircom not to apply a Margin Squeeze when supplying wholesale CO and wholesale FVCT as part of a Wholesale SV Service.

8.83 Those alternative FSPs designated as having SMP by the 2007 Decision were allowed a derogation from a specific price control obligation until such time as they reached a 5% share of total direct access paths. Where the alternative FSP did not reach a 5% share of the market within a five-year timeframe, it

[290] Pursuant to Regulation 13(1) of the Access Regulations.

[291] Pursuant to Regulation 13(2) of the Access Regulations.

[292] Pursuant to Regulation 13(3) of the Access Regulations.

was provided that ComReg may, following a consultation, impose price control regulation.

8.84 ComReg has not to date reached a determination as to whether any alternative FSP has in fact reached the 5% threshold referred to in the preceding paragraph and accordingly the FTRs charged by alternative FSPs have not to date been subject to any price control obligations.

8.85 Those alternative FSPs which were not covered by the 2007 Decision currently have no price control or cost accounting obligations imposed upon them as they were not previously designated as SMP operators.

Proposed price control and cost accounting remedies

8.86 In Sections 6[293] and 7, ComReg has identified that SMP FSPs have the ability and incentive to set their prices associated with access to FVCT at an excessive or inefficient level, thereby impacting on downstream competition to the detriment of consumers. In view of this, ComReg considers that the imposition of obligations of price control on all SMP FSPs is justified and proportionate.

8.87 ComReg has also considered whether price control obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, discriminatory behaviour (on price or non-price grounds) or denial of access problems would not be capable of being adequately addressed through such obligations alone.

8.88 ComReg has carried out a separate consultation over the period 28 June 2012 to 4 September 2012 (the FTRs and MTRs Consultation Paper) on the detailed nature and implementation of the proposed price control obligation for Eircom and the 6 alternative FSPs designated as having SMP in the 2007 Decision (see Appendix B and paragraphs 1.24 and 7.19 above).

8.89 As currently drafted, the FTRs and MTRs Consultation Paper does not cover those alternative FSPs which were not subject to the 2007 Decision. However, as part of this current Consultation Paper it is proposed (as further justified below) that all FSPs[294], including Eircom and each of the 17 alternative FSPs, would be subject to the price control obligations set out in this current Consultation Paper and the FTRs and MTRs Consultation Paper.

8.90 Accordingly, the FTRs and MTRs Consultation Paper is included as Appendix B of this current Consultation Paper for those 11 alternative FSPs which were not covered by the initial consultation over the period 28 June 2012 to 4 September 2012. In addition, a further draft Decision Instrument is included as Appendix D (‘**the (extended) Draft FTRs Decision Instrument**’) which specifies the detailed nature and implementation of the price control obligations for all SMP FSPs, including those 11 FSPs not previously covered

[293] See the discussion of CBP in Section 6 for the evolution of FTRs since the 2007 Decision (paragraphs 6.100 to 6.117).

[294] For the avoidance of doubt, this includes all those FSPs listed in paragraph 5.128 above.

by the 2007 Decision and not previously covered by the FTRs and MTRs Consultation Paper published on 28 June 2012. For the avoidance of doubt, the (extended) Draft FTRs Decision Instrument equally applies to the FSPs covered by the 2007 Decision and relies on the updated market analysis contained in this current Consultation Paper.

8.91 In this way, the current Consultation Paper **invites interested parties, and in particular those 11 alternative FSPs not previously covered by the 2007 Decision, to respond to the FTRs and MTRs Consultation Paper (Appendix B) as part of this FVCT Consultation Paper by 17:00 on 15 October 2012, only insofar as the FTRs and MTRs Consultation Paper relates to FTRs. Such parties are also invited to respond to the (extended) Draft FTRs Decision Instrument (Appendix D) by 17:00 on 15 October 2012.**

8.92 For the avoidance of doubt, ComReg intends to proceed, in the first instance, with the current proposal contained in the FTRs and MTRs Consultation Paper, meaning that it proposes initially to adopt a final decision in respect of *only* those FSPs designated as having SMP arising from the 2007 Decision. Consequently, those 7 FSPs should respond to the proposals contained in the FTRs and MTRs Consultation Paper by the deadline for submitting responses to that Paper (i.e. by 4 September 2012).

8.93 In turn, ComReg proposes, following the current FVCT Consultation Paper, and upon reaching a final decision in respect of this FVCT Consultation, to adopt the new SMP decision designating the wider group of 18 FSPs with SMP in the FVCT markets (as set out in Appendix C of this Consultation Paper) and to adopt an accompanying new pricing decision regulating the FTRs charged by those 18 FSPs (as set out in Appendix D of this Consultation Paper).

8.94 As part of the current FVCT Consultation Paper, ComReg will take into account any further submissions received from interested parties in respect of the FTRs and MTRs Consultation Paper insofar as the latter relates to FTRs. However, as this current FVCT Consultation Paper does not raise any new issues to the draft principles elaborated in the FTRs and MTRs Consultation Paper, ComReg welcomes, in particular, submissions from the 11 FSPs not previously designated with SMP in the 2007 Decision.

Price control remedies

8.95 Given the risk of price-related competition problems which ComReg has identified as deriving from an SMP position in the Relevant FVCT Markets, ComReg proposes that each SMP FSP should be subject to a cost-orientation obligation with respect to access to FVCT and associated facilities, the detailed specification of which will be determined through the FTRs and MTRs Consultation Paper. A consistent approach to price control in the form of cost orientation for SMP FSPs will ensure efficient price and investment signals are provided to all market players and, in ComReg's view, does not represent an undue burden in light of the identified problem of excessive pricing and its detrimental impact on retail competition and consumers.

8.96 ComReg also considers that imposing a cost-orientation obligation on all SMP FSPs provides regulatory certainty to each party, as well as to buyers of FVCT who purchase this service from several FSPs. In doing so, it will minimise the scope for disputes or investigations and potentially inefficient case-by-case regulation through dispute resolution or other activities. A consistent and harmonised approach will also promote the provision of pan-European services and minimise the regulatory burden on FSPs, the significant majority of which have operations in other European countries.

8.97 A cost-orientation obligation, once specified in detail, will also reduce the scope for inefficient financial transfers from smaller to larger Service Providers and associated competitive distortions. It will further reduce the scope for undue on-net/off-net price discrimination arising from FTRs above efficient costs, while at the same time continuing to allow retail pricing flexibility. However, as noted in Section 7 above, it is recognised that, while current retail pricing structures for fixed voice services do not widely feature such on-net/off-net price discrimination at present, according to the modified Greenfield approach, ComReg nonetheless recognises this as a potential risk absent regulation.

8.98 While the 2007 Decision proposed a derogation from the price control obligation for alternative FSPs with less than 5% market share of total direct access paths, this proposal for asymmetric treatment of FSPs was made in the context of an initially somewhat more fragmented European approach amongst NRAs to the treatment of economies of scale and scope in termination pricing models. In this respect, the European Commission's Explanatory Note to the 2009 Recommendation on Termination Rates has clearly stated that rewarding an operator for its smaller size can give inappropriate investment signals and risks promoting inefficient entry. The Explanatory Note to the 2009 Termination Rates Recommendation states further (page 19) that economies of scale would not seem an appropriate argument for asymmetric price controls in the case of FSPs[295].

8.99 Since the 2007 Decision ComReg has also observed significant and persistent variations in the level of FTRs applied by the alternative FSPs, and has noted the gap between alternative FSPs' unregulated FTRs and Eircom's regulated FTRs for geographic numbers widening over time. The analysis in paragraphs 6.100 to 6.117 above shows that there have been wide variations between the FTRs charged by each of the FSPs since the 2007 Decision. Non-regulated FSPs have charged (often) substantially higher FTRs than Eircom's regulated FTRs, with the difference increasing over time as Eircom has reduced its cost-oriented FTRs.

[295] See paragraph 7.36 above.

8.100 Given their ability and incentives to set FTRs above a competitive market outcome and the scope for such pricing behaviour to impact on downstream competition and consumers, ComReg sees no objective reason to distinguish its approach in setting a price control for alternative FSPs from the price control approach which applies to Eircom, particularly given such a remedy is designed to address the same competition problem.

8.101 This preliminary view also takes into account European Commission's comments on the 2007 Decision[296] where it noted ComReg's proposal not to impose a price control obligation on alternative FSPs. The European Commission was of the view that the mechanism proposed to impose price control obligations on alternative FSPs did not address the competition problem identified (i.e. risk of excessive pricing). Furthermore, the European Commission commented that the remedy was based on a threshold which was not sufficiently justified. Taking into account its view that alternative FSPs were able to charge FTRs significantly above those of Eircom and that in general the level of FTRs in Ireland seemed high, the European Commission invited ComReg to impose an appropriate price control on alternative FSPs.

8.102 ComReg further considers proportionality issues associated with the imposition of particular forms of cost-orientation on all SMP FSPs in the FTRs and MTRs Pricing Consultation. In so doing, ComReg also considers in accordance with Regulation 13(2) of the Access Regulations, the relevant investment made by the SMP FSPs and allows such operators a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to particular new investment network projects. The precise costing methodology to be employed will also seek to promote efficiency and sustainable competition and maximise consumer benefits.

8.103 As ComReg is required to take utmost account of the 2009 Termination Rates Recommendation, the FTRs and MTRs Consultation Paper in particular investigates whether it is appropriate to Irish circumstances and whether it is consistent with the goals and objectives of ComReg. The 2009 Termination Rates Recommendation sets out that the evaluation of efficient costs in Relevant FVCT Markets should be based on a bottom-up ('**BU**') modelling approach using long-run incremental costs ('**LRIC**') as the relevant cost methodology. The approach favoured by the European Commission in the Recommendation is referred to as a pure LRIC approach in which the relevant increment is the wholesale call termination service and which includes only avoidable costs, i.e. all fixed and variable costs which are incremental to the provision of the wholesale call termination service.

8.104 In the MTRs and FTRs Consultation Paper, ComReg, having regard to the report prepared by its external consultants, Analysys Mason[297], considers possible regulatory approaches for imposing a price control obligation on

[296] See footnote 240.

[297] A copy of the Analysys Mason report is separately published in ComReg Document No 12/67a.

FVCT suppliers. ComReg also, with the assistance of Analysys Mason, and based on a set of identified assessment criteria, assesses which approach is most appropriate to Ireland and how this might be implemented by the Service Providers designated with SMP in the FVCT and MVCT markets. In the FTRs and MTRs Consultation Paper, ComReg provides its preliminary view that there is no reason for Ireland to diverge from the methodology recommended by the European Commission, i.e. (i) the appropriate price control is a cost orientation obligation, and (ii) the cost orientation obligation should be implemented for all FSPs designated with SMP in the Relevant FVCT Markets by means of the pure LRIC cost recovery methodology. In the current Consultation Paper ComReg also sees no reason to diverge from the methodology recommended by the European Commission in the Termination Rates Recommendation also in the case of alternative FSPs not previously covered by the 2007 Decision. As part of this current Consultation Paper it is therefore also provisionally proposed to apply the preliminary conclusions arising from the MTRs and FTRs Consultation Paper to those 11 alternative FSPs not previously covered by the 2007 Decision.

8.105 According to preliminary estimates provided in the FTRs and MTRs Consultation Paper, the current proposed pure LRIC FTR ranges from the current draft BU LRIC model are between 0.02 and 0.07 cent per minute and between 0.00 (zero) and 0.07 cent per call[298]. The current draft BU pure LRIC model and the associated model inputs are subject to consultation which may result in a change to the pure LRIC FTR ranges, which will then be reflected as part of any final decision. ComReg invites all FSPs and in particular those not previously covered by the 2007 Decision to provide any relevant and sufficiently granular information to justify a pure LRIC FTR that reflects an efficient operator as referred to in the 2009 Termination Rates Recommendation. Furthermore, given the specific circumstances of the Relevant FVCT Markets, in particular the fact that it will be the first time that [17] alternative FSPs other than Eircom will be subject to a regulated FTR, ComReg also indicates in the FTRs and MTRs Consultation Paper that it is minded towards an implementation date of 1 July 2013 (rather than 1 January 2013) for a pure LRIC FTR, subject to consultation responses.

8.106 A detailed assessment of the proposed cost orientation obligation which ComReg considers appropriate to now apply to apply to all FSPs designated with SMP in the current Consultation Paper, including Eircom, the 6 alternative FSPs previously covered by the 2007 Decision and the 11 other alternative FSPs not previously by the 2007 Decision, is set out in the FTRs and MTRs Consultation Paper at Appendix B. As noted at paragraph 8.86 to 8.94 above, **interested parties, and in particular those 11 alternative FSPs not previously covered by the 2007 Decision, are invited to respond to the FTRs and MTRs Consultation Paper (Appendix B) as part of this FVCT Consultation (i.e. by 17:00 on 15 October 2012), only insofar as the FTRs**

[298] The FTRs and MTRs Consultation Paper, page 12.

<u>and MTRs Consultation Paper relates to FTRs. Such parties are also invited to respond to the (extended) Draft FTRs Decision Instrument (Appendix D) by 17:00 on 15 October 2012.</u>

8.107 ComReg would also note that, in accordance with Regulation 13(4) of the Access Regulations, in the presence of the proposed obligation of cost orientation, the burden of proof that charges (including FTRs) are derived from costs, including a reasonable rate of return on investment, will rest with the FSP concerned.

8.108 As also noted in Section 7 above, ComReg maintains its view in the 2011 Decision that, absent regulation, Eircom would have the ability and incentive to price key inputs at successive levels of the value chain in such a way that could dissuade market participants from engaging in efficient infrastructural investments in interconnection. This could be achieved, for example, through setting an insufficient space between the relative prices for FVCT when sold on a stand-alone basis to interconnected operators and FVCT when sold as part of a (end-to-end) Wholesale SV Services to non-interconnected operators. Hence the competition rationale for the 2011 Decision continues to apply. However, as noted above, ComReg has set out detailed proposals in the FTRs and MTRs Consultation Paper and the (extended) Draft FTRs Decision Instrument for the way in which FTRs should be regulated going forward. It is ComReg's preliminary view that the proposed move to a pure LRIC cost recovery approach for FTRs, consistent with the 2009 Termination Rates Recommendation, could limit the scope for Eircom to apply an insufficient economic space between its pricing of FVCT when sold as a Wholesale SV Service and FVCT when sold on a standalone basis.

8.109 The Margin Squeeze test adopted in the 2011 Decision includes all costs incurred in the provision of Wholesale SV Services, including the costs of wholesale CO and FVCT sold on a standalone basis together with the other cost inputs of an interconnected FSPs, such as interconnect links etc, to give a fair representation of the likely cost of the hypothetical Similarly Efficient Operator[299] wishing to compete against Eircom in the provision of Wholesale SV Services. However, where the price of standalone FVCT is set at a pure LRIC level, the scope for Eircom to act in a discriminatory manner on FVCT by giving preferential FVCT rates to its Wholesale SV Service customers that are not available to interconnected FSPs appears somewhat moderated. Notwithstanding this, the ability and incentives for Eircom to squeeze interconnected FSPs on the other components of the Wholesale SV Service remains (i.e. the CO and other inputs involved in providing Wholesale SV Services) even in the presence of wholesale regulation in the CO Market. If it is the case that a pure LRIC methodology in the Relevant FVCT Market would limit the scope for Eircom to apply a squeeze on the regulated FVCT component of its Wholesale SV Service, ComReg provisionally proposes that

[299] A Similarly Efficient Operator means an operator that shares the same costs as Eircom but does not have the same economies of scale and economies of scope as Eircom.

the pricing principles adopted in the 2011 Decision would be withdrawn and instead be monitored primarily through the existing price control remedy for CO[300]. However, as noted in paragraph 8.69 above, it is proposed that the non-price principles for the delivery of FVCT within Eircom's Wholesale SV Service would continue to be monitored through the transparency obligation proposed for Eircom in its Relevant FVCT Market.

