Commission for
Communications Regulation

Market Review

Voice Call Termination on Individual Mobile Networks

All responses to this consultation should be clearly marked:-
"Reference: Submission re Market Review – Voice Call Termination on Individual Mobile Networks ComReg 12/46" as indicated above, and sent by post, facsimile, email or online at www.comreg.ie (current consultations), to arrive on or before 17:00 on 5 July 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 12/46

Date: 23/05/2012

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Redacted Information

Please note 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✂.

Contents

Table of Figures

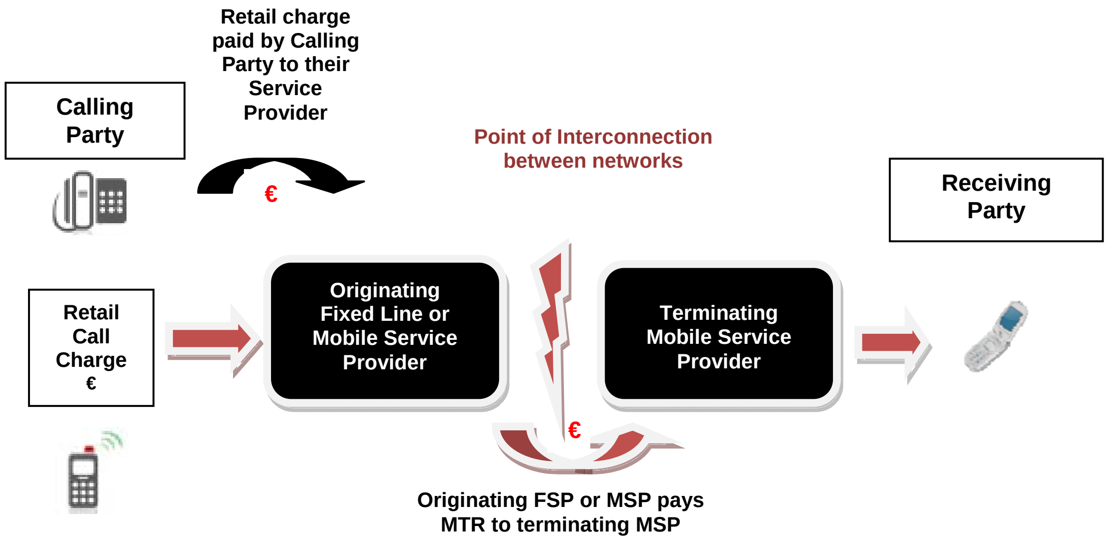
List of Tables

1 Introduction

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

1.2 In providing MVCT, the terminating MSP will charge the originating MSP or FSP a Mobile Termination Rate ('**MTR**'). It should be noted that FSPs and MSPs are referred to collectively for the purposes of this Consultation Paper as "Service Providers". The retail relationship between the calling party, the called party, along with the underlying wholesale interconnection[2] and payment mechanisms, are described in Figure 1 below.

Figure 1: Retail charging and mobile termination interconnect arrangements



[1] The mobile voice call termination service can be provided by the called party's MSP directly. Where an MSP is offering retail mobile services based on an MVNO arrangement (see discussion at paragraphs 3.5 to 3.11), the mobile voice call termination service can be provided by either the called party's MSP itself or indirectly by the MSP (that has no retail contractual relationship with the called party) that provides underlying network and other hosting services to the called party's MVNO-based MSP (i.e. the MSP that has the retail contractual relationship with the called party). i.e. in certain circumstances, mobile voice call termination is not provided by the called party's MSP (which is an MVNO) but is provided by the MSP supporting the underlying MVNO arrangements.

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

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 mobile phone (the '**Receiving Party**'). The Calling Party ('**CP'**) will pay their Service Provider a retail charge for making the call. At the wholesale level, the CP's Service Provider originates the telephone call on its network and, where it is directly interconnected[3], hands the call over to the MSP of the Receiving Party ('**RP**'), thereby facilitating the connection of the call. In general[4], the completion of the call by the RP's MSP involves the provision of a MVCT service by the RP's MSP. The RP's MSP will ultimately charge the CP's Service Provider a MTR to reflect the cost of providing the MVCT service. Neither the CP nor the RP has direct visibility of the MTR charged, however, it is likely that the originating Service Provider will pass some or all of the MTR charge through to the CP 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 markets for the provision of MVCT on individual mobile networks (the '**Relevant MVCT Market(s)**'). The objective of this review is ultimately to decide if, absent regulation, any MSP has significant market power ('**SMP**') in a Relevant MVCT Market and, if so, to impose appropriate remedies to address competition problems that have arisen or could arise in that market. Such competition problems could, for example, include:

- refusal to supply MVCT resulting in an undermining of competition and the inability for consumers to make calls across networks;
- the levying of excessive MVCT 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, MTR price controls and related issues.

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

[3] 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 mobile network.

[4] See footnote 1.

- the **2007 Recommendation**[5] and the **Explanatory Note to the 2007 Recommendation**[6] on relevant product and service markets susceptible to *ex ante* regulation within the electronic communications sector and;
- the **SMP Guidelines**[7] on market analysis and the assessment of significant market power and;
- the **2009 Termination Rate Recommendation**[8] on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU; and
- the **2005 Accounting Separation and Cost Accounting Recommendation**[9].

1.7 ComReg also takes account of:

- the **Notice on Market Definition**[10] for the purposes of community competition law;
- any relevant common positions adopted by **BEREC**[11]

1.8 ComReg has also had regard to relevant European Commission comments made, pursuant to Article 7 of the Framework Directive, with respect to NRAs' market analyses.

1.9 The Consultation Paper defines the Relevant MVCT Markets (product and geographic), assesses competition within those markets and then, finally, examines potential competition problems and proposes appropriate regulatory remedies (along with their impacts) to address such problems. ComReg seeks feedback from all interested parties on these preliminary views.

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[5] 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**').

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

[7] 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**').

[8] 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 Rate Recommendation**').

[9] 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**').

[10] 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.

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

1.10 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 MVCT Markets to date.

Legal basis and regulatory framework

1.11 This market review is being undertaken by ComReg in accordance with the obligation under the **Framework Directive**[12] that NRAs should analyse and define the Relevant MVCT Markets taking the utmost account of the 2007 Recommendation and the SMP Guidelines.

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

1.13 The European Commission refers in the 2007 Recommendation to the wholesale Relevant MVCT Markets as follows:

"Voice call termination on individual mobile networks." [14]

1.14 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 significant market power (**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.

1.15 Where an operator is designated as having SMP in a relevant market, ComReg is obliged, under Regulation 8(1) of the **Access Regulations**[15], to impose on such an operator 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;

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[12] Articles 15 and 16 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC (the '**Framework Directive'**).

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

[14] Annex to the 2007 Recommendation, point 7.

[15] European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the '**Access Regulations'**). The SMP Guidelines also state at paragraph 17 that "NRAs must impose at least one regulatory obligation on an undertaking that has been designated as having SMP".

(b) be proportionate and justified in the light of the objectives laid down in section 12 of the **Communications Regulation Acts 2002 to 2011**[16], 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.

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

(a) to promote competition;

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

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

1.17 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[17] and the NRAs in other Member States pursuant to Regulation 13(3) of the Framework Regulations. Pursuant to Regulation 27(1) of the Framework Regulations, ComReg shall carry out an analysis of the relevant markets in accordance, where appropriate, with an agreement with the Competition Authority under section 34 or 47G of the Competition Act 2002.

1.18 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 MVCT Markets

1.19 The Relevant MVCT Markets have, to date, been regulated pursuant to two separate decisions. In 2004, ComReg designated Meteor, O2, Vodafone and

[16] 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**').

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

H3GI with significant market power (SMP) [18] and regulatory obligations were subsequently imposed[19]. However, the SMP designation with respect to H3GI was (on foot of an appeal by H3GI) subsequently annulled by the Electronic Communications Appeals Panel ('ECAP')[20]. This led to a further analysis of the market for MVCT on H3GI's network and culminated in H3GI being designated with SMP in December 2008 with regulatory obligations also being imposed.[21]

Current Review of the Relevant MVCT Markets

1.20 Given the time that has elapsed since the conduct of the original analyses of the Relevant MVCT Markets and, having regard to market developments, it is now considered appropriate to carry out a further review.

1.21 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, as well as industry meetings. This supplements information which is provided to ComReg in the performance of its regular operations (e.g. for the Irish Communications Market Quarterly Key Data Report (Quarterly Report)). ComReg has also reviewed, in detail, the experience of regulating Relevant 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.

1.22 ComReg has also carried out market research to inform its understanding of consumer and business attitudes/behaviours in the retail mobile market, a copy of which is set out in Appendix A (the '**2011 Market Research**')[22]. ComReg is mindful that surveys, while a useful practical means of gathering information on consumers' preferences/behaviours, need to be interpreted with care and the stated preferences of survey respondents can overestimate what they will actually do in practice.

Liaison with the Competition Authority

1.23 In accordance with Regulation 27(1) of the Framework Regulations, ComReg will consult with the Competition Authority on the Relevant MVCT Markets to be set out in the subsequent decision which will issue following ComReg's consideration of the responses received to the issues raised in this Consultation Paper. ComReg will also continue to keep the Competition Authority informed throughout the conduct of this market analysis process.

[18] Market Analysis – Wholesale Voice Call Termination on Individual Mobile Networks, ComReg Document No. 04/82, Decision 09/04, 24 July 2004.

[19] Market Analysis – Mobile Voice Call Termination on Individual Mobile Networks, Imposition of SMP Obligations, ComReg Document 05/78, Decision 11/05, 13 October 2005.

[20] ECAP Decision No. 02/05, 26 September 2005.

[21] Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/92, Decision 05/08, 1 December 2008.

[22] See paragraph 4.10 for further details regarding the 2011 Market Research.

Consultation Process

1.24 As noted above, the purpose of this Consultation Paper is to set out ComReg's preliminary views on the Relevant MVCT Markets (including 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 document. In so doing, respondents are requested to clearly explain the reasoning for their response, indicating the relevant paragraph numbers within the Consultation Paper to which their response refers, along with all relevant factual or other 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 and in section 9.1. Respondents should also be aware that all non-confidential responses to this Consultation Paper will be published, subject to the provisions of ComReg's guidelines on the treatment of confidential information.[23] 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 or submitted online at www.comreg.ie (current consultations), to arrive on or before 17:00 on 5 July 2012. Any responses received after this date may not be considered.

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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 Providers which 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

[23] See "Guidelines on the treatment of confidential information", ComReg Document No. 05/24, March 2005.

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 as follows:

Section 2: This section contains the executive summary of the issues and proposals for regulation of the Relevant MVCT Markets.

Section 3: This section provides an overview of the main trends that have occurred in the retail mobile market over the last four years.

Section 4: This section provides an assessment of the structural and behavioural characteristics in the retail mobile market, with a view to informing the subsequent definition and Significant Market Power (SMP) analysis of the wholesale Relevant MVCT Markets.

Section 5: This section defines the wholesale Relevant MVCT Markets from both a product and a geographic perspective.

Section 6: This section assesses competition within each of the defined Relevant MVCT Markets and considers whether any MSP 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 MVCT Markets, 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 MSPs having SMP.

Section 9: This section sets out the Regulatory Impact Assessment ('RIA') of the proposed approaches to regulation in the Relevant MVCT Markets.

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 retail market research commissioned by ComReg for the purpose of informing its analysis of the Relevant MVCT Markets.

Appendix B: This section provides a non-exhaustive overview of the key characteristics of retail price plans offered by MSPs and FSPs.

Appendix C: This section provides an analysis of a range of criteria considered other than those set out in section 5 when assessing whether and MSP has SMP.

Appendix D: This section sets out the Draft Decision Instrument which specifies, in legal terms, the nature of the regulatory remedies discussed in section 8.

Appendix E: This section lists each of the questions set out in the Consultation Paper and on which views from interested parties are now being sought.

Appendix F: This section contains a glossary of the most frequently used terms used within the Consultation Paper.

2 Executive Summary

Overview

2.1 There are currently 8 mobile service providers ('**MSPs**') operating within the retail mobile market, four of whom do so on the basis of having their own mobile networks, with the remaining MSPs doing so on the basis of having commercially negotiated Mobile Virtual Network Operator ('**MVNO'**) access to other MSPs' networks. Together, these MSPs provide mobile voice services to just over 4.9 million subscribers in Ireland.

2.1 MSPs and fixed service providers ('**FSPs**') (together '**Service Providers**') provide the ability for their subscribers to make calls to subscribers of other Service Providers. Similarly, MSPs' subscribers also expect to be able to receive calls from subscribers of other Service Providers. To facilitate the ability for subscribers to make and receive calls, at the wholesale level, one Service Provider is responsible for originating calls whereas the other Service Provider receiving the call is responsible for terminating it.

2.2 In the context of facilitating subscribers' ability to make calls to mobiles, the originating Service Provider, through commercial interconnection arrangements, will pay a wholesale charge to the terminating MSP, known as a Mobile Termination Rate ('**MTR**'). This MTR is to allow the terminating MSP to recover its relevant costs associated with the provision of the mobile voice call termination ('**MVCT**') service, essentially being the terminating MSP's completion of the incoming leg of a call to its mobile subscriber.

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. The European Commission has established that the wholesale MVCT market is susceptible to *ex ante* regulation and this Consultation Paper presents ComReg's preliminary views on its analysis of the wholesale markets for the provision of MVCT on individual mobile networks (the '**Relevant MVCT Market(s)**').

2.4 Following previous analyses of Relevant MVCT Markets in Ireland in 2004/2005 and 2008, certain MSPs have been subject to regulation, notably Hutchison 3G Ireland, Meteor, O2 and Vodafone. Having regard to developments since those previous reviews, ComReg is now carrying out a new analysis to assess whether regulation of MVCT provided by such MSPs continues to be warranted and whether it needs to be extended, for the first time, to other MSPs.

2.5 In considering these matters, this Consultation Paper sets out ComReg's preliminary views on the definition of the Relevant MVCT Markets; identifies whether any MSP has significant market power ('**SMP**') in such markets; identifies competition and consumer impacts that could arise as a consequence of such an SMP position; and proposes to impose proportionate regulatory obligations on SMP MSPs in order to address these impacts.

2.6 ComReg's preliminary view is that each of Hutchison 3G Ireland Limited, Meteor Mobile Communications Limited, Telefónica Ireland Limited, Lycamobile Ireland Limited, Tesco Mobile Ireland Limited and Vodafone Ireland Limited has SMP in its Relevant MVCT Market (together the '**SMP MSPs**').

2.7 Amongst the main competition problems arising in the Relevant MVCT Markets is the ability for an SMP MSP, by virtue of its market power, to set its wholesale MTRs above the competitive level. At the retail level, because of what is known as the Calling Party Pays ('CPP') principle, the subscriber making the call to a mobile subscriber bears the entire cost of the call, i.e. the subscriber receiving the call does not pay for it. As MTRs feed into the retail costs of making 'off-network' calls to mobiles (and potentially other services), whether from a fixed line or mobile phone, they ultimately feed into retail prices charged by other Service Providers for making 'off-network' calls to mobiles.

2.8 Because of the CPP principle, the subscriber receiving the call is not typically sensitive to the MTR set by its MSP (as the MTR is paid for by the originating Service Provider). This, coupled with excessively priced MTRs can ultimately lead to distortions in competition between MSPs or indeed between MSPs and FSPs, as such excessive MTRs effectively raise the costs (or reduce the profitability) of rival Service Providers with whom the terminating MSP is, to a greater or lesser extent, in competition.

2.9 Regulation within the Relevant MVCT Markets ultimately seeks to address these pricing and other issues associated with the exercise of SMP by MSPs, for example, by imposing price control obligations that seek to ensure MTRs are reflective of costs. In this regard, there has been much discussion across Europe as to the appropriate economic and regulatory basis upon which National Regulatory Authorities (NRAs), such as ComReg, should set MTRs. This resulted in the 2009 publication by the European Commission of a recommendation on the appropriate cost methodology to be employed by all NRAs when setting termination rates, including MTRs ('**2009 Termination Rate Recommendation**'). ComReg is required to take utmost account of the 2009 Termination Rate Recommendation in establishing its national approach with respect to MTR price control obligations and, where it deviates from it, is required to provide the reasoning for its position to the European Commission.

2.10 While ComReg has specified proposed obligations in detail in this Consultation Paper with respect to access, transparency and non-discrimination remedies, it is, at this stage, proposing to impose a price control obligation of cost orientation in principle. A separate but parallel consultation is expected to issue shortly and will consider, in detail, the further specification of the detailed nature of the cost orientation obligation to be imposed, taking utmost account of the European Commission's 2009 Termination Rate Recommendation.

2.11 Ultimately, it is intended that, following the completion of the two consultations, a final decision on ComReg's approach across all matters will issue in Q4 2012.

2.12 In view of the above overview, 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 MVCT Markets and Competition Assessment

2.13 Prior to assessing whether a MSP has SMP, ComReg must first define the wholesale Relevant MVCT Markets. In this regard, ComReg has, as a first step, carried out an assessment of retail markets, principally to examine whether any retail consumer behaviour, including whether effective retail substitutes for a call to a mobile exist, is likely to constrain an MSP in setting its MTRs above the competitive level. Similar to the retail market assessment, the subsequent analysis of the Relevant MVCT Markets considers whether there are any wholesale products or services which might be considered by a Service Provider as an effective substitute for MVCT, taking account of demand-side and supply-side considerations.

2.14 It is ComReg's preliminary view that neither retail nor wholesale constraints are likely to be effective in preventing a MSP who supplies MVCT from setting its MTRs above the competitive level. As a consequence of this and having considered a range of factors, ComReg has proposed to define six separate national Relevant MVCT Markets, in particular, by reference to characteristics related to the allocation to MSP's of mobile numbers (used by subscribers and key to the routing of the final leg of an inbound call to a subscriber's mobile) and the MSP's ability to set the MTR.

2.15 Having regard to the proposed approach on market definition above, it is ComReg's preliminary view that the following separate Relevant MVCT Markets exist:

- Wholesale MVCT supplied by Hutchison 3G Ireland Limited;
- Wholesale MVCT supplied[24] by Lycamobile Ireland Limited;
- Wholesale MVCT supplied by Meteor Mobile Communications Limited[25];
- Wholesale MVCT supplied by Telefónica Ireland Limited[26];
- Wholesale MVCT supplied by Tesco Mobile Ireland Limited;
- Wholesale MVCT supplied by Vodafone Ireland Limited;

[24] While Lycamobile has not yet entered the retail mobile market, it has effectively entered the wholesale Relevant MVCT Market and its provision of MVCT is credible.

[25] Note that this includes MVCT supplied by Meteor Mobile Communications Limited for the purposes of completing calls to Eircom's 'emobile' subscribers.

[26] Note that this includes MVCT supplied by Telefónica Ireland Limited for the purposes of completing calls to O2's '48' subscribers.

2.16 Given the definition of the Relevant MVCT Markets, neither Postfone nor Blueface fall within the scope of a Relevant MVCT Market, in particular, given they do not charge, nor do they currently have the ability to set, an MTR. However, were they (or new entrant MSPs) to do so, then ComReg considers that there is a strong case to be made that Postfone and Blueface (or a new entrant) would each constitute a defined Relevant MVCT Market in their own right.

2.17 ComReg has assessed whether each of the MSPs operating within the above separate Relevant MVCT Markets has SMP, that is, the ability to act independently of its competitors, customers and consumers. Having considered existing competition, the potential for competition to emerge over the next 2 years, along with other factors (such MSPs' MTR pricing behaviour and the strength of any Service Provider's buyer power in its MVCT negotiations with MSPs), it is ComReg's preliminary view that each of the Relevant MVCT Markets is not effectively competitive. Consequently, ComReg has proposed designating each of the MSPs operating within each Relevant MVCT Market as having Significant Market Power.

Imposition of Regulatory Obligations on MSPs with SMP

2.18 To mitigate identified potential competition problems that could arise from the exercise of market power by SMP MSPs, ComReg has proposed that a range of proportionate *ex ante* regulatory remedies should be imposed, ultimately designed to ensure the development of effective competition amongst Service Providers, to the ultimate benefit of consumers.

2.19 Furthermore, in order to promote regulatory certainty and predictability, and to ensure a continued non-discriminatory approach to regulation, ComReg considers it justified to impose the same obligations on all SMP MSPs. In this regard, amongst the obligations that ComReg has proposed to impose on SMP MSPs are:

- **Access Obligations:** the requirement to provide access to MVCT and associated facilities, and to do so in a fair, reasonable and timely manner; the requirement to negotiate in good faith with Service Providers requesting access to MVCT; the requirement not to withdraw access to facilities already granted; the requirement to grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of services or virtual network services.
- **Non-Discrimination Obligations:** requirements to ensure that other Service Providers being provided with MVCT are not treated differently, for example, with respect to the level of MTRs charged, the quality of service provided and the provision of information concerning MVCT.
- **Transparency Obligations:** requirements to publish a Reference Interconnect Offer setting out the contractual terms and conditions and technical basis upon which Service Providers can obtain access to MVCT

and associated facilities; requirements to publish MTRs and provide advanced notice of changes to them.

- **Price Control:** requirements that prices for access to MVCT and associated facilities, including MTRs, are cost oriented, with the detailed nature of the specific costing methodology to be adopted in light of the proposed cost orientation obligation to be the subject of a separate but near parallel pricing consultation which is expected to be published shortly, i.e. we have proposed to impose cost orientation in principle and this will be further specified through a separate, but near parallel, pricing consultation.

2.20 ComReg has also given consideration to other potential obligations relating to maintenance of cost accounting systems and separated accounts and considers that such remedies are not, at this time, warranted, largely having regard to proportionality grounds and given that the remedies proposed above should, if applied, address the relevant competition and other concerns.

2.21 ComReg expects to reach its final decision on all the matters above in Q4 2012.

3 Retail Mobile Market Trends

3.1 In this section we describe the main developments in the retail mobile market since the last reviews of the wholesale MVCT market.

Structure of the Retail Mobile Market

3.2 Before examining whether any constraints in the retail market impact the price setting behaviour of a hypothetical monopolist supplier of MVCT, ComReg has described below the main MSPs participating in the retail mobile market.

3.3 There are currently four mobile network operators[27] (MNOs) in Ireland, namely, Vodafone, O2, Meteor and H3GI. A brief overview of these MNOs is set out below.

- Vodafone Ireland (**Vodafone**[28]) launched retail service in Ireland in 2001 following its acquisition of Eircell (which had been operating since 1984). It offers both pre-pay and post-pay (contract/billpay) mobile services to personal and business customer segments. Such services typically include voice, SMS (text messaging) and data services with its stated voice network covering 99%[29] of the population. Vodafone has obtained a Primary Allocation/Reservation[30] of mobile numbers from ComReg in the '087 XXXXXXX' mobile number range[31] and a Mobile Network Access Code (MNAC), and it utilises these in providing services to its subscribers. Vodafone is directly interconnected with a number of authorised undertakings.

- Telefonica Ireland (**O2**[32]) launched in 1997 (at that time it was Esat Digifone) and offers both pre-pay and post-pay (contract/billpay) services to personal and business customer segments. Such services typically include voice, SMS (text messaging) and data services with its stated voice network covering 99% of the population[33]. O2 has obtained from ComReg a Primary Allocation/Reservation of mobile numbers in the '086 XXXXXXX' mobile number range and a MNAC, and it utilises these in providing services to its

[27] By MNOs we refer to those mobile service providers which own and operate radio access networks for the purpose of the provision of retail mobile phone and other services.

[28] See www.vodafone.ie .

[29] See http://www.vodafone.ie/coverage/?ts=1313593627816.

[30] As defined under the National Numbering Conventions, Version 7.0, ComReg Document 11/17, as may be amended from time to time. In summary it provides for the direct allocation or reservation of numbers by ComReg to individual network operators, service providers or users.

[31] A mobile number is defined under the National Numbering Conventions (currently version 7.0, ComReg Document 11/17) as "a number from the national numbering scheme commencing with the network code 08X, where 'X' can represent any digital character 0-9, except 1".

[32] See www.o2.ie. For the avoidance of doubt, Telefonica Ireland also includes its brands 'o2' and '48'.

[33] See http://www.o2online.ie/wps/wcm/connect/O2/Home/Business/Coverage/In%20Ireland.

subscribers. O2 is directly interconnected with a number of authorised undertakings.

- Meteor Mobile Communications (**Meteor**[34]) launched in 2001 and offers both pre-pay and post-pay (contract/billpay) mobile services to personal and business customer segments. Such services typically include voice, SMS (text messaging) and data services with its stated voice network covering 99% of the population[35]. Meteor has obtained a Primary Allocation/Reservation of mobile numbers from ComReg in the '085 XXXXXXX' mobile number range and a MNAC and it utilises these in providing services to its subscribers. Meteor is directly interconnected with a number of authorised undertakings.
- Hutchison 3G Ireland (**H3GI**[36]) which commercially launched 3G services in Ireland in September 2003 and in July 2005 offered a full suite of 3G services, offers both pre-pay and post-pay (contract/billpay) services to personal and business customer segments. Such services typically include voice, SMS (text messaging) and data services with its stated voice network covering 99.36% of the population and 90% of the country geographically. H3GI has obtained a Primary Allocation/Reservation of mobile numbers from ComReg in the '083 XXXXXXX' mobile number range and a MNAC, and it utilises this in providing services to its subscribers. H3GI is directly interconnected with a number of authorised undertakings.

3.4 Each of the MNOs above has access to 2G and/or 3G spectrum and has established significant physical radio access networks in the State, combining to provide mobile phone coverage to approximately 99% of the population, i.e. each MNO effectively has a national network.

3.5 There are also a number of mobile virtual network operators (MVNOs[37]) in Ireland which have entered into commercial wholesale network access arrangements with MNOs which permit them to offer their own branded retail mobile services to customers. Such MVNO arrangements include[38] the following:

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[34] Meteor is a wholly owned subsidiary of the Eircom Group. Meteor also includes the 'emobile' brand and, taken together, Meteor and emobile are referred to in this Consultation Paper as 'Eircom Group Mobile'. See www.meteor.ie and www.emobile.ie.

[35] See www.meteor.ie. For the avoidance of doubt, Meteor Mobile Communications also includes its brand 'emobile'.

In achieving this coverage Meteor has entered into a national roaming agreement with Vodafone.

[36] See www.threeireland.ie. In achieving this coverage H3GI has entered into a national roaming agreement with Vodafone.

[37] While it is unnecessary to precisely specify an MVNO definition for the purposes of this Consultation Paper, it is useful to note that MVNO arrangements essentially involve a commercial arrangement with an MNO through which the MNO provides call conveyance and other services to the MVNO over its radio access network. The MVNO arrangement can be differentiated according to the nature and level of wholesale network access provided by the host MNO to the MVNO.

[38] Just Mobile, a MVNO hosted on the Vodafone Network, exited the retail market in August 2011.

- Tesco Mobile Ireland[39] (**TMI**) has entered into an MVNO commercial arrangement with O2[40] through which its traffic is carried on O2's network. TMI, through a Secondary Allocation/Reservation[41], uses the Liffey Telecom '089 XXXXXXX' mobile number range[42] and MNAC in providing services to its subscribers. TMI commenced offering pre-pay mobile services to non-business/personal customer segments in November 2007 and billpay mobile services to personal customers in September 2011. As it is a virtual operator on the O2 radio access network, TMI's population and geographic coverage for voice services are identical to O2 Ireland's 2G and 3G coverage. TMI, through Liffey Telecom, has established interconnection with a number of authorised undertakings.

- Postfone[43] has entered into an MVNO commercial arrangement with Vodafone, through which its traffic is carried on Vodafone's network. Postfone commenced offering pre-pay mobile services to non-business/personal customer segments in May 2010 and its voice services are available to 99% of the population (using Vodafone's network). In offering such services, Postfone has entered into a commercial arrangement with Vodafone through which its traffic is carried on Vodafone's network. Postfone does not have any network, switching or interconnect infrastructure of its own and, through a Secondary Allocation/Reservation, it utilises the Vodafone number range '087 XXXXXXX' (as allocated by ComReg to Vodafone through a Primary Allocation/Reservation) in providing services to its subscribers. It effectively resells minutes carried on the Vodafone network and differentiates its services at the retail level through its own branded offerings.

- Lycamobile[44] has entered into an MVNO commercial arrangement with O2 through which its traffic is carried on O2's network. Lycamobile has not yet commenced offering pre-pay mobile services to non-business/personal customer segments but it is expected to do so in [✂[redacted]], with its voice services to be available to 99% of the population (using O2's network). Lycamobile has obtained a Primary Allocation/Reservation of mobile

[39] Tesco Mobile Ireland was established through a 50/50 joint venture between Tesco Ireland and O2 Ireland. See www.tescomobile.ie.

[40] O2 Ireland has established a wholly owned subsidiary called Liffey Telecom to act as a Mobile Virtual Network Enabler (MVNE). Given Liffey Telecom's relationship with O2, its falls within the scope of O2's existing SMP designation and associated regulatory obligations. TMI purchases MVNO services from Liffey Telecom.

[41] This is known as a Secondary Allocation/Reservation within the meaning of the National Numbering Conventions, Version 7.0, ComReg Document No. 11/17, as may be amended from time to time. In summary it 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.

[42] As allocated by ComReg to Liffey Telecom through a Primary Allocation/Reservation.

[43] See www.postfone.ie.

[44] See www.lycamobile.com.

numbers from ComReg in the '089 XXXXXXX' mobile number range and a MNAC, and it utilises these in providing services to its subscribers. Lycamobile has its own switching infrastructure and is indirectly[45] interconnected to other authorised undertakings.

- Blueface[46] has entered into an commercial arrangement with X-Mobility[47] Limited which is a Mobile Virtual Network Enabler (MVNE)[48]. X-Mobility, in turn has entered into an MVNO arrangement with H3GI which allows it to have its wholesale traffic carried on H3GI's network. In essence, Blueface has indirect access to H3GI's network via X-Mobility. It is through such an arrangement that Blueface commenced offering pre-pay and post-pay mobile services to business customer segments in February 2012 and its voice services are available to 99% of the population (using H3GI's network). In offering such services. Blueface does not have any network, switching or interconnect infrastructure of its own and, through a Secondary Allocation/Reservation, it utilises the H3GI number range '083 XXXXXXX' (as allocated by ComReg to H3GI through a Primary Allocation/Reservation) in providing services to its subscribers. It effectively resells minutes carried on the H3GI network and differentiates its services at the retail level through its own branded offerings.

3.6 While the level of network access provided by the MNOs above under their MVNO arrangements can vary, some characteristics are particularly clear in an Irish context. None of the existing MVNOs have either an allocation of spectrum or have any radio access network (mast, antennae etc.) infrastructure.

3.7 The 'lightest' of the existing MVNO arrangements are characterised by the Postfone and Blueface MVNO arrangements described above.

3.8 Postfone does not have a Primary Allocation/Reservation of mobile numbers from ComReg, and does not have any switching facilities or direct[49] interconnection arrangements with other MSPs or FSPs. Postfone principally acts as a retail re-seller of 'own branded' voice, SMS and other services based the underlying network and switching facilities provided by their host MNO, Vodafone. At the wholesale level, Vodafone charges its MTR to other networks handing over calls destined for Postfone subscriber mobile numbers.

3.9 Blueface, like Postfone, principally acts as a retail re-seller of 'own branded' voice, SMS and other services based the underlying network and switching

[45] Lycamobile has not yet established direct interconnection with other authorised undertakings but plans to do so once traffic volumes justify it. It currently uses O2 as a transit provider.

[46] See www.blueface.ie.

[47] See www.x-mobility.com.

[48] As an MVNE, X-Mobility is not directly active in the Irish retail market but provides 'white label' wholesale services to enable MSPs to enter the retail mobile market through an MVNO type arrangement.

[49] All interconnection and switching facilities are provided by the host networks of these MVNOs.

facilities provided by their host MNO, H3GI (albeit via X-Mobility). At the wholesale level, H3GI charges its MTR to other networks handing over calls destined for Blueface subscriber mobile numbers.