Cost accounting remedies

8.110 In general, if specific price control obligations are to be meaningful, it may be necessary to have a clear and comprehensive understanding of the costs associated with an SMP FSP's provision of FVCT. Obligations to maintain appropriate cost accounting systems generally support obligations of price control (and accounting separation), and can also assist ComReg in monitoring the obligation of non-discrimination.

8.111 As noted in the FTRs and MTRs Consultation Paper (page 126) 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. This is particularly true for Eircom where voice and data services are regulated. As mentioned previously, Eircom also has an obligation to provide separated accounts and maintain detailed cost accounting systems that are sufficiently detailed to allow an assessment of cost allocations. ComReg Decision D08/10 ('**the 2010 Decision**') set out detailed requirements in this regard[301].

8.112 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 and the associated need to ensure sufficient visibility of how costs are allocated across FVCT and other horizontally and vertically-related input services, ComReg proposes to continue to apply an obligation of cost accounting on Eircom.

8.113 In respect of the alternative FSPs, ComReg would note that each of the alternative FSPs proposed to be designated with SMP would only be subject to regulation in one wholesale market (as distinct from Eircom which is presently designated with SMP in 5 other regulated wholesale markets[302]). This further

[300] The 2011 Decision amended the price control obligations contained in the Decision Instrument annexed to ComReg Decision D04/07, entitled "Market Analysis – Interconnection Market Review Wholesale Call Origination & Transit Services" dated 5 October 2007 by inserting an obligation that Eircom shall not apply a margin squeeze with respect to services contained in the Wholesale Call Origination market. Please note, however, that if it is the case a pure LRIC methodology is not adopted in respect of Eircom's FTRs then its ability to to act in a discriminatory manner on FVCT by giving preferential FVCT rates to its Wholesale SV Service customers could be enhanced and would continue to be monitored through any final Decision Instruments adopted in relation to FVCT.

[301] ComReg Document 10/68 (Decision D08/10) Accounting separation and cost accounting review of Eircom Limited.

[302] As noted in footnote 24 above, separate consultation processes will take place in H2 2012 on the updated reviews of the markets for Retail Access, CO and Transit markets.

raised proportionality considerations with respect to such alternative FSPs. As also noted in the FTRs and MTRs Consultation Paper, the relevant network information may not be available from other SMP FSPs and it may be disproportionate for ComReg to require models from those alternative FSPs given the nature and scale of their operations and the likely burden involved.

8.114 Regulation 13(5) of the Access Regulations requires that where implementation of a cost accounting system is imposed, ComReg must ensure that a description of the cost accounting system is made publicly available showing at least the main categories under which costs are grouped and the rules used for the allocation of costs. ComReg notes in the FTRs and MTRs Consultation Paper that imposing this obligation on an SMP operator can require very detailed financial data and can be resource intensive and costly.

8.115 Given the specific circumstances of the alternative FSPs, in particular the proposal that they would be regulated in only one input market, ComReg does not consider it proportionate or necessary, at this point, to impose an obligation to maintain appropriate cost accounting systems on any alternative SMP FSP. However, it may be necessary as part of a future detailed cost modelling exercise for ComReg to require such detailed information from all SMP FSPs.

8.116 Therefore, ComReg proposes to refrain from imposing such cost accounting obligations on the alternative FSPs in the Draft Decision Instrument contained at Appendix C of this Consultation Paper. ComReg proposes however to keep this under review and may revisit this issue if any data gathering exercise required to arrive at a pure BU-LRIC model shows that accounting separation and/or cost accounting obligations might be appropriate.

8.117 It is also recalled from paragraph 8.107 above that ultimately the burden of proof will rest on FSPs to show that their FTRs are derived from costs. Hence as noted in paragraph 8.105 above, FSPs are invited to provide any relevant and sufficiently granular information to justify a pure LRIC FTR that reflects an efficient operator as referred to in the 2009 Termination Rates Recommendation. Furthermore, for the purpose of calculating the cost of efficient provision of FVCT and associated facilities, in accordance with Regulation 13(4) of the Access Regulations, ComReg may also use cost accounting methods independent of those used by any FSPs. Additionally, ComReg can also issue directions requiring an operator to provide full justification for its prices and may, where appropriate, require prices to be adjusted. ComReg does not therefore consider it to be proportionate or necessary, at this point, to impose an obligation to maintain appropriate cost accounting systems on any alternative FSP.

Q. 13. Do you agree with ComReg's approach on price control and cost accounting remedies? 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.

Accounting Separation Remedies

Overview

8.118 In accordance with Regulation 11 of the Access Regulations, ComReg can, *inter alia*, require an operator which is vertically integrated to make transparent its wholesale prices and its internal transfer prices, among other things, to ensure compliance with any non-discrimination obligation imposed or, where necessary, to prevent unfair cross-subsidy.

8.119 An accounting separation obligation can also reinforce cost accounting and transparency obligations as it can help to ensure that costs are neither over nor under recovered and help disclose such possible competition problems by making visible the wholesale prices and internal transfer prices of an SMP operator's services.

Regulation to date

8.120 Only Eircom currently has an obligation to maintain separate accounts pursuant to the 2007 Decision.

Proposed accounting separation remedies

8.121 In general, the purpose[303] of an accounting separation obligation would be to provide a higher level of detail of information than that which can be derived from the statutory financial statements of undertakings designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the undertaking's business were it to operate on a standalone basis. In the case of vertically integrated undertakings, it can support non-discrimination obligations and prevent unfair cross-subsidies to other services.

8.122 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 in these markets (as noted in Section 7) and the associated need to ensure sufficient visibility of how costs are allocated across FVCT and other horizontally and vertically-related input services, ComReg proposes to continue to impose an obligation of accounting separation on Eircom.

8.123 Subject to the implementation of an appropriate price control obligation (considered in the FTRs and MTRs Consultation Paper), ComReg does not consider it appropriate or proportionate at this point to impose an obligation on alternative FSPs to maintain separated accounts. Having regard to the competition problems identified in Section 7 and the particular circumstances of the Relevant FVCT Markets, it is ComReg's view that the imposition of an accounting separation obligation at this stage may be excessively burdensome and costly for alternative FSPs to comply with and may therefore represent a disproportionate approach to resolving issues such as excessive pricing (and

[303] See Article 1 of the 2005 Accounting Separation and Cost Accounting Recommendation.

their impacts on downstream markets) particularly, in light of the alternative proposed obligations identified in the sections above.

Q. 14. Do you agree with ComReg's approach to accounting separation remedies at this time? 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 Conclusions on Remedies in the Relevant FVCT Markets

8.124 Having regard to the competition problems identified in Section 7 and the discussion in paragraphs 8.1 to 8.125 above, ComReg proposes to impose a range of access, non-discrimination, transparency and price control remedies on all SMP FSPs. In addition, ComReg proposes to impose cost accounting and accounting separation obligations on Eircom.

8.125 ComReg has set out these remedies in the form of a Draft Decision Instrument which is attached at Appendix C and an (extended) Draft Decision Instrument at Appendix D and respondents are invited to comment on these Appendices.

Q. 15. Do respondents agree with ComReg's draft Decision Instruments set out in Appendix C and Appendix D? Do respondents agree with ComReg's Definitions and Interpretations as set out in the draft Decision Instruments? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer.

9 Regulatory Impact Assessment

9.1 The Regulatory Impact Assessment ('RIA') is an analysis of the likely effect of proposed new regulation or regulatory change. The purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. The RIA should help identify regulatory options, and should establish whether proposed regulation is likely to have the desired impact. It is a structured approach to the development of policy, and analyses the impact of regulatory options on different stakeholders. Appropriate use of the RIA should ensure that the most effective approach to regulation is adopted.

9.2 ComReg's approach to RIA follows the RIA Guidelines[304] published by ComReg in August 2007 and takes into account the "Better Regulation" programme[305] and international best practice (for example, considering developments involving RIA published by the European Commission and the OECD).

9.3 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[306] 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.

9.4 In conducting the RIA, ComReg has regard to the RIA Guidelines, while recognising that regulation by way of issuing decisions, e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation. Our ultimate aim in conducting a RIA is to ensure that all measures are appropriate, proportionate and justified. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken. As decisions are likely to vary in terms of their impact, if after initial investigation, a decision appears to have relatively low impact ComReg may carry out a lighter RIA in respect of those decisions.

9.5 ComReg's approach to RIA follows five steps:

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[304] ComReg Document 07/56a, ComReg, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", 10 August 2007 (the '**RIA Guidelines'**).

[305] Department of the Taoiseach, "Regulating Better", January 2004. See also "Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis", June 2009, ('**The Department of An Taoiseach's Revised RIA Guidelines**'), available from: http://www.taoiseach.gov.ie/eng/Publications/Publications_Archive/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf

[306] Ministerial Policy Direction made by the Minister of Communications, Marine and Natural Resources on 21 February 2003.

Step 1: Describe the policy issue and identify the objectives.

Step 2: Identify and describe the regulatory options.

Step 3: Determine the impacts on stakeholders.

Step 4: Determine the impacts on competition.

Step 5: Assess the impacts and choose the best option.

9.6 The purpose of carrying out a RIA is to aid decision-making through identifying regulatory options and analysing the impact of those options in a structured manner. The Department of An Taoiseach's Revised RIA Guidelines state that

> *"RIA should be conducted at an early stage and before a decision to regulate has been taken"*[307].

9.7 The European Commission, in reviewing its own use of impact assessments, also notes that:

> *"Impact assessments need to be conducted earlier in the policy development process so that alternative courses of action can be thoroughly examined before a proposal is tabled"*[308].

9.8 In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost benefit analysis would only arise where it would be proportionate or in exceptional cases where robust, detailed and independently verifiable data is available. Such comprehensive review may be undertaken by ComReg when necessary and appropriate.

9.9 Having regard to the various sets of guidelines, it is clear that the RIA should be introduced as early as possible in the assessment of potential regulatory options, where appropriate and feasible. The consideration of regulatory impact provides a discussion of options, and the RIA should therefore be integrated within the overall preliminary analysis. This is the approach which ComReg is following in this market review. The RIA will be finalised in the final decision document, having taken into account all the responses to this Consultation Paper and any comments from the European Commission and the Competition Authority.

9.10 ComReg now conducts its RIA having regard to its proposed approach to impose (or not) regulatory remedies identifed in Section 8, along with a consideration of other options. The following sections, in conjunction with the rest of the analysis and discussion set out elsewhere in this Consultation Paper, represent a RIA. It sets out a preliminary assessment of the potential impact of proposed regulatory obligations for the Relevant FVCT Markets on FSPs that have been designated with SMP.

[307] See paragraph 2.1.

[308] 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.

Principles in Selecting Remedies

9.11 In paragraphs 8.2 to 8.5 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.

9.12 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:

- To promote competition;
- To contribute to the development of the internal market; and
- To promote the interests of users within the European Union.

Describe the Policy Issue and Identify the Objectives

9.13 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 previously[309] that the European Commission has established that the wholesale market for fixed call termination is susceptible to *ex ante* regulation and on this basis ComReg has carried out the preceding analysis in this Consultation Paper.

9.14 In Sections 5 and 6 of this Consultation Paper respectively, ComReg set out its preliminary view on the definition of the individual Relevant FVCT Markets, followed by a competition analysis within each of these markets. ComReg consequently proposes to designate 18 FSPs with SMP in each of the separate Relevant FVCT Markets in which they operate. In Section 7, ComReg considered, on the basis of a preliminary SMP finding, the potential for competition problems to arise in the Relevant FVCT Markets over the review period in question. As noted in paragraph 8.2, 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 obligations (or remedies) set out below:

[309] See paragraph 4.2.

- Access;
- Transparency;
- Non-Discrimination;
- Price Control and Cost Accounting; and
- Accounting Separation.

9.15 With specific regard to the analysis of competition within the Relevant FVCT Markets and, having regard to the competition problems identified in Section 7, ComReg's objectives are to enhance the development of effective competition in downstream markets and to help ensure that consumers can reap maximum benefits in terms of price, choice and quality of service. In so doing, ComReg is seeking to prevent exploitative behaviour and/or restrictions or distortions in competition amongst Service Providers. ComReg is also seeking to provide regulatory certainty to all Service Providers through the development of an effective and efficient forward-looking regulatory regime that serves to promote competition. These objectives also serve to further the development of the internal market given FVCT is an input for calls originating abroad but destined for Irish fixed numbers and also recognising that some FSPs provide services in other European jurisdictions.

9.16 In pursuing these objectives, ComReg has considered the impact of specific forms of regulation in the Relevant FVCT 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.

Identify and Describe the Potential Regulatory Options

9.17 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 potential competition problems in the Relevant FVCT Markets.

9.18 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 measure that can be imposed is the obligation of transparency[310]. Should this be insufficient to address competition problems on its own, ComReg may apply a non-discrimination obligation[311]. If this is still not sufficient, ComReg may next consider the imposition of an access obligation[312], or accounting separation

[310] Regulation 9 of the Access Regulations.
[311] Regulation 10 of the Access Regulations.
[312] Regulation 12 of the Access Regulations.

obligations[313]. The final measure to be considered is the imposition of a price control and cost accounting remedy[314].

9.19 The question of regulatory forbearance and the incremental imposition of one or more of the above obligations is considered below.

Forbearance

9.20 In the case of the current analysis of the Relevant FVCT Markets, ComReg is required[315] to impose at least some level of regulation on FSPs designated as having SMP. Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations require ComReg to impose at least some level of regulation on undertakings designated as having SMP. In Section 6, ComReg set out its view that none of the Relevant FVCT Markets is effectively competitive (or likely to become effectively competitive within the timeframe covered by this review). In Section 7, ComReg identified a range of competition problems that could occur in these markets, absent regulation.

9.21 In Section 7, ComReg set out its view that, absent regulation, there is the potential and incentive for an FSP with SMP in the Relevant FVCT Markets to engage in exploitative and/or exclusionary behaviour. In view of this, absent the imposition of any remedies within the Relevant FVCT Markets, it is ComReg's view that such markets would not likely function effectively. For example, in the context of interconnection negotiations between FSPs and other Service Providers (including other FSPs), access could be effectively refused or materially delayed (resulting in certain consumers not being able to contact the subscribers of particular FVCT suppliers or having to incur the additional costs of their Service Providers interconnecting indirectly *via* a transit provider). In addition, FTRs could be set above the level that would pertain in a competitive outcome and/or an FSP with SMP in a Relevant FVCT Market may be in a position to distort competition in adjacent markets, e.g. through obstructing effective FVCT access. As highlighted in paragraphs 8.9 to 8.12, it is ComReg's preliminary view that the option of regulatory forbearance in each of the Relevant FVCT Markets is not, therefore, appropriate or justified. By not imposing any regulatory obligations on an FSP designated with SMP, ComReg would be acting contrary to its regulatory obligations. Per Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations, once SMP has been identified ComReg is obliged to impose at least one regulatory remedy.

Transparency Obligations

9.22 As noted in paragraphs 8.61 to 8.64, Eircom and the 6 alternative FSPsdesignated with SMP by the 2007 Decision[316] are currently subject to

[313] Regulation 11 of the Access Regulations.
[314] Regulation 13 of the Access Regulations.
[315] Per Regulation 8(1) of the Access Regulations.

[316] See footnote 272 above.

transparency obligations. The 11 alternative FSPs which were not previously covered by the 2007 Decision[317] do not currently have any transparency obligations.

9.23 ComReg's preliminary view in Section 8 is that all SMP FSPs should be required to comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate effective access to FVCT and promote effective competition in downstream markets. In Section 7 ComReg identified competition problems which, absent regulation, could potentially arise in the Relevant FVCT Markets. The competition problems identified included *inter alia* potentially excessive and/or discriminatory pricing, as well as a potential for outright or constructive (e.g. through protracted negotiations on terms and conditions) refusal to supply with a view to extracting FTRs above efficient cost and/or distorting competition in related markets. In this regard, ComReg is proposing that, as part of a general transparency obligation pursuant to Regulation 9 of the Access Regulations, each FSP designated with SMP shall be required to publish a RIO setting out the contractual terms and conditions and technical basis upon which Service Providers can obtain access to FVCT and associated facilities. It is further proposed to publish FTRs and to provide advance notice of FTR changes to ComReg and to other Service Providers.

9.24 While Eircom is already subject to an obligation to publish a RIO by virtue of the 2007 Decision, and thus faces a relatively moderate level of incremental burden from the proposed transparency obligations, the 6 other alternative FSPs covered by the 2007 Decision have to date been subject to a more general obligation to publish their prices and associated terms and conditions for FVCT access. The 11 other alternative FSPs not previously covered by the 2007 Decision have also not had any SMP obligations imposed on them to date.

9.25 ComReg recognises that the RIO obligations will require some greater level of implementation than say general pricing publication obligations. However, as the RIO is effectively the standard offer of contract for access to FVCT and associated facilitaties and taking into account that the 17 alternative FSPs have all entered into interconnection arrangements to date, ComReg is of the preliminary view that the incremental level of implementation associated with publishing such standard contracts should be relatively contained. As the 17 alternative FSPs would only be subject to such a RIO obligation in respect of one market (i.e. the Relevant FVCT Markets), distinct from Eircom which is currently subject to a RIO obligation across multiple markets, the RIOs for the alternative 17 FSPs would accordingly not be of equivalent detail to Eircom's RIO.

9.26 Furthermore, in view of current FTR publication arrangements (according to which all FVCT suppliers' FTRs are currently published on Eircom's STRPL),

[317] See footnote 274 above.

ComReg considers that the implementation of an obligation on all SMP FSPs to make FTRs publicly available would not place a disproportionate burden on such FSPs. In recognition of the level of initial implementation being somewhat higher for the 17 alternative FSPs which are not previously subject to an obligation to publish a RIO, ComReg has proposed for these 17 alternative FSPs that the RIO be published within 3 months following the effective date of ComReg's decision on the FVCT market analysis.

9.27 As regards the proposed 35 calendar day timeframe for advance notification of FTR changes to industry (and 2-month timeframe, unless otherwise agreed, for advance notification of FTR changes to ComReg), this represents a slightly longer publication period than the three-week (or 21 calendar days) advance notification periods which were generally foreseen in the 2002 Decision and the 2007 Decision.

9.28 This slight extension to the notification obligations previously imposed under the 2007 Decision is however considered appropriate to ensure FVCT purchasers have sufficient time to amend billing systems that run on a monthly cycle and can therefore avail of the price changes in the next calendar month. It is envisaged that this 35 calendar day timeframe should achieve an appropriate balance between the need for SMP FSPs to be able to make changes speedily, while also recognising the requirements for FVCT purchasers to factor such changes into retail and wholesale pricing decisions and any related billing system changes or developments. In particular, given many FVCT purchasers current access FVCT *via* indirect interconnection (transit) arrangements, the wholesale billing systems of such third parties will require amendment to give effect to FTR changes. This may also involve such third parties providing notification to their wholesale customers. Taking the above considerations into account, ComReg does not consider these moderate extensions to the notification periods for FTR changes to impose a disproportionate burden on the 7 FSPs previously covered by the 2007 Decision.

9.29 While the 11 alternative FSPs not covered by the 2007 Decision have not been subject to any advance notification obligations to date, broadly the same competition problems have been identified in respect of these operators and thus ComReg sees no objective reason to differentiate the transparency obligations in respect of these SMP FSPs. As noted above, the advance notification periods are considered appropriate and proportionate to striking a balance between being able to make changes speedily, while also recognising the requirements for FVCT purchasers to factor such changes into retail and wholesale pricing decisions and any related billing system changes or developments accordingly.

9.30 ComReg has considered whether transparency obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, problems *inter alia* associated with excessive pricing, discriminatory behaviour (on price or non-price grounds) and/or impeded or delayed access would not be capable of being adequately addressed through transparency obligations alone.

Non-Discrimination Obligations

9.31 The principle of non-discrimination is designed to ensure that undertakings with market power do not distort competition, in particular, where they are vertically-integrated undertakings that supply services to undertakings with whom they compete on downstream markets. As discussed in Section 7 a 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. In such circumstances the SMP operator may attempt to transfer (leverage) its market power to such horizontally or vertically related markets. This could enable the SMP operator to strengthen its position in those related markets and potentially also reinforce its existing market power in the SMP market in question.

9.32 As noted in paragraphs 8.50 to 8.52, Eircom currently has an obligation of non-discrimination with respect to the provision of wholesale access products, features and additional associated facilities. Those 6 alternative FSPs designated as having SMP by the 2007 Decision[318] have an obligation to apply similar terms and conditions to undertakings that obtain, or seek to obtain from them, call termination services, products, services and facilities. Those 11 alternative FSPs which were not previously covered by the 2007 Decision are not currently subject to any non-discrimination obligations[319].

9.33 In Section 7 ComReg identified that an FSP designated with SMP has the ability and incentive to engage in such behaviour which can impact upon downstream competition and consumers. For example, FSPs designated with SMP could offer different FTRs or other terms and conditions and service quality to different buyers. Equally so, an FSP designated with SMP could degrade inbound traffic from other undertakings relative to its own terminating traffic. As a consequence, ComReg proposes to require that all SMP FSPs apply equivalent conditions, including in respect of FTRs or other charges and ensure that access and information are provided to all other undertakings under the same conditions as the SMP FSP provides to itself or to its subsidiaries.

9.34 As broadly the same competition problems have been identified in the case of the alternative SMP FSPs, ComReg sees no objective reason to differentiate the non-discrimination obligations in respect of the 11 alternative FSPs not previously covered by the 2007 Decision. Requiring all SMP FSPs not to discriminate in their terms and conditions of access to FVCT is essential to addressing the core competition problems (identified in Section 7) associated

[318] See footnote 272 above.

[319] See footnote 274 above.

with pricing of, and access to FVCT services. Applying the non-discrimination obligation to all SMP FSPs is therefore considered proportionate and necessary to reinforce the effectiveness of the proposed access and pricing obligations.

9.35 ComReg has considered whether transparency obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, excessive/discriminatory pricing, outright or constructive denial of access problems, delaying tactics or poor service quality issues could *inter alia* still remain in the presence of a transparency obligation. Therefore, the imposition of non-discrimination obligations is both proportionate and justified having regard to the competition problems identified. All 7 FSPs designated with SMP under the 2007 Decision have some form of non-discrimination obligations imposed upon them. In view of the competition problems identified ComReg does not consider it objectively justified to adopt an alternate approach for those 11 FSPs it now proposes to designate with SMP for the first time.

Access Obligations

9.36 An access obligation gives Service Providers the right to request access to FVCT and associated facilities and establishes the principles on which the relevant products and services should be made available. As noted in paragraphs 8.19, Eircom has a range of access obligations currently imposed upon it by virtue of its existing designation with SMP. These include obligations to negotiate in good faith with undertakings requesting access; not withdraw access to facilities already granted and continue to provide such facilities in accordance with existing terms and conditions and specifications; and meet reasonable requests for access to specified network elements, facilities or both such elements and facilities.

9.37 As noted in paragraph 8.20, the 6 alternative FSPs designated with SMP pursuant to the 2007 Decision[320] have not, to date, had an obligation to provide access imposed upon them. None of the other 11 alternative FSPs currently active in the market[321] have been designated with SMP to date and, consequently none of them have had access (or other) SMP-related obligations imposed upon them.

9.38 ComReg's preliminary view is that obligations to provide FVCT and access to associated facilities (including physical interconnect infrastructure necessary for effecting such access, e.g. interconnect paths in the case of Eircom) are both proportionate and justified. The express reference to interconnect paths as an associated facility is considered necessary to support Eircom's general access obligation. This is because Eircom could potentially impede/raise the costs of effective handover of calls for call termination to fixed numbers on its

[320] See footnote 272 above.

[321] See footnote 274 above.

network through ineffective access to such associated facilities. The apppropriate provision of interconnect paths by Eircom is required to provide other Service Providers with a mechanism for reaching all points in the Eircom network to which they need to interconnect. It is further considered that three collocation mechanisms should be made available to Service Providers to enable them to efficiently use such associated facilities according to their specific network deployments and resulting needs. ComReg sees no objective reason why a requirement on Eircom to make efficient processes for interconnect paths available to Service Providers requesting access to its FVCT service could constitute a disproportionate burden given that it makes such interconnect paths and collocation mechanisms available in other contexts. Furthermore, as ineffective or inefficient access to such supporting facilities could potentially obstruct or raise the cost of FVCT access, particularly in the case of Eircom in view of its ubiquitous network coverage, this obligation is considered proportionate to the competition problem which has been identified.

9.39 In view of similar competition problems having been identified (in Section 7) for all FSPs associated with possible outright or constructive denial of access problems, delaying tactics and/or poor service quality issues and the important role of FVCT in ensuring the completion of an end-to-end call, ComReg considers that, in addition to a non-discrimination obligation, access obligations should be imposed upon all FSPs designated with SMP to ensure efficient and effective FVCT access.

9.40 ComReg is also of the preliminary view that applying an access obligation on all FSPs designated with SMP will promote regulatory predictability and ensure that FSPs are treated, from a regulatory perspective, in a consistent fashion. As noted in paragraph 7.16 above, ComReg sees no objective reason to distinguish its approach for alternative FSPs from the approach which applies to Eircom, particularly given that broadly the same competition problem has been identified in each case. This is reinforced by the European Commission comments on the 2007 Decision that appropriate access remedies should be imposed on all FSPs[322]. Furthermore, the European Commission has reiterated these views including issuing a serious doubts letter to the Latvian NRA in March 2012 concerning non-imposition of access remedies where it noted - *"Every termination market is likely to be characterised by similar competition problems i.e. incentives to refuse to provide access and to charge excessive* prices" and *"the different treatment of operators having monopoly positions in the respective termination markets, which are characterised by the same competition problems…. does not appear to be compatible with EU law"*[323].

9.41 ComReg's preliminary view is that obligations to provide access to FVCT and to associated facilities are both proportionate and justified in view of the

[322] See footnote 240.

[323] See Case LV/2012/1296 (referenced in footnote 223 above).

competition problems identified. ComReg has considered whether obligations other than those relating to access would in themselves resolve the competition problems identified and does not consider this to be the case. Similarly the imposition of access obligations on their own also would not likely prevent all possible forms of exploitative/exclusionary behaviour in the Relevant FVCT Markets such as excessive pricing, discrimination (on price or quality grounds) or ensure transparency of terms and conditions of access.

Price Control and Cost Accounting Obligations

9.42 The purpose of price control and cost accounting obligations is to ensure that prices charged are not set above efficient cost (or cause a margin squeeze) and to promote efficiency and sustainable retail competition while maximising consumer benefits. As noted in paragraphs 8.81 to 8.85, Eircom is currently subject to a price control obligation of cost orientation and cost accounting pursuant to the 2007 Decision. The 2011 Decision imposes an additional obligation on Eircom not to apply a margin squeeze. Those 6 alternative FSPs designated as having SMP by the 2007 Decision[324] are not currently subject to either price control[325] or cost accounting obligations. The 11 alternative FSPs not previously covered by the 2007 Decision have also not been subject to price control obligations to date[326].

9.43 In the review of competition problems in Section 7, ComReg considered on a forward-looking basis the scope for competition problems to arise absent price control and cost accounting obligations. A significant and persistent risk of price-related competition problems was identified as deriving from a position of SMP in the Relevant FVCT Markets. Furthermore, paragraphs 7.41 to 7.51 above and the FTRs and MTRs Consultation Paper[327] identify a number of important competition, efficiency and ultimately consumer impacts arising from FTRs which are set above efficient cost.

9.44 ComReg proposes that each FSP designated with SMP should be subject to a cost-orientation obligation with respect to access to FVCT and associated facilities. ComReg's analysis has indicated that each of the proposed FSPs with SMP has the ability and incentive to engage in excessive pricing absent regulation. ComReg thus sees no objective reason to distinguish its approach for alternative FSPs from the approach which applies to Eircom, particularly given the same exploitative competition problem has been identified in each case. The analysis of the evolution of FTRs (for calls to geographic numbers) since the 2007 Decision, as set out paragraphs 6.100 to 6.120 above, shows that there have been wide variations between the FTRs charged by the alternative FSPs. Non-regulated FSPs have charged (often) substantially

[324] See footnote 272 above.

[325] As noted in paragraphs 8.83 and 8.84 above, the 2007 Decision allowed a derogation from the price control obligation for the 6 alternative FSPs until certain thresholds were met.

[326] See footnote 274 above.

[327] See, for example, paragraph 7.42 above.

higher FTRs than Eircom's regulated FTRs, with the difference increasing over time as Eircom has reduced its cost-oriented FTRs. Imposing a cost-orientation obligation on all FSPs designated with SMP will provide regulatory certainty to each party, as well as to buyers of FVCT who purchase this service from several FSPs. In doing so, it will minimise the scope for disputes/investigations and potentially inefficient case-by-case regulation through dispute resolution or other activities.

9.45 This preliminary view to impose a cost orientation obligation on all FSPs designated with SMP also promotes harmonisation and regulatory certainty at EU level as it takes into account the European Commission's comments on the 2007 Decision[328] which criticised ComReg's proposal not to impose a price control obligation on alternative FSPs. The European Commission was of the view that the mechanism proposed to impose price control obligations on alternative FSPs did not address the competition problem identified (i.e. risk of excessive pricing). The 2009 Termination Rates Recommendation also reiterates this view where it states (recital 9) that *"in the light of the ability and incentives of terminating operators to raise prices substantially above cost, cost orientation is considered the most appropriate intervention to address this concern over the medium term"*.

9.46 The FTRs and MTRs Consultation Paper (Appendix B) already includes a detailed RIA on the impacts and justifications for the specific FVCT pricing obligations proposed. As the principles contained therein are also considered relevant in the current Consultation Paper, ComReg does not propose to re-state this analysis but advises respondents to refer to Appendix B for further details in this regard.

9.47 In general, if specific price control obligations are to be meaningful, it may be necessary to have a clear and comprehensive understanding of the costs associated with the provision of FVCT by a FSP designated with SMP. ComReg proposes to continue to impose a cost accounting obligation on Eircom having regard to its integrated position across several upstream and downstream markets (in particular noting its SMP designations in a number of these markets). In the discussion of competition problems (Section 7), Eircom was identified as having particular ability and incentives to leverage its position from FVCT into related markets. There is thus still a need to ensure sufficient visibility of how costs are allocated across FVCT and other horizontally and vertically-related input services. As Eircom is already subject to a cost accounting obligation across a number of regulated markets, including FVCT, ComReg considers any incremental burden is substantially lessened.