3.10 TMI, like Postfone, does not have a Primary Allocation of mobile numbers from ComReg, and it does not have any switching facilities of its own. However, as noted above, TMI is providing its services through Liffey Telecom and has established the contractual right to determine its own wholesale commercial terms and conditions associated with its supply of MVCT and sets its own MTR independently of Liffey Telecom and other mobile service providers (including O2).

3.11 The 'deepest' of the existing MVNO network arrangements is characterised by the Lycamobile scenario, with Lycamobile having its own UK based switching infrastructure and controlling MVCT access to its subscribers given its ability to switch and route terminating traffic (albeit still utilising the host network, O2). Lycamobile also determines its commercial terms and conditions associated with its supply of MVCT and sets its MTRs independently of its host network (O2) and other mobile service providers.

3.12 In the context of the current analysis of the Relevant MVCT Markets, and having regard to the underlying wholesale network and technical arrangements between MSPs described above, in identifying the economic bottleneck associated with mobile termination, it is important to consider:

- the nature of the arrangements governing the control of the final routing of an incoming call to a MSP's subscribers; and
- who sets/controls the MTR.

3.13 We return to these questions later in section 5.

3.14 The retail market shares[50] of the four MNOs mentioned above and TMI (for 2011 only), as measured according to the number of retail subscribers (excluding mobile broadband) are illustrated in Figure 2 below. This data is presented for the period between Q1 2008[51] and Q4 2011 and includes both personal and business subscriptions. Market shares have, for the most part, remained relatively stable over the period of this graphical analysis.

[50] Market shares of Postfone, Lycamobile and Blueface are not shown are they are sufficiently low such that they do not warrant reporting at this point in time.

[51] As noted in 3.17 below, due to H3GI reporting errors, the H3GI figures up to and including Q4 2008 included reporting errors. Figures were corrected from 2009 onwards.

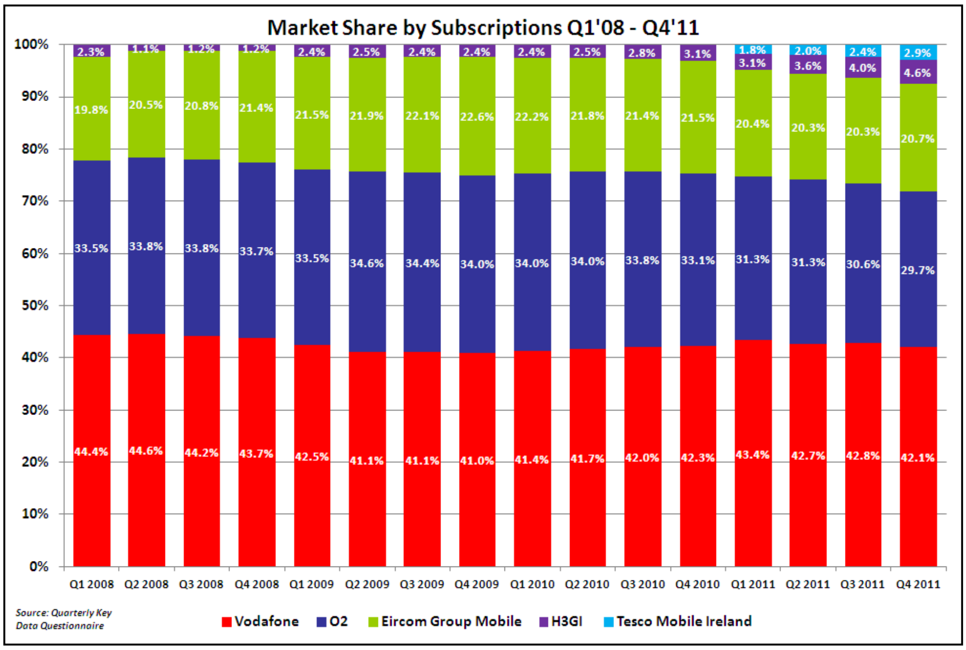


Figure 2: Mobile Service Provider Subscriber Market Shares

Behavioural trends in the Retail Mobile Market

3.15 Over the last number of years the retail mobile market has experienced both growth in the number of mobile subscribers and increases in the average number of minutes used by mobile subscribers. These and other trends are discussed below.

Growth in mobile phone subscriptions

3.16 As shown in Figure 3 below, in the period Q1 2008 to Q4 2011 mobile subscriptions (excluding mobile broadband subscriptions) declined somewhat for a time, however, this trend has been largely reversed with subscriptions broadly returning to the levels experienced at the start of the period (now being approximately 0.5% lower than in Q1 2008).

3.17 However, it should be noted that due to historical H3GI reporting errors, the four quarters of 2008 are not directly comparable to those periods that follow. This is due to an error by H3GI in reporting data to ComReg in the period up to and including 2008. H3GI has provided revised prepaid subscription data for 2009 and 2010 and, based on this revised data, since Q1 2009 subscriptions have increased by 2.2%[52].

[52] Note that Postfone's subscription base has been excluded from the above figures as it has not yet reached a level at which it is published by ComReg in it its quarterly data reports.

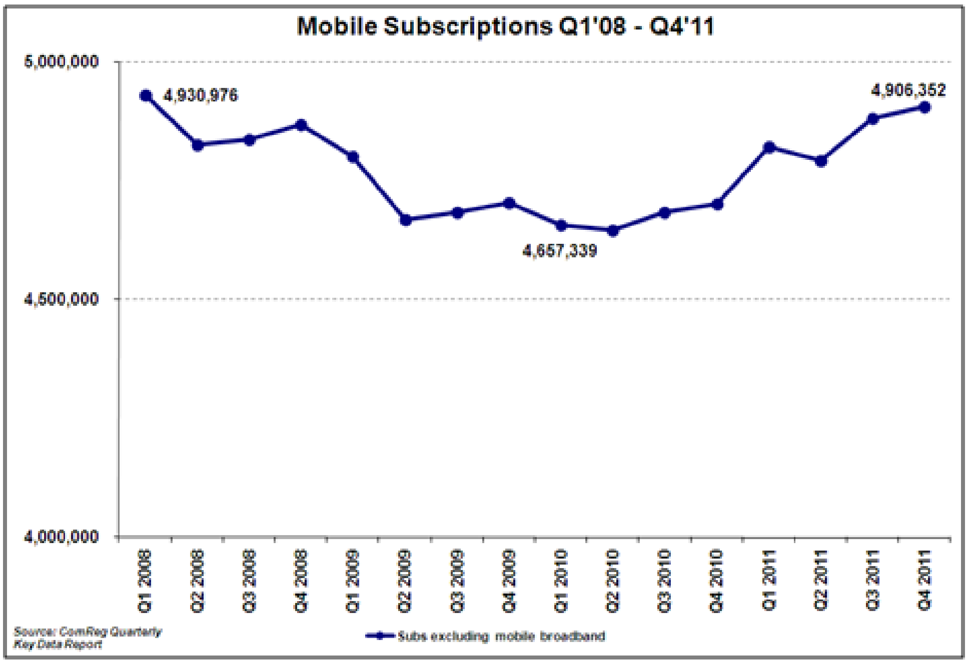


Figure 3: Growth in Mobile Phone Subscriptions

3.18 Figure 4 below shows the split between prepaid and billpay (post-paid) mobile subscriptions between Q1 2008 and Q4 2011. In Q4 2011, approximately 37% of mobile subscriptions were billpay, having grown from 28% in Q1 2008. In Q4 2011, approximately 63% were prepaid subscriptions having fallen from 72% in Q1 2008). The growth trend over the four years appears to show an increased movement from prepaid towards billpay subscriptions.

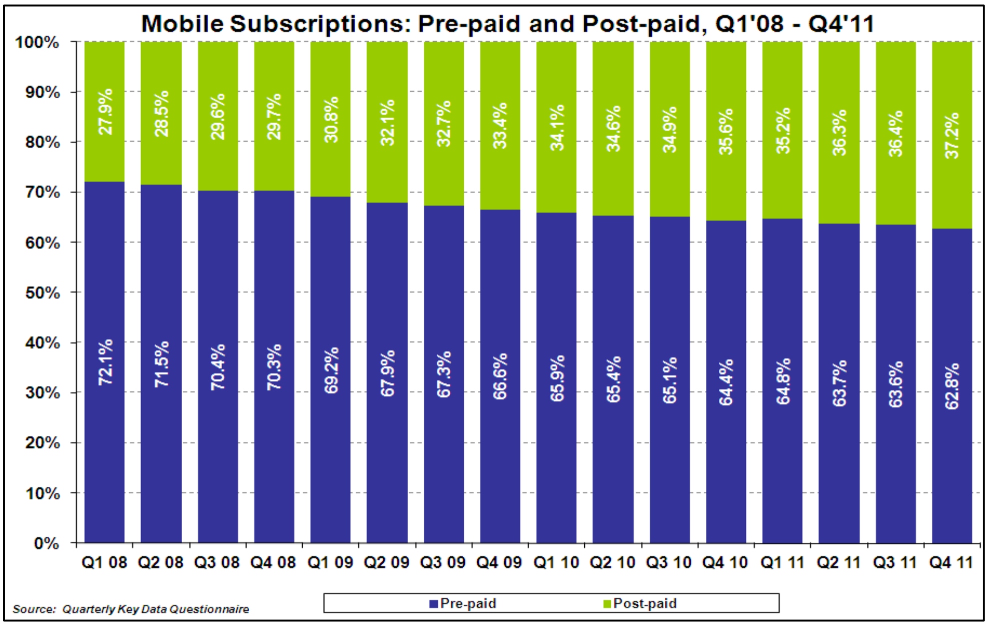


Figure 4: Prepaid and billpay mobile phone subscriptions (excluding mobile broadband)

Growth in use of mobile voice services

3.19 Figure 5 below shows the quarter-on-quarter growth of the average number of minutes of use ('**MoU**') by Irish mobile subscribers in the period Q1 2007 to Q4 2011. Over this period it shows growth of 10.8%.

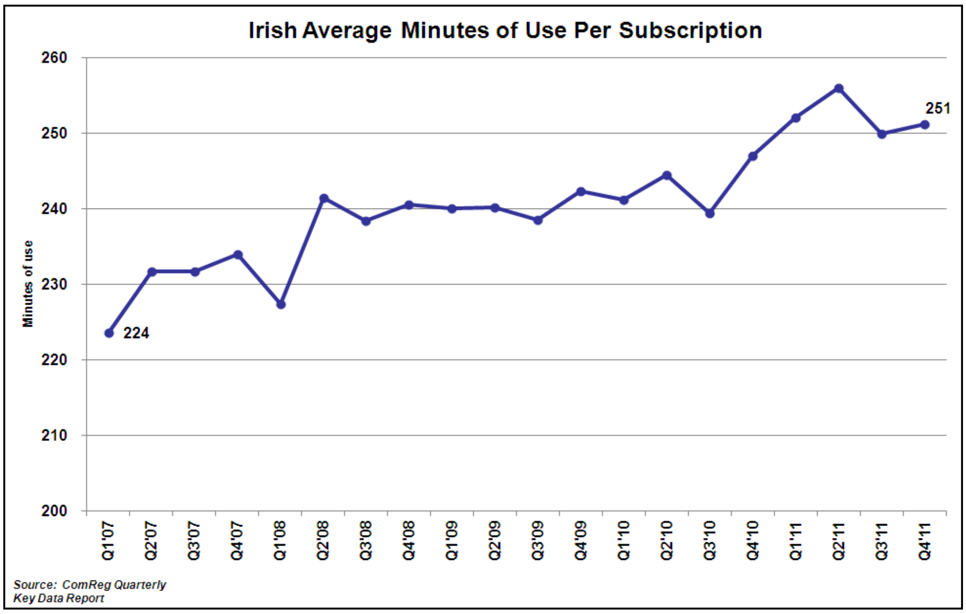


Figure 5: Irish average monthly minutes of mobile use Q1 2007 – Q4 2011

3.20 The average number of monthly mobile MoU by Irish mobile subscribers is also amongst the highest in Europe, with the telecommunications market research agency Informa Telecoms & Media[53] estimating it is approximately 36% higher than the European average. In this regard, Figure 6 below shows that, in March 2011, only French mobile subscribers (279 minutes per month) used more mobile minutes when compared to the Irish subscribers (257 minutes per month). In fact, Irish mobile voice usage in the same quarter in 2010 was higher than all of the other counties compared.

[53] See http://www.informatandm.com/about/wcis/.

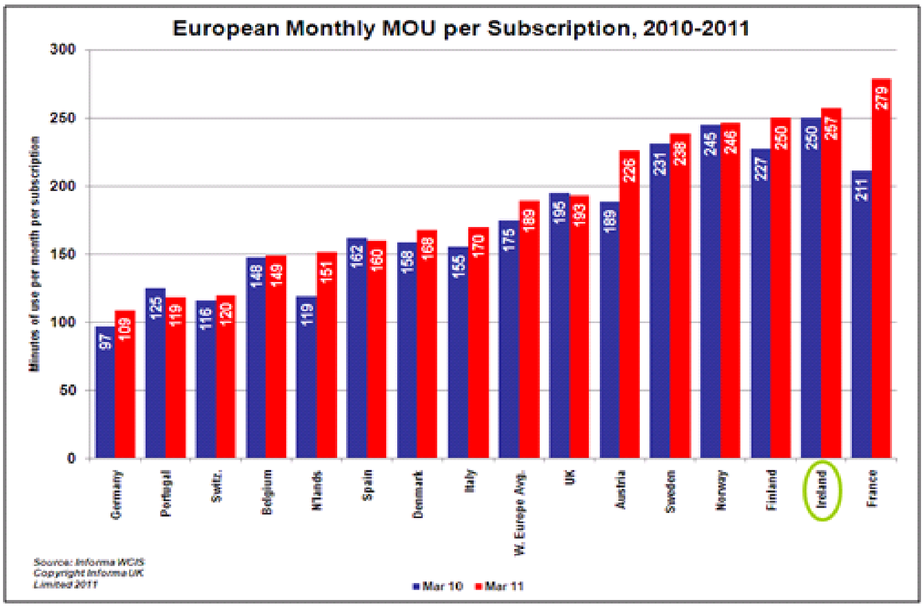


Figure 6: European monthly minutes of use per subscription

Mobile on-net and off-net traffic trends

3.21 ComReg has also examined quantitative data provided by MSPs in response to statutory information requests[54] to assess how on-net and off-net traffic trends have changed over the last four years.

3.22 Figure 7 below shows, for the five main MSPs[55], how on-net traffic trends have changed over the last four years. All MSPs have seen an increase in their on-net traffic between 2007 and 2011:

[54] See paragraph 4.8 for details.

[55] Data is not yet available for Lycamobile which has not yet entered the retail mobile market. Postfone and Blueface data is excluded given scale issues.

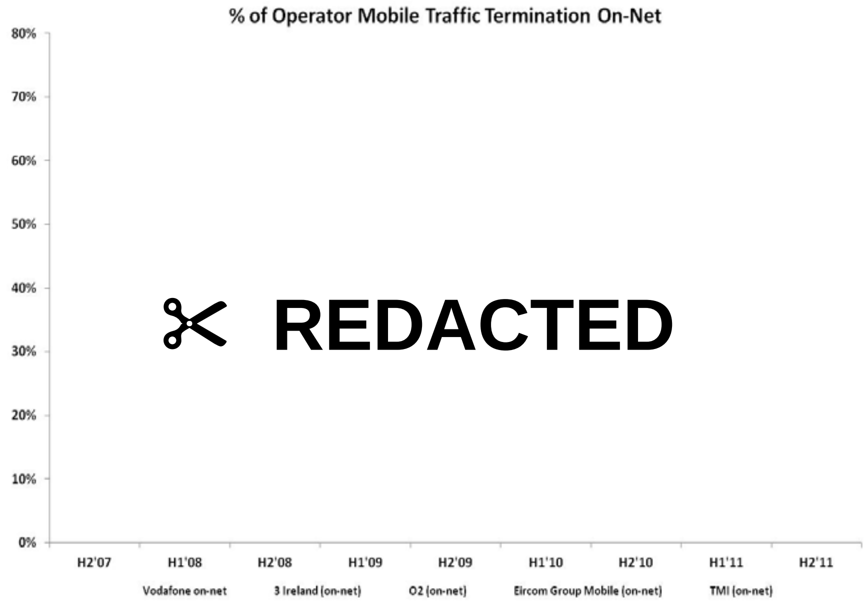


Figure 7: MSP's on-net termination 2007-2011

3.23 Figure 8 below shows the weighted average[56] off-net (termination on another MSP or FSP) and on-net (self-supplied) termination of retail traffic for the 5 main MSPs in the period H2[57] 2007 to H2 2011. As at H2 2011 off-net termination counted for 41.9% having fallen from 54.3% in H2 2007. Similarly, on-net termination grew from 45.7% in H2 2007 to 58.1% in H2 2011.

[56] Given the varied on-net/off-net traffic profiles that each MSP has experienced over time, ComReg has, in the relevant period, weighted all individual MSPs' traffic profiles by their individual market shares (as measured by subscriptions). These are then aggregated for the relevant time period.

[57] Throughout this Consultation Paper, 'H' refers to half year. For example, H1 refers to the half year ending 30 June, whereas H2 refers to the half year ending 31 December.

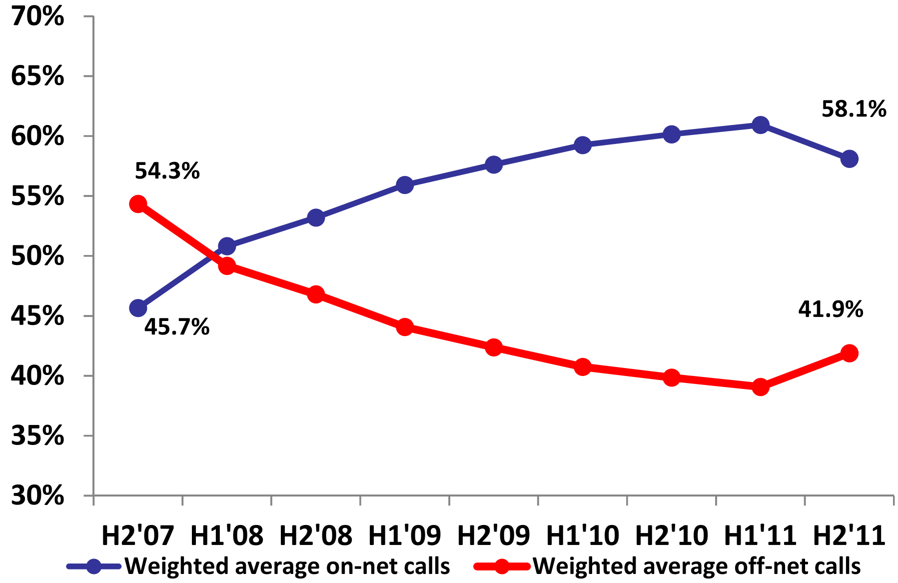


Figure 8: Weighted Average of Off-Net and On-Net Termination across MSPs

3.24 Individual MSP's on-net retail termination is also considered. As at H2 2011, on-net retail termination as a percentage of overall termination[58] for each of the MSPs was as follows:

Mobile Service Provider	% of on-net termination
Vodafone	[✂ [redacted]%]
Eircom Group Mobile	[✂ [redacted]%]
O2	[✂ [redacted]%]
TMI	[✂ [redacted]%]
H3GI	[✂ [redacted]%]

Table 1: % of MSP's on-net 'termination'

3.25 The proportion of on-net 'voice termination' traffic is highest for Vodafone, Eircom Group Mobile and O2 with TMI's and H3GI's on-net traffic being noticeably lower. As at H2 2011, [✂ [redacted]%] of originated mobile calls on Vodafone's network were to other Vodafone customers[59] (self supply of mobile termination). Similarly, Eircom Group Mobile and O2 terminate [✂ [redacted]%] and [✂ [redacted]%] of their own originated traffic, respectively. While growth in on-net traffic for TMI and H3GI has not been as significant as for the other MSPs, it still accounts for

[58] Overall termination refers to self-supplied termination and termination supplied to other undertakings.

[59] Excludes calls to voicemail, premium rate numbers etc.

approximately [✂ [redacted]] and [✂ [redacted]] of all their retail termination traffic respectively.

3.26 Table 2 below shows the rate of growth in the proportion of on-net 'self-supplied termination'[60] over the period H2 2007 to H2 2011. In all cases, the trend in such on-net traffic growth has been upwards, with growth rates ranging from [✂ [redacted]%] to [✂ [redacted]%].

Mobile Service Provider	% growth in on-net termination
Eircom Group Mobile	[✂ +[redacted]%]
Vodafone	[✂ +[redacted]%]
H3GI	[✂ +[redacted]%]
O2	[✂ +[redacted]%]
TMI	[✂ +[redacted]%]

Table 2: % rate of growth in MSP's on-net 'termination'

3.27 Table 3 below shows the actual percentage change in individual MSP <u>volumes</u> of on-net self-supplied termination minutes over the period H2 2007 to H2 2011. In all cases, the trend in on-net traffic volume growth has been upwards, with growth rates ranging from [✂ [redacted]%] to [✂ [redacted]%][61].

Mobile Service Provider	% change in growth of on-net termination
TMI	[✂ +[redacted]%]
H3GI	[✂ +[redacted]%]
Vodafone	[✂ +[redacted]%]
Eircom Group Mobile	[✂ +[redacted]%]
O2	[✂ +[redacted]%]

Table 3: % actual growth in on-net 'termination'

3.28 ComReg has also examined how off-net termination traffic trends have changed over the last four years, with the trends shown in Figure 9 below.

[60] This is calculated as the percentage point change of a MSP's own 'self-supplied termination' (i.e. subscribers' calls both originating and terminating on the same MSP network).

[61] Caution is needed when interpreting this highest figure as it is calculated from a very low starting base.

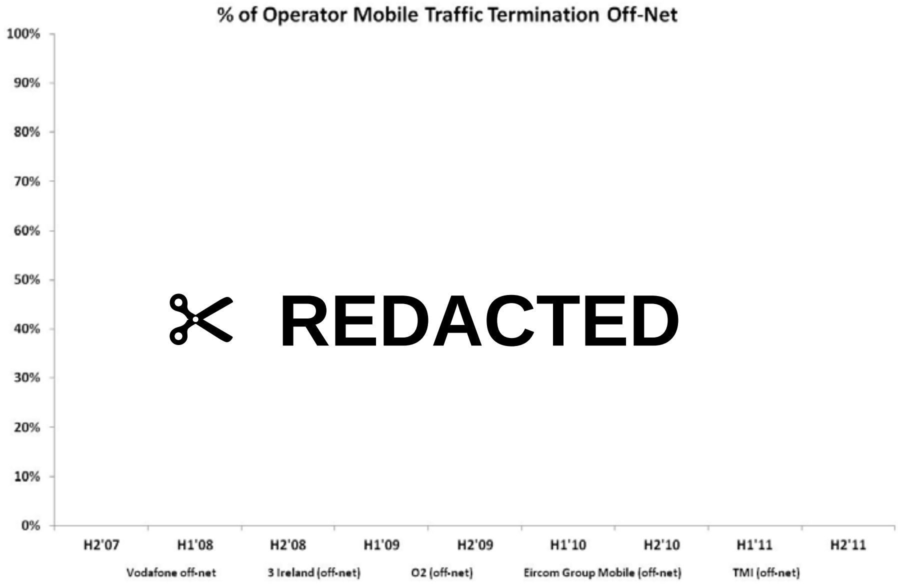


Figure 9: MSP's off-net termination 2007-2011

3.29 As noted in Figure 9 above, the weighted average[62] off-net termination traffic for the 5 main MSPs in the period H2 2007 to H2 2011 shows a general decline in off-net termination. As at H2 2011 off-net termination counted for 41.9% having fallen from 54.3% in H2 2007.

3.30 Individual MSP's off-net traffic profiles are also considered. Table 4 below shows the total rate of growth/decline in off-net traffic termination[63] as a percentage of overall termination over the period H2 2007 to H2 2011.

Mobile Service Provider	% rate of growth decline in off-net termination
Eircom Group Mobile	[✂-[redacted]%]
Vodafone	[✂-[redacted]%]
H3GI	[✂-[redacted]%]
O2	[✂-[redacted]%]
TMI	[✂-[redacted]%]

Table 4: % Growth decline in off-net 'termination'

[62] Given the varied on-net/off-net traffic profiles that each MSP has experienced over time, ComReg has, in the relevant period, weighted all individual MSPs' traffic profiles by their individual market shares (as measured by subscriptions). These are then aggregated for the relevant time period.

[63] This is calculated as the percentage point change of a MSP's purchase of termination on other networks (i.e. MSP's subscribers' call originating on its network and terminating to a subscriber on a different MSP's network).

3.31 In all cases, the trend for off-net traffic termination has shown a decline in growth ranging from [✂-[redacted]%] to [✂-[redacted]%].

3.32 Table 5 below shows the actual percentage change in the per operator volumes of off-net termination minutes over the period H2 2007 to H2 2011. For both TMI and H3GI the positive growth in off-net traffic has been significant[64]. However, the trend for the other MSPs has shown that off-net termination has declined with negative growth rates ranging from [✂ - [redacted]%] to [✂ - [redacted]%].

Mobile Service Provider	% growth/ decline in off-net termination
Eircom Group Mobile	[✂ [redacted]]
H3GI	[✂ [redacted]]
O2	[✂ [redacted]]
Vodafone	[✂ [redacted]]
TMI	[✂ [redacted]]

Table 5: % growth/decline in volumes of off-net termination minutes

3.33 Having regard to the information presented in paragraphs 3.21 to 3.32 above, it is clear that for all MSPs, the percentage of on-net traffic has increased, while off-net traffic has decreased. Smaller MSPs (measured according to overall traffic volumes) also tend to have significantly higher proportion of off-net traffic in comparison to larger and longer established MSPs.

Switching trends

3.34 Mobile Number Portability (MNP) is the process according to which subscribers can keep their mobile number when switching MSP. The level of MNP is, therefore, somewhat indicative of the level of switching in the retail mobile market. Figure 10 below illustrates the cumulative total of mobile numbers ported between Irish MSPs since the launch of MNP in June 2003. Just over 2.6 million mobile numbers have been ported since July 2003, representing approximately 54% of the total mobile subscription base as of Q4 2011. In Q4 2011, 118,042 mobile numbers were ported between MSPs (453,098 mobile numbers in the twelve months to December 2011).Over 2011, an average of 113,275 mobile numbers were ported each quarter.

[64] Some caution is required when interpreting some of these figures given they have been calculated from a relatively small starting base.

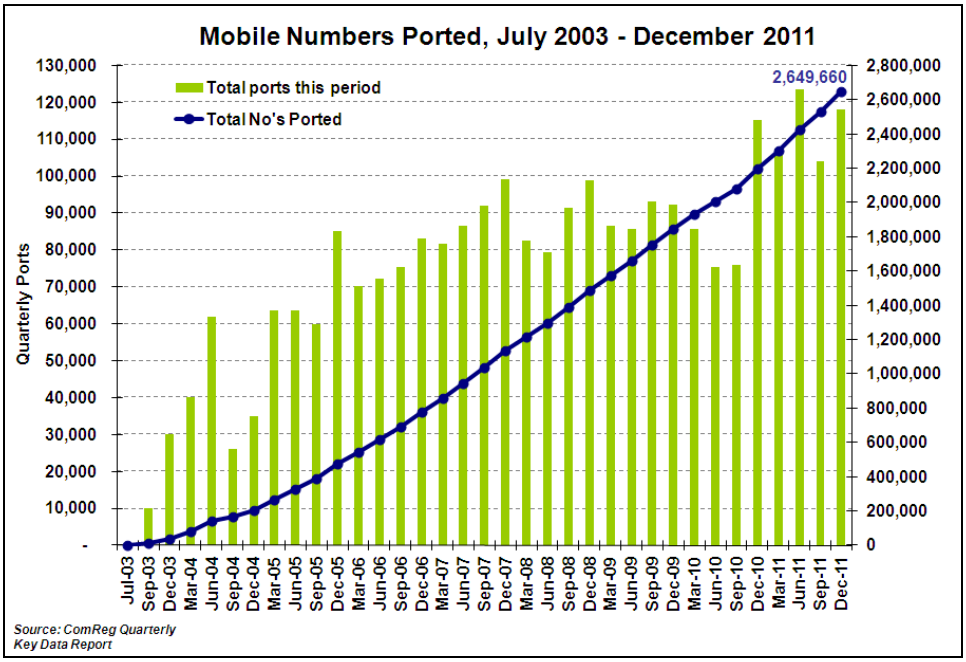


Figure 10: Mobile numbers ported in Ireland

3.35 According to the 2011 Market Research[65] conducted by The Research Perspective, 33% of consumer respondents indicated they had at some point in the past switched MSP, with 6% stating they had done so within the last 12 months. 73% of consumer respondents also indicated they had been with their MSP for 3 or more years. This corresponds with previous research[66] conducted by Millward Brown Lansdowne for ComReg which indicated that 33% of consumers had, at some stage, switched MSP.

3.36 The 2011 Market Research also revealed[67] that 42% of SMEs had at some point in the past changed MSP. 56% of SMEs indicated they had been with their current MSP for 3 or more years.

3.37 The above switching figures, allied to the long periods that consumers have been with their current service provider, may suggest that customer switching is concentrated amongst a group of mobile subscribers (repeat switchers) rather than amongst the broader subscriber base.

Retail Price Plans

3.38 The structure of retail mobile price plans has also changed somewhat since the last review of the wholesale MVCT markets. ComReg has carried out a non-exhaustive but extensive review of retail mobile price plan structures within the

[65] See Appendix A: Slides 49 to 53.

[66] "Consumer ICT Survey Q2 2010: A review of findings" conducted by Millward Brown Lansdowne on behalf of ComReg, ComReg Document 1062r.

[67] See Appendix A: slides 115 to 120.

market, as well as the structure of fixed line phone plan costs for calling mobile phones. This has involved an examination of, for example, whether the cost of calling mobiles differs by network called and by time of day called.

3.39 The output for this review is summarised in Appendix B, with the key trends within retail mobile price plan structures being broadly summarised as follows:

(a) specific or unlimited amounts of minutes are included in all mobile billpay plans and can be used for calls to any network, i.e. they are not restricted to particular networks;

(b) the cost of off-net calls (or text messages) for both prepay and billpay mobile customers does not tend to vary[68] based on the network called. i.e. the prices charged for calling other mobile or landline networks do not vary;

(c) a significant number of prepay[69] and billpay plans offer free unlimited or a specific number of minutes/calls[70] to all other mobiles on the same network (on-net);

(d) the cost of calls (or text messages) for both prepay and billpay customers does not tend to vary based on the time of day called;

3.40 The above trends also feature amongst MSPs' business pricing plans (businesses tend to mainly use billpay plans). Other common features amongst such business plans are free or low cost calls to company mobiles (essentially a subset of on-net calls) and the ability to share inclusive company plan minutes across all employee mobile subscriptions. Many MSPs' bill-pay pricing plans offer unlimited calls to any network (on-net and off-net) at anytime of day or only to subscribers on the same network (i.e. on-net).

3.41 As for the trend of landline retail pricing structures for calling mobiles, these generally tend to exhibit the following:

- prices for calls differ according to whether it is a call to a landline or a mobile;
- prices for calls to mobiles can differ according to which mobile network is called and at what time of day the call is made.
- there is evidence of some inclusion within fixed line call bundles of set amounts of designated inclusive minutes that can be used for calling mobiles, although the number of such inclusive minutes tends to be low. When the fixed line service provider is also operating within the retail mobile market,

[68] There are some minor variances amongst certain plans offered by certain MSPs. Where this is the case, the variance usually takes the form of a lower on-net or landline call price either at any time of day or restricted to off-peak and/or weekend periods.

[69] Some pre-pay plans impose eligibility conditions such as the requirement to purchase a minimum amount of credit each month.

[70] Unlimited call offers mainly allow calls to be made at any time of day, however, some MSP plans restrict such calls to evenings and weekends.

the volume of such minutes tends to be slightly higher, but restricted to calling mobile subscribers on the service provider's own mobile network.