9.48 ComReg also considers it proportionate and justified to continue impose the obligations set out in the 2011 Decision. The discussion of competition problems in Section 7 still maintains that, absent regulation, Eircom would have the ability and incentive to price key inputs at successive levels of the

[328] See footnote 240.

value chain in such a way that could dissuade efficient infrastructural investments in interconnection. This could be achieved, for example, through setting an insufficient space between the relative prices for FVCT when sold on a stand-alone basis to interconnected operators and FVCT when sold as part of (end-to-end) Wholesale SV Services. However, it is also considered that the proposed price control methodology set out in the FTRs and MTRs Consultation Paper, if implemented, would potentially serve to mitigate this margin squeeze risk in respect of the FVCT component of Eircom's Wholesale SV Service. Hence, in the event that the proposed price control methodology set out in the FTRs and MTRs Consultation Paper is implemented, then ComReg considers it justified and proportionate that the pricing principles adopted in the 2011 Decision would be withdrawn and instead be monitored primarily through the existing price control remedy for CO[329].

9.49 ComReg does not propose to impose a cost accounting obligation on alternative FSPs at this stage although it proposes to keep the situation under review. ComReg's preliminary view is that the imposition of a cost accounting obligation at this stage may not be justified for alternative FSPs to comply with given that, distinct from Eircom, their proposed SMP designation relates to only one wholesale market. Furthermore, while alternative FSPs are also vertically integrated into retail markets, Section 7 identified a somewhat less immediate scope for such alternative FSPs to impact on such related markets through leveraging strategies. Therefore ComReg does not consider it appropriate or proportionate at this point to impose an obligation on alternative FSPs to maintain appropriate cost accounting systems but proposes to keep the situation under review in case it becomes necessary in order to effect the price control obligation.

9.50 ComReg has considered whether price control obligations alone would be sufficient to address the competition problems identified in Section 7 and does not consider this to be the case. For example, discriminatory behaviour (on price or non-price grounds) or denial of access problems would not be capable of being adequately addressed through such obligations alone.

Accounting Separation Obligations

9.51 As noted in paragraphs 8.118 to 8.123, in general, the purpose[330] of an accounting separation obligation would be to provide a higher level of detail of information than that which can be derived from the statutory financial statements of undertakings designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the undertaking's business were it to operate on a standalone basis. In the case of vertically-integrated undertakings, it can support non-discrimination obligations and prevent unfair cross-subsidies to other services.

[329] See footnote 300.

[330] See Article 1 of the 2005 Accounting Separation and Cost Accounting Recommendation.

9.52 Only Eircom currently has an obligation to maintain separate accounts. In Section 7, ComReg has identified potential competition problems associated with possible price-related leveraging to be particularly pertinent in the case of Eircom (absent regulation) which highlights the importance of continuing to ensure a transparent and effective mechanism of accounting separation.

9.53 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), separated accounts help disclose such possible competition problems and make visible the wholesale and internal transfer prices of a dominant operator's services, thereby facilitating transparency as regards any potential misallocation of costs across different services. The main objective of accounting separation is to make the practical implementation of non-discrimination and cost-orientation transparent by showing cross-subsidisation between products. Requiring separated accounts for the main products and services creates more transparency on internal transfer pricing and repartition of common and joint costs. It is therefore considered proportionate and justified to continue to impose an obligation on Eircom to maintain separated accounts

9.54 It is ComReg's preliminary view that the imposition of an accounting separation obligation at this stage may not be proportionate and justified in the case of the 17 alternative FSPs. Unlike the situation for Eircom, such alternative FSPs would only be designated with SMP on one wholesale market. Furthermore, while the alternative FSPs are also vertically integrated into retail markets, Section 7 identified somewhat less immediate impacts from any leveraging strategies pursued by such alternative FSPs. Therefore, ComReg does not consider it appropriate or proportionate at this point to impose an obligation on alternative FSPs to maintain separated accounts.

Determine the Impacts on Stakeholders

9.55 Given that ComReg has proposed to designate 18 FSPs with SMP, it is ComReg's preliminary view, as outlined paragraphs 8.9 to 8.12 above, that the option of regulatory forbearance is not appropriate or justified and can be discounted when considering the impact on stakeholders.

9.56 Having regard to the proposed SMP designations in Section 6 (which require ComReg to impose at lease some level of regulation[331]) as well as the review of competition problems and remedies in Sections 7 and 8 respectively, ComReg has, on an incremental basis, identified why a range of appropriate remedies are necessary, proportionate and justified, while at the same time discounting other remedies where appropriate. Having regard to the analysis and assessment of the Relevant FVCT Markets, ComReg has now grouped remedies into 4 options (separately for Eircom's Relevant FVCT Market and

[331] Pursuant to Regulation 8(1) of the Access Regulations and Regulation 27(4) of the Framework Regulations.

for the 17 alternative FSPs' Relevant FVCT Markets) below for the purpose of considering the incremental impact of each option on stakeholders.

Options for Eircom's Relevant FVCT Market

- Option 1: Impose Access obligation only
- Option 2: Impose Access, Transparency and Non-Discrimination obligations
- Option 3: Impose Access, Transparency, Non-Discrimination and Price Control and Cost Accounting obligations
- **Option 4: Impose Access, Transparency, Non-Discrimination, Price Control & Cost Accounting and Accounting Separation obligations.**

Option 1: Impose Access Obligation only		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from reduced regulatory burden relative to 2007 Decision. There would be increased flexibility for Eircom to use its market power at wholesale level to engage in exploitative behavior and/or influence market developments at the retail level. Could facilitate extraction of excessive rents from FVCT and related markets. Eircom's incentives to innovate and increase efficiency may be reduced where FTRs set above efficient cost are paid for by competitors and, in turn, by their customers. Increased risk of disputes and legal challenges involving Eircom's FVCT service arising from ineffective transparency and other preventative measures to protect against non-discrimination. Disputes could increase legal and regulatory costs faced by Eircom.	High risk that, even though access mandated in principle, there would be significant scope for it to be effectively undermined through such practices as high or discriminatory pricing,unreasonable terms and conditions, delaying tactics, poor service quality, etc. Where access is provided to downstream competitors on exploitative or discriminatory terms (relative to that provided to Eircom's own retail arm) this could significantly disadvantage existing rivals and distort existing competition in downstream markets. Ineffective access to FVCT could also raise barriers to entry and expansion for new entrants in downstream markets due to inability to guarantee end-to-end connectivity to Eircom's established customer base. FTRs set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail markets. This is because they would likely have significant voice traffic outflows to Eircom's subscribers. High FTR pricing thus results in inefficient cross-subsidies from smaller to larger operators. Such financial barriers to entry resulting from FTRs set above efficient cost (as well as scope for any tariff-mediated network externalities to materialise)	Availability of FVCT access, if effective, would enable subscribers of other networks to call Eircom's subscribers. However, high risk that, even though access mandated in principle, there would be significant scope for it to be effectively undermined through such practices as high or discriminatory pricing, unreasonable terms and conditions, delaying tactics, poor service quality, etc. If downstream competition is distorted or investments discouraged due to ineffective FVCT access, consumers would potentially have reduced service choice, quality and innovation. Above-cost FTRs, if applied, could put upward pressure (or slow the rate of any decline) on retail voice prices. Above-cost FTRs would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed voice calls.

Option 1: Impose Access Obligation only		
	are considered further in the FTRs and MTRs Consultation Paper. Where FTRs are set above efficient cost, this could limit scope for retail pricing innovations (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by Eircom's downstream rivals. Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of FVCT vis-à-vis other wholesale (e.g. Transit and Wholesale SV) and retail (e.g. Calls) services. Regulatory certainty is reduced given wholesale access and pricing uncertainty. A potentially increased incidence of disputes could also raise legal and regulatory costs for Eircom's rivals. Differences in regulatory approach between Ireland and other EU countries (broader set of obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could also generate legal uncertainty for pan-European operators considering investments in Ireland.	

Option 2: Impose Access, Transparency and Non-Discrimination Obligations		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Eircom would benefit from a reduced regulatory burden relative to 2007 Decision. There would still be increased flexibility for Eircom to use its market power at wholesale level to engage in exploitative and exclusionary behavior in respect of FVCT pricing. Could facilitate extraction of excessive rents from FVCT and related markets. Eircom's incentives to innovate and increase efficiency may be reduced where FTRs set above efficient cost are paid for by competitors and, in turn, by their customers. While risk of disputes and legal challenges involving Eircom's FVCT service might be eased somewhat relative to Option 1 due to enhanced transparency, risk of disputes would persist due to lack of direct regulatory oversight in respect of Eircom's FTRs. Disputes could increase the legal and regulatory costs faced by Eircom.	While risk of impeding access to FVCT may be moderated somewhat relative to Option 1, effective FVCT access may still be undermined through high FTR pricing. Where access is provided to downstream competitors on exploitative terms, this could significantly disadvantage existing rivals and distort existing competition in downstream markets. Ineffective access to FVCT (through exploitative or exclusionary FTR pricing) could also raise barriers to entry and expansion for new entrants in downstream markets due to inability to guarantee end-to-end connectivity to Eircom's established customer base. FTRs set above efficient cost would raise financial barriers to entry and expansion for smaller or newer entrants in downstream retail markets. This is because they would likely have significant voice traffic outflows to Eircom's subscribers. High FTR pricing thus results in inefficient cross-subsidies from smaller to larger operators. Such financial barriers to entry resulting from FTRs set above efficient cost (as well as scope for any tariff-mediated network externalities to materialise) are considered further in the FTRs and MTRs Consultation Paper.	Availability of FVCT access would enable subscribers of other networks to contact Eircom's subscribers. However, high risk that, even though access mandated in principle, there would be significant scope for such access to be effectively undermined through excessive pricing. If downstream competition is distorted or investments discouraged through FTRs which are above efficient cost, consumers would potentially have reduced service choice, quality and innovation. Above-cost FTRs, if applied, could put upward pressure (or slow the rate of any decline) on retail voice prices. Above-cost FTRs would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed voice calls.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations		
	Scope would persist for Eircom to squeeze competitors across related wholesale/retail markets through its relative pricing of FVCT vis-à-vis other wholesale (e.g. Transit and Wholesale SV) and retail (e.g. Calls) services. Where FTRs are set above efficient cost, this could limit scope for retail pricing innovations (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by Eircom's downstream rivals. Regulatory certainty is reduced given wholesale pricing uncertainty. Disputes over the level of FTRs could also raise legal and regulatory costs for Eircom's rivals. Differences in regulatory approach between Ireland and other EU countries (price control obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could generate legal uncertainty for pan-European operators considering investments in Ireland.	

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control[332] & Cost Accounting Obligations		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
As Eircom is currently subject to price control and cost accounting obligations pursuant to 2007 Decision, incremental burden of such obligations is not likely to be significant. Eircom's regulatory burden under Option 3 would not be significantly less than under Option 4 as Eircom is already subject to accounting separation obligations in other SMP markets. Under Option 3 there would be increased flexibility for Eircom to obscure internal transfer prices and the real costs of FVCT if no accounting separation obligation imposed. There would thus be an increased opportunity for Eircom's non-discrimination and/or price control obligations to be undermined. Risk of disputes and legal challenges involving Eircom's FTRs may be eased relative to Options 1 and 2 due to price control obligation. However, lack of accounting separation may generate uncertainty regarding Eircom's compliance with	Regulating FTRs at efficient cost would reinforce the effectiveness of the access, transparency and non discrimination obligations thus reducing risk of competitive distortions in downstream retail markets and potentially lowering barriers to entry/expansion for smaller Service Providers. The impact of lower wholesale costs (resulting from the proposed price control set out in the FTRs and MTRs Consultation Paper for all FVCT suppliers) is likely to be more significant for smaller FSPs, since a large number of their calls are likely to be off-net. Thus, regulating FTRs at efficient cost would contribute to reducing the impact of any inefficient financial transfers or cross subsidies from smaller to larger FSPs and thereby contribute to a level playing field between all FSPs. Regulating FTRs at efficient cost would potentially provide greater scope for retail pricing innovations (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by Eircom's	Availability of FVCT access would facilitate interoperability of services by enabling subscribers of other networks to call Eircom's subscribers. Reduced risk of competitive distortions and more level playing field in downstream markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered). Reduced risk of high FTRs being passed through to end users in form of higher prices relative to Options 1 and 2 above. Potential for discriminatory behavior due to lack of accounting separation may impact on downstream competition and investment with consequent negative implications in terms of price and service choice over time.

[332] A detailed RIA on the proposed price control obligation is set out in the FTRs and MTRs Consultation paper (Appendix B) and is not further elaborated here. Options 3 and 4 in this Consultation Paper thus assess the merits of imposing a price control obligation which would regulate FTRs according to the concept of efficient cost (with the impacts of the precise efficient costing methodology proposed set out further in Appendix B).

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control[332] & Cost Accounting Obligations		
non-discrimination and price control obligations, thus also contributing to risk of disputes. Any revenue impacts associated with the proposed price control obligation are considered in the FTRs and MTRs Consultation Paper.	downstream rivals. Greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors although lack of accounting separation obligation may render monitoring of potential exclusionary behavior less transparent further impacting on investment incentives for new entrants. While greater certainty that FTRs would be set at efficient cost potentially moderates risk of disputes relative to Options 1 and 2, the lack of transparency of Eircom's internal transfer prices due to absence of an accounting separation obligation may still contribute to scope for discrimination (relative to its own retail arm) and consequent risk of disputes.	

Option 4: Impose Access, Transparency, Non-Discrimination, Price Control & Cost Accounting and Accounting Separation Obligations		
Impact on Eircom	**Impact on Competition**	**Impact on Consumers**
Existing regulatory burden on Eircom (per 2007 Decision) would remain. Risk of disputes and legal challenges involving Eircom's FTRs would be eased relative to Options 1, 2 and 3.	General competition/revenue/cost impacts associated with proposed price control for FTRs are as set out for Option 3 above and in accordance with the FTRs and MTRs Consultation Paper.	Availability of FVCT access would facilitate interoperability of services enabling subscribers of other networks to call Eircom's subscribers. Reduced risk of competitive distortions and more level playing field in downstream

Option 4: Impose Access, Transparency, Non-Discrimination, Price Control & Cost Accounting and Accounting Separation Obligations		
Any revenue impacts associated with the proposed price control obligation are considered in the FTRs and MTRs Consultation Paper.	As set out for Option 3 above, greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors. Greater certainty that FTRs would be set at efficient cost, complemented by greater visibility of internal transfers to support non discrimination obligation, moderates risk of disputes relative to Options 1, 2 and 3.	markets and greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered). Reduced risk of above-cost FTRs being passed through to end users in form of higher prices relative to Options 1 and 2 above. Dynamic competition from alternative Service Providers (facilitated by effective price control and appropriate preventative measures for discriminatory behavior in respect of Eircom's FVCT) should help facilitate ongoing delivery of price and service innovations and choice to end users over time.

Options for the 17 alternative FSPs' FVCT Markets

- Option 1: Impose Transparency and Non-Discrimination obligations
- Option 2: Impose Access, Transparency and Non-Discrimination obligations
- **Option 3: Impose Access, Transparency, Non-Discrimination and Price Control obligations**
- Option 4: Impose Access, Transparency, Non-discrimination, Price Control & Cost Accounting obligations and Accounting Separation obligations.

Option 1: Impose Transparency and Non-Discrimination Obligations		
Impact on alternative (SMP) FSPs	**Impact on Competition**	**Impact on Consumers**
Existing regulatory burden would remain for those 6	Risk that, even though non discrimination mandated in	Absent effective access and price control obligations, scope

Option 1: Impose Transparency and Non-Discrimination Obligations		
alternative FSPs covered by the 2007 Decision[333]. Increase in regulatory burden for those 11 alternative FSPs not covered by the 2007 Decision[334]. Overall, alternative FSPs would have lightest form of regulation imposed on them. Relatively low cost of compliance as rates published already in Eircom's STRPL and non-price terms included in RIO obligation would be those generally pertaining in FSPs' standard interconnect agreements. Alternative FSPs would have flexibility to charge FTRs above efficient cost and/or obstruct access by existing rivals and/or new entrants in downstream markets. Could facilitate extraction of excessive rents from FVCT markets. The SMP FSPs' incentives to innovate and increase efficiency may be reduced where FTRs set above efficient cost are paid for by competitors and, in turn, by their customers. Risk of disputes and legal challenges if FTRs set above efficient cost.	principle, there would be scope for exploitative and exclusionary practices such as high or discriminatory pricing. Effective denial of access and/or delaying tactics could *inter alia* also be invoked to extract excessive FTRs and/or raise rivals' costs. While impacts of any leveraging are likely to be less immediate than in case of Eircom, high FTR pricing or ineffective access could still raise the costs of existing rivals in downstream markets. This could also contribute to raising entry barriers for newer or smaller retail market participants. Negative impact on competition increases as retail market share of alternative SMP FSPs grow. Where FTRs are set above efficient cost, this could limit scope for retail pricing innovations (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by downstream rivals. Regulatory certainty is reduced given wholesale pricing uncertainty. Disputes over the level of FTRs could also raise legal and regulatory costs for the wholesale FVCT customers of the alternative FSPs. Differences in regulatory approach between Ireland and other EU countries (access and price control obligations are generally envisaged by other NRAs) and deviations	for FVCT access to be undermined through *inter alia* high pricing, refusals to supply, delaying tactics, etc. would contribute to reduced scope of retail service (more limited interoperability or higher cost service) for end users. If downstream competition is distorted or investments discouraged through FTRs which are above efficient cost, consumers would potentially have reduced service choice, quality and innovation. Where FTRs are set above efficient cost, this could put upward pressure (or slow the rate of any decline) on retail voice prices. Higher wholesale prices would also limit scope for retail pricing innovations potentially depriving consumers of new and innovative bundles/packages involving fixed voice calls.

[333] See footnote 272 above.

[334] See footnote 274 above.

Option 1: Impose Transparency and Non-Discrimination Obligations		
	from European Commission guidance could generate legal uncertainty for pan-European operators considering investments in Ireland.	

Option 2: Impose Access, Transparency and Non-Discrimination Obligations		
Impact on alternative (SMP) FSPs	**Impact on Competition**	**Impact on Consumers**
Increase in regulatory burden for all 17 alternative FSPs relative to current situation. Relative to Option 1, imposition of an access obligation would not generate significant additional incremental burden. However, alternative FSPs would still have flexibility to charge FTRs above efficient cost. Could facilitate extraction of excessive rents from FVCT markets. The SMP FSPs' incentives to innovate and increase efficiency may be reduced where FTRs set above efficient cost are paid for by competitors and, in turn, by their customers. Risk of disputes and legal challenges if FTRs set above efficient cost.	Risk that, even though access mandated in principle, there would be scope for exploitative practices such as high pricing which could undermine effective access and raise rivals' costs. While impacts from any leveraging are likely to be lower than in case of Eircom, high FTR pricing or ineffective access could still raise the costs of existing rivals in downstream markets. This could also contribute to raising entry barriers for newer or smaller retail market participants. Negative impact on competition increases as retail market share of alternative SMP FSPs grow. Where FTRs are set above efficient cost, this could limit scope for retail pricing innovations (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by downstream rivals. Regulatory certainty is reduced given wholesale pricing uncertainty. Disputes over the level of FTRs could also raise legal and regulatory costs for the wholesale customers of	While access, transparency and non discrimination obligations would facilitate interoperability of retail services, scope for FVCT access to be undermined through high pricing remains absent effective price control obligations. This would in turn contribute to reduced scope of retail service (more limited interoperability or higher cost service) for end users. If downstream competition is distorted or investments discouraged through FTRs which are above efficient cost, consumers would potentially have reduced service choice, quality and innovation. Where FTRs are set above efficient cost, this could put upward pressure (or slow the rate of any decline) on retail voice prices. Higher wholesale prices would also limit scope for retail pricing innovations thereby potentially depriving consumers of new and innovative bundles/packages involving fixed voice calls.

Option 2: Impose Access, Transparency and Non-Discrimination Obligations		
	alternative FSPs. Differences in regulatory approach between Ireland and other EU countries (price control obligations are generally envisaged by other NRAs) and deviations from European Commission guidance could generate legal uncertainty for pan-European operators considering investments in Ireland.	

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control[335] Obligations		
Impact on alternative (SMP) FSPs	**Impact on Competition**	**Impact on Consumers**
Increased regulatory burden for alternative FSPs relative to current situation and relative to Options 1 and 2 above. Proposal in FTRs and MTRs Consultation Paper to set FTRs according to the costs of an efficient operator as determined by ComReg would reduce compliance and implementation costs. Any revenue impacts associated with the proposed price control obligation are considered in the FTRs and MTRs Consultation Paper. Symmetric approach to imposition of obligations to all FSPs promotes regulatory certainty for all.	Regulating FTRs at efficient cost would reinforce the effectiveness of access, transparency and non discrimination obligations and reduce risk of competitive distortions/barriers to entry for smaller or new entrant FSPs in downstream retail markets. Regulating FTRs at efficient cost would contribute to reducing the impact of financial transfers from smaller to larger FSPs and thereby contribute to a level playing field between all FSPs. Regulating FTRs at efficient cost would potentially provide greater scope for retail	Availability of effective FVCT access would facilitate interoperability of services enabling subscribers of other networks to call the alternative FSPs' subscribers. Greater wholesale pricing certainty helps facilitate retail price and service innovations (e.g. in terms of packages/bundles offered). Reduced risk of above-cost FTRs being passed through to end users in form of higher prices relative to Options 1 and 2 above. Reduced risk of competitive distortions and more level playing field in downstream markets should help facilitate ongoing delivery of price and service innovations and choice

[335] A detailed RIA on the proposed price control obligation is set out in the FTRs and MTRs Consultation paper (Appendix B) and is not further elaborated here. Options 3 and 4 in this Consultation Paper thus assess the merits of imposing a price control obligation which would regulate FTRs according to the concept of efficient cost (with the impacts of the precise efficient costing methodology proposed set out further in Appendix B).

Option 3: Impose Access, Transparency, Non-Discrimination and Price Control[335] Obligations		
When purchasing FVCT, the SMP FSPs will also benefit from effective access to FVCT inputs from other suppliers. Risk of disputes and legal challenges involving the alternative FSPs' FTRs would be eased relative to Options 1 and 2.	pricing innovations. Greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors. Greater certainty that FTRs would be set at efficient cost moderates risk of disputes relative to Options 1 and 2.	to end users over time.

Option 4: Impose Access, Transparency, Non-Discrimination, Accounting Separation and Price Control & Cost Accounting Obligations		
Impact on alternative (SMP) FSPs	**Impact on Competition**	**Impact on Consumers**
Increased burden for the alternative FSPs relative to Option 3 due to additional obligations of cost accounting and accounting separation. Higher incremental burden than for Eircom as no such obligations are currently in place for the alternative FSPs. Such additional accounting obligations help protect against discriminatory and leveraging behaviour. However, potentially exceeds what is necessary to address competition problems identified in Section 7. Alternative FSPs may have lesser ability to leverage across multiple markets and impacts of any leveraging may be less immediate than in the case of Eircom.	In addition to the impacts identified for Option 3 above, wholesale customers (and thus downstream rivals) would have significant certainty and transparency regarding alternative FSPs's costs and any potential leveraging practices. However, such wholesale customers would already be substantially protected against such behavior under Option 3.	Same as for Option 3 above.

Assess the Likely Impacts and Choose the Best Option

9.57 In the discussion on the 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.

9.58 ComReg's preliminary view is that, absent regulation, there is the potential and incentive for an SMP FSP in the Relevant FVCT Markets to engage in exploitative and exclusionary behaviours which would impact on competition and consumers. In Section 7 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 FVCT Markets in paragraph 9.15 above, in particular, preventing restrictions or distortions of competition in affected retail markets and helping to ensure that consumers can achieve maximum benefits in terms of price, choice and quality of service.

9.59 The imposition of appropriate *ex ante* remedies to address such competition problems was discussed and justified in Section 8 and each of the specific remedies is designed to promote the development of effective competition and to protect end users. Given that a full suite of remedies is proposed to be applied on Eircom and that all alternative FSPs would broadly face a consistent set of remedies (with the exception of cost accounting and accounting separation), it is ComReg's belief that the risk of competition problems and associated impacts resulting from all FSPs' position of SMP in the Relevant FVCT Markets should be minimised. This will ultimately be to the benefit of Service Providers and end users of downstream retail services.

9.60 The proposed maintenance of regulation in Eircom's Relevant FVCT Market (i.e. **Option 4**) is considered justifiable in that it is required to ensure that Eircom does not exploit its market power at the wholesale level to the detriment of competition in both upstream and downstream markets, and to the ultimate detriment of consumers. In Section 7, a broad range of potential competition problems were identified for Eircom, which has the ability and incentives for both exploitative and exclusionary practices given its continuing significant presence in upstream and downstream markets.

9.61 In particular, Eircom's strong position on downstream retail calls markets (see Section 3 above) implies that the ability and incentives to engage in vertical leveraging/foreclosure would seem particularly strong for Eircom. In view of its control over a number of key input markets, Eircom has the ability and incentives to impede downstream competitors through price (e.g. excessive/ discriminatory pricing) and/or non-price means (e.g. by not facilitating calls from the customers of rival or new entrant FSPs in the calls markets).

9.62 The regulatory obligations chosen do not unduly discriminate against Eircom in that, while the cost accounting and accounting separation obligations specifically only apply to Eircom, the obligations are proposed in order to specifically address the competition problems and are proportionate in that they are the least burdensome means of achieving this objective.

9.63 The proposed imposition of obligations in the relevant FVCT Markets of the 17 alternative FSPs (i.e. **Option 3**) is considered justifiable in that these alternative FSPs have been found to have SMP in their Relevant FVCT Markets, so obligations are required to ensure that these FSPs do not exploit their market power at the wholesale level. ComReg considers that there is insufficient pressure to constrain an FSP from behaving, to an appreciable extent, independently of its competitors and customers in its FVCT pricing behaviour. Therefore, in the absence of regulation, it is ComReg's preliminary view that each FSP with SMP would have an ability to set FVCT prices above efficient cost in the Relevant FVCT Market. These alternative FSPs with SMP in respect of their FVCT inputs also potentially have the ability and incentives to impede the effective supply of such FVCT inputs to operators of a comparable size and/or potential new entrants in the downstream markets.

9.64 The regulatory obligations chosen do not unduly discriminate against any of the 17 alternative FSPs in that SMP and broadly the same competition problems have been identified irrespective of the size of the respective FSPs' activities in downstream retail markets. ComReg thus sees no objective reason to distinguish its approach for alternative FSPs from the approach which applies to Eircom (with the exception fo the cost accounting and accounting separation obligations). This preliminary view also contributes to the development of the internal market since it promotes consistency with EU regulatory guidance and practice.

9.65 It is furthermore ComReg's considered view that the remedies proposed in Option 3 for the 17 alternative FSPs are proportionate in that they are the least burdensome means of achieving the required objectives. In Option 4 ComReg has given consideration to other potential regulatory remedies for the alternative FSPs (such as cost accounting, accounting separation) and considers that such remedies are not, at this time, warranted, largely having regard to proportionality grounds and given that other proposed remedies, if applied appropriately, would appropriately address the relevant competition and other concerns.

9.66 ComReg considers that it has met the condition of transparency by setting out the potential requirements on Eircom and the 17 alternative FSPs, outlining the justification for the proposed obligations, and issuing a detailed and reasoned public consultation on these matters.

9.67 ComReg invites comments from interested parties on the above regulatory impact assessment and its underlying analysis.

Q. 16. 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.

10 Next Steps

10.1 The consultation period will run from 03 September 2012 to 15 October 2012 and all comments on the issues set out in this Consultation Paper are welcome.

10.2 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 this document and summarised in Appendix G.

10.3 Having analysed and considered the comments received, ComReg will review the proposals set out in this Consultation Paper, consult with the Competition Authority and maintain or amend its proposals, as appropriate, including with respect to the draft measures set out in the Draft Decision Instrument concerning the FVCT market review[336].

10.4 ComReg will then notify these 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.

10.5 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[337].

10.6 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.

10.7 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 annex to their response. Such Information 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.

10.8 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.

[336] See Appendix C.

[337] Guidelines on the Treatment of Confidential Information, Response to Consultation, ComReg Document 05/24, March 2005.

Appendix A The 2012 Market Research

The 2012 Market Research has been published separately as ComReg Document 12/96a and is available on ComReg's website at the following link:

http://www.comreg.ie/publications/publications.583.0.0.2012.p.html

Appendix B The FTRs and MTRs Consultation Paper and accompanying Analysys Mason Report on Fixed and Mobile Termination Rates in Ireland

ComReg Document 12/67, Voice Termination Rates in Ireland - Proposed Price Control for Fixed and Mobile Termination Rates, 28 June 2012 is available on ComReg's website at the following link:

http://www.comreg.ie/_fileupload/publications/ComReg1267.pdf

ComReg Document 12/67a, Analysys Mason Final Report for Consultation, Fixed and mobile termination rates in Ireland, 26 June 2012 is available on ComReg's website at the following link:

http://www.comreg.ie/_fileupload/publications/ComReg1267a.pdf

Appendix C Draft Decision Instrument – markets for voice call termination on individual public telephone networks provided at a fixed location - general obligations

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Decision Instrument ("Decision Instrument") is made by the Commission for Communications Regulation ("ComReg") and relates to the market for voice call termination on individual public telephone networks provided at a fixed location 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[1] ("the 2007 Recommendation") and as analysed by ComReg in the document entitled *[Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location] Decision No. D [•], Document No. [•]*.

1.2. This Decision Instrument is made by ComReg:

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[2] and in Regulation 16 of the Framework Regulations; and

ii. Having taken account of its functions 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

[1] 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").

[2] 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).

regulatory framework for electronic communications networks and services ("the SMP Guidelines")[3]; 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[4]; and

v. Having taken the utmost account of the European Commission's Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU ("the Termination Rates Recommendation")[5]; and

vi. Having had regard to the market definition, market analysis and reasoning set out in [*Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location, Consultation Paper and Draft Decision*],ComReg Document No. [12/96]; and

vii. Having taken account of the submissions received from interested parties in relation to ComReg Document No. [12/96] following a public consultation pursuant to Regulation 12 of the Framework Regulations; and

viii. Having consulted with the Competition Authority further to Regulation 27 of the Framework Regulations; and

ix. 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 Regulation 13 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[6]; and

x. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations and Regulations 8, 9, 10, 11, 12 and 13 of the Access Regulations.