Other related developments since the last review

3.42 We have already noted above that, over the last three years, we have seen relatively stable subscriber market shares across most MSPs, with the total number of mobile subscriptions also being currently at the same level as it was in Q1 2008. We have also seen significant growth in subscribers' use of mobile voice minutes.

3.43 Apart from these and the other developments noted, there have been a number of other changes in the retail market since the completion of the last analysis of the wholesale MVCT markets, as well as signs of potential developments which may occur over the next number of years which could impact on the Relevant MVCT Markets in the future. These are discussed below.

Growth in mobile phone usage and decline in fixed line phone usage

3.44 Figure 11 below shows the trend in total retail mobile and fixed voice traffic over the period Q1 2007 to Q4 2011. Retail mobile voice traffic totalled just over 2.7 billion minutes in Q4 2011 having grown by 79% since 2007. Over the same period, there has also been a decline of 38% in the number of fixed line phone minutes.

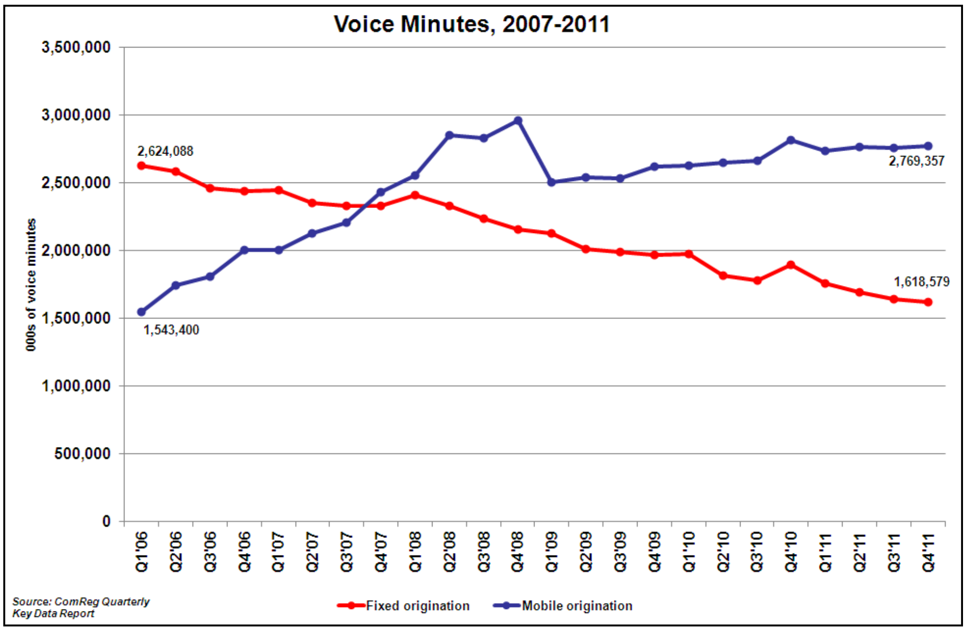


Figure 11: Fixed and mobile voice minutes, 2007-2011

3.45 As of Q4 2011[71], approximately 77% of all mobile originated voice minutes were mobile-to-mobile (on-net and off-net) minutes with just over 11% being to fixed

[71] Sources: ComReg Quarterly key Data Questionnaire and information provided by service providers.

line phones[72]. In Q1 2008, 61% of all mobile originated voice minutes were mobile-to-mobile (on-net and off-net) minutes, with approximately 12% being to fixed line phones[73]. Over this same period, the total volume of mobile to mobile voice minutes increased by 53% while mobile to fixed minutes increased by 2%.

3.46 Similarly, as of Q4 2011 54% of all fixed line originated voice minutes were to other domestic fixed line phones with 14% being to domestic mobiles[74]. In Q1 2008, 56% of all fixed line originated voice minutes were to other domestic fixed line phones with approximately 15% being to domestic mobiles. Over this same period, the total volume of fixed to mobile voice minutes decreased by 39% while fixed to fixed minutes decreased by 34%.

Decline in fixed line ownership

3.47 Based on information from ComReg's Quarterly Key Data Report, Figure 12 below shows that total fixed access paths (direct and indirect PSTN and ISDN), which are usually used for voice services and internet access, have declined by 11.8% since Q1 2006 and stood at 1.76m in Q4 2011. It should be noted that these figures exclude UPC's telephony subscribers (provided over their cable broadband network) which, as at Q4 2011, amounted to 162,200 subscribers[75]. The reduction in the number of fixed access paths below could be due to a number of reasons such as an increase in the number of business failures, competition from other platforms (such as UPC) and fixed line disconnections due to emigration and/or cut backs in personal expenditure habits.

[72] The remainder of mobile originated minutes are accounted for by international and roaming calls as well as 'advanced' voice minutes which include calls to premium rate services.

[73] While the proportion of mobile to fixed line has remained stable, the gain in market share by mobile to mobile calls between 2008 and 2011 can, in part, be explained by changes to certain definitions in ComReg's Key Quarterly Report questionnaires send to service providers.

[74] The remainder of fixed line originated minutes are accounted for as international and "advanced" minutes.

[75] See page 13 of Liberty Global –quarterly report at http://www.lgi.com/PDF/UPC-Holding-BV-2011-RESULTS.pdf.

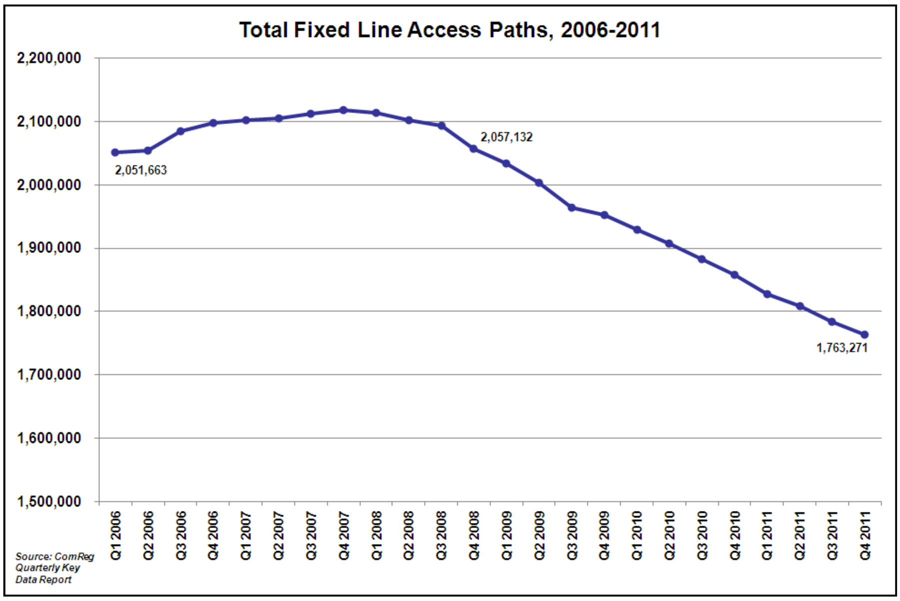


Figure 12: Total fixed line access paths, 2006-2011

3.48 According to the 2011 Market Research[76], 39% of all mobile consumers[77] surveyed indicated that there was no fixed line phone in their place of residence. Of those who said there was no fixed phone in their place of residence, 53% indicated that this was in order to save money and 42% suggested that they preferred to use their mobile phone.

3.49 Of the SMEs surveyed as part of the 2011 Market Research[78], of those with a mobile phone, only 6% indicated that there was no fixed line phone in the place of business, while 17% of such SME respondents said that there was only one fixed line phone present. Approximately the same proportion of calls are made from the business' fixed line phones to mobile phones as are made to other fixed line phones, while 4% of SMEs with fixed line phones state that they make no calls to mobile phone numbers.

3.50 The decline in fixed line ownership in both the consumer and business sectors may also explain, to some degree, the fall in the volume of fixed line originated voice minutes to mobiles (and other domestic fixed lines) discussed in paragraphs 3.45 and 3.46 above.

Smartphone usage

3.51 Since the last review handset and network technologies have been developing which have enabled the provision of a broader range of content rich services to

[76] See Appendix A: Slide 25.

[77] It should be noted that this indicates the prevalence of fixed line ownership amongst mobile subscribers as opposed to fixed line ownership in general.

[78] See Appendix A: Slide 90.

mobile users on their handsets. Mobile broadband availability enables consumers to access social networking media (such as Facebook, Twitter, and Linkedin), instant messaging services, voice-over-internet protocol (VoIP) services (such as Skype) and provide the means to download multimedia applications to their mobile handsets.

3.52 The emergence of smartphone technology has allowed consumers use these applications and functionalities. As of Q4 2011 there was approximately 2.1m active, non-dongle 3G SIMs used in mobile phones[79]. This figure roughly corresponds with the 2011 Market Research which showed[80] that 44% of the consumer respondents owned a smartphone in 2011. Since Q2 2009 ComReg estimates that smartphone usage in Ireland has grown by 38%.[81]

3.53 Among the 44% of consumers who own a smart phone, approximately half use email, social networks or web browsing on their mobile phones with approximately 20% using these services every day. VoIP is used by 20% of smart phone owners with 4% using it every day.

3.54 The 2011 Market Research also indicated[82] that those consumer respondents in the younger age cohorts are more likely to use smart phone applications over the internet than those in older age cohorts. The 2011 Market Research also showed[83] that those with prepaid subscriptions are less likely than those with post pay subscriptions to have a smart phone. Among smart phone consumer users, access to social networking sites is the most commonly used smart phone data service in the under 25 age cohort with email most commonly used in the 26-35 age group.

Spectrum

3.55 The availability of spectrum is essential for market entry for any mobile network operator. Vodafone, O2, and Meteor have each been assigned spectrum[84] in the 900 MHz (GSM), 1800 MHz (GSM) and 2100 MHz (3G) spectrum bands, whereas H3GI has been assigned spectrum in the 2100 MHz (3G) band only. While all of the GSM licences are due to expire between 2013 and 2015, the 3G licences all have at least ten years to their expiry.

[79] This is based on the aggregate of all operators' submissions to ComReg's Quarterly Key Data Report. Active 3G Users–Total Number of Dedicated Mobile Broadband Subscriptions (Dongle/modem only). For the purposes of this analysis this figure is used as the total number of smartphones.

[80] See Appendix A: Slide 14.

[81] Using two separate pieces of research, one conducted by Millward Brown Lansdowne in 2009 and the other conducted by The Research Perspective in 2011

[82] See Appendix A: Slide 16.

[83] See Appendix A: Slide 13.

[84] For details of spectrum allocations and associated licences please see http://www.comreg.ie/radio_spectrum/search.541.874.10003.0.rslicensing.html

3.56 ComReg recently published[85] its response to consultation and the decision for the multi-band spectrum release of individual rights of use in the 800 MHz, 900 MHz and 1800 MHz radio spectrum bands. ComReg is currently finalising its approach to the proposed auction of rights of use in these radio spectrum bands and it is anticipated that this will ultimately result in the assignment of spectrum rights across these three radio spectrum bands for the period 2013 to 2030.

3.57 It is also envisaged that the rights of use in these radio spectrum bands will facilitate the deployment of advanced wireless technologies, thus allowing higher mobile broadband speeds to be offered, potentially enabling the development of further advanced mobile services/applications.

Q. 1.	**Do you agree that the above identifies the main relevant developments in the retail mobile market since the previous reviews of the Relevant MVCT 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.**

[85] See ComReg Document 12/25, Multiband Spectrum Release, Release of the 800 MHz, 900 MHz and 1800 MHz Radio Spectrum Bands, Response to Consultation and Decision (March 2012) and ComReg Document 12/25A which contains associated annexes.

4 Assessment of the Retail Market

4.1 In this section, ComReg outlines some of the structural and behavioural characteristics in the retail mobile market, with a view to informing the subsequent definition and SMP analysis of the wholesale Relevant MVCT Markets in sections 5 and 6 respectively.

Relationship between the retail calls and the wholesale Relevant MVCT Markets

4.2 As noted in section 1, the European Commission's 2007 Recommendation has already identified mobile voice call termination on individual mobile networks as a relevant wholesale market that is 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 MVCT assessment.

4.3 While the objective of this Consultation Paper is to define and analyse competition within the wholesale Relevant MVCT Markets, given wholesale demand for MCVT is largely derived from retail demand associated with the ability to make calls to mobile 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 MVCT is largely related to:

- fixed or mobile subscribers' requirements for making calls to mobile subscribers. i.e. calling party requirements; and
- mobile subscribers' requirements for receiving calls from other fixed or mobile subscribers. i.e. receiving parties' requirements.

4.4 In ultimately considering the definition of the wholesale Relevant MVCT 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 MTR/price setting behaviour of a hypothetical monopolist[87] ('**HM**') supplier of MVCT. To the extent that such effective substitutes exist and constrain this behaviour, then a broader MVCT product definition may be appropriate.

[86] See section 4 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, sufficient customers would switch to readily available alternative substitute products such that it would render the price increase unprofitable. If the level of switching 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.

4.5 In this section, ComReg considers whether any effective retail demand-side side substitutes exist such that they might effectively constrain MVCT pricing behaviour at the wholesale level, in particular:

- whether any forms of communication exist that, by virtue of their characteristics, prices and intended use, constitute a reasonable substitute to making a call to a subscriber on a mobile network; and
- whether such alternatives are likely to act as an effective constraint on the price setting behaviour of a MVCT supplier by making it unprofitable for it to raise its MTRs above the competitive level[88].

4.6 Retail supply-side substitutes are also considered.

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 MVCT Markets. Where, for example, the inclusion/exclusion of particular products/services at retail market level would have a material impact on the definition and subsequent SMP analysis in the wholesale Relevant MVCT Markets, it is important to obtain a clear view of whether those particular retail products/services fall within the boundaries of the relevant retail market.

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

(a) Attitudinal surveys of retail consumer and SME users of mobile services (including calls to/from mobile phones);

(b) Information provided by Service Providers in response to detailed statutory information requests[89] issued by ComReg in which both quantitative and qualitative information on the retail mobile market and the wholesale Relevant MVCT Markets were sought;

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

(d) Information provided to ComReg by Service Providers for the purpose of ComReg's publication of its Key Quarterly Data Reports[90];

(e) Other information in the public domain

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

[89] ComReg issued a series of information requests to Service Providers pursuant to its powers under section 13D of the Communications Regulation Acts 2002 to 2011. Such requests were issued in November 2010, July 2011 and October 2011.

[90] The most recent Key Quarterly Data Report published related to Q4 2011, ComReg Document Number 12/20.

Factors affecting the impact of retail consumer behaviour in Relevant MVCT Markets

4.9 As noted in paragraphs 4.3 and 4.4 above, wholesale demand for MVCT is derived from the demand of mobile and fixed retail subscribers who make calls to mobile 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 MSP and the extent to which any such substitutes might impact behaviour in the upstream wholesale Relevant MVCT Markets. Given such characteristics are relevant to both

- the retail demand-side substitution analysis; and
- the assessment as to whether the wholesale Relevant MVCT Markets and competition within those markets are impacted by any indirect constraints emanating from the retail market,

they are discussed below.

4.10 To inform its consideration of the above issues, ComReg commissioned The Research Perspective[91] to carry out two separate pieces of research in the Irish retail mobile market. The research field work took place in March/April 2011 (the '**2011 Market Research**') with the results being presented to ComReg in June 2011.

4.11 1128 non-business/consumer mobile phone users were surveyed through face-to face interviews. In addition, 500 SMEs were surveyed via a computer aided telephone interview (CATI), with the person interviewed being the individual responsible for selecting the relevant SME's then MSP ('**SME Decision Makers**'). Amongst the issues surveyed included:

- Mobile phone usage profiles;
- Fixed line phone ownership amongst mobile phone users;
- Payment methods, price plan details and choices;
- Switching behaviour and the criteria for choosing a MSP;
- Awareness of the costs of making calls and sending text messages;
- Awareness of both the identity of the called party's MSP and the identity of the calling party's MSP;
- Price sensitivity to increases in the costs of calls and text messages; and
- Usage policies and the monitoring of these (SME only).

[91] See www.theresearchperspective.com

4.12 A copy of the research outputs is set out at Appendix A. ComReg will refer to these market research findings[92] throughout the remainder of the analysis in this section and elsewhere in the Consultation Paper.

4.13 It should be noted that, rather than being definitive, this 2011 Market Research informs the analysis throughout this Consultation Paper, and its outputs are considered alongside empirical data/evidence, where available.

Calling Party Pays Principle and its Impact on Call Behaviour

4.14 Under the Calling Party Pays ('**CPP**') principle adopted in Ireland (and throughout the EU), it is the retail mobile or fixed subscriber that bears the entire cost[93] of making a call to a mobile (or fixed line) phone. As set out in paragraph 1.3, the MSP of the party receiving the call supplies wholesale MVCT to the calling party's originating Service Provider. The originating MSP pays a wholesale MTR to the terminating MSP. The MTR 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.

4.15 So what are the implications of the CPP principle in the context of the retail market and the analysis of the Relevant MVCT Markets? Firstly, having regard to the degree to which any change in the wholesale MTR is passed through by the originating Service Provider to its subscribers via its retail call charges, the impact of MTR rates is felt, not by the called party, but by the calling party. In view of this, the retail subscribers of the terminating MSP (i.e. the called parties) have no direct visibility of MTRs and are unlikely, therefore, to react significantly to changes in such MTRs (this is considered further below). Given the strong likelihood of an absence of direct MTR price signals to the subscribers of the recipient terminating MSP, it will likely impact the ability and the degree to which the terminating MSP can profitably sustain an increase its MTRs above the competitive level.

4.16 As the impact of any increase in wholesale MTRs (subject to the degree to which it is being passed through into retail prices) is felt by the subscriber of the originating Service Provider, it is possible that such calling party subscribers could react to MTR driven retail price increases in a number of ways, including:

- Substituting a call to a mobile with a viable alternative means of communication (say text message, call to a fixed line phone etc.); and/or
- Reducing the number of overall calls made, principally resulting in reduced retail revenues for the originating Service Provider; and/or

[92] 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 mobile 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.

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

- Reducing the number of calls made to the specific MSP that increased the MTR and gave rise to the retail call price increase; and/or
- Ceasing the use of the retail mobile service altogether or switching service to a different MSP; and/or
- Changing patterns of use such as changes in how calls are made to subscribers of particular MSPs.

4.17 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 MSP; and
- awareness of the cost of calling a mobile generally and the cost of calling subscribers of a particular MSP; and
- sensitivity to cost and changes in it; and
- ability to change their calling behaviour and/or switch to viable substitute products, along with the frequency with which they would do this.

4.18 Each of the non-exhaustive possibilities in paragraph 4.16 above (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.

4.19 However, where subscriber changes in behaviour result in reductions in call volumes to the specific terminating MSP which levies the MTR, it could also result in a loss of wholesale termination (and other) revenues for such MSPs.

4.20 To the extent that a called party might be concerned that an increase in its MSP's MTRs could result in fewer people calling them[94] (as a result of the MTR pass through to the retail call charges levied by originating Service Providers on their subscribers), then it is possible that the called party could exert a level of constraint on the MTR price setting behaviour of its own MSP. Called party behaviours which could impact include:

- substituting the receipt of a call with a viable alternative means of communication; and
- not taking the call and then phoning the calling party back; and
- cancelling mobile subscription/switching Service Provider.

4.21 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

[94] Call externalities arise where calling parties make too few (or too short) calls relative to the value of their calls to receiving parties which, according to the CPP, do not contribute towards the cost of the call.

- sensitivity to cost faced by the calling party; and
- ability to change their call receiving behaviour and/or switch to viable products which may be substitutes to making a call to a mobile subscriber, along with the frequency with which they would do this.

4.22 In circumstances where a terminating MSP were to increase its MTRs above the competitive level,

- depending on the level of pass-through of the MTR increase by originating Service Providers into their retail charges for calls to subscribers of the terminating MSP; and
- depending on the strength of any subsequent calling party reactions to the resulting retail price increase; and
- depending on the strength of any subsequent called party reactions to the resulting the calling party's retail price increase,

subscriber behaviour may, through demand-side substitution at the retail level, indirectly impact the ability of the terminating MSP to profitably sustain an increase in MTRs above the competitive level, i.e. indirect constraints coming from the retail market may affect the MTR setting behaviour in the wholesale Relevant MVCT Markets.

4.23 While such indirect constraints are considered in detail in paragraphs 4.104 to 4.214 and further in section 5, we consider below some of the factors which are likely to impact the degree to which subscribers would be able to react to changes in the retail price for calls to mobile subscribers, or those retail price increases stemming from an increase in wholesale MTRs above the competitive level, i.e. factors which are likely to affect retail demand-side substitution.

Mobile Pricing Structures

4.24 Retail pricing structures can influence consumer calling behaviour and some of the key features of these are discussed below.

4.25 The key trends in consumer retail mobile pricing structures were identified in the discussion commencing at paragraph 3.38 in particular:

(a) specific or unlimited amounts[95] of minutes are included in all billpay plans and can be used for calls to any network;

(b) the cost of off-net calls (and text messages) for both prepay and billpay mobile customers does not tend to vary based on the called party's Service Provider;

[95] There are relatively few unlimited plans and such plans typically cost at least €70 to €80 per month. Unlimited plans also usually specify a maximum amount of minutes that can be used on the plan.

(c) significant number of prepay and billpay plans offer free (unlimited or specified amounts) or reduced charges for on-net calls to all other mobiles on the same network;

(d) the cost of calls (and text messages) for both prepay and billpay customers does not tend to vary based on the time of day called.

4.26 These and other trends also featured amongst MSPs' business pricing plans (businesses tend to mainly use billpay plans).

4.27 The effect of the above consumer and business mobile price plan structures, in particular, the absence of a distinction between prices charged for calls to any off-net mobile or fixed line and the absence of differentiated time of day pricing, is likely to directly influence retail consumer's usage behaviour, i.e. if the price of such calls does not differ, then it is not likely to be a key factor in driving the usage of off-net calls to subscribers of one particular MSP over another, or at particular times of day.

4.28 However, the significant presence of reduced rate or free on-net call costs amongst MSP price plans is likely[96] to drive a higher consumer usage of such calls relative to other call types, particularly where the consumer can identify that the called party is a subscriber of the same MSP. Free on-net pricing is also likely have a greater relevance for those mobile users who are subscribers of those MSPs that have large subscriber bases, i.e. the greater the number of subscribers of a MSP the greater the benefit to that MSP's subscribers of free on-net calls.

4.29 The pricing structure trends in the cost of calling mobiles under fixed line plans was also noted in paragraph 3.41, including that costs differ according to whether a call is being made to a fixed line or a mobile, based on the MSP of the called party and at what time of day the call is made. These differences in the cost of calling mobiles from fixed line phones may potentially impact the degree of price sensitivity of fixed line calling parties when making such calls. Similarly, those price sensitive consumers with both mobile and fixed line phones that are aware of mobile calls costs may be in a position to segment their calling behaviours to maximise their perceived value of their price plans i.e. a consumer may use their mobile phone to call another mobile phone and use their fixed line phone for calling other fixed line phones.

Consumer/SME Network Awareness

4.30 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 MSP or to react to those retail price increases stemming from an increase in wholesale MTRs (above the competitive level), they would at least need to be able to identify the MSP of the person they

[96] Appendix A: Slide 64 of the 2011 Market Research shows that consumer respondents indicated that 67% of calls made from their mobiles were on-net calls. Whether or not this is directly attributable to the cost of on-net calls is unclear, however, the observed tendency for discounted/free on-net call costs amongst a significant number of MSPs' price plans is likely to be a relevant factor.

are calling (being the MSP, other than their own, which levies the MTR on the calling party's originating Service Provider).

4.31 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 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 called party's MSP.

4.32 As noted in section 3.34, between June 2003 and December 2011 just over 2.6m mobile numbers have been ported between MSPs, with 453,098 numbers ported in the final twelve months of this period. Using the called party's mobile number alone does not appear to ComReg to be a definitive basis upon which consumers could identify the called party's MSP. Nevertheless, it is possible that a consumer has remained with (or returned to) its original MSP and, therefore, in a number of cases the use of their mobile number could allow the calling party correctly to identify the called party's underlying MSP.

4.33 In this regard, the 2011 Market Research reveals[97] that despite a high level of consumer awareness of MNP (88%), 67% of consumers[98] and 58% of SMEs claimed never to have switched MSP. When considered alongside the number of mobile numbers ported, this may indicate that those consumers/SMEs that are changing MSP are 'serial switchers', i.e. the switching could be largely amongst the same consumers/SMEs groups.

Calling Party Network Awareness

4.34 As part of the 2011 Market Research, ComReg specifically asked[99] mobile consumers to indicate, when using their mobile phone, to what extent they are aware of the mobile network[100] being called and how they were aware with the results shown in Figure 13 and Figure 14 below.

[97] See Appendix A slides 59, 53 and 118 respectively.

[98] Where the terms consumers is used in the context of the 2011 Market research, it refers to non-business mobile phone subscribers.

[99] See Appendix A slide 62.

[100] Given the context within which the term MNO was employed the 2011 Market Research it is equivalent to the term MSP as used within this Consultation Paper

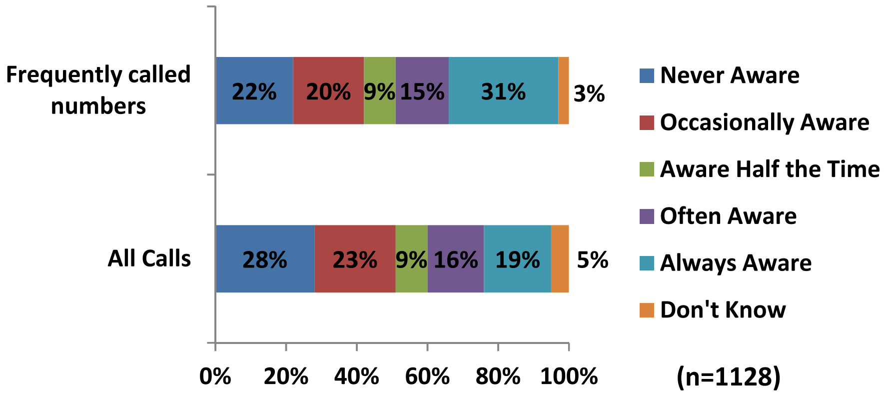


Figure 13: Consumer awareness of mobile network being called

4.35 For all calls made, 32% of respondents were aware of the mobile network being called half the time or less, with 28% of respondents indicating they were never aware of the mobile network being called. Similar questions were asked with respect to the awareness of the mobile network called for frequently dialled numbers, with 29% of respondents being aware of the mobile network being called half the time or less, with 22% of indicating they were never aware of the mobile network being called.

4.36 Consumer respondents were also asked[101] why there were not always aware of the mobile network called with 33% indicating they could not tell from the mobile number and a large number (40%) stating that it was not a matter of concern to them.

4.37 Consumer respondents were also asked[102] whether there were ways in which they could tell if they were calling a mobile network other than their own (off-net mobile calls). As set out in Figure 14 below, 37% stated there was no way to tell and 11% indicated the existence of the network alert tone[103] played to the caller prior to an off-net call being connected. 35% indicated the mobile number may identify the mobile network called while 15% stated it would definitely indicate the mobile network called.

[101] Ibid.

[102] See Appendix A: Slide 65.

[103] This is a 'pip' tone implemented at a network level and sounds while the call is being connected but before it is answered. It definitively tells the caller that they are making an off-net call.

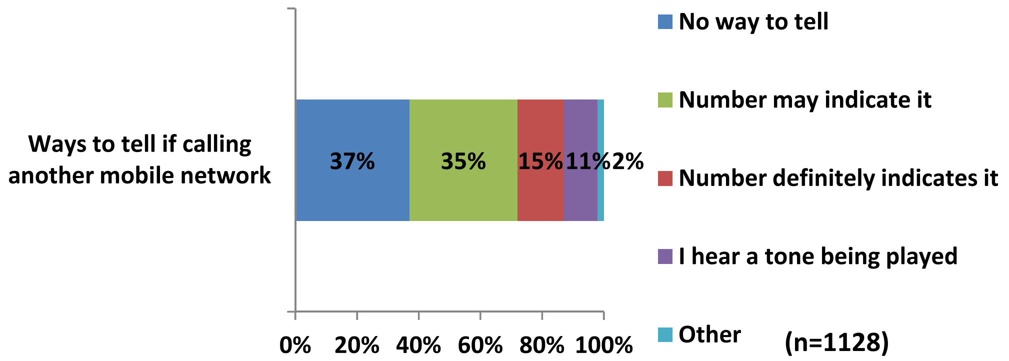


Figure 14: Consumer identified ways to tell if mobile being called is on another mobile network

4.38 53% of consumer respondents also stated[104] (see Figure 15 below) that, when using their mobile, they were always aware whether they calling a fixed line phone, with 14% being never aware.

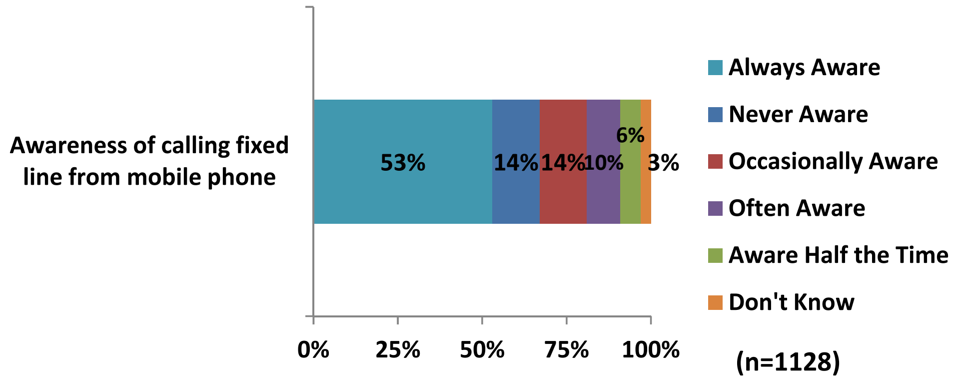


Figure 15: Consumer awareness that they are calling a fixed line network

4.39 The main reasons cited by those that were not always aware whether they were calling a fixed line phone included:

- It does not matter to me because fixed calls are included for free in my mobile package (39.7%);
- I mostly make calls from my address book and don't see the number (21.6%)
- Other reasons/don't know (23.3%); and
- It doesn't matter to me whether the person is on a fixed line phone, if I need to call I just call (13.7%).

4.40 Questions[105] similar to those above were also asked of SME survey participants[106]. When considering overall calls made to mobiles, the majority of SME Decision

[104] See Appendix A: Slide 63.

[105] See Appendix A: Slide 124.

Makers indicated (see Figure 16 below) that they were never aware (61%) or occasionally aware (13%) of the mobile network being called. For Frequently called numbers, 52% of SME Decision Makers indicated that they were never aware of the mobile network being called, although in this scenario 20% stated they were always aware.

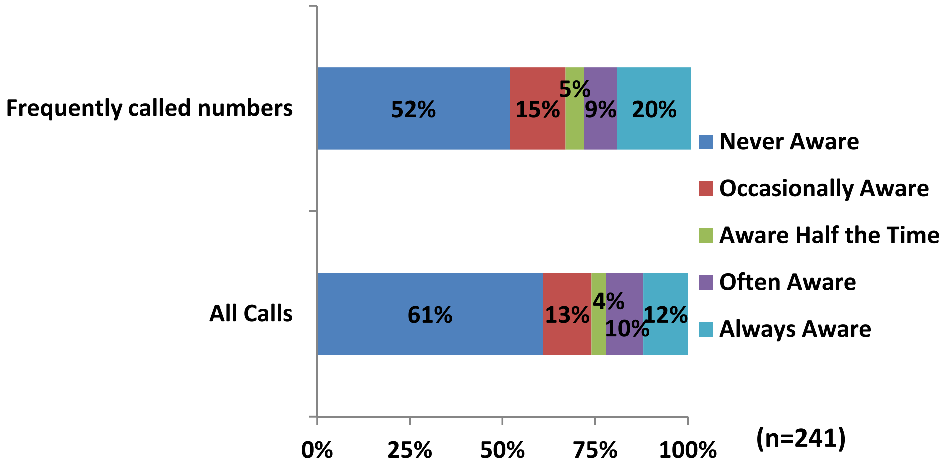


Figure 16: SME awareness that mobile being called is on another mobile network

4.41 35% of SME Decision Makers also indicated[107] that, when using their mobile phone they were not aware whether the number they were calling is a fixed line phone.