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[3] 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).

[4] Policy Directions made by Dermot Ahern TD, then Minister for Communications, Marine and Natural Resources, dated 21 February 2003 and 26 March 2004.

[5] European Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC) (OJ L124/67).

[6] 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.

1.3. The provisions of ComReg Document No. 12/96 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" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time; for the avoidance of doubt, Access shall include (but shall not be limited to) Access to FVCT and Associated Facilities;

"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;

"Airspeed Communications" means Airspeed Communications Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Associated Facilities" shall have the same meaning as under Regulation 2 of the Framework Regulations, 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;

"Blue Face" means Blue Face Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"BT Communications" means BT Communications Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Cable & Wireless" means Cable & Wireless (Ireland) Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Colt Technology Services" means Colt Technology Services Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"ComReg" means the Commission for Communications Regulation, established under Section 6 of the Communications Regulation Acts 2002 to 2011, as may be amended from time to time;

"ComReg Decision D06/07" means ComReg Document No. 07/109 entitled "Decision Notice & Decision Instrument – Designation of SMP & SMP Obligations Market Analysis – Interconnection Market Review Fixed Wholesale Call Termination Services" dated 21 December 2007;

"ComReg Decision DXX/XX" means ComReg Document No. 12/XX entitled "Market Review – Wholesale Voice Call Termination Services Provided at a Fixed Location" [Insert actual title] dated [date to be inserted];

"ComReg Decision D07/11" means ComReg Document No. 11/67 entitled "Response to Consultation and Decisions, Wholesale Call Origination and Wholesale Termination Markets, Response to Consultation Document No. 10/76 and decisions amending price control obligations and withdrawing and further specifying transparency obligations" dated 15 September 2011;

"ComReg Decision D08/10" means ComReg Document No. 10/67 entitled "Response to Consultation Document and Final Direction and Decision, Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited" dated 31 August 2010;

"Digiweb Holdings" means Digiweb Holdings Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Effective Date" means the date set out in Section 17 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 it, and its successors, affiliates and assigns;

"Electronic Communications Network" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Electronic Communications Service" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"End-User" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Equant Network Services" means Equant Network Services International Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“Finarea” means Finarea SA and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“Fixed Number” means a number from the Irish national numbering scheme as set out in the National Numbering Conventions which, within the meaning of this Decision Instrument, is terminated at a fixed location and means a Geographic Number or an internet protocol (“IP”) based number commencing with a network code of 076;

“Fixed Service Provider(s)” or **“FSP(s)”** means an Undertaking providing End-Users with publicly available voice telephony services using a Fixed Number at a fixed location, irrespective of the underlying technology over which such services are delivered;

“Fixed Termination Rate(s)” or **“FTR(s)”** means the wholesale charge(s) levied by a Fixed Service Provider for the supply of Fixed Voice Call Termination;

“**Fixed Voice Call Termination**” or “**FVCT**” means the provision by a Fixed Service Provider of a wholesale call termination service to other Undertakings for the purpose of terminating incoming calls to a Fixed Number in respect of which that Fixed Service Provider is able to set the Fixed Termination Rate. For the avoidance of doubt, the provision of Fixed Voice Call Termination involves the provision of an Interconnection service;

“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;

“**Geographic Number**” shall have the same meaning as set out in the National Numbering Conventions, as may be amended from time to time. The current meaning of a Geographic Number is a number from the Irish national numbering scheme where part of its digit structure contains geographic significance used for routing calls to the physical location where the call is terminated on the network;

“Imagine Communications” means Imagine Communications Group Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“Interconnection Path(s)” means the physical transmission connection(s) between the Electoninc Communications Networks of two Undertakings which allows for the carriage of calls between the respective networks;

"In2com" means In2com Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Interconnection" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time;

"Magnet Networks" means Magnet Networks Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Magrathea Telecommunications" means Magrathea Telecommunications Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Modeva Networks" means Modeva Networks and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"National Numbering Conventions" means the set of rules under which the Irish national numbering scheme is managed and administered as set out in the document entitled *National Numbering Conventions, Version 7.0, ComReg Document No. 11/17*, as may be amended by ComReg from time to time;

"Numbering Plan Management" shall have the same meaning as under the National Numbering Conventions, as may be amended from time to time. The current meaning of Numbering Plan Management is the function within ComReg which carries out management of the Irish national numbering scheme;

"ODTR Decision Notice 10/02" means ODTR Document No. 02/55 entitled "*eircom's* Reference Interconnect Offer" dated 26 June 2002;

"Primary Allocation/Reservation" shall have the same meaning as under the National Numbering Conventions, as may be amended from time to time. The current meaning of Primary Allocation/Reservation is the direct allocation or reservation of numbers by the Numbering Plan Management to individual network operators, service providers or users;

"Reference Interconnect Offer" or **"RIO"** means the offer of contract by a Fixed Service Provider to another Undertaking in respect of FVCT (and Associated Facilities). To the extent that there is any conflict between the RIO and the obligations now set out herein, the latter shall prevail;

"Relevant Market" means, in the context of a particular SMP Fixed Service Provider, the specific market relating to that SMP Fixed Service Provider's supply of FVCT as identified in Sections 4.2.(i) to 4.2.18 (xviii) below;

"Relevant Markets" means all of the markets defined in Section 4.2 below;

"Secondary Allocation/Reservation" shall have the same meaning as under the National Numbering Conventions, as may be amended from time to time. The current meaning of Secondary Allocation/Reservation is the allocation or reservation of numbers to a downstream Undertaking or to an End-User, by an Undertaking to whom a Primary Allocation/Reservation has already been made. For the avoidance of doubt, a downstream Undertaking in this context includes any Undertaking other than the Undertaking to whom the Primary Allocation/Reservation was made;

"Service Level Agreement(s)" or **"SLA(s)"** means a legally binding contract between Eircom and another Undertaking in relation to the service levels which Eircom commits to from time to time, as more particularily set out in the Reference Interconnect Offer. For the avoidance of doubt, however, to the extent that there is any conflict between the Reference Interconnect Offer, the SLAs and Eircom's obligations set out herein, it is the latter that will prevail;

"Significant Market Power (SMP) Fixed Service Provider" refers to a Fixed Service Provider designated with SMP in Section 5 below;

"Significant Market Power (SMP) Obligations" are those obligations as more particularly described in Part II below;

"Subscriber" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Undertaking" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"UPC Communications" means UPC Communications Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Verizon" means Verizon Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Voxbone" means Voxbone SA and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns; and

"3Play Plus" means 3Play Plus Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns.

3. SCOPE AND APPLICATION

3.1. This Decision Instrument applies to each of the following Undertakings in respect of activities falling within the scope of the Relevant Markets defined in Section 4 of this Decision Instrument. Furthermore, this Decision Instrument is binding upon each such Undertaking in the manner now set out below and each such Undertaking shall comply with this Decision Instrument to the extent that it applies to that Undertaking.

i. Airspeed Communications;

ii. Blue Face;

iii. BT Communications;

iv. Cable & Wireless;

v. Colt Technology Services;

vi. Digiweb Holdings;

vii. Eircom;

viii. Equant Network Services;

ix. Finarea;

x. Imagine Communications;

xi. In2com;

xii. Magnet Networks;

xiii. Magrathea Telecommunications;

xiv. Modeva Networks;

xv. UPC Communications;

xvi. Verizon;

xvii. Voxbone; and

xviii. 3Play Plus.

4. MARKET DEFINITION

4.1. This Decision Instrument relates to the market for voice call termination on individual public telephone networks provided at a fixed location, as identified in the 2007 Recommendation and as analysed by ComReg in the document entitled *[Market Review: Wholesale Voice Call Termination*

Services Provided at a Fixed Location] (Decision No. [D…], Document No. [..]. For the purposes of this Decision Instrument, ComReg identifies 18 separate markets as defined in Section 4.2 below (referred to in this Decision Instrument as the Relevant Market(s)).

4.2. Pursuant to Regulation 26 of the Framework Regulations and in accordance with the 2007 Recommendation and the Explanatory Note[7], taking the utmost account of the SMP Guidelines and in accordance with the principles of competition law, the 18 separate Relevant Markets defined in this Decision Instrument are the markets for the provision, by each of those Fixed Service Providers below, of voice call termination services in Ireland to other Undertakings for the purpose of terminating incoming voice calls, as more particularly described in Sections 4.2 (i) to 4.2 (xviii) below:

(i) the provision by Airspeed Communications of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Airspeed Communications is able to set the FTR;

(ii) the provision by Blue Face of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Blue Face is able to set the FTR;

(iii) the provision by BT Communications of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which BT Communications is able to set the FTR;

(iv) the provision by Cable & Wireless of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Cable & Wireless is able to set the FTR;

(v) the provision by Colt Technology Services of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary

[7] European Commission Explanatory Note accompanying the 2007 Recommendation, SEC(2007) 1483/2, C(2007) 5406 ("the Explanatory Note").

Allocation/Reservation) in respect of which Colt Technology Services is able to set the FTR;

(vi) the provision by Digiweb Holdings of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Digiweb Holdings is able to set the FTR;

(vii) the provision by Eircom of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Eircom is able to set the FTR;

(viii) the provision by Equant Network Services of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Equant Network Services is able to set the FTR;

(ix) the provision by Finarea of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Finarea is able to set the FTR;

(x) the provision by Imagine Communications of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Imagine Communications is able to set the FTR;

(xi) the provision by In2com of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which In2com is able to set the FTR;

(xii) the provision by Magnet Networks of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Magnet Networks is able to set the FTR;

(xiii) the provision by Magrathea Telecommunications of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Magrathea Telecommunications is able to set the FTR;

(xiv) the provision by Modeva Networks of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Modeva Networks is able to set the FTR;

(xv) the provision by UPC Communications of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which UPC Communications is able to set the FTR;

(xvi) the provision by Verizon of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Verizon is able to set the FTR;

(xvii) the provision by Voxbone of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Voxbone is able to set the FTR; and

(xviii) the provision by 3Play Plus of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Fixed Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which 3Play Plus is able to set the FTR.

4.3. The Relevant Markets are more particularly described in Section […] of the document entitled *[Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location] Decision No. D [•], Document No. [•].*

5. DESIGNATION OF FIXED SERVICE PROVIDERS 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, each of the following Fixed Service Providers is individually (and not collectively) designated as having SMP in relation to the Relevant Market on which that Fixed Service Provider operates:

i. Airspeed Communications;

ii. Blue Face;

iii. BT Communications;

iv. Cable & Wireless;

v. Colt Technology Services;

vi. Digiweb Holdings;

vii. Eircom;

viii. Equant Network Services;

ix. Finarea;

x. Imagine Communications;

xi. In2com;

xii. Magnet Networks;

xiii. Magrathea Telecommunications;

xiv. Modeva Networks;

xv. UPC Communications;

xvi. Verizon;

xvii. Voxbone; and

xviii. 3Play Plus.

<u>PART II - SMP OBLIGATIONS IN RELATION TO SMP FIXED SERVICE PROVIDERS (SECTIONS 6 TO 13 OF THE DECISION INSTRUMENT)</u>

6. GENERAL PROVISIONS REGARDING SMP OBLIGATIONS

6.1. For the purposes of Part II of this Decision Instrument, the Fixed Service Providers identified at Sections 5.1(i) to 5.1(xviii) above are referred to individually as the “SMP Fixed Service Provider” and collectively as the “SMP Fixed Service Providers”.

6.2. For the purposes of this Decision Instrument, an SMP Obligation applies to an SMP Fixed Service Provider only insofar as and to the extent that such SMP Fixed Service Provider is operating on its Relevant Market.

7. SMP OBLIGATIONS IN RELATION TO FVCT

7.1. ComReg is imposing certain SMP Obligations on SMP Fixed Service Providers in accordance with and pursuant to Regulations 8, 9, 10, 11, 12, and 13 of the Access Regulations, as detailed further in Sections 8 to 13 below.

8. OBLIGATIONS TO PROVIDE ACCESS

8.1. Pursuant to Regulation 12(1) of the Access Regulations, each SMP Fixed Service Provider shall meet all reasonable requests from other Undertakings for the provision of Access.

8.2. Without prejudice to the generality of Section 8.1 and pursuant to Regulation 12(2) of the Access Regulations, each SMP Fixed Service Provider shall provide and grant Access to Undertakings to the following particular services and facilities:

(i) FVCT;

(ii) Associated Facilities.

8.3. Without prejudice to the generality of Section 8.1 (ii) Eircom shall provide and grant Access to Undertakings to Interconnect Paths as a form of Associated Facility.

8.4. Without prejudice to the generality of Sections 8.1 and 8.2, each SMP Fixed Service Provider shall:

(i) Pursuant to Regulation 12(2)(b) of the Access Regulations, negotiate in good faith with Undertakings requesting Access (including Access to FVCT and Associated Facilities); and

(ii) Pursuant to Regulation 12(2)(c) of the Access Regulations, not without the prior approval of ComReg withdraw Access (including Access to FVCT and Associated Facilities) already granted; and

(iii) Pursuant to Regulation 12(2)(e) of the Access Regulations, grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of services or virtual network services (including Access to FVCT and Associated Facilities).

9. CONDITIONS ATTACHED TO THE ACCESS OBLIGATIONS

9.1. Pursuant to Regulation 12(3) of the Access Regulations, each SMP Fixed Service Provider shall, in relation to the obligations set out under Section 8 above, grant Undertakings Access (including Access to FVCT and Associated Facilities) in a fair, reasonable and timely manner.

9.2. Where a request by an Undertaking for provision of Access (including Access to FVCT and Associated Facilities), or a request by an Undertaking for the provision of information in relation to such Access is refused or granted only in part by an SMP Fixed Service Provider, the SMP Fixed Service Provider shall, at the time of the refusal or partial grant, provide in detail to the Undertaking each of the objective reasons for such refusal or partial grant.

9.3. In accordance with its obligation of non-discrimination under Section 10 below and pursuant to Regulation 12(3) of the Access Regulations, Eircom shall conclude, maintain or update as appropriate, legally binding SLAs in respect of its provision of those products and services referred to in Section 8 above.

10. OBLIGATION OF NON-DISCRIMINATION

10.1. Each SMP Fixed Service Provider shall have an obligation of non-discrimination as provided for by Regulation 10 of the Access Regulations in respect of Access (including Access to FVCT and Associated Facilities).

10.2. Without prejudice to the generality of Section 10.1, each SMP Fixed Service Provider shall:

(i) Apply equivalent conditions, including in respect of FTRs or other charges, in equivalent circumstances to other Undertakings requesting or being provided with Access (including Access to FVCT and Associated Facilities) or requesting or being provided with information in relation to such Access; and

(ii) Provide Access (including Access to FVCT and Associated Facilities) and information to all other Undertakings under the same conditions and of the same quality as the SMP Fixed Service Provider provides to itself or to its subsidiaries, affiliates or partners.

10.3. For the avoidance of any doubt, the obligations set out in this Section 10 apply irrespective of whether or not a specific request for services or information has been made by an Undertaking to the relevant SMP Fixed Service Provider.

11. OBLIGATION OF TRANSPARENCY

11.1. Each SMP Fixed Service Provider shall have an obligation of transparency as provided for by Regulation 9 of the Access Regulations in relation to Access (including Access to FVCT and Associated Facilities).

11.2. Without prejudice to the generality of the obligation in Section 11.1, pursuant to Regulation 9(2) of the Access Regulations, each SMP Fixed Service Provider shall make publicly available, and keep updated on its website, a RIO. Eircom shall continue to make publicly available, and keep updated on its website, a RIO (currently Version 3.23 but which may from time to time be amended). The RIO shall be sufficiently unbundled so as to ensure that Undertakings availing of Access (including Access to FVCT and Associated Facilities) are not required to pay for services or facilities which are not necessary for the Access requested.

11.3. The RIO shall include:

(i) A description of the offer of contract for Access (including Access to FVCT and Associated Facilities) broken down into components according to market needs; and

(ii) A description of any associated contractual or other terms and conditions for Access (including Access to FVCT and Associated Facilities) including FTRs and other charges; and

(iii) A description of the technical specifications and network characteristics of the Access (including Access to FVCT and Associated Facilities) being offered.

11.4. Each SMP Fixed Service Provider, other than Eircom, shall publish its RIO within three (3) months of the Effective Date.

11.5. Pursuant to Regulation 9(1) and 9(4) of the Access Regulations, each SMP Fixed Service Provider shall make its FTRs publicly available and shall publish such FTRs in an easily accessible manner on its publicly available website. Each SMP Fixed Service Provider shall, unless otherwise agreed with ComReg:

(i) publish a notice of its intention to amend its FTR(s) not less than 35 calendar days in advance of the date on which any such amendment comes into effect. Such notice shall at least include a statement of the existing FTR(s), a description of the proposed new FTR(s) and the date on which such new FTR(s) are proposed to come into effect; and

(ii) provide Undertakings with which it has entered into a contract in respect of Access, written notification of its intention to amend its FTR(s) not less than 35 calendar days in advance of the date on which any such amendment comes into effect. Such notification shall at least include a statement of the existing FTR(s), a description of the proposed new FTR(s) and the date on which such new FTR(s) are proposed to come into effect.

11.6. Pursuant to Regulation 9(3) of the Access Regulations, ComReg may issue directions requiring an SMP Fixed Service Provider to make changes to the RIO to give effect to obligations imposed in this Decision Instrument and to publish the RIO with such changes. In accordance with Regulation 18 of the Access Regulations, ComReg may issue directions to an SMP Fixed Service Provider from time to time requiring it to publish specified information, such as accounting information, technical specifications, network characteristics, prices, and terms and conditions for supply and use, including any conditions limiting access to or use of services and applications where such conditions are permitted by law. Each of the alternative SMP Fixed Service Providers shall publish its RIO within three (3) months of the Effective Date. Furthermore, Eircom is obliged to continue to make publicly available, and keep updated on its website, its RIO in its current form (version 3.23) but which may, from time to time, be amended.

11.7. Without prejudice to Section 11.3 Eircom shall comply with the processes developed in accordance with ODTR Decision Notice D10/02, as it relates to the services referred to in Section 8 of this Decision Instrument, to the extent that the obligations contained in ODTR Decision Notice D10/02 do not conflict with the obligations contained in this Decision Instrument. Where there is any conflict between the ODTR Decision Notice D10/02 and Eircom's obligations now set out herein, it is the latter which shall prevail.

11.8. For the avoidance of doubt, Eircom shall comply with its existing transparency obligations as set out in Part 5 and Part 6 of the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11 in its provision to any other Undertaking of Access to or use of those products, services or facilities referred to in Section 8 of this Decision Instrument. For the avoidance of doubt, an obligaton (relating to FVCT) that was in force under ComReg Decision D07/11 immediately before the coming into operation of this Decision Instrument shall continue in force as if was made pursuant to this Decision Instrument.

12. OBLIGATION OF ACCOUNTING SEPERATION

12.1. Pursuant to Regulation 11 of the Access Regulations, Eircom shall have an obligation to maintain separated accounts. All of the obligations in relation to accounting separation, set out in Annex 1 and 2 of ComReg Decision D08/10 applying to Eircom and in force immediately prior to the Effective Date of this Decision Instrument which relate to the Relevant Market shall be maintained in their entirety.

13. OBLIGATION RELATING TO PRICE CONTROL

13.1. Pursuant to Regulation 13(1) of the Access Regulations, each SMP Fixed Service Provider shall be subject to a cost orientation obligation as regards FTRs and prices charged by that SMP Fixed Service Provider to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 8 of this Decision Instrument.

13.2. The cost orientation obligation referred to in Section 13.1 shall be subject to the requirements further specified by ComReg in the [Draft] Decision Instrument contained in Appendix D of ComReg Document No. [12/96]**.**

13.3. Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall continue to comply with all of the obligations in relation to cost accounting in force immediately prior to the Effective Date of this Decision Instrument.

13.4. Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall maintain appropriate cost accounting systems in respect of products, services or facilities referred to in Section 8 of this Decision Instrument.

13.5. For the avoidance of doubt, Eircom shall comply with its existing price control obligations as set out in the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11 in its provision to any other Undertaking of Access to or use of those products, services or facilities referred to in Section 8 of this Decision Instrument. For the avoidance of doubt, an obligaton (relating to FVCT) that was in force under ComReg Decision D07/11 immediately before the coming into operation of this Decision Instrument shall continue in force as if was made under pursuant to this Decision Instrument.

13.6. Without prejudice to Section 13.5 of this Decision Instrument, Part 4 of the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11 shall be withdrawn from the effective date of Section 7.1, and Section 4 of the Decision Instrument contained in Appendix X of ComReg Document No. 12/XX ***[Insert Doc. No. of Decision Document/Response to ComReg Document No. 12/67 - FTR Decision]****.*

PART III - OBLIGATIONS AND EFFECTIVE DATE (SECTIONS 14 TO 17 OF THE DECISION INSTRUMENT)

14. STATUTORY POWERS NOT AFFECTED

14.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it from time to time under any primary or secondary legislation (in force prior to or after the effective date of this Decision Instrument).

15. WITHDRAWAL OF OBLIGATIONS

15.1. The Decisions set out in ComReg Decision D06/07, save for the provisions contained in the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11, are hereby withdrawn when this Decision Instrument shall take effect.

15.2. Further to Section 15.1 and pursuant to Regulation 8 of the Access Regulations and in accordance with Regulation 13 of the Access Regulations, Part 4 of the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11 shall be withdrawn from the effective date of Section 7.1, and Section 4 of the Decision Instrument contained in Appendix X of ComReg Document No. 12/XX ***[Insert Doc. No. of Decision Document/Response to ComReg Document No. 12/67 - FTR Decision]***.

15.3. Further to Section 15.2 of this Decision Instrument, Part 4 of the Decision Instrument (Wholesale Call Termination) annexed to ComReg Decision D07/11 shall be amended such that the following wording shall be withdrawn:-

"4. AMENDMENT TO OBLIGATION RELATING TO PRICE CONTROL

4.1. The following text shall be inserted following s.10.2 of Decision Instrument at Appendix A of D06/07

4.2. "10.2A Eircom shall not apply a Margin Squeeze.

10.2B Following a request by ComReg, Eircom shall submit to ComReg in confidence its minimum prices and other relevant pricing information for the Call Termination component part of a SV service in order to demonstrate compliance with its obligation at 10.2A.""

16. MAINTENANCE OF OBLIGATIONS

16.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to each SMP Fixed Service Provider and in force immediately prior to the effective date of this Decision Instrument, are continued in force by this Decision Instrument and each SMP Fixed Service Provider shall comply with same.

16.2. 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.

17. EFFECTIVE DATE

17.1. The effective date of this Decision Instrument shall be the date of its publication and notification to each SMP Fixed Service Provider 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. 17. Do you believe that the draft text of the proposed Decision Instrument in relation to general obligations for FVCT is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? 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 D Draft Decision Instrument - markets for voice call termination on individual public telephone networks provided at a fixed location - fixed call termination rates

1. **STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT**

1.1 This Direction and Decision Instrument (“hereinafter Decision Instrument”) relates to a further specification of the cost orientation obligation imposed by the Commission for Communications Regulation (“ComReg”) under Section 13.1 of the [Draft] Decision Instrument contained in Appendix C of this document [ComReg Document No. 12/96].

1.2 This Decision Instrument is made by ComReg:

i. Pursuant to Regulations 8, 13 and 18 of the Access Regulations;

ii. Pursuant to and having regard to the Significant Market Power (SMP) designations on the SMP Fixed Service Providers in the Relevant Markets as provided for in Section 5.1 of the [Draft] Decision Instrument contained in Appendix C of this document [ComReg Document No. 12/96];

iii. Pursuant to and having regard to the cost orientation obligation imposed on each of the SMP Fixed Service Providers by Section 13.1 of the [Draft] Decision Instrument contained in Appendix C of this document [ComReg Document No.12/96];

iv. Having had regard to the functions and objectives of ComReg as set out in Sections 10 and 12 of the Communications Regulation Acts 2002 to 2011[8] and Regulation 16 of the Framework Regulations and Regulation 6 of the Access Regulations;

[8] 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”).

v. Having, where appropriate, pursuant to Section 13 of the Communications Regulation Acts 2002 to 2011 complied with policy directions made by the Minister for Communications, Marine and Natural Resources[9];

vi. Having taken the utmost account of the 2009 Termination Rates Recommendation;

vii. Having had regard to the market definition, market analysis and reasoning in the consultation entitled "Market Review – Wholesale Voice Call Termination Services Provided at a Fixed Location" [*Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location, Consultation Paper and Draft Decision*]; [ComReg Document No 12/96] and the Response to Consultation and Decision Document entitled "[Title to be inserted]", ComReg Decision DXX/12, Document No 12/XX.

viii. Having regard to the analysis and reasoning set out in the consultation and draft decision and directions entitled "Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates" (ComReg Document No 12/67) and the Response to Consultation and Final Decision and Directions entitled "[Title to be inserted]" ComReg Decision DXX/12, Document No 12/XX.

ix. Having notified the draft measure and the reasoning on which the measure is based to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Regulation 13 and Regulation 14 of the Framework Regulations and having taken account of any comments made by these parties.

1.3 The provisions of the Response to Consultation and Final Decision document entitled "[Title to be inserted]", ComReg Decision DXX/12, Document No 12/XX, the Consultation and Draft Decision entitled: "Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates" (ComReg Document No 12/67) and the Response to Consultation and Final Decision entitled "[Title to be inserted]", ComReg Decision DXX/12, ComReg Document No 12/XX shall, where appropriate, be construed with this Decision Instrument.

[9] Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February 2003 and 26 March 2004.

2. Definitions

2.1 In this Decision Instrument, unless the context otherwise suggests:

"Access" shall have the meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time, but shall also include, for the avoidance of doubt, Fixed Voice Call Termination and Associated Facilities;

"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;

"Airspeed Communications" means Airspeed Communications Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Authorisation Regulations" means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011), as may be amended from time to time;

"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;

"Blue Face" means Blue Face Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Bottom Up Pure Long Run Incremental Costs" or **"BU Pure LRIC"** means the methodology used to estimate the pure LRIC of an efficient operator which is derived from an economic/engineering model of an efficient network;

"BT Communications" means BT Communications Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"BU Pure LRIC Model" means a bottom-up model based on the Pure LRIC of an efficient operator and in the context of this Decision Instrument is the bottom up economic/engineering model of an efficient network used to determine the Pure LRIC associated with the supply of Fixed Voice Call Termination which is more particularly described at Chapter 7 of ComReg Document No. ***[Insert Doc. No. of the FTR Decision Document - FTR Decision]***;

"Cable & Wireless" means Cable & Wireless (Ireland) Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Colt Technology Services" means Colt Technology Services Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"ComReg Decision DXX/XX" means ComReg Document No. 12/XX entitled "Market Review – Wholesale Voice Call Termination Services Provided at a Fixed Location" [Insert actual title] dated [date to be inserted];

"ComReg" means the Commission for Communications Regulation, established under Section 6 of the Communications Regulation Acts 2002 to 2011, as may be amended from time to time;

"Digiweb Holdings" means Digiweb Holdings Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Effective Date" means the date set out in Section 8 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 it, and its successors, affiliates 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;

"Equant Network Services" means Equant Network Services International Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Finarea" means Finarea SA and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Fixed Number**" means a number from the Irish national numbering scheme as set out in the National Numbering Conventions which, for the purpose of this Decision Instrument, is terminated at a fixed location and means a Geographic Number, or an internet protocol ("IP") based number commencing with a network code of 076;

"Fixed Service Provider(s)" or **"FSP(s)"** means an Undertaking providing End-Users with publicly available voice telephony services using a Fixed Number at a fixed location, irrespective of the underlying technology over which such services are delivered;

"Fixed Termination Rate(s)" or **"FTR(s)"** means the wholesale charge(s) levied by a Fixed Service Provider for the supply of Fixed Voice Call Termination which are determined on a cent per minute basis and may also include a cent per call basis. For the avoidance of doubt, Fixed Termination Rate(s) includes the Peak Fixed Termination Rate(s), Off Peak Fixed Termination Rate(s) and Weekend Fixed Termination Rate(s);

"Fixed Voice Call Termination" or **"FVCT"** means the provision by a Fixed Service Provider of a wholesale call termination service to other Undertakings for the purpose of terminating incoming calls to a Fixed Number in respect of which that Fixed Service Provider is able to set the Fixed Termination Rate. For the avoidance of doubt, the provision of Fixed Voice Call Termination involves the provision of an Interconnection service;

"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;

"**Geographic Number**" shall have the same meaning as set out in the National Numbering Conventions, as may be amended from time to time. The current meaning of a Geographic Number is a number from the Irish national numbering scheme where part of its digit structure contains geographic significance used for routing calls to the physical location where the call is terminated on the network;

"Imagine Communications" means Imagine Communications Group Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"In2com " means In2com Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Interconnection" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time;

"Magnet Networks" means Magnet Networks Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Magrathea Telecommunications" means Magrathea Telecommunications Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"Modeva Networks" means Modeva Networks and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"National Numbering Conventions" means the set of rules under which the Irish national numbering scheme is managed and administered as set out in the document entitled *National Numbering Conventions, Version 7.0, ComReg Document No. 11/17*, as may be amended by ComReg from time to time;

"**Off Peak-Fixed Termination Rate**" means the FTR charged by the FSP to another Undertaking (or other Undertakings) in respect of the provision of FVCT by the FSP to the Undertaking(s) typically outside of normal working hours (or as such period may be stipulated more specifically in the contract between the FSP and the relevant Undertaking(s) in respect of Access);

"**Peak-Fixed Termination Rate**" means the FTR charged by the FSP to another Undertaking (or other Undertakings) in respect of the provision of FVCT by the FSP to the Undertaking(s) typically during normal working hours (or as such period may be stipulated more specifically in the contract between the FSP and the relevant Undertaking(s) in respect of Access);

"Pure Long Run Incremental Costs" or "**Pure LRIC**" means those costs which are caused by the provision of FVCT and includes only avoidable costs;

“Relevant Markets” means all of the markets defined in Section 4.2 of the Decision Instrument contained in Appendix C of this document [ComReg Document No. 12/96];

“SMP Fixed Service Provider” means a Fixed Service Provider designated with Significant Market Power (SMP) in Section 5 of the [Draft] Decision Instrument contained in Appendix C of this document [ComReg Document No. 12/96], namely; Airspeed Communications; Blue Face; BT Communications; Cable & Wireless; Colt Technology Services; Digiweb Holdings; Eircom; Equant Network Services; Finarea; Imagine Communications; In2com; Magnet Networks; Magrathea Telecommunications; Modeva Networks; UPC Communications; Verizon; Voxbone; and 3Play Plus;

“Undertaking” shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

“UPC Communications” means UPC Communications Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“Verizon ” means Verizon Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“Voxbone” means Voxbone SA and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“**Weekend-Fixed Termination Rate**” means the FTR charged by the FSP to another Undertaking (or other Undertakings) in respect of the provision of FVCT by the FSP to the Undertaking(s) typically during weekends and bank holidays (or as such period may be stipulated more specifically in the contract between the FSP and the relevant Undertaking(s) in respect of Access).