4.42 In considering ways[108] in which SME respondents could tell if they were calling a mobile network other than their own (see Figure 17 below), 65% stated there was no way to tell, with 14% indicating the existence of the network alert tone played to the caller prior to an off-net mobile call being connected.

[106] It should be noted that the SME survey was targeted at those individuals within a company responsible for choosing their current MSP ('Decision makers'). Network awareness and pricing survey questions were only targeted at SME Decision Makers who had been provided with a company mobile phone (with the decision maker's views being taken as broadly representative of individual employee use.)

[107] See Appendix A: Slide 128.

[108] See Appendix A: Slide 126.

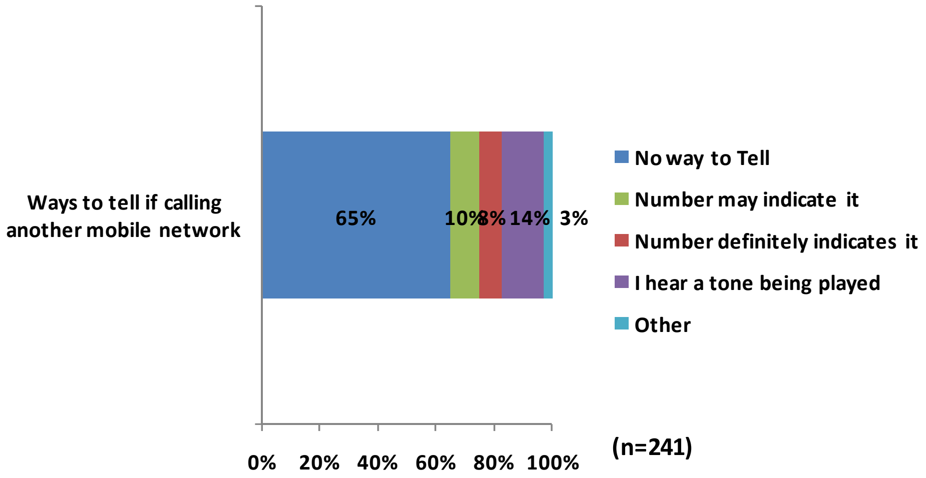


Figure 17: SME identified ways to tell if mobile being called is on another mobile network

4.43 ComReg has also reviewed market research provided by Service Providers in response to statutory information requests[109] for information relating to calling parties' level of network awareness. Little, if any, data of direct relevance to this issue was dealt with as part of service providers' market research and, consequently, does not materially inform the analysis above.

4.44 Having regard to the discussion at 4.30 to 4.43 above, ComReg takes the view that both consumers and SMEs tend to have relatively low levels of awareness of the identity of the called party's MSP and that this is likely to impact the degree to which calling parties can react to changes in the retail price for calls to subscribers of specific MSPs or to react those retail price increases stemming from an increase in wholesale MTRs.

Called Party Network Awareness

4.45 As noted in paragraph 4.20, if the called party was concerned about the cost faced by people when calling them, it may also be in a position to exert a constraint on the MTR price setting behaviour of its own MSP. In order to be in a position to do this, the called party would need to be both concerned about the cost faced by the calling party as well as being aware of the identity of the calling party's Service Provider (this latter point is considered below).

4.46 The MNP issues identified in paragraph 4.31 to 4.33 above remain relevant in this scenario and would also impact the called party's ability to identify the calling party's Service Provider. As part of the 2011 Market Research, ComReg also sought to ascertain consumer and SME network identity awareness from a called party perspective.

[109] See paragraph 4.8.

4.47 Consumer respondents were asked[110] if someone is calling them on their mobile, to what extent they would know if they were being called from a fixed line network or a mobile network. As shown in Figure 18 below, 38% of respondents indicated they were almost always or always aware, with 37% having varying degrees of awareness. 17.3% indicated that they were never aware and 7% stated did it not matter to them.

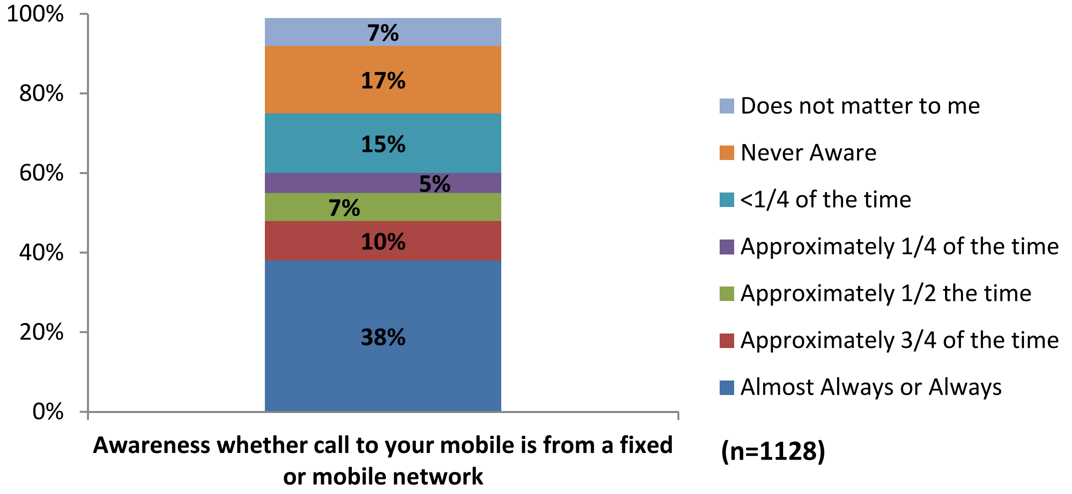


Figure 18: Consumer awareness whether incoming call is from a fixed line or mobile network

4.48 Consumer respondents were also asked[111], when someone is calling them on their mobile phone, to what extent they are aware of the identity of the calling party's mobile network. As shown in Figure 19, 33% indicated they were never aware, 8% stating it did not matter to them and the remainder having varying degrees of awareness.

[110] See Appendix A: Slide 67.

[111] See Appendix A: Slide 68.

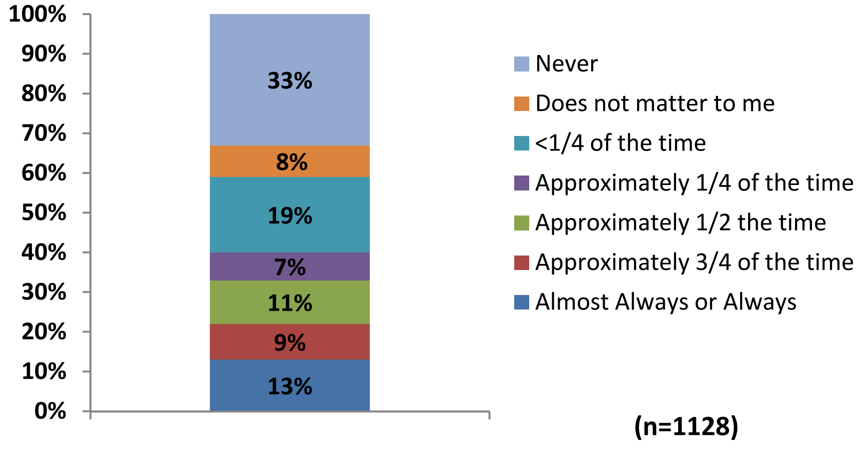


Figure 19: Consumer level of awareness of calling party's mobile network.

4.49 Consumers were also asked[112] whether there were ways in which they could identify the mobile network of the calling party. As shown in Figure 20 below, 36% stated there was no way to tell and 18% indicating they could definitely rely on the mobile number to identify the mobile network called.

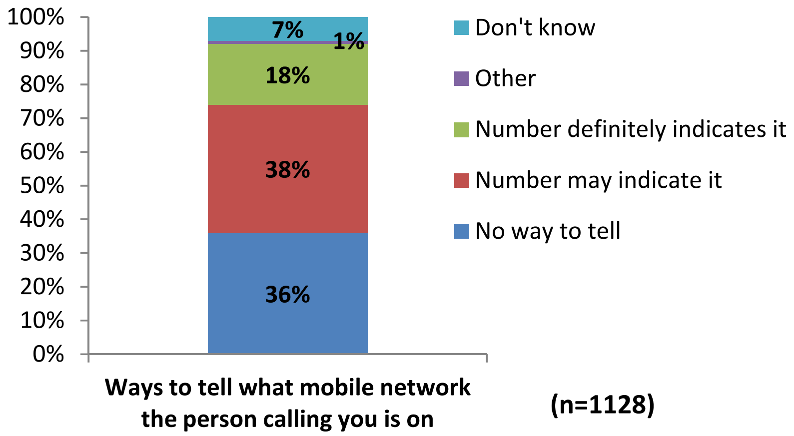


Figure 20: Consumer ways of identifying calling party's mobile network.

4.50 Similar questions[113] were asked of SME survey participants with 70% stating that they were not aware of the identity of the calling party's mobile network, 9% stating it did not matter to them and the remaining 21% having varying degrees of awareness.

4.51 ComReg has also reviewed market research provided by Service Providers in response to statutory information requests for information relating to called

[112] See Appendix A: Slide 67.

[113] See Appendix A: Slide 129.

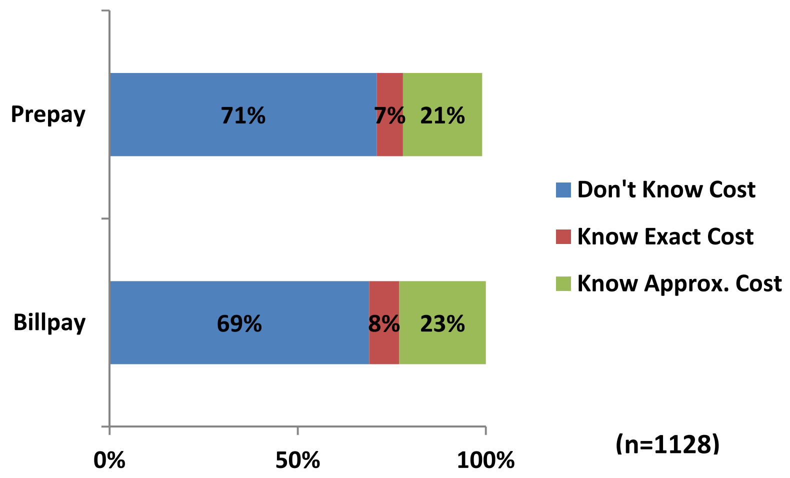
parties' level of network awareness. Little, if any, data of direct relevance to this issue was dealt with as part of Service Providers' market research and, consequently, does not materially inform the analysis above.

4.52 Having regard to the discussion at 4.45 to 4.51 above, ComReg takes the preliminary view that a large number of both consumers and SMEs 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 (where they may be subscribers of the same MSP), the overall level of expressed awareness may be somewhat overstated given mobile numbers themselves are not a reliable means for identifying calling party's MSP. This low level of called party awareness is likely to ultimately impact the degree to which called subscribers can react to any price effects faced by the calling party, in particular, those stemming from MTR increases by the terminating MSP (of the calling party).

Consumer/SME Awareness of Cost

4.53 In order for the calling party to be in a position to react to changes in the retail price for calls to subscribers on specific mobile networks or to react those retail price increases stemming from an increase in wholesale MTRs, they would also need to be aware of the retail call costs, including the costs associated with calling particular mobile networks.

4.54 As part of the 2011 Market Research, ComReg also specifically asked[114] mobile consumers to indicate the extent to which they were aware of the costs of making calls or sending text messages from their mobile phones, with respondent's views set out in Figure 21 below. 71% of prepay and 69% of billpay consumers stated that they did not know or were unsure of the costs of making calls and sending text messages, with the remainder of respondents stating they either knew the exact cost or approximate cost.



[114] See Appendix A: Slides 45 to 48.

Figure 21: Consumer stated knowledge of the costs of calls and text messages

4.55 35% of both prepay and billpay consumer respondents also indicated[115] they did not know whether the costs of calls from mobiles varied according to the time of day they were made.

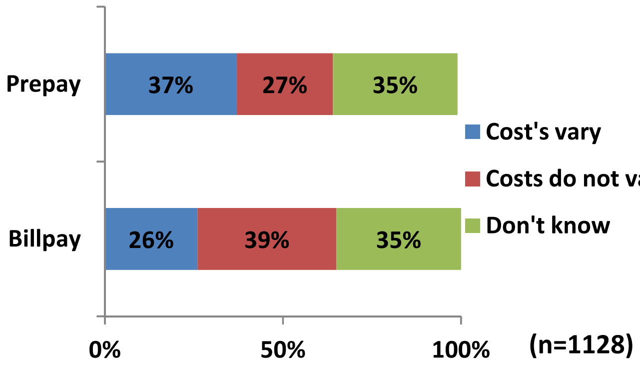


Figure 22: Consumer stated knowledge of whether costs of calls/texts vary by time of day

4.56 Consumers were also asked[116] to estimate the cost of making calls and sending texts from their mobile phones. While it is not possible to assess the accuracy of claimed cost knowledge (given it would depend on what price plan each respondent was on and knowledge of specific call prices within these), the following general points are of note:

Billpay Consumers	Prepay Consumers
• No perceived difference between the cost of calling on-net and off-net mobiles. • Off-net calls to fixed lines are perceived as being more expensive than both on-net and off-net calls to mobiles	• Off-net calls to mobiles perceived as more expensive than on-net calls to mobiles. • Off-net calls to fixed lines are perceived as being more expensive than both on-net and off-net calls to mobiles

Table 5: Consumer perceptions on cost of calls from mobiles

4.57 SME respondents expressed[117] similar levels of cost awareness to consumers with 75% stating they did not know or were unsure of the cost of calls.

115 See Appendix A: Slide 45.

116 See Appendix A: Slide 47.

117 See Appendix A: Slide 108.

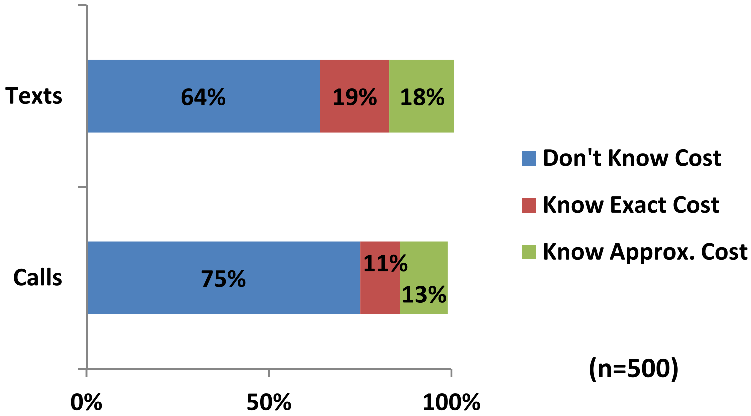


Figure 23: SME stated knowledge of the costs of calls and text messages

4.58 We return in paragraphs 4.79 to the issue of whether consumer/SME awareness of costs differ according to when they choose/sign up with their service provider as opposed to when utilising the service once a service provider has been selected.

4.59 ComReg also suggests that, in general, called mobile parties are unlikely to have any meaningful level of knowledge of the costs faced by those calling them, however, this is likely to be more exacerbated in the case of those calling from other mobile or fixed networks. i.e. when the person calling them is on the same mobile network, this may give the called party some knowledge of the costs faced by the calling party (assuming they know what particular price plan they are on), particularly, where the mobile service provider commonly offers free or reduced rate on-net calls.

4.60 In the 2011 Market Research SMEs were asked if the cost for their customers to call the SME's mobiles were to increase, whether they would notice this increase. Between 17% and 41% of SME's indicated[118] they would notice a 1 cent and 3 cent increase respectively. Although, it is not immediately clear to ComReg how they would notice a price increase faced by people calling them given the CPP principle and the absence of any price signal. In this regard, it is worth noting that in paragraph 4.55 it was explained that 75% of SMEs indicated they were unaware or unsure of the cost of making calls themselves.

4.61 ComReg has also reviewed market research provided by fixed and mobile service providers in response to statutory information requests[119]. Little, if any, meaningful evidence was presented which would shed light on consumer/SME levels of awareness of cost when using the service (as noted in paragraph 4.58 consumer/SME awareness of/sensitivity to cost in the context of selecting or switching mobile provider is considered later in this Consultation Paper).

[118] See Appendix A: Slide 144.

[119] See paragraph 4.8.

4.62 Having regard to issues set out in paragraphs 4.53 to 4.61, ComReg takes the preliminary view that consumers and SMEs are likely to have low levels of specific awareness of the cost of making calls or sending text messages. The low level of awareness of cost, rather than suggesting cost is not important to consumers/SMEs, may be somewhat related to retail mobile call pricing structures (as noted in paragraphs 4.24 to 4.29 above) as, in circumstances where prices for on-net and/or off-net calls tend not to differ (or are free) or vary by time of day, it may lessen the degree of importance that consumers attach to call cost awareness. It also appears that consumers and SME have a general level of awareness of the differences in cost in making on-net and off-net calls from their mobiles, as well as making calls to mobiles and landlines from their fixed line phones.

Consumer/SME sensitivity to cost

4.63 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/SME 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 – particularly 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.

4.64 As noted in paragraph 3.35, 14% of consumer respondents indicated they had changed price plan with their current MSP within the previous 12 months. Furthermore, 73% of consumer respondents indicated that they had been with their existing MSP for 3 years or more.

4.65 Additionally, consumer reactions to price changes may not be immediate (say due to a lack of awareness of price changes) and may only emerge over a medium to long term time horizon. For example, the impact of a change in price may not become realised until a bill (in the case of billpay customers) is received - usually some time after the actual price change has occurred.

4.66 However, 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 MVCT by a particular MSP to subscribers, consumers/SMEs would need to be aware of the retail call costs, be aware of the called party's or calling party's MSP (as appropriate) and be sufficiently concerned about cost such that it warrants some change in behaviour.

4.67 As noted in paragraphs 4.51 ComReg takes the preliminary view that consumers and SMEs will have low levels of awareness of both the identity of the called party's MSP and the calling party's MSP. As part of the 2011 Market Research, ComReg asked[120] consumer respondents whether there were any types of phone calls that they were concerned about when considering the cost of a call from your mobile phone, with the results presented below in Figure 24.

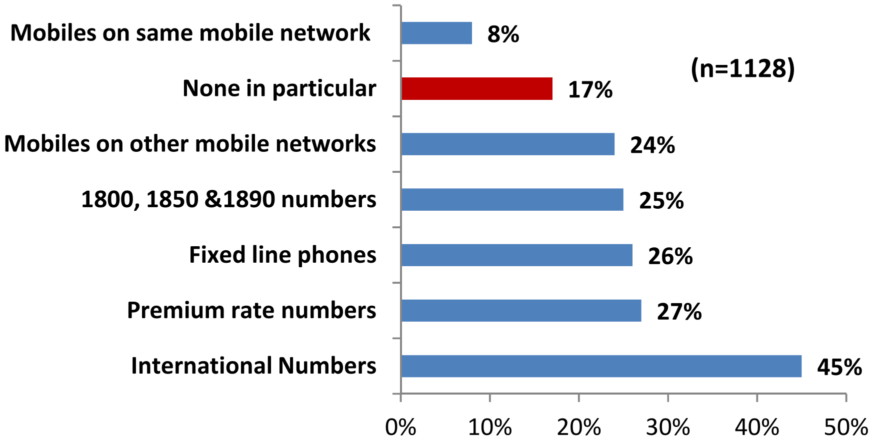


Figure 24: Level of consumer concern about cost of making certain call types from mobile

4.68 Where there were concerns expressed, 45% of respondents indicated these related to the cost of calling international numbers from their mobiles, with the cost of off-net calls to other mobile networks and fixed line numbers (24% and 26% respectively) causing broadly similar levels of concern. In comparison, respondents were least concerned about the cost of making on-net mobile calls (8%), with 17% not being concerned about the cost of any particular calls.

4.69 SMEs were asked[121] similar questions as to whether there were any types of phone calls that they were concerned about when considering the cost of a call from their mobile phone, with the results presented below in Figure 25.

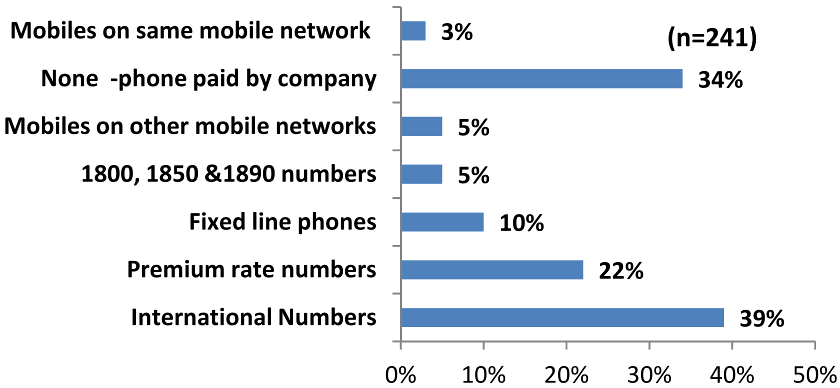


Figure 25: SME level of concern about cost of making certain call types from mobile phone

[120] See Appendix A: Slide 66.

[121] See Appendix A: Slide 133.

4.70 SMEs expressed most concern about the cost of making calls to international mobiles, with on-net mobile costs causing least concern.

4.71 ComReg also asked[122] SME respondents[123] the extent to which they thought about the cost of the call when calling from their business mobile. 67% or respondents said they never thought about cost, with the remaining respondents thinking about it to varying degrees. SME respondents also indicated[124] that their awareness level was typical of (49%) or higher than (33%) the average employee's awareness level of cost.

4.72 As part of the 2011 Market Research, ComReg also sought views from consumer and SME 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.

4.73 To this end, those consumer respondents with any expressed level of awareness of the identity of the mobile network calling them (59%)[125] were also asked[126], as a called party, to what extent they consider the cost faced by the calling party when calling them. As set out in Figure 26, 35% of all consumer respondents indicated they were never concerned, with the remaining 24% expressing varying degrees of concern at the cost faced by the calling party.

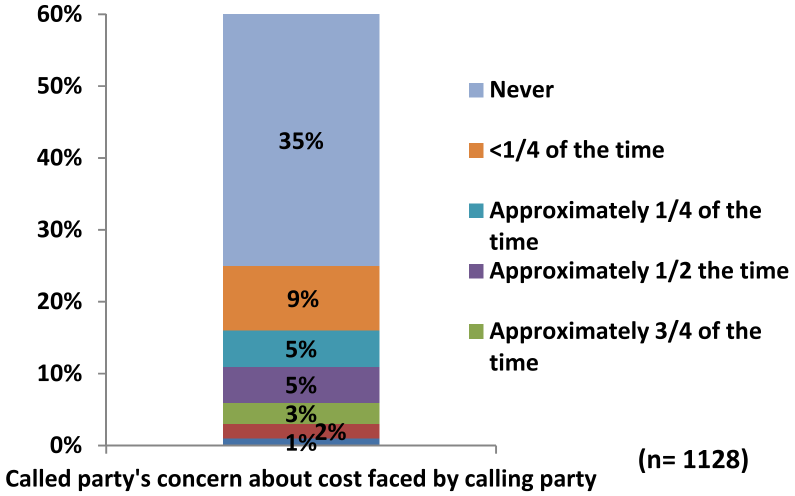


Figure 26: Called party's concern about cost faced by calling party

[122] See Appendix A: Slide 132.

[123] Only SME Decision Makers with mobile phones provided for work purposes were asked awareness questions.

[124] See Appendix A: Slide 134.

[125] See paragraph 4.48.

[126] See Appendix A: Slide 69.

4.74 Those consumer respondents that expressed any level of concern about the cost faced by the calling party (24%) were also asked[127] whether such concerns would impact upon how they treat incoming calls. While no respondent indicated they would always change their behaviour in response to concern about the cost faced by the calling party, as illustrated in Figure 27 below, 21% stated they would change it to varying degrees of frequency, the majority of which would occur a quarter of the time or less.

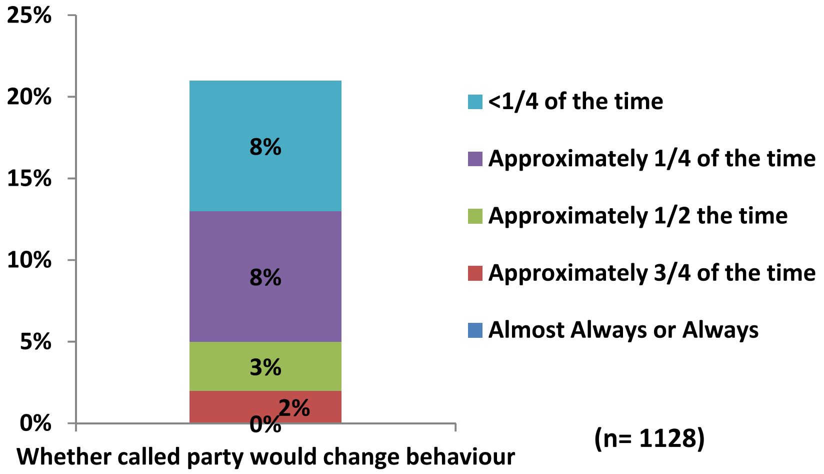


Figure 27: Called party's change in behaviour given concern at cost faced by calling party

4.75 This suggests that one in five called parties (21%) would change their behaviour in response to a concern about the cost faced by the calling party. However, the majority of these (16%[128]) would change their behaviour a quarter of the time or less (i.e. one in every four calls received). Those consumers that indicated they considered the cost faced by calling party (24%) were asked[129] whether the frequency with which they would change their calling behaviour would change based on who was calling them, with the views expressed presented in Figure 28 below.

[127] See Appendix A: Slide 70.

[128] 16% out of 21%

[129] See Appendix A: Slide 71.

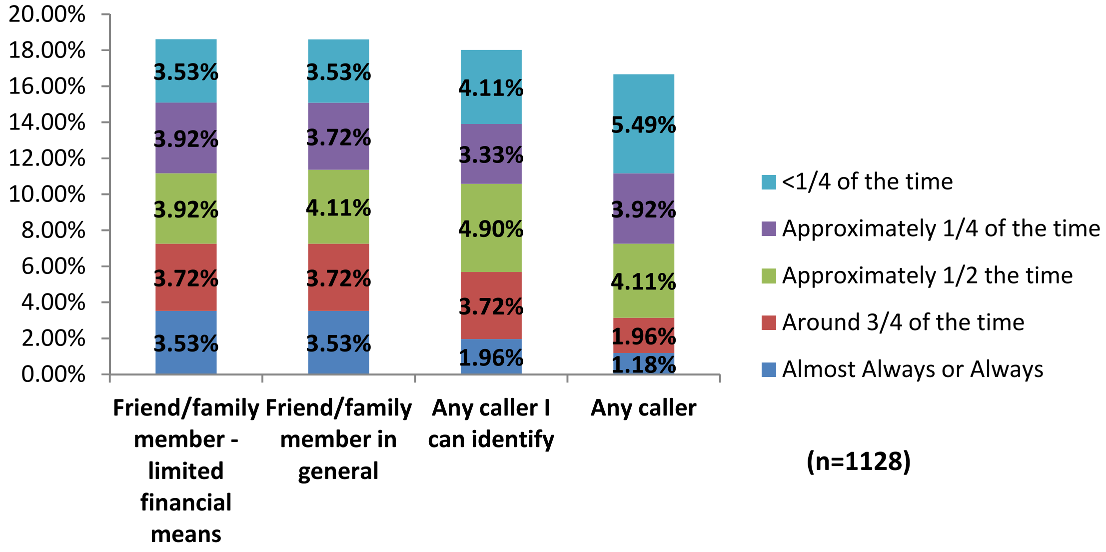


Figure 28: Circumstances within which called party would change behaviour given concern about cost faced by calling party

4.76 The above would suggest that there are only slight variances amongst changes in consumer called party behaviour having regard to who is calling them and concern about the cost faced by such calling parties.

4.77 As noted in paragraph 4.50, 21% of SME Decision Makers with business supplied mobile phones (48% of all SMEs)[130] indicated they were aware of the identity of the calling party's mobile network. Those respondents that indicated they were aware were also asked[131], as a called party, to what extent they consider the cost faced by the calling party when receiving a call. 16% (out of the 21%) of such SME Decision Makers indicated they were never concerned, with the remaining 5% expressing varying degrees of concern at the cost faced by the calling party. The degree to which these 5% would change their treatment of incoming calls out of concern at the cost to the caller varied.

4.78 This suggests to ComReg that SME respondents have low levels of concern for the cost faced by the calling party and that the level of any consequential behavioural change in the treatment of such calls is not likely to be significant.

4.79 As noted earlier, consumer/SME 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/SME thoughts when they are switching MSP or switching price plans with the same MSP (rather than when they are making specific calls once they have chosen a MSP). This sensitivity may also differ

130 82% of SME Decision Makers with company supplied mobile phones indicated that their level of awareness typical of or greater than the level of awareness of other employees with business supplied mobile phones. See Appendix A: Slide 134.

131 See Appendix A: Slide 129.

amongst prepay and billpay users, particularly where the latter will effectively be locked in to minimum contract periods typically lasting for at least 1 year (although longer minimum contract periods are becoming more prevalent in the retail market, usually associated with the purchase of smart phone handsets).

4.80 With the above in mind, ComReg asked consumer[132] and SME[133] respondents what were their top three reasons for the selection of their current MSP. The most commonly cited reasons (overall rank in brackets) amongst all consumer respondents and those consumer respondents that had switched were:

Top 3 Reasons (% of respondents selecting each reason as a top 3 reason)	Switchers (n=372)	All Respondents (n=1128)
My friends and family are mostly on this network and selecting this network reduces the cost of calling them	60% (1)	60% (1)
Costs of texts to the same mobile networks	42% (2)	34% (2)
Number of inclusive call minutes included	27% (3)	24% (4)
Network coverage/network reliability	20% (5)	25% (3)
Cost of calls to other mobile networks	21% (4)	17% (5)
Cost of calls to same mobile network	18%(6)	16% (6)

Table 6: Top 3 consumer reasons for selection of their current MSP

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

Top Reason (most important of the top 3 reasons selected)	Switchers (n=372)	All Respondents (n=1128)
My friends and family are mostly on this network and selecting this network reduces the cost of calling them	40% (1)	42% (1)
Number of inclusive call minutes included	11% (2)	24% (4)
Costs of texts to the same mobile networks	10% (3)	7% (4)
No one reason more important that another	-	9% (3)
Network coverage/network reliability	9% (4)	14% (2)
Cost of calls to other mobile networks	7% (5)	17% (5)

Table 7: Most important consumer reason for selection of their current MSP

132 See Appendix A: Slides 54 to 58.

133 See Appendix A: Slides 121 to 123.

4.82 Table 7 is also broken down below into prepay and billpay subscribers.

Top Reason (most important of the top 3 reasons selected)	Prepay (n=837)	Billpay (n=291)
My friends and family are mostly on this network and selecting this network reduces the cost of calling them	46% (1)	32% (1)
Network coverage/network reliability	12% (2)	19% (2)
No one reason more important that another	9% (3)	9% (4)
Cost of texts to same mobile networks	8% (4)	5% (5)
Number of inclusive call minutes included	-	16% (3)
Cost of calls to same mobile network	5% (5)	

Table 8: Most important consumer reason for selection of their current mobile provider

4.83 While the above tables suggest that there are some differences amongst consumer segments (switching, non-switching, prepay and bill pay consumers) as to what are their most important reasons for selecting their current MSP, there is one reason common to all consumer segments and outweighs all other reasons chosen. All consumer respondents clearly identified friends or family being on the same network for the purpose of reducing the cost of calls made and received as being the most significant factor in the decision when selecting their current MSP. Assuming consumers switched to avail of such lower on-net call costs for calling their most frequently called numbers, this may explain to some extent why, as noted in paragraph 4.67, consumer respondents were least concerned (at 8%) about the cost of on-net calls, i.e. because they are at a lower or free cost in comparison to other call types.

4.84 Similar questions[134] were also asked of SME respondents who had switched MSP. The most commonly cited reasons (overall rank in brackets) amongst all SME respondents and those SME respondents that had switched were:

Top 3 Reasons (% of respondents selecting each reason as a top 3 reason)	Switchers[135] (n=146)
Cost of calls to same mobile networks	44%
Cost of calls between employees on same mobile network	34%
Network Coverage/Network reliability	29%
Amount of inclusive minutes included	27%
Cost of calls to the other mobile networks	18%

[134] See Appendix A: slides 121 to 123.

[135] 42% of SME respondents stated they never changed MSP. This question was asked of those SMEs that switched and where the SME survey respondent was involved in the switching decision.

Table 9: Top 3 SME reasons for selection of their current MSP when switching

4.85 Of SMEs that have switched in the past, cost of on-net calls, network coverage and the costs of calls to employee mobiles on the same network (essentially on-net calls) were most often identified as the top three reasons for selecting a MSP. When asked to select the single most important of the three reasons, SME respondents indicated the following:

Top Reason (most important of the top 3 reasons selected)	Switchers (n=146)
No single reason more important than the others	23%
Network Coverage/Network reliability	18%
Cost of calls to same mobile networks	13%
Other reasons	8%
Cost of calls to other mobile networks	6%

Table 10: Most important SME reason for selection of current MSP

4.86 Given ‘no single reason seems more important than others’ was most commonly selected, it suggests that SMEs consider a broad range of factors when selecting their MSP. However, network coverage (perhaps based on employees being out of the office and the need to be frequently contactable) and cost associated reasons, were also identified as the most important reasons by a number of SMEs.

4.87 In statutory information requests[136] ComReg also sought the views of Service Providers as to what they considered consumers would rank as their most important reasons for selecting their Service Provider and asked for evidence to support views expressed, typically consumer market research. Where views were received on this, they were varied. However, almost all Service Providers expressed the view that the general cost of calls (and SMS) was likely to be one of the most important factors for consumers. Other commonly cited reasons as being amongst the most important related to the cost of calls to subscribers on the same network (with cost of calling friends and family being a subset of this) and the number of inclusive minutes within a plan. Coverage, while an important factor, tended to be considered by Service Providers as being of lower importance (relative to the above factors). This was because network coverage was generally good and, in view of this, it was something that was unlikely to be key factor in a consumer’s purchasing decision (save for circumstances where coverage in a specific geographic area was poor). Most Service Providers also considered the cost of calls faced by calling parties as being a relatively less important reason[137] for consumers when selecting their Service Provider.

[136] See paragraph 4.8.

[137] Relative to other reasons, this tended to be lower down the scale of important issues.

4.88 Where consumer market research (mostly relating to switching behaviour) was provided by Service Providers, it tended, in general, to support some of the views expressed above, in particular, that the cost of making calls (whether free on-net calls, lower priced off-net calls or free/low cost calls to friends and family on the same network) are likely to be amongst the most important considerations for consumers when selecting a Service Provider. The research also reveals that handset choice and coverage also appear to rank amongst the most important factors for consumers.

4.89 Having regard to issues set out in paragraphs 4.63 to 4.86, ComReg takes the preliminary view that:

- Cost of making calls is likely to be the one of the most important factors for consumers when selecting a MSP, primarily driven by the desire to minimise expenditure and obtain the best value for the services purchased. However, once consumers have chosen a MSP, some consumers appear to be less concerned about the cost of making on-net calls in comparison to making off-net calls and are most concerned about the cost of calling international or premium rate numbers. However, this lower level of concern for on-net call costs may be due, at least in part, to the prevalence of free or lower cost on-net call costs price plans and the prevalence of bundled minutes in the retail market – and as such, the cost of such calls may be of less importance once consumers have availed of the price plan (i.e. the importance of this factor seems to decline once the selection of the MSP is made). This would also appear to accord with the significant weight attached by consumers (when switching) to friends and family being subscribers of the same MSP in order to reduce their respective costs in calling each other, in particular, given this was the predominant reason suggested for selecting their MSP when switching (i.e. consumers' desire to internalise the externality of a perceived higher cost associated with calling off-net by creating an 'on-net community' through using the same MSP as their friends and family).[138]
- Just less than one in four consumers appear to have some level of concern about cost faced by people calling them on their mobile phones, with such concerns likely to be irregular in terms of their frequency. This seems to be supported by the views of Service Providers who rank this as being a reason of lower importance for consumers when switching. Any behavioural change as a result of called parties' concerns regarding the cost faced by calling parties is, in ComReg's view, likely to be low. Consumer sensitivities to the cost faced by calling parties, while slightly higher for known rather than unknown callers are also likely to be low.
- SME mobile users do not tend to think about the cost of making calls when using their mobiles and this is likely to be largely due to the fact that the cost

[138] As noted in recent economics literature, lower on-net charges relative to off-net charges can result in 'club effects' which favour the larger networks, where customers expect more of their contacts to be on those larger networks.

is borne by the SME itself and not the employee. However, where concerns were expressed about the cost of certain calls these tended to relate to the cost of international calls, with the least concern being expressed about the cost of calling on-net, particularly with respect to calls between employees. This lower level of sensitivity for on-net calls is likely to be influenced by the presence of retail plans offering lower or free pricing for on-net calls, including calls between employees of the relevant SME (i.e. an 'on-net community' pricing effect is also likely to be present).

- SME mobile users are not likely to be concerned about the cost faced by people calling them (other than, say, other employees of the same SME) and this is not likely to lead to any significant changes in how SMEs treat incoming calls. SME sensitivities to the cost faced by calling parties is likely to be insignificant.

Summary of preliminary conclusions on relevant consumer behaviours

4.90 In summary, ComReg has set out above in paragraphs 4.9 to 4.89 its preliminary conclusions on a range of issues relating to mobile pricing structures and consumer/SME behaviour in the retail market. These behaviours, depending on their impact, are also relevant to the definition and competition assessment of the Relevant MVCT Markets (actual impact is assessed in paragraphs 4.104 to 4.214 and in sections 5), in particular, the degree to which retail subscriber behaviour (either the calling party or the called party) and market characteristics may affect the MTR setting behaviour of a hypothetical monopolist supplier of wholesale MVCT.

4.91 Given the Calling Party Pays (**CPP**) principle, the called party does not pay for incoming calls. Within this CPP environment and having regard to the 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.

4.92 ComReg's preliminary view is that the called party is likely to have

- low levels of awareness of the calling party's Service Provider, particularly with respect to cases in which the calling party is a mobile subscriber;
- 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.

4.93 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 mobile subscriber.

4.94 Similarly, ComReg's preliminary view is that the calling party is likely to have

- low levels of awareness of the called party's MSP;

- low levels of awareness of the cost of making calls (perhaps driven, in the case of calls being made by mobile subscribers, by mobile pricing structures);
- varying (but high) degrees of sensitivity to the cost of making calls, in particular, amongst on-net (including to friends and family) and off-net (other mobile and fixed network) calls. Consumers/SMEs are likely to be sensitive to overall costs, however, price sensitivity to the cost of calling off-net to subscribers of one Service Provider over another is likely to be somewhat diminished given the nature and prevalence of any-network, any-time (of day) bill pay price plans (and, in some cases, pre-paid price plans) offered by MSPs, including the prevalence of free on-net calls and /or bundled minutes for billpay customers.

4.95 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 MSP.

4.96 We return further to the assessment of the impact of such behaviours on the MTR setting behaviour of a hypothetical monopolist supplier of MVCT in paragraphs 4.104 to 4.214 below.

Q. 2. Do you agree that ComReg has identified the retail consumer/SME behaviours and retail market characteristics that are most relevant to the analysis of the Relevant MVCT 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 behaviours and retail market characteristics in terms of their potential to impact the Relevant MVCT 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 MVCT Markets

Overview

4.97 As noted in paragraph 4.2, the European Commission's 2007 Recommendation has already identified voice call termination on individual mobile networks 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 MVCT assessment. However, a characterisation of retail markets is being carried out to inform ComReg's subsequent definition of the wholesale Relevant MVCT 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 at wholesale level.

4.98 In line with the methodology recommended by the European Commission,[139] ComReg begins its analysis by considering the narrow Candidate Product at the wholesale level (MVCT to a particular mobile subscriber) and the corresponding narrow retail service involving the ability to call a specific retail mobile subscriber (at a non-fixed location) and examines whether the 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.[140]

4.99 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 a MSP. We examine this from two perspectives.

- Firstly, whether the characteristics, prices and intended use of potential substitute products are sufficiently interchangeable with those attributes associated with making calls to a subscriber of a different MSP (i.e. an off-net call).
- 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 the making calls to an off-net mobile phone were to increase as a result of an increase in wholesale MTRs.

4.100 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 hypothetical monopolist test (**HMT**). This HMT consists of observing whether a small but significant non-transitory increase in price (SSNIP) above the competitive level - taken to be in the range of 5 to 10% - of a candidate product supplied by a hypothetical monopolist (**HM)** would provoke a sufficient number of consumers to switch to an alternative product (a substitute product) such that it would make the

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

[140] 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.

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[141], then these are also included in the definition of the relevant product market.

4.101 In line with European Commission guidance[142] 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 proportion of the wholesale price in the overall retail price;

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

(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.

4.102 As part of the demand-side substitution assessment, ComReg considers the 2011 Market Research discussed earlier, information provided by Service Providers in response to ComReg requests for information (using our statutory information gathering powers), as well as other data available[143]. ComReg has used this information to inform its retail analysis, rather than acting as a definitive source for the definition of a relevant retail market. In addition, given the absence of the availability of clear and precise data regarding elasticities of demand for calls to mobiles (the narrowest retail service driving demand for the Candidate Product at wholesale level) and potential substitutes, ComReg considers the HMT in a general sense, and uses this as an additional tool to help inform its consideration of relevant issues along side other available qualitative and other data.

4.103 After considering demand-side substitution we go on to consider supply-side substitution, in particular, whether any suppliers not currently within the retail mobile market would, within the short term, enter the market without incurring

[141] See paragraphs 4.110 to 4.114 for discussion on how application of SSNP test to MTRs may impact profitability.

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

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

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".*[144]

Retail Demand Side Substitution

4.104 ComReg's starting point is to examine whether, instead of making a call to a mobile subscriber of a specific MSP, the following are likely to be considered by consumers[145] as effective forms of substitute communication.

- Make a call from a mobile to a fixed line phone instead of an off-net mobile to mobile call;
- Make a call from a fixed line to a fixed line instead of an off-net mobile to mobile call;
- Make an on-net mobile to mobile call instead of an off-net call to a mobile;
- Make a Voice over Internet Protocol ('VoIP') call instead of an off-net call to a mobile;
- Send an SMS instead of an off-net mobile to mobile call;
- Send an email instead of an off-net call to a mobile
- Shorten an off-net call to a mobile and/or request a call back
- Delay making the off-net call to a mobile to a time when it is cheaper to phone

4.105 These potential substitutes are considered across the range of relevant substitutability criteria set out in the 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".*[146]

4.106 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 consumers are likely to switch to using any such potential substitutes in response to an increase in the retail price of calling the terminating MSP, with this retail price increase driven by the pass-through of a 5% to 10% increase in the terminating MSP's wholesale MTRs.

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

[145] Unless otherwise stated, consumer(s) refers to both private consumers and SME consumers.

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

4.107 It should be borne in mind that MTRs are an input to the overall costs of the originating Service Provider which are highly likely to be passed on to its subscribers through their retail call or other charges. As part of the overall demand-side substitution assessment, what is being assessed is consumers' switching response following an increase in the terminating MSP's MTR and the pass-through[147] of this increase by the originating Service Provider into its retail prices for calling a subscriber of the relevant MSP. This is illustrated in the following example.

4.108 Suppose a terminating MSP was levying a MTR of 5[148] cent per minute. When a subscriber of an originating Service Provider ("OSP") calls a subscriber of the terminating MSP, at the wholesale level the OSP pays the terminating MSP an MTR of 5 cent per minute. The OSP then seeks to recover the MTR cost (and its own costs) through its retail charges for calling a subscriber of the terminating MSP. If this retail charge is 20 cent per minute, then the 5 cent MTR represents 25% of the charge.

4.109 As noted above, the SSNIP test seeks to test the effects on substitution following a price increase of 5% to 10% above the competitive level. In the context of the analysis set out in this section, we are seeking to understand the retail effects arising from a 5% to 10% increase in MTRs. Taking the above example, if the terminating MSP increased its MTR from 5 cent[149] to 5.5 cent (a 10% increase), the question arises as to whether this would in fact be passed through by the OSP in its retail prices. Assuming it is entirely passed through, then the retail price for a call to the terminating MSP's subscriber would increase from 20 cent to 20.5 cent, representing a 2.5% increase.

4.110 The effect of an increase in MTRs above the competitive level on the magnitude of the percentage increase in the retail price will obviously be dependent on the level of the MTR (and the increase) as a proportion of the overall retail price. As a consequence, the effects of an MTR increase on pricing for the retail customer may be somewhat lessened, and have implications for any behavioural response.

4.111 However, ComReg sought details from Service Providers as to whether they would pass-through a SSNIP in MTRs into retail prices. Again, views on this were

[147] While likely, it is by no means certain that some or all of the increase will be passed through. This will depend on the originating Service Provider's ability to absorb the price increase.

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

[149] Purely for illustrative purposes, this assumes that the 5 cent MTR is at the competitive level. For the avoidance of doubt, ComReg does not accept that this is the case and a competitive MTR is likely to be significantly lower than that.

mixed[150], however, the following highlights the expressed Service Providers' potential responses to a SSNIP in MTRs.

- Service Providers originating calls to subscribers of a MSP could decide to cease their purchase of MVCT. However, this would result in their subscribers not being able to contact mobile subscribers of the terminating MSP and could impact the originating Service Provider at the retail level - say through loss of subscribers switching to other Service Providers or through revenue foregone as a result of lower call volumes.
- Service Providers originating calls to subscribers of a MSP could decide to absorb the MTR increase and not pass it on to their retail subscribers. However, this would result in higher costs for the originating Service Provider, and could impact its overall profitability as well as its position in the market vis-à-vis any competitors.
- Service Providers originating calls to a subscriber of a MSP could decide to pass through the MTR increase (either in part or in full) to their retail subscribers. This could negatively impact the originating Service Provider's position in the market vis-à-vis any competitors.
- MSPs who originate as well as terminate calls (i.e. act both as a purchaser and supplier of MVCT) could decide to absorb the MTR increase and not pass it on to their retail subscribers and, at the same time, increase their own MTRs by a similar amount. The MSP's subscribers' demand for calls to subscribers of a particular MSP would likely be unaffected; however, other purchasers of its MVCT service would need to consider the extent, if any, to which they pass through this 'retaliatory' MTR increase to their subscribers.

4.112 The extent/intensity of competition in affected retail markets could impact the degree to which the above scenarios were likely to apply in practice. For example, faced with a strong competitor who had the ability to absorb an MTR increase (and not pass it through into higher retail prices), a competing Service Provider would need to consider, in response to an MTR increase, the degree to which it would raise its retail prices for calls to mobiles (or across a portfolio of services) and the likely impact that this would have on the potential for its subscribers to switch to the competitor's service. Where a decision was made not to pass on the MTR increase, it would nevertheless represent a cost to the business.

4.113 While it is uncertain whether the entire MTR increase will be passed through to the price of retail calls or other associated prices (or indeed if it is passed through

[150] Of the 11 Service Provider responses to statutory Information Requests received, views varied on the degree to which (if at all) a 5%-10% MTR increase would be passed through to consumers in the form of higher retail prices. 4 Service Providers considered that a corresponding pass through of MTR increases into retail prices was unlikely, whereas 3 Service Providers considered MVCT purchasers would pass-through some or all of the MTR increase (a complete pass through was considered more likely where retail mobile prices differed based on the MSP of the called party). 4 Service Providers expressed no definitive view on this question.

at all), ComReg makes the assumption that it is passed through in full for the purpose of market definition, since this will prevent any underestimation of any indirect retail constraints on the wholesale Relevant MVCT Markets arising from the pass-through of an MTR increase.

4.114 It is also worth noting that the pass-through of an MTR increase could be spread over the entire costs of a retail price plan as opposed to retail call prices alone. For example, the MTR increase could be recovered through a combination of access, call or handset price increases.

4.115 As noted in paragraphs 4.91 to 4.95, 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 MTR increases (on calling parties' retail prices for calling subscribers of a particular MSP) are unlikely to be sufficient to make an MTR increase unprofitable.

4.116 Similarly, it is ComReg's preliminary view that the calling party is likely to have low levels of awareness of the called party's MSP and the cost of calling subscribers of particular MSPs. These factors are likely to affect the degree to which the calling party or the calling party can change its call making/receiving behaviour in response to cost concerns.

4.117 As part of the 2011 Market Research, ComReg asked consumers[151] and SMEs the extent to which they would, as mobile users, notice an increase of 1 and 3 cents in the cost of calling a subscriber of a particular MSP and to what extent they would change their behaviour as a result. Note that it is more likely than not that this 1 cent and 3 cent retail price increase exaggerates the effects of a retail pass-through of a 5% to 10% increase in MTRs (above the competitive level).[152] Consumers and SMEs that indicated that they would or maybe would change behaviour were also asked to select their most likely behavioural responses and how often they would respond in such a way.

4.118 The expressed consumer/SME behaviours in response to hypothetical price changes, rather than being determinative, are used to inform ComReg's demand side substitution analysis, with the views expressed by consumers and SMEs set out in Figure 29 to Figure 33 below.

[151] See Appendix A: Slides 74 to 76 and slides 137 to 140.

[152] The current highest peak MTR in the market is that of Tesco Mobile Ireland (TMI) and is just over 15 cent per minute (note TMI is not currently designated with SMP and its MTRs are, therefore, unregulated). It is also likely that this MTR is above the competitive level having regard to international MTR benchmarks. A 5% to 10% increase in a 15 cent MTR is in the range of 0.85 cent to 1.7 cent and assuming this is fully passed through to retail customers, it would give rise to an increase of 1 to 2 cent.

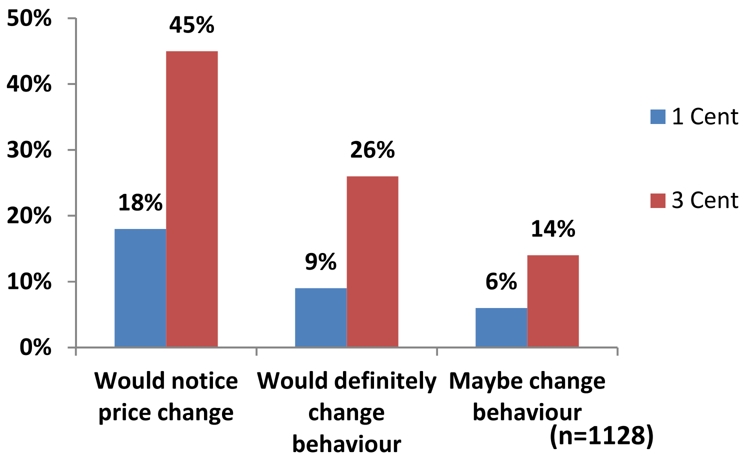

Figure 29: Consumer awareness and behaviour change from 1c and 3c increase

4.119 At a 1 cent increase, 18% of consumers indicated they would notice the price change, with 9% stating they would definitely change behaviour and 6% indicating they may change behaviour. At a 3 cent increase, 45% of consumers would notice the price change, with 26% stating they would definitely change behaviour and 14% indicating they may change behaviour.

4.120 The most likely behavioural responses indicated by consumers in response to a 1 cent and 3 cent increase, along with their frequency are set out in Figure 30 and Figure 31 below.

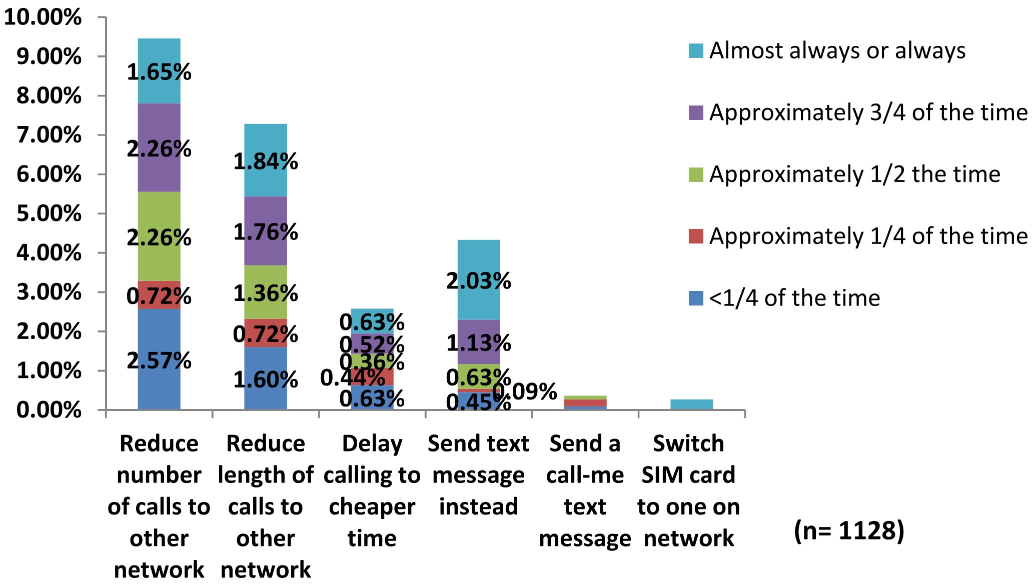

Figure 30: Consumer stated behavioural response at 1 cent increase[153]

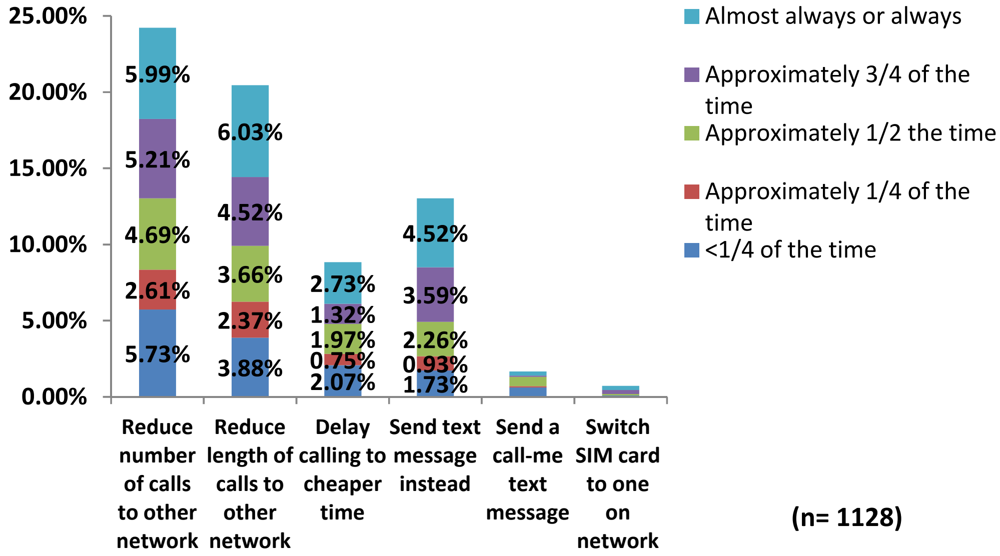

Figure 31: Consumer stated behavioural response at 3 cent increase[154]

4.121 Based on the above, the most likely mobile consumer behavioural responses to a 1 cent and 3 cent increase in retail prices would be to reduce either the number or duration of mobile calls to subscribers of the terminating MSP. The frequency with which consumer respondents indicated they would take either of these actions also varied considerably.

4.122 A similar response[155] was also given from fixed line consumers (who are also mobile users) with a reduction in either the number or duration of fixed line calls to subscribers of the terminating MSP. Again, the frequency with which such actions would be taken would also vary.

4.123 Consumers were also asked[156] how they would change their call receipt behaviour if they were concerned about the cost for people when calling them, with the reported behaviours and their frequency set out in Figure 32 below.

[153] See Appendix A: Slide 76.

[154] See Appendix A: Slide 76.

[155] See Appendix A: Slides 77 and 78.

[156] See Appendix A: Slide 71.

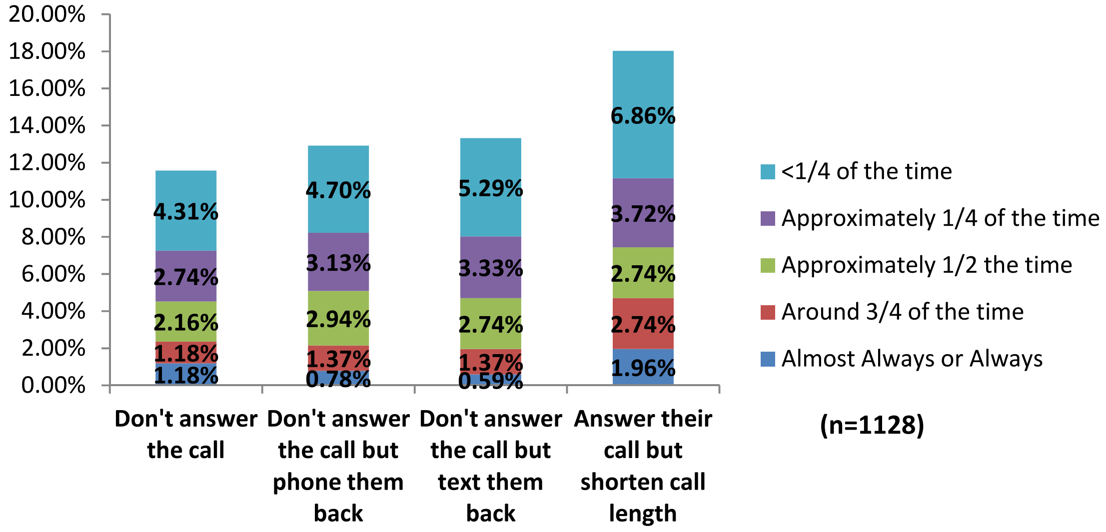

Figure 32: Consumer stated behaviour where concern at calling parties' cost of calling

4.124 SMEs were also asked the extent to which the relevant SME's business itself would notice an increase of 1 and 3 cents in the cost of calling a subscriber of a particular MSP (different to their own) and to what extent they would change their behaviour as a result.

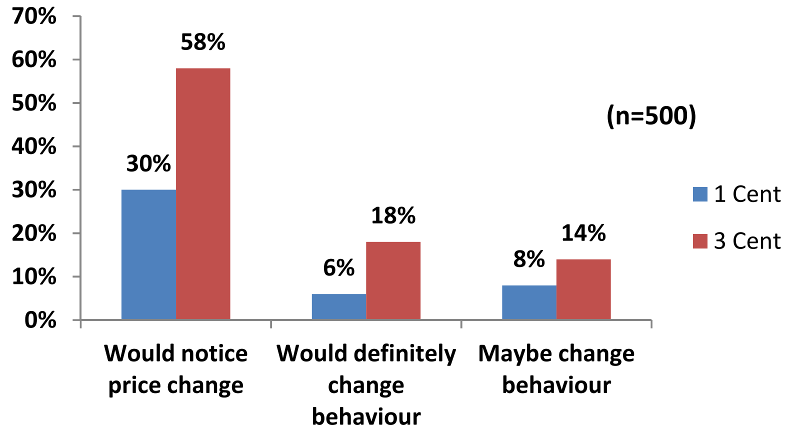

Figure 33: SME awareness and behaviour change from 1c and 3c increase[157]

4.125 At a 1 cent increase, 30% of SME Decision Makers indicated the business would notice the price change, with 6% stating they would definitely change behaviour and 8% indicating they may change behaviour. At a 3 cent increase, 58% of SMEs indicated that they would notice the price change, with 18% stating they would definitely change behaviour and 14% indicating they may change behaviour.

[157] See Appendix A: Slide 138.

4.126 SME Decision Makers that indicated there would be any change in behaviour were also asked[158] to provide an estimate of how this would impact the business' outbound communication. Those that were able to provide an estimate of the percentage impact on outbound communications indicated that, at a 1 cent and 3 cent increase, it would result in an overall reduction in outbound communications volumes (across a range of methods of communication) of 2.1% and 7% respectively.

4.127 SMEs were also asked[159] how they would change their call receipt behaviour if they were concerned about the cost for people when calling them. Between 5% and 14% of SMEs stated that would change their behaviour at a 1 cent and 3 cent increase respectively.

4.128 The behaviours identified in paragraphs 4.115 to 4.127 could have the following potential impacts on the profitability of the terminating MSP and on originating Service Providers:

- a potential impact upon the terminating MSP's termination revenue arising from a combination of (i) increased termination revenue from those consumers that continue to make calls to subscribers of the terminating MSP, notwithstanding the pass-through of the increased MTR into retail prices, (ii) a decrease in termination revenue from those consumers that reduce the number or length of calls (or substitution to other forms of outbound communication) as a consequence of the pass-through of the increased MTR into retail prices, and (iii) an increase in retail revenue where calling parties, in response to MTR induced retail price increases, were to switch from their existing Service Provider to the MSP that increased the MTR[160] in the first place.
- A potential impact on the retail revenue of the calling party's (originating) Service Provider as a result of fewer or shorter calls being made. There is also the possibility that some retail subscribers could switch Service Provider as a result of the pass-through of the MTR increase, again leading to a lowering of retail revenues.

4.129 Arising from the pass-through of an increase in MTRs, ComReg further considers below how the behavioural changes expressed by consumers and SMEs impact on their outbound communications mix, along with any potential substitution to specific potential alternative retail products.

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[158] See Appendix A: Slides 137 to 143.

[159] See Appendix A: Slide 144 and 145.

[160] Assuming the terminating MSP was acting rationally in seeking to maximise profits, it would likely increase its MTRs for all calls terminating with it, irrespective of the identify of the calling party's Service Provider i.e. the MTR increase would be passed on to all originating Service Providers.

Mobile call to a fixed line phone instead of an off-net mobile to mobile call

4.130 An increase in MTRs by a HM might be unprofitable if, in response, a sufficient number of consumers switched to making a mobile call to a fixed line phone (M2F) instead of an off-net mobile to mobile (M2M) call. The motivation for making a call to a fixed line instead of to a mobile would be to avoid the higher cost of the off-net mobile call and, presumably, to take advantage of the lower cost of a mobile call to a fixed line.

4.131 As noted in paragraphs 3.38 to 3.41 and 4.24 to 4.29 current MSP retail pricing is such that the costs of making an off-net call to a mobile and a fixed line are the same across both prepay and billpay MSPs' price plans. In addition, billpay customers' basic price plans include varying amounts of bundled minutes which can be used for calls to subscribers of any (fixed or mobile) Service Provider. If such common off-network pricing approaches were to persist absent regulation, then these would likely limit a consumer's rationale for switching to a fixed line call since the costs are the same irrespective of the identity of the called party's Service Provider.

4.132 This aside, ComReg considers that insufficient consumers are likely to consider a M2F call as a viable alternative to an off-net M2M call. This, in ComReg's view, is because the characteristics of fixed and mobile telephony are different (for the reasons set out below).

4.133 Fixed line phones are associated with fixed locations such as households and businesses, whereas mobile phones are associated with individual people, usually on the move. This means that mobile subscribers are contactable and can make calls, irrespective of location. It is more likely that an individual can have immediate contact with a called party when contacting them on their mobile while this is not always the case for mobile to fixed calls.

4.134 Given consumers are, in ComReg's view, likely to consider immediacy of contact to be a priority when making a call[161], it suggests to ComReg that with a M2F call (instead of a M2M call) there is a sufficient possibility that contact would not be made at all or in a timely fashion (say because the individual is away from home, or another member of the household is on the fixed line).