“2009 Termination Rates Recommendation” means the recommendation published by the European Commission on 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC) (OJ L124/67 20.5.2009); and

“3Play Plus” means 3Play Plus Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns.

3. SCOPE AND APPLICATION

3.1 This Decision Instrument applies to each of the following Undertakings and is binding upon each such Undertaking in the manner now set out below and each such Undertaking shall comply with this Decision Instrument to the extent that it applies to that Undertaking.

i. Airspeed Communications;

ii. Blue Face;
iii. BT Communications;
iv. Cable & Wireless;
v. Colt Technology Services;
vi. Digiweb Holdings;
vii. Eircom
viii. Equant Network Services;
ix. Finarea;
x. Imagine Communications;
xi. In2com;
xii. Magnet Networks;
xiii. Magrathea Telecommunications;
xiv. Modeva Networks;
xv. New Concepts Tech;
xvi. UPC Communications;
xvii. Verizon;
xviii. Voxbone; and
xix. 3Play Plus.

3.3 This Decision Instrument relates to a further specification of the cost orientation obligation imposed by ComReg under Section 13.1 of the [Draft] Decision Instrument contained in Appendix C of this document [ComReg Document No. 12/96].

4. FURTHER SPECIFICATION OF THE OBLIGATIONS RELATING TO PRICE CONTROL

4.1 Pursuant to Regulation 13(1) of the Access Regulations and Section 13.1 of the [Draft] Decision Instrument contained in Appendix C of [ComReg Document No. 12/96], each SMP Fixed Service Provider is subject to a cost orientation obligation as regards FTRs and prices charged by the SMP Fixed Service Provider to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 8 of the [Draft] Decision Instrument contained in Appendix C of [ComReg Document No. 12/96].

4.2 For the purpose of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 13.1 of the [Draft] Decision Instrument contained in Appendix C of [ComReg Document No. 12/96], and pursuant to Regulation 18 of the Access Regulations, each SMP Fixed Service Provider is hereby directed to ensure that its Fixed Termination Rate(s) are set in accordance with the Pure LRIC costing methodology.

4.3 Without prejudice to the generality of Section 4.2 of this Decision Instrument and pursuant to Regulation 13(3) of the Access Regulations, each SMP Fixed Service Provider shall ensure that its Fixed Termination Rates are no more than the Fixed Termination Rates, based on the BU Pure LRIC Model, which are set out in the table below.

	Peak	**Off-Peak**	**Weekend**
Cent per Minute			
Cent per Call			

4.4 With effect from [date to be inserted], each SMP Fixed Service Provider shall apply Section 4.3 to all invoices and credit notes issued by it to any Undertaking in respect of FVCT.

4.5 Each SMP Fixed Service Provider shall pre-notify ComReg of its intention to amend its published Fixed Termination Rates, not less than 2 months in advance of the date on which any such amendments come into effect, unless otherwise agreed by ComReg.

4.6 Without prejudice to the generality of Section 4.5, each SMP Fixed Service Provider shall furnish to ComReg at the date of notification, contemplated in Section 4.5, a statement confirming that its Fixed Termination Rates, as adjusted to reflect the proposed amended Fixed Termination Rates, complies with Section 4.3.

5. STATUTORY POWERS NOT AFFECTED

5.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument)

6. MAINTENANCE OF OBLIGATIONS

6.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to the SMP Fixed Service Providers and in force immediately prior to the Effective Date of this Decision Instrument, are continued in force by this Decision Instrument and the SMP Fixed Service Providers shall comply with same.

6.2 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.

7. WITHDRAWAL OF OBLIGATIONS

7.1 [The Decisions set out in Appendix X of ComReg Decision D12/XX ***[Insert Doc. No. of Decision Document/Response to ComReg Document No. 12/67 - FTR Decision]*** are hereby withdrawn when this Decision Instrument shall take effect.

8. EFFECTIVE DATE

8.1 The effective date of this Decision Instrument shall be the date of its notification to the SMP Fixed Service Providers and shall remain in force until further notice by ComReg.

8.2 Notwithstanding Section 8.1, Section 4 of this Decision Instrument shall apply to each SMP Fixed Service Providers with effect from [date to be inserted].

ALEX CHISHOLM

CHAIRPERSON

THE COMMISSION FOR COMMUNICATIONS REGULATION
THE X DAY OF X 2012

Q. 18. Do you believe that the draft text of the proposed Decision Instrument in relation to FTRs is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? 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 E Other SMP Criteria Considered

E.1 As noted in Section 6, other factors which could be used to indicate the potential market power of an FVCT supplier have been considered but, for the reasons set out below, are considered of little or no relevance for the purposes of the SMP assessment in the Relevant FVCT Markets.

Overall size of the undertaking

E.2 This criterion refers to the potential advantages, and the sustainability of those advantages, that may arise by virtue of the size of the undertaking relative to its competitors or customers. Having regard to the definition of the Relevant FVCT Markets, there is only one supplier in each Relevant FVCT Market and, therefore, there are no actual or potential competitors (given significant entry barriers). This criterion is, therefore, considered of less relevance. ComReg does, however, consider this factor to be somewhat relevant in considering the strength and impact of any countervailing buyer power on SMP which it took into account accordingly in that section.

Technological advantages or superiority

E.3 Technological advances or superiority can represent a barrier to entry as well as conferring the ability for an undertaking to achieve cost or production advantages/efficiencies over its competitors. Having regard to the definition of the Relevant FVCT Markets, there is only one supplier in each Relevant FVCT Market (given significant entry barriers) and, therefore, there are no actual or potential competitors. Comparisons amongst 'competitor' technologies thus have little or no bearing on the assessment of SMP in the Relevant FVCT Markets. This criterion is, therefore, considered of less relevance.

Easy or privileged access to capital markets/financial resources

E.4 Easy or privileged access to capital markets may act as a barrier to entry, however, for the same reasons identified in paragraph E.3 there are significant barriers to entry and no actual or potential competitors on each Relevant FVCT Market. The issue of comparing capital/financial advantages vis-à-vis competitors does not therefore arise in the Relevant FVCT Markets and this criterion is, therefore, considered of little or no relevance.

A highly developed distribution and sales network

E.5 The need to establish distribution systems might delay short to medium term market entry given the costs involved and can, therefore, act as a barrier to entry. FVCT is a wholesale service the demand for which is effectively driven by the retail subscribers of the wholesale access seekers making a call to the retail subscribers of the FVCT supplier. The extent of an FVCT supplier's wholesale distribution and sales network therefore plays little role in the decision to purchase FVCT. This is determined at retail level. Furthermore, FVCT may be purchased indirectly through an intermediary transit provider. Hence, the nature of the SMP FSP's distribution and sales network is not necessarily complex. This criterion is, therefore, not considered of relevance to the assessment of SMP in the Relevant FVCT Markets.

Product or services diversification

E.6 While there is often a positive correlation between product/service differentiation and market power (due to the impact of differentiation on brand loyalty and a customer's willingness to switch supplier), FVCT is generally purchased on a standalone basis rather than as part of a broader suite of retail and wholesale services (although Transit may be included as part of a bundle with FVCT). However, given that no actual or potential competitors have been identified in the Relevant FVCT Markets, product/service differentiation by FSPs would not confer any comparative advantage in such markets. This criterion is, therefore, considered of less relevance to the assessment of SMP in the Relevant FVCT Markets.

Economies of scale and scope

E.7 Economies of scale refer to the increase in efficiency of production as the number of goods being produced increases. Typically, a company that achieves economies of scale lowers the average cost per unit through increased production since fixed costs are shared over an increased number of goods.

E.8 There are two types of economies of scale:

- External economies - the cost per unit depends on the size of the industry, not the firm.
- Internal economies - the cost per unit depends on size of the individual firm.

E.9 Economies of scale can act as a barrier to entry given new entrants may not achieve the same cost advantages as an existing producer whose output is at operating at a higher level, i.e. it may result in new entrants only being able to operate below the minimum efficient scale.

E.10 Economies of scope exist when a product's average costs are reduced by virtue of the firm producing the product jointly with other products, i.e. where the firm achieves lower costs of production as it produces product jointly rather than separately. Such economies can come from businesses sharing centralised functions, such as finance or marketing. They can also come from interrelationships elsewhere in the business process, such as cross-selling one product alongside another, or using the outputs of one business as the inputs of another. Economies of scope can act as a barrier to entry given they can confer cost advantages on a firm over its competitors (who may not produce other products etc.).

E.11 For the same reasons identified in paragraph E.3 there are significant barriers to entry in the Relevant FVCT Markets, no actual or potential competitors and, as a consequence comparative cost advantages *via* scale or scope economies do not arise in the context of an SMP assessment. These criteria are, therefore, not considered relevant to the assessment of SMP in the Relevant FVCT Markets.

Barriers to expansion

E.12 Where entry barriers are overcome, the ability for new entrants to expand in a market is relevant to understanding the extent to which an undertaking can act independently of such new competitors. For the same reasons identified in paragraph E.3 there are significant barriers to entry in the Relevant FVCT Markets and no actual or potential competitors. As a consequence, entry is unlikely to occur within the period of this market review and competition is not likely to extend beyond the FSP supplying FVCT. This criterion is, therefore, not considered of relevance to the assessment of SMP in the Relevant FVCT Markets.

Sunk costs

E.13 Sunk costs are costs that once incurred cannot be recovered on exit from the market and can represent an absolute barrier to entry. A sunk cost differs from other, future costs that a business may face, such as inventory costs or R&D expenses, because it has already happened. Sunk costs are independent of any event that may occur in the future. For the same reasons identified in paragraph E.3 there are significant barriers to entry in the Relevant FVCT Markets, no actual or potential competitors and, as a consequence, any comparative advantages/disadvantages arising from sunk costs are not considered of relevance to the assessment of SMP in the Relevant FVCT Markets.

Appendix F Identification of Key Wholesale FVCT Suppliers since 2007 Decision

F.1 In identifying all FSPs which currently provide FVCT services as well as those FSPs whose FVCT activity is sufficiently likely/credible during the timeframe of this market review ComReg proposes to identify three broad groups of FSPs for the purposes of identifying their current/prospective FVCT activity as follows:

- **Group A** comprises all those FSPs with fixed number allocations which set/control the FTRs in respect of such fixed numbers and are currently active in the provision of FVCT
- **Group B** comprises those FSPs with fixed number allocations which are not currently active in the provision of FVCT in respect of such fixed numbers but have negotiated, or have concrete plans to negotiate, interconnection with relevant wholesale partners, including the FTRs to be applied, and have formal plans regarding prospective wholesale and/or retail activity; and
- **Group C** comprises those FSPs that have fixed number allocations and have indicated an intention to start supplying/charging for FVCT for calls to those fixed numbers within the next three years but do not currently have formal plans regarding prospective wholesale and/or retail activity.

F.2 Section 5 of this Consultation Paper sets out the key characteristics of a FVCT service as follows:

- FVCT involves the FSP's control (either through a primary or secondary number allocation) of the subscriber's fixed telephone number which is key to routing the final leg of an inbound call to an end user at a fixed location;
- FVCT involves interconnection between networks and the FSP's ability to set/control the FTR for inbound calls to the fixed telephone numbers; and
- FVCT involves technological neutrality (i.e. FVCT services for calls to all fixed telephone numbers are included irrespective of whether the underlying technology is wired or wireless).

F.3 Therefore, ComReg has performed a detailed analysis in order to identify all FSPs that currently or prospectively provide such FVCT services for the purposes of the present market review. In assessing the likelihood of potential FVCT service provisioning within the period of this market review, ComReg has examined *inter alia* whether a potential entrant has been allocated geographic and/or 076 numbers, whether there is any evidence of wholesale interconnection negotiations, and/or whether there are any formal plans for initiation of wholesale and/or retail activities over the three years following the completion of this market analysis process and the adoption of a new decision

F.4 Using this process ComReg has identified the list of FSPs that are currently or prospectively active in providing FVCT services within the timeframe of this market review as set out below. Based on the credibility of FVCT service provisioning over the timeframe of this market review, ComReg is of the preliminary view that the FSPs in Groups A and B would be identified as Relevant FVCT Markets for the purposes of this market review. It should also be noted in respect of the Relevant FVCT Markets that in each case the listed FSP is deemed to include any undertaking which it owns or controls and any undertaking which owns or controls it. The listed party also includes its successors, affiliates and assigns. This means that consolidation of companies by acquisition, creation of a subsidiary or any other changes of control should not affect the list. Where there is market entry or exit the list of FSPs will however require consideration. As noted in Section 5 of this Consultation Paper, ComReg proposes to keep Group C under review.

Group A – *FSPs with fixed number allocations which currently supply FVCT*

- Imagine Communications Group Limited
- Blue Face Limited
- BT Communications Ireland Limited
- Cable & Wireless (Ireland) Limited
- Colt Technology Services Limited
- Digiweb Holdings Limited
- Eircom Limited
- Magnet Networks Limited
- UPC Communications Ireland Limited
- Verizon Ireland Limited
- Airspeed Communications Limited
- In2com Limited
- Voxbone SA
- Finarea SA
- Equant Network Services International Limited
- 3Play Plus Limited
- Modeva Networks

Group B – *FSPs with fixed number allocations which do not currently supply FVCT but have negotiated, or have concrete plans to* *negotiate, interconnection with relevant wholesale partners, including FTRs to be applied, and have formal plans regarding prospective wholesale and/or retail activity*

- Magrathea Telecommunications Limited

<u>Group C</u> – *FSPs with fixed number allocations which do not currently supply FVCT and which have indicated an intention to supply FVCT over next 3 years but do not currently have formal plans regarding prospective wholesale and/or retail activity*

- **[✂....]**
- **[✂....]**

Appendix G Consultation Questions

Appendix H Glossary of Terms

Acronym	Full Title
BEREC	Body of European Regulators for Electronic Communications
CBP	Countervailing Buyer Power
CO	Call Origination
CPP	Calling Party Pays
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
FVCT	Fixed Voice Call Termination
FWA	Fixed Wireless Access
HM	Hypothetical Monopolist
IP	Internet Protocol
ISDN	Integrated Services Digital Network
LLU	Local Loop Unbundling
LRIC	Long Run Incremental Cost
M2F	Mobile-to-Fixed call
M2M	Mobile-to-Mobile call
MNP	Mobile Number Portability
MVNO	Mobile Virtual Network Operator
MSP	Mobile Service Provider
MTRs	Mobile Termination Rates
MVCT	Mobile Voice Call Termination
NGA	Next Generation Access
NRA	National Regulatory Authority
NTP	Network Termination Point
PSTN	Public Switched Telephone Network
RIO	Reference Interconnect Offer

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
STRPL	Switched Transit and Routing Price List
SV	Switchless Voice
TDM	Time Division Multiplexing
VASP	Value-Added Service Provider
VoIP	Voice over Internet Protocol
WBA	Wholesale Broadband Access
WPNIA	Wholesale Physical Network Infrastructure Access