4.135 This issue is likely to be impacted by fixed line ownership, particularly given approximately 30%[162] of all households do not have fixed line phones (a proportion of these households also may not have mobiles). In addition, the 2011 Market Research reveals[163] that 39% of consumers <u>with mobile phones</u> indicated they did not have a fixed line phone at home (with those aged 35 or less having

[161] Given other forms of communications such as a text message or and email typically involve a less immediate response.

[162] As at Q4 2011, there were 1,149,057 residential subscriptions with a fixed line element. Taking CSO household figures of 1,636,900, this translates into a fixed line penetration figure of 70.1%.

[163] See Appendix A: Slide 25.

even lower levels of fixed line ownership[164] - less than 48%). This suggests that even if a consumer were to make a M2F call instead of a M2M call, it is only likely to be potentially viable for between 61%-69% of called parties (assuming of course the called party is at home to receive the call).

4.136 The 2011 Market Research also shows[165] that consumer respondents perceive M2F calls as being approximately 25% more expensive than the cost of a M2M call (both on-net and off-net) - when it has been observed that they are usually the same. This suggests that the incentive to avail of a cheaper M2F call could be undermined through a lack of awareness of price differentials between the cost of calling a mobile and a fixed line.

4.137 As part of the 2011 Market Research SMEs were asked how a 1 cent and 3 cent increase in the cost of calling a particular mobile network would affect their mix of outbound communications. In response[166], SMEs that would notice the price increase and would change their behaviour[167] indicated that, at 1 cent, their outbound communication from mobiles would remain relatively unchanged, while at 3 cent, it would fall by 2%. Relative changes between the mix of on-net and off-net mobile calls as a result of the suggested reactions to price increases were also minimal, with on-net and off-net mobile calls increasing 2% and 1% respectively. Assuming the increase in off-net calls related to calls to fixed lines (which is by no means clear), it suggests that substitution to a M2F call instead of and off-net M2M call is not likely to be significant in response to MTR increases.

4.138 Furthermore, it is worth recalling that the vast majority of MSP retail price plans do not differentiate between the cost of making a call from a mobile to either another off-net mobile or a fixed line (notwithstanding large differences in current underlying fixed and mobile termination rates). This common pricing approach, were it to continue, could also impact the degree of retail consumer substitution.

4.139 As part of its statutory information requests[168] to Service Providers (and subsequent meetings regarding these) ComReg also asked whether they considered a M2F call to be a likely substitute for a M2M call and to provide any empirical evidence for their views. Several respondents either did not express views on this question (in some cases citing lack of supporting empirical evidence); however, three others indicated that a M2F call is not likely to be an effective substitute for an off-net M2M call. Some of the main reasons to support the latter views included mobility and lower consumer sensitivity to cost given the nature of MSP price plans. It was also noted that MTR price increases could, if passed through to consumers, impact the originating Service Providers'

[164] See Appendix A: Slide 26.

[165] See Appendix A: Slide 47.

[166] See Appendix A: slides 138 to 140.

[167] Between 14% and 32% of all SMEs, depending on whether price increase was 1 cent or 3 cent respectively

[168] See paragraph 4.8.

revenues, either through lower call volumes or customers switching to other Service Providers.

Preliminary Conclusion on M2F calls

4.140 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to making a mobile to fixed call such that it would make the MTR increase unprofitable. A M2F call is not, therefore, likely to pose an effective competitive constraint on MTRs.

Fixed line to fixed line call instead of an off-net mobile to mobile call

4.141 An increase in MTRs by a HM might be unprofitable if, in response, a sufficient number of consumers substituted making an off-net mobile to mobile (M2M) call with a fixed line to fixed line call (F2F) instead. The motivation for making a F2F call instead of an off-net M2M call would be to avoid the higher cost of the off-net mobile call and, presumably, to take advantage of the lower cost of a F2F call.

4.142 As part of its statutory information requests[169] to Service Providers (and subsequent meetings regarding these) ComReg also asked whether they considered a F2F call to be a likely substitute for a M2M call and to provide any empirical evidence for their views. While no firm evidence was provided to support the 5 respondents that expressed views, none consider a F2F call to be an effective substitute, mainly due to an insufficient number of customers changing their behaviour such that it would render price increases unprofitable.

4.143 This F2F instead of an off-net M2M scenario is similar to the scenario outlined above in paragraphs 4.130 to 4.140 and the issues regarding the different characteristics of fixed line and mobile services, fixed line penetration, dual mobile/fixed line ownership, network/price awareness and price sensitivity remain.

4.144 However, those mobile subscribers that have a fixed line as well as a mobile and are price sensitive, particularly where their fixed line plan has inclusive bundled minutes for F2F calls, may utilise this option for when the called party is at a fixed location. A further motivation for the mobile subscriber making a F2F call could be to avoid using any limited number of inclusive bundled minutes available in their mobile subscription - thereby keeping such minutes for M2M calls.

4.145 As part of the 2011 Market Research SMEs were asked how a 1 cent and 3 cent increase in the cost of calling a particular mobile network would affect their mix of outbound communications. In response, SME's that would notice the price increase and would change their behaviour indicated[170] that, at 1 cent, their outbound communication from mobiles would remain relatively unchanged, while for fixed lines it would decrease by 3%. At 3 cent, their outbound communication from mobiles would fall by 2%, while for fixed lines it would decrease by 5%. This

[169] See paragraph 4.8.

[170] See Appendix A: Slides 138 to 140.

suggests to ComReg that an insignificant degree of substitution by SMEs to F2F calls is likely to arise as a result of MTR increases.

Preliminary Conclusion of F2F calls

4.146 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to making a F2F call instead of an off-net M2M call such that it would make the MTR increase unprofitable. A F2F call is not, therefore, likely to pose an effective competitive constraint on MTRs.

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

4.147 An increase in MTRs by a HM might be unprofitable if, in response, a sufficient number of consumers switched to making an on-net M2M call instead of a F2M or an off-net M2M call. The motivation for making an on-net M2M call instead of F2M/off-net M2M call would be to avoid the higher cost of calling the mobile from a fixed line/off-net mobile and, presumably, to take advantage of the lower cost of an on-net M2M call.

4.148 This would man that on-net M2M calls could be a substitute for both F2M calls and off-net M2M calls. On-net M2M calls do not involve an explicit termination payment as the calling party's MSP is the same as that of the called party.

4.149 In order for on-net mobile calls to be a viable substitute it would be necessary for either the calling party or the called party to have multiple (at least two) mobile subscriptions, one of which must be with the same MSP for both parties. This could take the form of either party having two mobile phones, each with their own network specific SIM[171] card, or else having one mobile phone but multiple SIM cards. In these scenarios, consumers would turn the call into an on-net call, either by switching phone or SIM.

4.150 As noted earlier, MSPs do not tend to differentiate their pricing for off-net calls to either mobiles or landlines. Similarly, the majority of billpay plans do not differentiate charges for <u>out of bundle</u> on-net and off-net calls, however, a substantial amount of billpay plans offer free or reduced rate on-net calls. In terms of prepay plans, a substantial number differentiate between the cost of making off-net and on-net M2M calls, with the cost of the latter often being free or at a reduced rate.

4.151 Given the costs involved in maintaining two or more bill-pay subscriptions, ComReg considers that it is unlikely to be a viable alternative for a significant number of consumers – particularly given mobile users are distributed across a range of MSPs. However, a secondary prepaid subscription (additional phone or SIM card) could be an attractive option for some consumers. ComReg also considers that the use of multiple SIM cards (with the same mobile phone), while

[171] The SIM card is the Subscriber Identity Module. Each SIM card is unique to a MSP and an individual mobile subscriber's number.

possible, is likely to be highly inconvenient for consumers given it involves powering down the mobile handset to swap out the SIM card to one tied to the MSP of the party being called. It also would require the consumer, on a call by call basis, to be able accurately identify the MSP of the party being called and potentially to have a SIM card for every MSP – particularly given mobile users are distributed across a range of MSPs. As noted in paragraphs 4.90 to 4.95 both consumers and SMEs tend to have low levels of awareness of the MSP of the party being called. These factors are likely to undermine the effective use of on-net substitution.

4.152 It is also worth noting that a bill-pay subscriber may not have the option of using a second SIM card in the same phone. It is particularly common place for retail MSPs to 'SIM Lock' handsets (during minimum contract periods), thereby blocking the use of other network SIM cards in such handsets.

4.153 Nevertheless, as part of the 2011 Market Research ComReg asked consumer and SME respondents to indicate whether they have multiple mobile subscriptions/SIM cards. Only 5% of consumer respondents indicated[172] they have more than one mobile phone number[173], with just over half (2.7%) of these citing business use as the reason for having the second mobile number. The remainder (2%) had a second mobile number for their personal use, with the main reason cited for doing so being 'personal reasons' rather than cost reasons. Consumer respondents were also asked whether, in response to a 1 cent and 3 cent increase in the cost of calling a subscriber of another MSP, whether they would consider switching their SIM card to one of the MSP being called. In each Scenario, less than 1% of consumers indicated they would respond in this way.

4.154 Similarly, 4% of SMEs indicated[174] that they use more than a single MSP for all of the mobile phone numbers provided by the business to employees, with just under half of these SMEs expressing cost as the main reason for doing so.

4.155 Another way for an on-net call to become a potential substitute of an off-net call would be for subscribers to switch their services in order to be on the same network as those they are calling – thereby creating the ability to avail of cheaper on-net call charges. ComReg recognises that this may well be a viable option for some subscribers, in particular, those that are price sensitive and make a sufficiently large number of calls to subscribers of the same MSP (although there may be switching costs such as those involved in breaking a minimum term bill-pay contract). For example, in the case of personal users making frequent calls to the same friends/family circles or, in the case of businesses, employee to employee calls. As noted in paragraph 4.128, such customer switching in response to increases in MTRs would impact the calling party's Service Provider

[172] See Appendix A: Slides 21 to 24.

[173] Given a mobile number is tied to each subscription/SIM card consumers were asked whether they had more than one phone number.

[174] See Appendix A: Slides 95 and 96.

and the terminating MSP. As part of the 2011 Market Research, in response to a 1 cent and 3 cent increase in the cost of calling (from a mobile) to an off-net mobile, of those SMEs that would notice the increase and change behaviour[175], between 7% (5 SMEs) and 25% (40 SMEs) of such SMEs indicated[176] respectively that switching to another MSP was one of the actions very likely to be considered. However, as noted earlier, actual cost/network awareness issues would likely dampen actual sensitivity to such changes.

4.156 In ComReg's preliminary view, switching MSP in order to take advantage of reduced on-net rates is not likely to render an MTR price increase unprofitable for a terminating MSP.

Preliminary Conclusion

4.157 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to making an on-net M2M call such that it would make the MTR increase unprofitable. An on-net M2M call is not, therefore, likely to pose an effective competitive constraint on MTRs.

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

4.158 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR increase being passed through into the retail price, a sufficient number of consumers were to switch to making a Voice over Internet Protocol (VoIP) call to a mobile instead of a traditional call to a mobile. The rationale for making a VoIP call to a mobile would be to avoid the retail cost associated with making a M2M or F2M call.

4.159 A VoIP call essentially involves the use of a data/broadband network to make an internet type call (an example would include Skype) and it potentially allows a caller to bypass the terminating MSP, thereby avoiding the retail costs (and the termination charge) of making a traditional circuit switched call. In order for a VoIP call to be a potential alternative to a traditional call to a mobile, both the calling party and the called party would need to have a data/broadband subscription[177]. While a VoIP call itself could be free (and therefore avoid the MTR), given both incur costs of the data/broadband subscription, unlike the CPP principle, the receiving party does face some costs and this could impact their behaviour when receiving VoIP calls on their mobile. As to how it would impact their behaviour is unclear at this point. However, one issue that could impact is whether a mobile user would opt to receive a VoIP call that will cost them (due to

[175] Between 14% (n=71) and 32% (n=158) of all SMEs.

[176] See Appendix A: slides 137 to 140. Note, when percentages are represented as a percentage of all SMEs it equates to between 1% and 8% of SMEs.

[177] It is possible to make a VoIP call directly to a mobile number without the receiving mobile 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 MTR price setting behaviour of a HM.

the use of data) when, in contrast, there would be no cost associated with receiving a traditional circuit switched voice call. The availability of data bundles with large or unlimited data allowances could lessen this impact, as could the ability to use a Wi-Fi network (either at home or at a public internet point where access to unmanaged VoIP services, such as Skype, is available – although this too could involve cost associated with access to such networks).

4.160 Both parties, apart from having a data subscription would also need to have a VoIP client (such as Skype). This implies that the called party would, need to have a 'smart' mobile phone capable of operating on a data network and supporting the VoIP client. The calling party would also need a smart phone/device.

4.161 There are also other considerations as to whether the quality of a VoIP call would be sufficiently similar to a traditional voice call such that consumers would used 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 then ComReg suggests that such functional differences between VoIP and traditional voice call would likely undermine consumer usage of VoIP calls as a substitute for traditional calling methods.

4.162 No MSPs place technical restrictions on making or receiving VoIP to VoIP calls[178] on their data networks. H3GI has gone into a specific partnership with a VoIP provider (Skype) which allows H3GI subscribers to make free Skype to Skype calls to each other or to other Skype users.

4.163 As part of statutory information requests[179], ComReg sought information from MSPs as to the level of general VoIP usage on their data networks and also evidence concerning the use of VoIP for the purposes of calling their subscribers. ComReg also sought evidence as to whether and how any such use impacted MSPs' MTR setting behaviour. No respondent was in a position to quantify the specific usage of mobile to mobile VoIP calls by their subscribers. Some estimates of general Skype or other VoIP related data usage were provided, however, these were relatively low in comparison to overall data usage on networks. Following clarification by ComReg with MSPs it was generally acknowledged that Skype-associated data usage was likely to relate mostly to outbound mobile VoIP calls to international destinations rather than to other domestic mobiles. As to whether any VoIP usage impacted or could sufficiently constrain their MTR setting behaviour, all but one MSP indicated that it would not. This MSP indicated that VoIP usage has constrained its MTR setting

[178] In some cases commercial restrictions are placed on making outward bound Skype calls to domestic national telephone numbers.

[179] See paragraph 4.8.

behaviour. However, it did not provide any meaningful evidence[180] to support its claim.

4.164 As noted above, in order to make a VoIP call from a mobile to another mobile, both the calling party[181] and the called party would need to have a smart phone. As part of the 2011 Market Research, 44% of consumers indicated[182] that they had a smart phone device. Recent Amárach research[183] showed that 37% of mobile users had a smart phone. More recent research[184] carried out by Red C and the WIN Research Group suggested that in November 2011 smartphone ownership in Ireland was close to 49%. While the prevalence of smart phones amongst users is likely increase over the coming short to medium term, it is also likely that a substantial number of users will continue not to have one and the receipt of a VoIP call on a mobile phone will not, therefore be viable for such persons.

4.165 As part of the 2011 Market Research, those consumers with a smart phone were also asked the extent to which they use VoIP services on their mobile, with 80% indicating[185] they never use it and the remainder doing so with varying frequencies (overall, this suggests that just over 91% of all mobile users, irrespective of mobile phone type, do not use VoIP on their mobile. Smart phone consumers were also asked the extent to which they used VoIP to call someone else on their mobile, with 33%[186] of such VoIP users indicating[187] they did so, albeit on a sporadic basis. While the levels of usage of VoIP may increase, it is ComReg's view that it would not be sufficient such that it would impact MTR setting behaviour.

4.166 SMEs were also asked whether employees were provided with smart phones with the responses set out in Figure 34 below.

[180] This Service Provider did acknowledge that the only reason its MTRs had been reduced to date was in response to regulatory intervention.

[181] The calling party could also use a VoIP application from a computer or other handheld device.

[182] See Appendix A: Slide 14.

[183] The Smart Future, Amárach Research, May 2011, slides 10 and 11.

[184] 'Connecting the World – Mobile and Social Media Trends', research carried out by Red C in conjunction with the Worldwide Independent Network (WIN) Research Group. See slides 5 and 9.

[185] See Appendix A: Slide 15.

[186] This translates into less than 3% of the mobile phone population surveyed.

[187] See Appendix A: Slide 17.

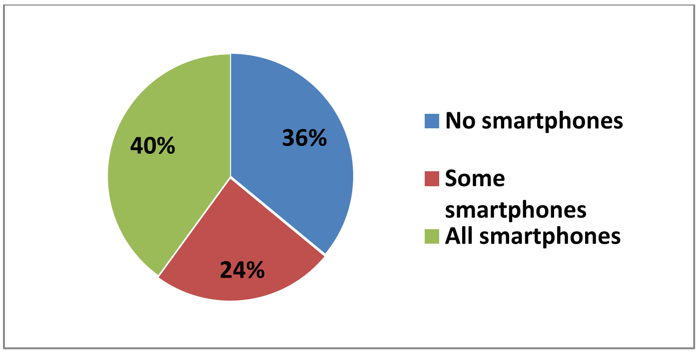

Figure 34: Prevalence of smart phones amongst SME employees

4.167 Notwithstanding the ability of MSP subscribers to make/receive VoIP calls, this does not, in ComReg's view, appear to have had any significant impact on MSP' MTR setting behaviour, as the only reductions to date in MTRs have been as a direct consequence of regulatory intervention.

Preliminary Conclusion

4.168 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to making a VoIP to VoIP call to a mobile such that it would make the MTR increase unprofitable. A VoIP to VoIP call to a mobile is not, therefore, likely to pose an effective competitive constraint on MTRs.

Send an off-net SMS/Text instead of an off-net mobile to mobile call

4.169 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR increase being passed through into the retail price, a sufficient number of consumers were to switch to sending an SMS instead of making an off-net mobile[188] call. The rationale for sending an SMS to a mobile would be to avoid the retail cost associated with making an off-net M2M call.

4.170 ComReg's preliminary view is that there are sufficient functional differences between making an off-net mobile call and sending an off-net SMS text message. Firstly, there is a restriction on how much 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[189] for each. SMS messages are sent on a 'store and forward' basis meaning that there may be a delay in the recipient receiving a text. i.e. it is not a

[188] In response to Statutory Information Requests, data has been provided by fixed operators which shows that, the level of fixed line originated SMS is virtually non-existent and that this is not likely to change within the short to medium term. Therefore, ComReg does not consider fixed SMS in this analysis given its impact is likely to be extremely low.

[189] 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.

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 mobile (although it is recognised by ComReg that some people may consider them to be, particularly for short calls or where real-time communication is not important).

4.171 It should also be borne in mind that the MSP terminating the mobile voice call will also be the same MSP that would terminate an SMS. Given SMS termination[190] is not currently subject to regulation, terminating MSPs are entirely free to determine their SMS termination rates and these could be set such that any competitive impact on voice termination rates is reduced.

4.172 As part of the 2011 Market Research, in response to a 1 cent and 3 cent increase in the cost of an off-net mobile call, 5% to 13 % of consumers indicated[191] respectively that they would send an SMS instead. As noted in Figure 30 and Figure 31 at paragraph 4.19, the frequency with which they would do this would vary.

4.173 As noted in paragraph 4.123 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. As shown in Figure 32 just over 13% of consumers indicated they would not answer the call and text the calling party back, although the vast majority indicated they would do this on one in four occasions or less.

4.174 Between 4% and 9% of SMEs also indicated that, in response to 1 cent and 3 cent increases in the cost of calling subscribers of another MSP, they would likely encourage the use of text messaging instead.

4.175 ComReg's preliminary view is that the expressed consumer and SME behaviours above are unlikely to constrain the MTR setting behaviour of a HM.

Preliminary Conclusion

4.176 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to sending an off-net SMS such that it would make the MTR increase unprofitable. An off-net SMS is not, therefore, likely to pose an effective competitive constraint on MTRs.

Send an email instead of making an off-net mobile call

4.177 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR increase being passed through into the retail price, a sufficient number of consumers were to switch to sending an email instead of making an off-net mobile call. The rationale for sending an email to a mobile would be to avoid the retail cost associated with making an off-net M2M call.

[190] SMS termination rates across all MSPs are currently 3.17 cent.

[191] See Appendix A: slide 76.

4.178 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 mobile called party to receive an email it would need to have both a smart phone and a data plan. Secondly, there is no limitation in the number of characters that can be sent in an email.

4.179 As part of the 2011 Market Research, those consumers with a smart phone (44% of all respondents) were asked whether they use email[192] on their phone and, if so, how often. 57% of smart phone users indicated they never use email with the remaining 43%[193] using it with varying degrees of frequency. The predominant use was amongst those aged between 15 years and 45 years.

4.180 While some consumers may find email[194] to be a close substitute to making a call to a mobile, 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 mobile.

Preliminary Conclusion

4.181 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to sending an email[195] such that it would make the MTR increase unprofitable. An email is not, therefore, likely to pose an effective competitive constraint on MTRs.

Shortening calls or requesting a call back instead of an off-net call to a mobile

4.182 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR 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 or sending a text message). The intention in using either of these alternatives would be to reduce the length of communication and, consequently, lower costs.

4.183 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.

[192] See Appendix A: slide 15.

[193] Representing just fewer than 19% of all consumers surveyed (i.e. including both those with and without smart phones).

[194] Similarly, an email could be sent from a laptop/PC or other device. However, ComReg considers that such forms of communication also lack the immediacy of contact that is facilitated by a call.

[195] ComReg considers that similar to an email, use of social media is unlikely to make an MTR increase unprofitable. Use of social media is also examined in the 2011 Market Research – see Appendix A: slide 15.

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

4.185 Shortening a call may be an option for some callers. However, this will depend on whether or not it is convenient in light of the information that is to be discussed.

4.186 For call back (either in response to a voice mail or through a specific service offered by Service Providers[196]) to be successful it is necessary that there is agreement between the caller and the call recipient that a return-call will be made. The success of call back requires that the recipient is willing to become the caller and pay the cost of making the call, including the termination charges. The existence of the CPP means that the called party does not pay any contribution towards the cost of the call.

4.187 As the use of call back is not widespread among all mobile users, it is not considered by ComReg to be an effective substitute for an off-net call to a mobile.

4.188 Nevertheless, some consumers, as an alternative to calling a mobile may opt to send a 'call-me' text message, with a view to getting the receiving party to phone them back. As part of the 2011 Market Research, in response to a 1 cent and 3 cent increase in the cost of an off-net mobile call, less than 2% of consumers indicated[197] that they would send a 'call-me' text message instead. As noted in Figure 30 and Figure 31, the frequency with which they would do this would vary.

Preliminary Conclusion

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

Delay making the off-net mobile call to a time of day when the cost is cheaper

4.190 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR 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.

[196] ComReg has no evidence of Service Providers offering a call back service.

[197] See Appendix A: Slide 76.

4.191 Delaying the making of an off-net mobile call 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.

4.192 As part of the 2011 Market Research, in response to a 1 cent and 3 cent increase in the cost of an off-net mobile call, between 2.5% and 8.8% of consumers indicated[198] (at varying degrees of frequency) that they would make a call at a cheaper time of day.

4.193 Two issues may impact the degree to which such an approach by consumers could impact upon the profitability of the HM supplier of MVCT. Firstly, as noted in paragraphs 3.38 to 3.41 and 4.24 to 4.29, the majority of retail mobile price plans do not tend to differentiate their call charges by time of day, i.e. a flat rate charge applies. Making a call at a cheaper time may not, therefore, be a viable switching option for some consumers and this may undermine its potential use. Secondly, even if there were such an option available and utilised, it would result in a reduction of rather than an elimination in mobile termination revenue[199], as at the wholesale level an off-peak/weekend MTR would still be levied.

Preliminary Conclusion

4.194 Having regard to the above, ComReg's preliminary view is that, in response to an increase in MTRs, a sufficient number of consumers are unlikely to switch to making an off-net call to a mobile at a cheaper time such that it would make an MTR increase unprofitable. Delaying calls is not, therefore, likely to pose an effective competitive constraint on MTRs.

Preliminary conclusion on retail demand-side substitution

4.195 Having regard to the factors likely to affect the impact of retail consumer behaviour on the Relevant MVCT Markets, ComReg has considered whether the following are likely to be effective retail demand-side substitutes for an off-net call to a subscriber on a mobile network:

- Make a mobile call to a fixed line
- Make a fixed line call to a fixed line
- Make an on-net mobile call
- Make a VoIP call
- Send an off-net SMS/Text
- Send an email
- Shorten calls or request a call back

[198] See Appendix A: Slide 76.

[199] The reduction in mobile termination revenue for the call would be calculated having regard to the difference between the peak MTR and off-peak/weekend MTR multiplied by the call duration.

4.196 ComReg has reached the preliminary view that substitution to the above alternative forms of communication, either individually or collectively, is unlikely to pose an effective competitive constraint on MTRs.

4.197 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 over the lifetime of this review (typically a three year time horizon).

Retail supply-side substitution

4.198 A HM might be constrained in setting its MTR above the competitive level if, in response to the MTR increase, a Service Provider that does not currently offer retail calls to mobiles switched to doing so (say as a new entrant or by switching existing production) and started supplying retail calls to mobiles. Such supply side substitution[200] would only pose an effective constraint were it to make the HM's MTR increase (above the competitive level) unprofitable.

4.199 In order to do this, the Service Provider would have to have the ability to provide a voice call service to a mobile number which was not reliant on the provision of MVCT by the subscriber's MSP (and to do so in a timely manner, without incurring significant costs). Currently, it is the terminating MSP which controls the final routing and termination of calls to subscriber mobile numbers[201] and, as a consequence retail supply side substitution is not possible.

4.200 ComReg is also unaware of any technologies in development or in existence that would, within the immediate to medium term such that it would allow an originating Service Provider to bypass the called party's MSP to terminate a call to a subscriber's mobile number.

Preliminary conclusion on retail supply-side substitution

4.201 Retail supply-side substitution is not likely to pose an effective constraint on the MTR setting behaviour of a HM supplier of MVCT services.

Retail geographic market assessment

4.202 The consideration of the geographic scope of the retail market is focused on the extent to which it informs the consideration of the wholesale market. It is not necessary for ComReg to conclude on the precise geographic scope of the retail market. However, any visible regional or local variations in competitive conditions at the retail level can help in identifying the geographic scope of the corresponding wholesale market(s).

4.203 ComReg identifies geographic market boundaries on the basis of a clearly defined geographic area:

[200] As noted in paragraph 4.103 in order for supply side substitution to effectively constrain an MTR 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.

[201] Either technically and/or contractually.

".. in which the conditions are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas".[202]

4.204 The European Commission's Notice on Market Definition notes[203] further that it:

"….will take a preliminary view of the scope of the geographic market on the basis of broad indications as to the distribution of market shares between the parties and their competitors, as well as a preliminary analysis of pricing and price differences at national and Community or EEA level. This initial view is used basically as a working hypothesis to focus the Commission's enquiries for the purpose of arriving at a precise geographic market definition".

4.205 In assessing potential geographic variances in competitive conditions, ComReg has also had regard to the ERG's Common Position on Geographic Aspects of Market Analysis (ERG Common Position)[204].

4.206 Overall, in examining the likely geographic scope of the retail market, ComReg has considered a range of issues, including:

- Coverage and entry conditions; and
- Pricing and product patterns.

Coverage and entry conditions

4.207 In considering the geographic scope of the market, ComReg assesses the extent to which different competitive conditions have or may evolve in particular geographic areas of the State over the short to medium term. To do this, ComReg assesses the coverage of mobile networks as a means of identifying any existing or potential variances in entry and competitive conditions across different areas. This initial assessment of coverage provides a high-level check to identify if any broad variances in competitive conditions can be identified which may require further investigation.

4.208 As noted in paragraph 3.3, all retail MSPs have coverage to at least 99% of the population[205] and to over [✂[redacted]] of the geographic area of the State. As such their network coverage is effectively national in scope.

4.209 Such coverage is also provided either entirely based on a MSP's own network infrastructure, or in the case of MVNOs, on foot of arrangements with host networks. Some MSPs also supplement the coverage provided on their own network infrastructure through national roaming arrangements with other MSPs.

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

[203] *Ibid*, paragraph 28.

[204] ERG "Common Position on Geographic Aspects of Market Analysis (definition and remedies)", ERG (08) 20, October 2008.

[205] In some cases through national roaming arrangements and MVNO arrangements.

Notwithstanding the underlying network arrangements that are used by MSPs to offer national coverage, at the retail level ComReg has not observed any resultant underlying difference in the nature of retail voice services offered.

Pricing and product patterns

4.210 ComReg has examined MSPs' retail pricing plans to examine if there are any differences in their approach to pricing calls from/to mobiles based on geographic considerations and has found that no differences exist.

4.211 MSPs individually charge the same price for calling all subscribers of a particular MSP, irrespective of the location from which the call is made or received. In addition, most MSPs do not tend[206] to differentiate their call prices on the basis of the identity of the called party's MSP. Furthermore, such prices do not differ based on the underlying network technology (for example, 2G or 3G) used by the calling or called mobile party.

4.212 ComReg has also examined whether MSPs offer different call services in different geographic areas and has not found any evidence of such behaviour.

4.213 Having regard to the information provided by MSPs in response to statutory requests for information, it is ComReg's view that there are also not likely to be any significant changes to the above retail product and pricing characteristics within the lifetime of this market review. No MSP indicated to ComReg that it has firm plans to start charging retail mobile subscribers for the receipt of calls to mobile numbers and no MSP has indicated that they intend to offer a 'home zone'[207] type service to mobile numbers[208].

Preliminary conclusion on geographic scope

4.214 In view of the nationally-driven pricing practices of the MSPs and, given the uniformity in mobile call product characteristics offered across different geographic areas, ComReg's preliminary conclusion is that the conditions of competition in the retail mobile market are sufficiently homogeneous to suggest the geographic market is national in scope.

Overall preliminary conclusions on the retail mobile market assessment

4.215 Having regard to the analysis in paragraphs 4.97 to 4.214, it is ComReg's preliminary view that there are not likely to be any effective retail demand-side or

[206] One exception to this is the costs of making on-net calls, which, as noted in paragraphs 3.38 to 3.41 and 4.24 to 4.29 can be free or at a reduced rate.

[207] A 'Home Zone' type service is where a mobile phone user has the ability (using its mobile phone) to make calls or send SMS within a defined geographic service area (typically within a certain radius of a home/ business location or coverage of a particular mobile base station/cell) at prices which are equivalent to landline rates. Once the mobile phone user moves outside the defined geographic service area prices charged revert to typical mobile rates.

[208] To the extent that a 'Home Zone' type service would have an impact, if any, on the MVCT market would need to be considered.

retail supply-side substitutes which would, within the timeframe of this market analysis, indirectly constrain a SSNIP in MTRs by a MSP supplying call termination services to its subscribers.

4.216 ComReg's preliminary conclusion is that, given a common pricing constraint and the fact that conditions of competition in the retail mobile market are sufficiently homogeneous, it suggests the geographic market is national in scope[209].

Q. 4.	**Do you agree with ComReg's preliminary conclusions on the retail product and 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 views.**

[209] As noted in paragraph 4.2, Given the European Commission has identified that the market for voice call termination on individual mobile networks is susceptible to *ex ante* regulation, ComReg is not obliged *per se* to conclude on a precise definition of the retail market for the purposes of its present MVCT assessment.

5 Wholesale Relevant MVCT Markets Definition

5.1 As noted in paragraph 2.1, the European Commission has established that the wholesale mobile termination market is susceptible to *ex ante* regulation and, in doing so, refers to the market as:

"Voice call termination on individual mobile networks."

5.2 In defining the wholesale Relevant MVCT Markets, ComReg therefore takes the provision of a voice call termination service by an individual MSP as its starting point. i.e. calls terminated by a MSP to its subscribers (see earlier discussion in sections 1.1 to 1.3 describing mobile termination).

5.3 As was the case in the retail market, ComReg begins its analysis by considering the narrow wholesale service involving the provision of a voice call termination service for the purpose of completing a call to a mobile subscriber. From here, ComReg examines whether this narrow product market should be broadened to include other wholesale products or services, taking account of demand-side and supply-side substitutability considerations.

5.4 In line with the "modified greenfield approach" set out in the Explanatory Note to the Commission's Recommendation,[210] ComReg's assessment starts from the assumption that regulation is not present in the market under consideration, i.e. no regulation in the Relevant MVCT Markets. 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 MVCT 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.

Wholesale MVCT Product Market

Approach to Assessment of the MVCT Product Market

5.5 Before considering the detailed definition of the Relevant MVCT Markets, 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 market 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 MVCT Markets.

What is a mobile service provider (MSP)?

5.6 In the context of identifying an MVCT candidate product, it is first necessary to consider what constitutes a MSP.

[210] Explanatory Note, p. 13.

- Firstly, a MSP must be capable of providing voice call termination for the purpose of completing calls to its subscribers at non-fixed locations, i.e. while the subscriber is in motion and irrespective of the subscriber's location. To do this, a MSP must have access to spectrum that is capable of being used to support such mobility. Those MSPs that do not have direct access to spectrum can, of course, come to commercial agreements with mobile network operators ('MNOs') to provide wholesale MVNO[211] call conveyance (origination, transit and termination) and other services on their network, thereby enabling mobile services to be offered in the absence of direct access to spectrum.
- Secondly, in order to provide call termination services a MSP must be interconnected (typically through circuit switched interconnection) with at least one other network. Absent this, all calls would effectively be on-net (a closed network) and no mobile call termination service would be provided. Given MVCT is essentially an interconnect service, it also follows that the supplier of MVCT should have the ability to set/control the associated charges (MTRs) for the relevant service. While traditional MNOs (i.e. those MSPs allocated with spectrum providing mobile services) will have the ability to set the level of the MTR, the ability of an MVNO to do so will depend on the commercial relationship with its host MNO[212].
- Lastly, calls to mobile users are routed to mobile networks according to mobile network/routing codes, with final routing/switching of the call effectively based on individual subscribers' mobile numbers[213]. In doing so, the terminating MSP will need to ascertain the location[214] of the mobile user and, following any necessary authentication, hand the call over to the user's handset. MSPs in providing call termination will, therefore, control access to end user call recipients through their allocation of mobile numbers (either through a primary or secondary allocation of such numbers).

5.7 ComReg acknowledges that it may be possible to use other means to route voice calls to mobile subscribers, for example a mobile VoIP to VoIP call over a data (rather than a circuit switched connection) network can involve the use of identifiers such as email addresses or IP addresses (say Skype). However, these services do not currently involve interconnection.

[211] See earlier discussion on MVNOs in paragraph 3.6.

[212] For example, Tesco Mobile and Lycamobile (both hosted on O2's network) have the ability to determine their own MTRs. Whereas Postfone (hosted on Vodafone's network) does not have the ability to determine its own MTR.

[213] Mobile Numbers are defined in the National Numbering Conventions/Plan, as may be amended from time to time. The current meaning of a Mobile Number is a number from the national numbering scheme commencing with the network code 08X, where X can represent any digital character 0-9, except 1.

[214] Typically subscriber locations are identified through the Home Location Register (HLR).

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

- it involves interconnection between networks; and
- it involves call termination for the purpose of completing voice calls to subscribers/mobile numbers that have been allocated (through a primary or secondary allocation) to an individual MSP; and
- the supplier of MVCT should have the ability to set/control the associated charges (MTRs) for the relevant wholesale service.

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

5.9 In taking the above starting point, ComReg could seek to define a narrow product market involving the provision of mobile call termination by a MSP at an individual subscriber level (identified by their mobile number). However, given the homogeneous[215] conditions of competition and the presence of a common pricing constraint[216] for call termination to all subscribers of a particular MSP, ComReg's preliminary view is that the starting point for the definition of the Relevant MVCT Market should include the provision of mobile call termination to all subscribers of an individual MSP[217].

Should MVCT be defined on the basis of mobile network technology employed?

5.10 ComReg approaches market definition from a technology neutral perspective[218] and it is ComReg's view that there should be no difference in the treatment of MVCT on the basis of whether a MSP terminates a voice call employing 2G, 3G, 4G or other mobile technology standards.

5.11 Neither MSPs nor FSPs in the market currently differentiate their retail charges for calls to mobiles on the basis of whether the called party is on a 2G or 3G (or other) technology employed by the terminating MSP. Even if they were to do so, it is not clear to ComReg how a calling party would know what underlying technology supported the call to the called party (save perhaps in the case of H3GI which only operates a 3G network) or indeed, determine the basis of the technology to be used to terminate the call. It would be the terminating MSP that decides whether the call is terminated on its 2G or 3G network.

[215] The current conditions relating to the supply of MVCT by a MSP do not differ (nor are they likely to) on the basis of the particular mobile number/subscriber called.

[216] MSPs supplying MVCT do not currently differentiate (nor are they likely to) their MTRs on the basis of the particular mobile number/subscriber called. The MTR is the same irrespective of the mobile number/subscriber called and to alter this position would likely involve substantial investment in billing systems and potential technical difficulties.

[217] Note that this does not mean that the supply of MVCT for one subscriber/mobile number is a substitute for the supply of MVCT to another subscriber/mobile number as neither will constrain each other's MTRs.

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

5.12 Similarly, no MSP charging a MTR does so having regard to the basis of underlying network technology/standard used in its supply of MVCT. Indeed, it is not immediately clear to ComReg that an MSP, in providing MVCT on its 2G, 3G (or other standard) network faces an incentive to compete with itself in the supply of termination, i.e. while it may be technically feasible for the same MSP to have different MTRs for 2G and 3G calls, were an MSP to offer 2G mobile termination it is unlikely to act as a sufficient competitive constraint on its 3G termination rates (and vice versa) given it would, in effect, be competing with itself.

5.13 ComReg is also aware that some MSPs[219] have entered into national roaming agreements in order to augment existing coverage (and therefore provide call services to their subscribers). While a MSP is terminating calls to subscribers (in particular geographic locations) on the basis of a wholesale national roaming agreement with another MSP, the terminating MSP still levies an MTR which is the same as its 'own network' MTR. From a functional and behavioural perspective, such termination does not appear to be different to 'own network' termination.

5.14 ComReg's preliminary view, therefore, is that the starting point for the definition of MVCT should be on a technology neutral basis and should not differ by underlying technology and should include MVCT provided by a MSP through a national roaming agreement.

Preliminary Conclusion on Candidate MVCT Product Market

5.15 Having regard to the above, ComReg's preliminary view is that the candidate MVCT product market, being the starting point from which the question as to the existence of any effective 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' mobile numbers that have been allocated (through a primary or secondary allocation) to an individual MSP; and
- is provided by a MSP (irrespective of whether it is a MNO or an MVNO) who has the ability to set/control the MTR; and
- is technology neutral and does not differ according to whether MVCT is provided over a 2G, 3G or other underlying mobile technology.

5.16 It is ComReg's preliminary view that the candidate MVCT product market consists of:

"the provision by a mobile service provider of a wholesale service to other undertakings for the purpose of terminating incoming voice calls to

[219] Both Meteor and H3GI have separate national roaming agreements with Vodafone. O2 and Meteor have also entered into a network sharing arrangement.

mobile numbers[220] in respect of which that mobile service provider is able to set the MTR"

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

Wholesale Demand-Side Substitution

5.18 Demand-side substitution at the wholesale level[221] measures the extent to which a purchaser of MVCT would, in response to a SSNIP in MTRs above the competitive level, switch to purchasing available alternative substitute products such that it would render the MTR increase unprofitable. If the level of switching to alternative products is sufficient to render the MTR increase unprofitable (say because of the resulting loss of sales) then the alternative products are included in the relevant wholesale product market.

5.19 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".

5.20 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.

5.21 In this regard, the European Commission's Notice on Market Definition states that demand-side substitution

"…. 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."

[220] The term "mobile number" includes a mobile which is the subject of a "primary allocation/reservation" and a mobile number which is the subject of a "secondary allocation/reservation", within the meaning set out in the National Numbering Conventions, the current version of which is National Numbering Conventions, Version 7.0, ComReg Document 11/17.

[221] Given the demand for MVCT 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 MVCT Markets. ComReg's preliminary view was that such constraints were unlikely to have a material impact on the Relevant MVCT Markets.

5.22 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.

Responses to Statutory Information Requests

5.23 In the statutory information requests[222] issued to Service Providers, ComReg sought views and evidence on whether there were any actual or potential effective wholesale MVCT demand-side substitutes. Some respondents expressed no views. Of the 7 MSP, only one indicated there was an effective 'technical' substitute, namely Skype, however, it did not provide any meaningful evidence to support its position.

5.24 Of the 4 FSP respondents to the statutory information request, none indicated there were any effective demand-side substitutes for MVCT, nor were there likely to be within the timeframe of this review.

5.25 ComReg has considered views provided under the statutory information requests and in subsequent follow-up meetings and it does not consider unmanaged VoIP services (such as Skype) to be an effective wholesale demand-side substitute for MVCT. Skype is a retail service rather than a wholesale service, so any impact on the wholesale Relevant MVCT Markets will be as a consequence of any indirect constraints emanating from the retail market. In section 4[223], ComReg already considered whether a VoIP to VoIP call (such as through Skype) made to a mobile was likely to pose an effective indirect competitive constraint on MTRs and has expressed the preliminary view that it does not.

Consideration of Demand-Side Substitutes

5.26 Given the nature of MVCT, a purchaser does not currently have any viable alternatives for terminating a mobile voice call to a subscriber of an individual MSP, i.e. it is not possible for an originating (or transiting) Service Provider to terminate a call to a MSP's subscriber by purchasing termination on another MSP's network.

5.27 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 MVCT from one MSP for the purpose of terminating a call on another MSP's network.

Preliminary View on Wholesale Demand-Side Substitution

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

[222] See paragraph 4.8.

[223] See paragraphs 4.158 to 4.168.

Wholesale Supply-Side Substitution

5.29 Supply-side substitution at the wholesale level[224] measures the extent to which a producer not currently active in supplying MVCT would, in response to a HM's SSNIP (above the competitive level) in MTRs, switch production in the immediate to short term without incurring significant costs and start supplying a MVCT service of equivalent characteristics and, as a consequence of such provision, render the HM's MTR increase unprofitable[225].

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

5.31 As noted in paragraph 20 of the 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[226] 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.*

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

5.33 Paragraph 23 of the 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.*

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[224] Given the demand for MVCT 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 MVCT Markets. ComReg's preliminary view was that such constraints were unlikely to have a material impact on the Relevant MVCT Markets

[225] See paragraph 39 of the SMP Guidelines.

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

5.34 Having regard to paragraph 5.31 to 5.33 above, along with general competition law considerations, it is ComReg's view that that any relevant supply-side substitutes should be sufficiently imminent to be capable of constraining small but significant wholesale price increases[227].

5.35 ComReg examines below other potential sources of MVCT supply. In doing so, ComReg has considered Service Providers' responses to the statutory information requests[228] issued, in particular, views and evidence on whether there were any actual or potentially effective wholesale MVCT supply-side substitutes.

5.36 ComReg also has had regard to the analysis in section 4 regarding mobile pricing structures and consumer/SME behaviour in the retail market and the preliminary conclusions[229] on the impact of such behaviours on the Relevant MVCT Markets.

Responses to Statutory Information Requests

5.37 In the statutory information requests[230] issued to Service Providers, ComReg sought views and evidence on whether there were any actual or potential effective wholesale MVCT supply-side substitutes.

5.38 Of the 7 MSP respondents, only two suggested there were supply-side substitutes. One MSP suggested that SMS termination was a supply-side substitute for MVCT, however, this appears to have been based on retail customers' behaviour, in particular, their willingness to use both voice and text messaging. Given functional and technical differences, and having regard to the analysis in Section 3 (which examined the effect of any indirect constraints[231] resulting from retail customer behaviour on the Relevant MVCT Markets), ComReg does not consider SMS termination to be an effective substitute for MVCT. The other MSP (the same one identified in paragraph 5.23 above) stated that Skype was an effective supply-side substitute, however, it did not provide any meaningful evidence to support its position. For the same reasons identified in paragraph 5.25, ComReg does not accept that unmanaged VoIP services (such as Skype) are an effective wholesale supply-side substitute for MVCT.

5.39 Of the 4 FSP respondents, only one identified a possible future supply-side substitute, namely IP interconnection (instead of the current circuit switched based interconnection). For the reasons set out in paragraph 5.52 below,

[227] 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 MVCT market would likely involve additional investment in networks and associated billing systems as well as the associated time delay in doing so.

[228] See paragraph 4.8.

[229] See paragraphs 4.90 to 4.96.

[230] See paragraph 4.8.

[231] See paragraphs 4.169 to 4.175.

ComReg does not consider IP interconnection to be a possible future wholesale supply-side substitute for MVCT.

MSPs Other Than the Called Party's MSP

5.40 Supply-side substitution would likely come most easily from an existing MSP that has the necessary infrastructure, resources and expertise associated with the supply of MVCT. However, in order for such MSPs to provide the ability to terminate calls to another MSPs' subscriber (i.e. not MVCT to their own subscriber), mobile phones/handsets would need to be capable of automatically moving from the subscriber's home mobile network to the mobile network of the MSP now supplying the MVCT alternative. To do this, the originating MSP would need to be able to take control of the routing of the call by accessing the called party's handset/Subscriber Identity Module (SIM) card details. This would also require terminating MSPs 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 called party when calling them, and for the reasons set out in section 4 ComReg considers that this sensitivity is likely to be low.

5.41 It is ComReg's preliminary view that the current inability of an originating MSP to access other MSPs' subscribers' handset/SIM card details (and the associated technical developments required to do this) is likely to mean that such supply-side substitution would not pose an effective constraint on the price setting behaviour of a HM MVCT supplier. ComReg considers that it is unlikely that an existing terminating MSP faces sufficient incentives for it to engage in the necessary network and other technical developments and co-operate with potential competitors.

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

Entry of New MSPs

5.43 Supply-side substitution could also come from the entry of new MSPs into the market either from the entry of new MNOs that gain access to spectrum or through MVNO entry, whereby, services are provided through having access to existing MNO networks.

5.44 As noted in section 3.55, ComReg recently published its response to consultation and the decision for the auction of a number of individual rights of use in the 800 MHz, 900 MHz and 1800 MHz radio spectrum bands and it is anticipated that this will ultimately result in the assignment of spectrum rights across these three bands for the period 2013 to 2030. This could facilitate new entry to the mobile market, although, it would likely involve substantial network and infrastructure investment. MVNO entry, by its nature, exhibits lower barriers to entry and, subject to commercial negotiation with an existing MNO, may be an easier route to market.

5.45 However, in both cases described above (and as with MVCT supply-side substitution from an existing MSP), the same issues regarding access to called party handset/SIM card details (and associated technical issues) and called party sensitivity to cost arise and it is ComReg's preliminary view that such matters are likely to mean that the entry of new MSPs (other than providing termination for subscribers on their network) would not facilitate the provision of an effective alternative to the provision of MVCT by an existing MSP.

5.46 It is also ComReg's preliminary view that an existing (or new[232]) MVNO (underpinned by a commercial arrangement with an existing MNO) that has the ability to determine its MTRs will likely face similar incentives to existing MSPs when setting their actual MTRs.

5.47 Given the above, ComReg's preliminary view is that supply-side substitution from entry of new MSPs is unlikely to effectively constrain the price setting behaviour of a HM supplier of MVCT. ComReg is not aware of any future developments that would lead it to alter its view.

Entry through Other Technologies

5.48 Supply-side substitution could also come from other wireless networks such as Wideband Digital Mobile Data Service (WDMDS)[233], Fixed Wireless Access Local Area (FWALA), WiFi or other wireless networks. Such networks could also potentially provide retail mobile services which directly compete at the retail level with MSPs and may pose an indirect constraint on MVCT.

5.49 The coverage of WiFi networks' tends to be localised and geographically limited, particularly in comparison to the coverage provided by MSPs. While coverage of FWALA networks (and to a lesser extent WDMDS networks) are more extensive, they are still limited when compared to that provided by MSPs. Technical issues associated with the ability to handover calls as mobile subscribers move between WiFi 'cells' or FWALA areas may also arise, as do the technical difficulties in accessing called party's handset/SIM card details. The receiving party's sensitivity to the costs faced by the calling party is also a factor which would undermine the degree of any substitution at the retail level.

5.50 In view of the above, potential supply-side substitution from FWALA, WiFi or other wireless networks is unlikely to effectively constrain the price setting behaviour of a HM supplier of MVCT.

5.51 It is also ComReg's preliminary view that, to the extent these wireless networks (or other similar technologies) could facilitate the offer by a service provider of a wholesale service for the termination of incoming calls to subscribers on their own networks (as opposed to other networks), and having regard to whether they utilise mobile numbers and their ability to determine their own MTRs, such

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[232] Whether a new MVNO faces such incentives would need to be considered in light of the particular circumstances of the situation.

[233] Digiweb has been offered a WDMDS licence and is not currently providing retail mobile services or wholesale MVCT services. Having regard to Digiweb's response to Statutory Information requests, it is ComReg's view that this position is not likely to have a material impact within the timeframe of this market analysis.

service providers are likely to face similar incentives to existing MSPs when setting their actual 'MTRs'.

5.52 ComReg has also considered whether a move to IP interconnection (rather than traditional circuit switched interconnection) would impact on the Relevant MVCT Markets from a demand-side perspective. IP interconnection facilitating a VoIP call, where the call is handed over between MSPs (or between FSPs and MSPs) as a data stream and possibly terminated to a subscribers' IP address (rather than a mobile number[234]), could act as a competitive constraint on the provision of MVCT. However, this would require significant changes to the existing underlying interconnect arrangements between Service Providers as well as to the associated charging regime. For example, Service Providers would require significant network/switching investments and the associated interconnect charging arrangements[235] would need to change and impose a competitive constraint on MVCT charges.

5.53 Based on the information available to ComReg, supply-side substitution from IP interconnection (and associated changes to charging arrangements) is not likely to be sufficiently imminent to effectively constrain the price setting behaviour of a HM supplier of MVCT over the lifetime of this market analysis. This position may change in future in light of the emergence of such interconnection arrangements and their impact on the Relevant MVCT Market which ComReg will keep under review.

Preliminary View on Supply-Side Substitution

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

Other Considerations

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

Self Supply of MVCT

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

5.57 In summary, it is ComReg's preliminary view that an MSPs self-supply of mobile voice call termination does not fall within the Relevant MVCT Market given that

[234] However, for the avoidance of doubt, the provision of MVCT by an MSP over an IP network that still involves access to the subscriber's mobile number (and for which the MSP has control over the MTR which is levied according to current arrangements) would still be considered to fall within the Relevant MVCT Market given it exhibits the same economic bottleneck.

[235] For example, a move to IP interconnection that still involves the imposition of a termination charge may not impose a constraint, given the economic bottleneck is similar to that which currently exists.

the conditions of competition associated with self-supply differ to those associated with the supply of MVCT to other undertakings and the technical infeasibility of one Service Provider being able to terminate calls to subscribers of an MSP. As a result, self-supply is unlikely to constrain a HM MSP's MTR setting behaviour in supplying MVCT to other Service Providers.

5.58 In the consideration of wholesale supply side substitution above[236], ComReg has already considered whether potential sources of self-supply from existing MSPs other than the HM MVCT supplier would act as a constraint and has found that it would not.

5.59 The question also arises whether a HM MSP's MTR setting behaviour in supplying MVCT to other Service Providers would be constrained by its own supply of termination in providing 'on-net' calls. Such a HM MSP is unlikely to raise the price[237] of self-supplied 'on-net' termination given that it would likely result in an increase to its retail prices and potentially make its own services less attractive[238] when compared to those of competitor MSPs. Because of this, the MSP's incentives regarding the price of 'on-net' self-supplied termination are different to those in relation to the price of MVCT to other authorised undertakings. An MSP increasing MTRs associated with the supply of MVCT to other undertakings raises its competitors' costs and impacts their retail prices and, for the reasons identified in paragraphs 4.158 to 4.168, ComReg considers that any consequential indirect constraints coming from the retail market are unlikely to sufficiently impact the terminating MSP's MTR setting behaviour.

5.60 In view of the above, it is ComReg's preliminary view that, having regard to the circumstances of this particular market analysis, the self-supply of MVCT should be excluded from the wholesale product market definition.

5.61 ComReg notes that there may be concerns in relation to price discrimination between self-supplied mobile termination and mobile termination supplied to other undertakings. However, ComReg considers that rather than being an issue relevant to market definition, any such discriminatory behaviour can be addressed through *ex ante* remedies. ComReg would also note that *ex post* competition law[239] powers could be used to address the situation, however,

[236] See paragraphs 5.40 to 5.42.

[237] In paragraph 5.9, ComReg already noted the existence of homogeneous conditions of competition and a common pricing constraint in the supply of MVCT by MSPs. In view of this, MSPs do not generally differentiate their MTRs according to the subscriber/mobile number called. One divergence to this approach relates to wholesale MTRs for 'on-net' calls, i.e. an MSPs self-supply of mobile termination for the purpose of facilitating on-net calls.

[238] To the extent that a MSP's subscribers would respond to increases in retail prices, the MSP has the ability to price discriminate through the use of differential on-net tariffs and, in the case of businesses, offer discounts for calls to particular mobile users etc.

[239] ComReg has published "Guidance on the Submission of Competition Complaints relating to the Electronic Communications Sector" in ComReg Document 10/110.

resolving matters in this fashion can be less suitable given it is applied after any anti-competitive event has occurred and requires a detailed understanding of the cost structure of the MSP.

MVCT as a Broader Services Market

5.62 ComReg has also considered whether the Relevant MVCT Markets are part of a broader cluster market which incorporates a range of mobile services, for example, where mobile subscribers purchase a bundle of retail services (such as access, calls and SMS) and mobile termination.

5.63 For such a broader bundled market to exist, the MSP would not be able to increase its MTRs above the competitive level without reducing the price of other services in the bundle (to maintain the overall bundle price) as, absent such reductions, sufficient subscribers would be likely to switch to purchasing the bundle from another MSP (in response to the increase in the price of the bundle of services).

5.64 MSPs do not compete at the retail level on the basis of the price of incoming calls (although, lower on-net than off-net pricing may reflect some degree of differentiation). Given the presence of the CPP principle, ComReg has already set out in section 4 its preliminary view that, at the retail level, receiving parties are not likely to be sufficiently sensitive to the costs faced by the calling party and that indirect constraints from the retail market are unlikely to sufficiently constrain a SSNIP in MTRs. We also highlighted in section 4 that that the cost faced by the calling party is not one of the main reasons considered by consumers when choosing the MSP.

5.65 It is also worth noting that MVCT is a wholesale service and it is purchased by other undertakings as a standalone service, i.e. it is not part of a bundle. We have also noted in paragraph 5.59 above that MTRs increase the costs of rival MSPs, rather than the terminating MSP itself.

5.66 In view of the above, ComReg does not consider that the price of wholesale mobile voice call termination is likely to be constrained by bundled services and it is ComReg's preliminary view that the Relevant MVCT Markets are, therefore, standalone markets and are not part of broader bundled markets.

Preliminary Conclusion on Wholesale MVCT Product Market

5.67 In light of the analysis in paragraphs 5.1 to 5.62 it is ComReg's preliminary view that there are not likely to be any effective demand-side or supply-side substitutes to MVCT by individual MSPs within the timeframe of this market analysis. ComReg has also considered the strength of any indirect constraints from the retail market on MVCT and has set out its preliminary view that they are insufficient to act an effective competitive constraint.

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

"the provision by a mobile service provider of a wholesale service to other undertakings for the purpose of terminating incoming voice calls to mobile numbers[240] *in respect of which that mobile service provider is able to set the MTR"*

5.69 ComReg considers that the above definition is sufficiently flexible yet clear enough to identify the economic bottleneck in the mobile voice call termination market.

5.70 As noted in paragraph 5.51, to the extent that other wireless networks (or other similar technologies) could facilitate the offer by a MSP of a wholesale service for the termination of incoming calls to its own subscribers, and having regard to whether they utilise mobile numbers and their ability to determine their own MTRs, such MSPs are likely to face similar abilities and incentives to existing MSPs when setting their actual 'MTRs'. As a consequence, it is ComReg's preliminary view that mobile termination offered in these circumstances would likely fall within the wholesale MVCT product definition above.

Q. 5. Do you agree with ComReg's preliminary conclusions on the wholesale MVCT 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 evidence supporting your views.

Q. 6. Do you agree that ComReg's proposed definition of the Relevant MVCT Markets adequately identifies the economic bottleneck represented by mobile voice call termination? 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.

Wholesale MVCT geographic market

5.71 In paragraphs 4.202 to 4.214 ComReg considered the likely geographic scope of the retail mobile markets and set out its preliminary view that it is likely to be a national market. ComReg now considers the geographic scope of the wholesale Relevant MVCT Markets.

5.72 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

[240] The term "mobile number" includes a mobile which is the subject of a "primary allocation/reservation" and a mobile number which is the subject of a "secondary allocation/reservation", within the meaning set out in the National Numbering Conventions (as may be amended from time to time), the current version of which is National Numbering Conventions, Version 7.0, ComReg Document 11/17.

and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different."[241]

5.73 For similar reasons to the retail market, ComReg considers that, given a common pricing constraint and the homogeneity of conditions of competition, the wholesale Relevant MVCT Markets are each national markets, the boundaries of which are defined by the geographic coverage of each MSP's network. Having considered the responses to ComReg's statutory information requests, the reasons supporting a national geographic market include that MSPs:

- have national network/service coverage[242];
- do not differentiate MTRs based on the location[243] of the mobile subscriber, i.e. MTRs are geographically uniform; and
- do not differentiate MTRs based on the underlying network standards deployed in particular geographic locations.

Responses to Statutory Information Requests

5.74 One MSP in responding to ComReg's statutory information requests suggested that SMS termination was a substitute for MVCT, however, this appears to have been based on retail customers' behaviour, in particular, their willingness to use both voice and text messaging. For the reasons set out in paragraphs 4.169 to 4.176 ComReg does not consider this to be the case.

Preliminary conclusion on wholesale MVCT geographic market

5.75 It is ComReg's preliminary view that the geographic scope of the wholesale Relevant MVCT Markets is the Republic of Ireland.

Q. 7.	**Do you agree with ComReg's preliminary conclusions on the wholesale MVCT 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 views.**

Overall preliminary conclusion on the wholesale Relevant MVCT Markets

5.76 Having regard to the analysis in paragraphs 5.1 to 5.75, it is ComReg's preliminary view that the wholesale Relevant MVCT Market(s) consists of:

the provision by a mobile service provider of a wholesale service to other undertakings for the purpose of terminating incoming voice calls to

241 European Commission Notice on Market Definition, paragraph 8.

242 As noted in paragraph 3.3, all retail MSPs have coverage to at least 99% of the population and to over [✂[redacted]] of the geographic area of the State. MVCT is provided in all these areas.

243 This includes the location of the calling party or called party.

mobile numbers[244] *in respect of which that mobile service provider is able to set the MTR.*

The geographic scope of the Relevant MVCT Market(s) corresponds to the geographic coverage of each individual mobile service provider's network.

5.77 For the avoidance of doubt, 'other undertakings' above includes any undertaking, whether this be an undertaking located in the Republic of Ireland or in another jurisdiction.

5.78 Having regard to the above market definition it is ComReg's preliminary view that the following separate markets exist:

- Wholesale MVCT supplied by Hutchison 3G Ireland Limited;
- Wholesale MVCT supplied by Lycamobile Ireland Limited;
- Wholesale MVCT supplied by Meteor Mobile Communications Limited;
- Wholesale MVCT supplied by Telefonica Ireland Limited (including Liffey Telecom Limited);
- Wholesale MVCT supplied by Tesco Mobile Ireland Limited;
- Wholesale MVCT supplied by Vodafone Ireland Limited;

5.79 Given the definition of the Relevant MVCT Markets, neither Postfone nor Blueface fall within the scope of a Relevant MVCT Market, in particular, given they do not charge, nor do they currently have the ability to set, an MTR. However, were they to do so (or have the ability to do so), then ComReg considers that there is a strong case to be made that Postfone and Blueface would fall within the definition of the Relevant MVCT Market.

5.80 ComReg intends to keep the Relevant MVCT Market(s) under review, following the adoption of the proposed Decision Instrument, having regard to technological and other developments which may lead to the emergence of potentially effective demand-side and/or supply-side substitutes.

[244] The term "mobile number" includes a mobile which is the subject of a "primary allocation/reservation" and a mobile number which is the subject of a "secondary allocation/reservation", within the meaning set out in the National Numbering Conventions (as may be amended from time to time), the current version of which is National Numbering Conventions, Version 7.0, ComReg Document 11/17.

6 Competition Analysis and Assessment of Significant Market Power

Framework for Assessing SMP

6.1 Having defined separate wholesale Relevant MVCT Markets, ComReg is required to determine whether each market is effectively competitive having regard to whether or not any of the MSPs operating within those defined markets 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*[245]:

> *"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 Article 14(2) of the Framework Directive[246] 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[247], refer to a range of criteria that may be considered by National Regulatory Authorities (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.

> *"According to established case-law, very large market shares — in excess of 50 % — are in themselves, save in exceptional*

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

[246] Which is transposed by Regulation 25(1) of the Framework Regulations.

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

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"[248]

6.7 Market shares in excess of 50% give rise to a strong presumption of SMP. However, the SMP Guidelines also state[249] 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:

"A dominant position can derive from a combination of the above criteria, which taken separately may not necessarily be determinative"[250]

Approach to Assessing SMP in the Relevant MVCT Markets

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

[248] Paragraph 75 of the SMP Guidelines.

[249] Paragraphs 78 of the SMP Guidelines.

[250] Paragraph 78 of the SMP Guidelines.

existing and likely future market conditions[251] 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 MVCT 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 C, are considered of no or less relevance for the purposes of the SMP assessment in these Relevant MVCT 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[252] 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 MVCT Markets, the key hypothetical questions to be assessed are:

[251] 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."

[252] However, as noted in paragraph 5.4 of this Consultation Paper, while discounting SMP regulation in the market concerned, other obligations (such as, for example, relevant SMP remedies existing in other markets, or obligations relating to general consumer protection or interconnection) are considered.

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

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

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 MVCT Markets** – an assessment of factors such as market shares, relative strength of existing competitors and pricing behaviour.
- **Potential competition in the Relevant MVCT Markets** - an assessment of factors such as control of infrastructure not easily duplicated, barriers to entry in the Relevant MVCT 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 MVCT on the competitive behaviour of the MVCT sellers.

Existing Competition in the Relevant MVCT Markets

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

Existing Competition

6.17 In section 5, the Relevant MVCT Markets were defined such that each MSP identified is the sole supplier of mobile voice call termination to its subscribers and, in view of this, MSPs do not face existing competition within such markets. In section 4, ComReg also considered[253] 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 MVCT 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 6 individual MSPs identified in paragraph 5.77 have 100% market share, irrespective of whether this is measured by call

[253] See paragraphs 4.97 to 4.214.

termination volumes or call termination revenues. These high market shares have been maintained over time[254]. There are currently no competitors in the Relevant MVCT Markets, and this position is likely to be maintained over at least the medium term (the two year period following the completion of this review).

Pricing Behaviour

6.19 The development and extent of competition in a market over time may be observed by reference to pricing behaviour. In an SMP assessment context, the ability of a MSP to behave, to an appreciable extent, independently of the pricing behaviour of its competitors may be suggestive (but not determinative in itself) of SMP when considered alongside other factors. In view of this, ComReg has examined the trends in the MTR pricing behaviour of MSPs.

6.20 Table 11 below sets out the movement in individual MSPs' MTRs over the period since H2 2007, along with the blended weighted average MTRs[255] for each period. The data is based on information provided by MSPs in response to statutory information requests and data published in the Eircom[256] Switched Transit and Routing Price List (STRPL). The rates shown are the rates in place at the start of the period in question.

[254] In the last review of these markets H3GI, Meteor, O2 and Vodafone were also found to hold a 100% market share. TMI commenced offering wholesale MVCT in 2007 and since then it has held a 100% market share. While Lycamobile has not yet commenced offering wholesale MVCT, it has published its MTRs and the advanced stage of its wholesale arrangements mean that it is likely to offer MVCT from [✂[redacted]] (within the timeframe of this market analysis). Lycamobile is likely to hold a 100% market share which will be maintained over time.

[255] A blended MTR is a weighted average price of peak, off-peak and weekend MTRs. Weighting is based on the ratio of voice call termination minutes on the MSP's network between peak, off-peak and weekend time periods. Given Lycamobile is a new entrant a traffic profile is not yet available. However, given its MTRs are symmetric across all times of day the blended weighted average MTR is not relevant. It should be noted in this regard that Lycamobile published its MTRs in July 2011.

[256] Available at www.eircomwholesale.ie.

Vodafone	H2'07	H1'08	H2'08	H1'09	H2'09	H1'10	H2'10	H1'11	H2'11	Current
Peak	12.26	11.89	11.89	12.75	12.75	9.55	9.55	6.94	6.04	5.22
Off-peak	8.15	7.78	7.78	4.83	4.83	4.83	4.83	3.51	3.06	2.64
Weekend	5.00	4.87	4.87	4.83	4.83	4.83	4.83	3.51	3.05	2.64
Weighted average	***9.59***	***9.30***	***9.30***	***9.00***	***9.00***	***9.00***	***7.38***	***5.36***	***4.52***	***4.02***
O2	**H2'07**	**H1'08**	**H2'08**	**H1'09**	**H2'09**	**H1'10**	**H2'10**	**H1'11**	**H2'11**	**Current**
Peak	11.25	11.23	11.23	10.93	10.93	8.80	8.88	6.83	5.98	5.68
Off-peak	7.99	9.49	9.49	8.80	8.80	7.15	7.15	3.93	2.80	2.09
Weekend	7.99	4.75	4.75	4.75	4.75	3.86	3.86	3.40	2.86	2.14
Weighted average	***9.79***	***9.40***	***9.40***	***9.00***	***9.00***	***9.00***	***7.38***	***5.36***	***4.52***	***4.02***
Meteor	**H2'07**	**H1'08**	**H2'08**	**H1'09**	**H2'09**	**H1'10**	**H2'10**	**H1'11**	**H2'11**	**Current**
Peak	15.90	15.60	15.60	15.60	15.60	10.43	10.43	10.43	8.70	7.38
Off-peak	10.71	9.79	9.79	9.79	9.79	9.79	8.38	1.85	1.11	1.00
Weekend	8.32	7.60	7.60	5.21	5.21	5.21	4.46	1.85	1.10	1.00
Weighted average	***12.88***	***11.70***	***11.70***	***11.00***	***11.00***	***11.00***	***8.98***	***5.86***	***4.52***	***4.02***
H3GI	**H2'07**	**H1'08**	**H2'08**	**H1'09**	**H2'09**	**H1'10**	**H2'10**	**H1'11**	**H2'11**	**Current**
Peak	17.78	17.78	17.78	17.78	17.78	17.78	13.88	13.88	14.08	13.88
Off-peak	11.43	11.43	11.43	11.43	11.43	6.90	2.00	2.00	2.11	1.00
Weekend	8.89	8.89	8.89	8.89	8.89	8.89	8.89	3.91	4.01	2.00
Weighted average	***14.14***	***13.50***	***13.50***	***13.50***	***13.50***	***12.43***	***12.43***	***9.26***	***8.42***	***7.82***
TMI	**H2'07**	**H1'08**	**H2'08**	**H1'09**	**H2'09**	**H1'10**	**H2'10**	**H1'11**	**H2'11**	**Current**
Peak	17.80	17.80	17.80	17.80	17.80	17.12	17.12	17.12	17.12	15.41
Off-peak	12.50	12.50	12.50	12.50	12.50	12.02	12.02	12.02	12.02	10.82
Weekend	10.20	10.20	10.20	10.20	10.20	9.81	9.81	9.81	9.81	8.83
Weighted average	***14.30***	***14.30***	***14.30***	***14.30***	***14.30***	***13.80***	***13.80***	***13.80***	***13.80***	***12.55***
Lycamobile	**H2'07**	**H1'08**	**H2'08**	**H1'09**	**H2'09**	**H1'10**	**H2'10**	**H1'11**	**H2'11**	**Current**
Peak	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.79	13.79
Off-peak	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.79	13.79
Weekend	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.79	13.79
Weighted average	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**13.79**	***13.79***

Table 11: MTR Pricing H2 2007 to present (expressed in cent)

6.21 Table 12 below shows the relative movement in each individual MSP's MTRs over the period since H2 '07.

MSP	% Reduction in Blended MTRs
Vodafone	-138.56%
O2	-143.53%
Meteor	-68.79%
H3GI	-44.70%
TMI	-12.24%
Lycamobile	0%[257]

Table 12: % Reduction in Blended Average MTRs between H2 '07 to Present

[257] Note Lycamobile only published its MTRs in July 2011 (although some Service Providers were notified of its intended MTRs in May 2011) so figures only relate to this period.

6.22 The following points should be borne in mind when interpreting the MTR trends in Table 11 and Table 12 above.

(a) Eircom Group Mobile (i.e. now comprising Meteor and eMobile), O2 and Vodafone have all been subject to a regulatory price control obligation since October 2005[258] and the MTR changes above should be considered in this context, in particular:

- In October 2005, ComReg set the maximum permissible MTRs for each of these individual MSPs, pending a determination on what would be cost-oriented MTRs. ComReg also outlined the possibility of using a glide path approach to achieve a more appropriate MTR level. In response to this, Vodafone, O2 and Meteor (now Eircom Group Mobile which includes eMobile) committed to a glide path to reduce their MTRs to efficient levels, by lowering their MTRs over a two year period from 1st January 2006 to 31st December 2007.

- This was followed by further commitments[259] in August 2007 with the above MSPs to reduce their blended average MTRs to 7.99 cent by 1st January 2012.

- In April 2009, there were further commitments[260] to reduce their blended average MTRs to a symmetrical maximum per minute price of 5.00 cent by April/October 2012. ComReg also reserved the right to intervene further if reductions are not delivered or if material variances arose between the Irish average MTR and the EU average.

- In October 2010, there were further commitments[261] to reduce maximum blended average MTRs every six months over the next two years, up until the end of 2012. The reductions to be made were such that the maximum Irish average MTRs would approximate the European average based on the calculation of the EU simple average MTRs as published in the 'BEREC (Body of European Regulators for Electronic Communications) MTR benchmark snapshot' reports[262], on 1 January and 1 July annually. As a consequence, reductions in MTRs have occurred every six months since 1 January 2011.

(b) H3GI was found to have SMP in December 2008[263] and was made subject to a price control obligation which set the maximum MTRs to be charged at

[258] See Market Analysis – Mobile Voice Call Termination on Individual Mobile Networks, Imposition of SMP Obligations, ComReg Document 05/78, Decision 11/05, 13 October 2005

[259] See Information Notice 05/78, August 2007.

[260] See Information Notice 09/32, April 2009.

[261] See Information Notice 10/82, October 2010.

[262] http://erg.eu.int/.

[263] Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/92, Decision 05/08, 1 December 2008.

17.74 cent (Peak), 11.43 cent (off-peak) and 8.89 cent (weekend). H3GI was, subject to certain timing conditions[264], also to reduce its blended average MTR to 7.99 cent by 1 December 2013.

- In April 2009 H3GI committed[265] to reduce its MTRs annually on 1 January of each year, to reach a blended average rate of 5 cent by 1 January 2013. The first reduction under this glide path was to reduce its blended average MTRs to 12.43 cent on 1 January 2010. However, following a failure to comply with its regulatory obligations, ComReg took enforcement action[266] against H3GI which ultimately resulted in H3GI reducing its MTRs to the required level in April 2010 (and with retrospective application to 1 January 2010).
- In September 2010 H3GI committed[267] to further reduce its MTRs (superseding the April 2009 commitment) to the European average MTRs (based on the BEREC six monthly snap shot outlined in (a) above), with an additional uplift amount on top of that (ranging from 3.9 cent to 0 cent) applying over this period[268]. The MTR changes were to be applied at the end of June/December in each of the years 2010 to 2012.

(c) As TMI has not to date been subject to any wholesale price control regulation (since it has not been designated with SMP) its MTRs have been entirely set in this context.

- Of relevance during this period is a H3GI dispute raised with ComReg in October 2007, essentially concerning the level of the MTR to be levied by TMI on H3GI (as well as allegations that TMI had failed to negotiate interconnection in good faith). ComReg issued its determination[269] on the dispute (the “TMI Dispute Determination”) on 18 December 2009. During the course of the dispute (and prior to the TMI Dispute Determination), in November 2009 TMI voluntarily proposed to H3GI that it would amend its MTRs with effect from 1 December 2010.[270]

[264] H3GI was to start reducing its MTRs based on whichever of the following were achieved first: (i) achieving 5% market share in relation to mobile subscribers or (ii) upon the expiry of 6 calendar months from the effective date of the SMP decision.

[265] See Information Notice 09/34r, May 2009.

[266] See various notices of ComReg’s investigation into H3GI’s MTRs and its compliance with its price control obligation at http://www.comreg.ie/_fileupload/File/compliance/Case_235.pdf, ComReg Document 10/04 (January 2010) and ComReg Document 10/23 (March 2010).

[267] See Information Notice 10/82, October 2010.

[268] The removal of the uplift is to occur in December 2012, with the result that H3GI’s MTRs would be solely based on the BEREC snapshot European Average MTRs.

[269] See ComReg Document 08/98, December 2009.

[270] As a consequence, ComReg effectively did not need to determine upon the issue of the level of the MTR.

- In December 2011 TMI notified Service Providers that it intended to reduce its MTRs by approximately 10% with effect from 1 February 2012.
- TMI has also confirmed[271] to ComReg that it sets its MTRs independently of its competitors (including its host network O2/Liffey Telecom).

(d) As Lycamobile has not to date been subject to wholesale price control regulation (since it has not been designated with SMP) its MTRs have been set in this context. In July 2011 Lycamobile published its proposed MTRs of 13.79 cent (across peak, off-peak and weekend periods) which were to apply from 1 August 2011.

6.23 As noted in paragraph 6.13, in assessing whether an MSP has SMP, ComReg needs to consider how MVCT may have been priced absent SMP regulatory controls and whether resultant MTRs would approximate those which would arise in a competitive market. This is a difficult task, given some MSPs' MTRs have been set, since as far back as 2005, in the presence of regulation[272]. In addition, ComReg has set out its preliminary view in section 5 that, given the market definition, MVCT is an individual MSP-based market and, as such, there are no actual competitors against which the impact of competition on the level of MTRs can be readily assessed. In addition, for those MSPs providing MVCT and not subject to regulation, they may consider the potential threat of regulation in their MTR setting behaviour. Nevertheless, in the context of the SMP assessment, ComReg has considered trends in MSPs' pricing behaviour to date.

6.24 Recognising the above issues, Table 13 to Table 16 below set out the differences between individual MSPs' blended average MTRs in terms of how they compare amongst each other over the period H2'07 to date. Given Vodafone's and O2's MTRs have been almost identical[273] over this period, we do not show differences between such MSPs' MTRs below.

Meteor – Blended Average MTR Differences										
	H2'07	H1'08	H2'08	H1'09	H2'09	H1'10	H2'10	H1'11	H2'11	Current
% above Vodafone	34%	26%	26%	22%	22%	22%	22%	9%	0%	0%
% above O2	32%	24%	24%	22%	22%	22%	22%	9%	0%	0%

Table 13: % Difference in Meteor's MTRs in comparison to other MSPs' MTRs

H3GI - Blended Average MTR Differences										
	H2'07	H1'08	H2'08	H1'09	H2'09	H1'10	H2'10	H1'11	H2'11	Current
% above Vodafone	47%	45%	45%	50%	50%	38%	68%	73%	86%	95%
% above O2	44%	44%	44%	50%	50%	38%	68%	73%	86%	95%
% above Meteor	10%	15%	15%	23%	23%	13%	38%	58%	86%	95%

[271] TMI's response to statutory information requests and follow-up correspondence.

[272] Although MTR reductions prior to this would also likely have taken place against the backdrop of impending regulation.

[273] In H2 '07, O2's blended average MTR was 2% above that of Vodafone. This difference declined up to H1 '09 at which point respective blended average MTRs were symmetric.

Table 14: % Difference in H3GI's MTRs in comparison to other MSPs' MTRs

TMI - Blended Average MTR Differences										
	H2'07	H1'08	H2'08	H1'09	H2'09	H1'10	H2'10	H1'11	H2'11	Current
% above Vodafone	49%	54%	54%	59%	59%	53%	87%	157%	205%	212%
% above O2	46%	52%	52%	59%	59%	53%	87%	157%	205%	212%
% above Meteor	11%	22%	22%	30%	30%	25%	54%	135%	205%	212%
% above H3GI	1%	6%	6%	6%	6%	11%	11%	49%	64%	60%

Table 15: % Difference in TMI's MTRs in comparison to other MSPs' MTRs

Lycamobile – Blended Average MTR Differences				
	H2'11 Vodafone[274]	H2'11 Other Undertakings	Current - Vodafone	Current - Other Undertakings
% above Vodafone	[✂ [redacted]%]	205%	[✂ [redacted]%]	243%
% above O2	[✂ [redacted]%]	205%	[✂ [redacted]%]	243%
% above Meteor	[✂ [redacted]%]	205%	[✂ [redacted]%]	243%
% above H3GI	[✂ [redacted]%]	64%	[✂ [redacted]%]	76%
% above TMI	[✂ [redacted]%]	0%	[✂ [redacted]%]	10%

Table 16: % Difference in Lycamobile's MTRs versus MTRs of other MSPs

6.25 Eircom Group Mobile, H3GI, O2 and Vodafone have been subject to MTR price controls. The fact that ComReg has accepted the adoption of a glide path to reduce MTRs towards an efficient cost-oriented level does not mean that ComReg accepts that such rates actually represent what would be achieved were efficient cost-oriented mobile termination rates to be derived from a cost model. However, it is worth noting that even in the presence of the existing price control obligations and, having regard to the MTR reduction commitments identified in paragraph 6.22(a) and 6.22(b) above, all MSPs designated to date with SMP have set their MTRs at or just slightly below the maximum blended average MTR permissible/committed[275].

6.26 H3GI, prior to its designation with SMP in 2008, had set MTRs[276] that were in excess of those MTRs of other SMP MSPs (i.e. Vodafone, O2 and Meteor). As

[274] Vodafone has negotiated lower MTRs with Lycamobile - see further discussion in paragraph 6.31 below.

[275] Although, as noted in paragraph 6.22(b), following a failure to comply with its regulatory obligations in relation to the level of its MTRs, ComReg took enforcement action against H3GI which ultimately resulted in H3GI reducing its MTRs to the required level.

[276] In 2007 and 2008 (prior to regulation) H3GI's MTRs were 17.9c (peak), 11.5c (off-peak) and 8.9c (weekend). Taking the highest and lowest MTRs of other SMP MSPs in H2 2007, H3GI's peak MTRs were between 11.56% and 56.98% higher, off-peak rates were between 6.63% and 42.43% higher and weekend rates were between 6.75% and 76.27% higher.

set out in Table 11, H3GI's MTRs, since their regulation, have also continued to be in excess of other MSPs' regulated MTRs. Table 14 shows that H3GI's current blended average MTR is 95% higher than the MTRs of each of Meteor, O2 and Vodafone. Over the period H2'07 to H1'12 H3GI's MTRs have, on average, been between 38% and 60% higher than other SMP MSPs' MTRs. ComReg notes that H3GI's MTRs have also been lower that the MTRs of non-SMP MSPs since H1'10.

6.27 Table 13 also shows that between H2'07 and H1'10, Meteor's MTRs ranged between 34% and 0% above those MTRs of Vodafone and O2.

6.28 It is ComReg's preliminary view that, absent regulation, it is more likely than not that the existing SMP MSPs (Vodafone, O2, Meteor and H3GI) would not have reduced their MTRs to the levels experienced so far or to the levels anticipated in their remaining voluntary commitments. The review of historic pricing for Vodafone, O2, Meteor and H3GI (along with other factors already considered) suggests to ComReg that these MSPs have the power to behave, to an appreciable extent, independent of each other (and other MSPs and undertakings) when setting their MTRs.

6.29 TMI has not been subject to SMP regulation to date. Apart from one small change in H1 2010 (see earlier discussion on the H3GI dispute in paragraph 6.22(c) above), and a change that recently took effect in February 2012, TMI's MTRs have been relatively static since its entry to the market in 2007. As evidenced in Table 15, TMI's current blended average MTR of 12.55 cent is currently between 60% and 212% higher than the blended average MTRs of SMP MSPs (i.e. Vodafone, O2, Meteor and H3GI). TMI's blended average MTRs are 10% lower than Lycamobile's current blended average MTRs[277]. Over the period H2'07 to H1'12 TMI's MTRs have, on average, been between 21% and 98% higher than other SMP MSPs MTRs. It is also noteworthy that TMI's blended average MTRs are substantially above those of its host network, O2 (Liffey Telecom) which provides the underlying radio access network and other arrangements to supporting TMI's MVNO based service. These major differences (ranging between 46% and 212% higher) arise despite the fact that TMI, as an MVNO, has not invested to the same degree as O2 in mobile network infrastructure, although it is noted that TMI will have some infrastructure costs of its own. It is unclear as to what are, if any, the objective justifications for such cost differences. However, in the context of this SMP analysis ComReg is simply highlighting the fact that such differences exist and that they demonstrate a degree of independence by TMI in setting its MTRs.

6.30 It is ComReg's preliminary view that TMI's historical pricing behaviour, along with other factors already considered, is suggestive that it has the power to behave, to an appreciable extent, independent of all other MSPs and other undertakings when setting its MTRs.

[277] Save for Lycamobile's MTR levied on Vodafone.

6.31 Lycamobile has also not been subject to SMP regulation to date. As evidenced in Table 16, Lycamobile's current blended average MTRs of 13.79 cent (only published in July 2011) range between 76% and 243% higher than the blended average MTRs of MSPs designated with SMP and 10% above those of TMI, who has not to date been designated with SMP. ComReg notes that Vodafone has negotiated lower MTRs with Lycamobile with such lower MTRs being between [✂[redacted]%] and [✂[redacted]%] higher than the MTRs of those MSPs who have been designated with SMP and [✂[redacted]%] lower than TMI's MTRs (who has not to date been designated with SMP). These differences suggest that Lycamobile has the power to behave, to an appreciable extent, independently of other MSPs when setting its MTRs. However, the degree of such power appears to differ with respect to at least one MSP, namely Vodafone. In the context of the countervailing buyer power ("CBP") analysis later in this section[278], we return to the assessment as to whether Lycamobile's (and other MSPs') power to behave independently when setting its MTRs is sufficiently negated by Vodafone's (or other undertakings') buyer power such that it would undermine the previously discussed and other factors which strongly suggest and support a presumption that Lycamobile has SMP.

6.32 It is also noteworthy that Lycamobile's blended average MTRs are substantially above (243% above) those of its host network, O2, which provides the underlying radio access network and other arrangements to support Lycamobile's MVNO based service. These major differences (ranging between 205% and 243% higher) arise despite the fact that Lycamobile, as an MVNO, has not invested to the same degree as O2 in mobile network infrastructure. It is unclear as to what are, if any, the objective justifications for such MTR cost differences. However, in the context of this SMP analysis, ComReg is simply highlighting that such differences exist and demonstrate a degree of independence by Lycamobile in setting its MTRs.

6.33 The analysis in paragraphs 6.19 to 6.32 above shows that there have been wide variations between the MTRs charged by each of the MSPs. Non-regulated MSPs have charged substantially higher MTRs than regulated MSPs, with the difference increasing over time as regulated MSPs have reduced their MTRs. There have also been differences between the MTRs charged by regulated MSPs, however, this has eroded over time (although in the presence of regulation). In light of this analysis and having regard to the definition of the Relevant MVCT Markets (i.e. based on individual MVCT markets), it is ComReg's preliminary view that absent SMP regulation, it is more likely than not the case that Vodafone, O2, Meteor, H3GI, TMI and Lycamobile individually have the power to set their MTRs, to an appreciable extent, independently of each other and consumers. The review of trends in MTR pricing behaviour, and ComReg's view that such power would continue on a prospective basis (absent regulation), support the strong presumption of SMP in the Relevant MVCT Markets.

[278] See paragraphs 6.41 to 6.248.

Preliminary conclusion on impact of existing competition

6.34 Having regard to the market definition in section 5 and the discussion in paragraphs 6.15 to 6.33, it is ComReg's preliminary view that, absent regulation, over the medium term (i.e. the next 2 years following the completion of this market analysis process and the adoption of a new decision):

- the high market share positions in the Relevant MVCT 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 MVCT Markets; and
- MSPs supplying MVCT have, and are likely to continue to have, the power to set their MTRs independently of each other.

6.35 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, existing competition and historic MTR pricing behaviour trends are strongly suggestive that, individually, Vodafone, O2, Meteor, H3GI, TMI and Lycamobile have SMP on the Relevant MVCT Markets. However, ComReg now considers other relevant factors which might diminish or undermine this presumptive SMP position.

Potential Competition in the Relevant MVCT Markets

6.36 ComReg's assessment of potential competition in the Relevant MVCT Markets considers whether entry is likely over the medium term[279] to such an extent that it would constrain an MSP'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 MSPs within the Relevant MVCT Markets.

6.37 In considering the potential for entry into the Relevant MVCT Markets ComReg has assessed current market conditions and, in this context, considers that entry to the Relevant MVCT Markets could potentially come from a number of sources, including:

- Entry from MSPs other than the called party's MSP
- Entry of new MSPs
- Entry through other technologies (other wireless technologies such as fixed wireless access, WDMDS, WiFi, as well as from VoIP)

6.38 The analysis in section 5[280] concerning the definition of the Relevant MVCT Market(s) considers the possibility of these options emerging as supply-side

[279] See paragraph 74 of the European Commission's SMP Guidelines.

[280] See paragraphs 5.29 to 5.54.

substitutes in a shorter timeframe, and at negligible cost, and concluded that such entry was unlikely within the 12 month period 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 MVCT Markets.

6.39 ComReg has revisited the above analysis, in particular, having regard to the impact of possible developments over the medium term (i.e. over the next two 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 MVCT 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 MVCT Markets

6.40 ComReg's preliminary view is that potential competition in each of the Relevant MVCT Markets is unlikely to provide an effective competitive constraint on MSPs and, consequently, does not undermine the strong indication that, individually, each of Vodafone, O2, Meteor, H3GI, TMI and Lycamobile has the power to behave, to an appreciate extent, independently of each other, customers and consumers.

Countervailing Buyer Power

6.41 In this section ComReg considers whether bargaining power on the buyer side of the Relevant MVCT Markets is likely to impose a sufficient competitive constraint on the MTR setting behaviour of an MSP supplying MVCT, such that it would credibly offset their power to behave, to an appreciable extent, independently of competitors[281], customers and ultimately consumers.

6.42 In so doing, ComReg examines whether sufficient[282] countervailing buyer power (CBP) exists such that it results in MSPs supplying MVCT not being able to sustain MTRs that are above the competitive level, i.e. the effective exercise of CBP is one which results in MTRs being constrained to the levels that would be achieved in a competitive market outcome.

6.43 In this regard, the Explanatory Note to the 2007 Recommendation notes[283] 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*

[281] As noted above, there are no actual or potential competitor suppliers of MVCT in each Relevant MVCT Market.

[282] The existence of some level of CBP would not, in itself, be sufficient. Rather, it must be sufficiently strong such that it results in an MTR being prevented from rising above a level that would pertain in a competitive market outcome.

[283] Page 25 of Explanatory Note to the 2007 Recommendation.

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. Without any regulatory rules on interconnection, a network with few subscribers may have limited market power relative to a larger one in respect of call termination. The existence of a regulatory requirement to negotiate interconnection in order to ensure end-to-end connectivity (as required by the regulatory framework) redresses this imbalance of market power. However, such a requirement would not permit any attempt by a smaller network to initially set excessive termination charges. 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."

6.44 The effectiveness of CBP is likely to be significantly dependent on the strength of the bargaining power of the purchaser in its MTR negotiations.

6.45 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[284] (the '2009 Enforcement Priorities') are also informative on the issue of CBP in competition assessments. These state[285] that:

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

[284] 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.

[285] Paragraph 18 of the 2009 Enforcement Priorities.

6.46 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

6.47 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[286] from purchasers and sellers of MVCT to examine the history and extent of any negotiations regarding MTRs and to review any strategy employed by the relevant parties during such negotiations.

6.48 The framework under which ComReg considers CBP includes:

- the economic framework for CBP assessment;
- the regulatory context for CBP assessment; and
- other criteria relevant to the CBP assessment.

Economic framework for CBP assessment

6.49 The assessment as to the existence or otherwise of effective CBP involves an examination as to whether sufficient buyer power has been exercised such that results in the MVCT seller (i.e. an MSP supplying MVCT) not having the power to behave independently of competitors, customers or consumers, thereby not being able to sustain an MTR above the level that would pertain in a competitive market. As noted earlier, the concept of CBP is not an absolute one[287], and it is more likely than not that some degree of CBP will be present in interconnection negotiations between parties. Given interconnect negotiations between Service Providers are usually bilateral in nature, it is also reasonable to assume the level of any CBP exercised will differ between parties, having regard to their particular circumstances.

6.50 While there are a potential range of economic models/approaches which provide a context for the assessment of the exercise of CBP between interconnecting

[286] ComReg requested information through a series of Statutory Information requests in November 2010, July 2011 and October 2011. Such information included details of interconnection arrangements and any evidence of negotiations concerning the level of MTRs.

[287] Rather than being a question of whether CBP has been exercised or not, the question to be addressed more than likely relates to the strength of CBP exercised and whether this is sufficient to constrain the exercise of SMP, in particular, preventing an MSP supplying MVCT from pricing its MTRs above the competitive level.

parties[288], ComReg's current review is carried out in the context of a bilateral monopoly bargaining scenario involving one monopolist supplier of MVCT and one monopsonist purchaser of MVCT. ComReg recognises that in all circumstances, this may not in fact be the case in Ireland as there are a number of purchasers of MVCT who do so in the basis of interconnection through a transit provider. For example, Eircom, given its SMP position in wholesale origination and transit interconnection markets, purchases MVCT 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. When considering a Service Provider's buyer power, ComReg also has regard, not only to purchases of MVCT on their own behalf, but also those purchases of MVCT on behalf of other parties.

Regulatory context for CBP assessment

6.51 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 the Relevant MVCT Markets, being the markets within which prospective SMP is now being assessed;
- existing SMP regulation in markets other than the Relevant MVCT Markets; and
- other non-SMP regulation and the role of dispute resolution.

Approach to existing SMP regulation in the Relevant MVCT Markets when considering CBP

6.52 Insofar as existing SMP regulation in the Relevant MVCT Markets is concerned, ComReg has already noted in paragraph 5.4 that ComReg adopts the European Commission's 'modified greenfield approach'[289] whereby SMP regulation in the market under consideration is discounted when considering the prospective SMP analysis of the Relevant MVCT Markets. In the context of the assessment of the existence of any effective CBP, ComReg considers the potential bargaining outcomes in the absence any of the MSPs (providing MVCT) having been designated with SMP or being potentially 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 MVCT Markets may function absent regulation helps to ensure that regulation is only applied (or withdrawn) in those

[288] 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).

[289] Explanatory Note, p. 13.

circumstances where it is truly justified and proportionate. To do otherwise could result in a circularity of argument whereby, for example, the Relevant MVCT Markets are 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 MVCT Markets, thereby undermining the original finding of effective competition within those markets.

Approach to existing SMP regulation outside the Relevant MVCT Markets

6.53 SMP regulation in markets outside the Relevant MVCT Markets is considered and, in this regard the Explanatory Note to the 2007 Recommendation notes[290]:

> *"Considerations of relative market power are not limited to networks (of differing size or coverage) serving end-users at a fixed location or address but also apply to networks such as mobile cellular networks serving non-fixed locations. In circumstances where a 'fixed' network with significant market power is subject to a regulatory remedy (beyond the basic one to negotiate interconnect) such as regulated prices for call termination, market power relative to mobile networks would be affected.*"

6.54 Explicit in the above statement is that the bargaining position of a SMP FSP will likely be somewhat weakened in any MTR negotiations with a MSP, in particular, given that its supply of fixed termination provision is subject to SMP[291] price regulation, as well as other SMP obligations governing the requirement to meet reasonable requests for access and not to discriminate. For example, Eircom is designated with SMP in a number of fixed interconnect markets and its provision of fixed termination services is subject to access, price and non-discrimination regulation which, in effect, prevent Eircom from imposing excessive fixed termination rates ('FTRs'), engaging in price discrimination, refusing to supply access or leveraging its behaviour into other related markets. In these circumstances, Eircom, in its MTR negotiations with an MSP, is unable to credibly threaten to retaliate with an increase in its fixed termination rates or to refuse access to fixed termination services and, as such, its bargaining power is likely to be lessened. ComReg's preliminary view is that an SMP FSP (such as Eircom's) bargaining position in its MTR negotiations with an MSP is likely to be weakened given its SMP price and access obligations.

6.55 Other smaller SMP FSPs, while not currently subject to an active price control obligation in the fixed termination market, are also required[292] to charge fixed termination rates on a non-discriminatory basis. It is ComReg's preliminary view

[290] Explanatory Note, page 25, footnote 28.

[291] Market Analysis – Interconnection Market Review Fixed Wholesale Call Termination Services, ComReg Document 07/109, Decision D06/07, December 2007.

[292] Ibid.

their bargaining strength in MTR negotiations with MSPs is also likely to be somewhat constrained by such SMP obligations.

6.56 This limiting effect of SMP price and other regulation on CBP also arises with respect to other relevant retail and wholesale electronic communications markets. For example, Eircom is subject to access, price and non-discrimination obligations in the Wholesale Physical Network Infrastructure Access (WPNIA) market[293] and the Retail Narrowband Access (RNA) market.[294] An MSP, in providing retail services to its customers, may directly or indirectly[295] use wholesale products made available by Eircom pursuant to its obligations in these markets. Again, in the context of MTR negotiations and the bargaining dynamic, any exercise by Eircom of its market power in these markets is constrained by regulation. In light of this, it is ComReg's preliminary view that Eircom's position in these markets is not likely to strengthen its bargaining power in its MTR negotiations with an MSP, in particular, given its SMP position in such markets undermines the credibility of any threat to retaliate by, for example, imposing price increases or denying access to wholesale services provided in these markets.

Approach to other non-SMP regulatory obligations and the role of dispute resolution

6.57 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 interconnect negotiations and CBP. Regulation 31[296] 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.

6.58 The question arises as to whether ComReg's ability to actually or potentially exercise its dispute resolution powers (or initiate investigations at 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 MVCT is likely to offset an MSP's ability to set the

[293] Market Review – Wholesale Physical Network Infrastructure Access (Market 4), ComReg Document 10/39, ComReg Decision No. D05/10, May 2010.

[294] Market Analysis: Retail Fixed Narrowband Access Markets, and ComReg Decision 07/61, ComReg Document 07/61; SMP Obligation: Retail Price Cap Remedy and ComReg Decision 03/07, ComReg Document No. 07/76, 1 October 2007

[295] An MSP may purchase wholesale services from a third party authorised undertaking that directly purchases wholesale services from Eircom.

[296] This transposes Article 20 of the Framework Directive (Directive 2002/21/EC as amended by Directive 2009/140/EC).

level of its MTRs above the competitive level. These questions must also be addressed against the backdrop of the 'modified greenfield approach' discussed in paragraph 6.52 above whereby SMP regulation in the MVCT is discounted when considering the prospective analysis of the Relevant MVCT Markets, but other SMP regulation outside the Relevant MVCT Markets is considered alongside other general non-SMP type obligations.

6.59 The electronic communications legislative framework provides that SMP obligations (including a price control obligation of cost orientation) may only be imposed on an operator 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[297] and Regulation 16 of the Framework Regulations.

6.60 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 MTR being levied or proposed to be levied by a MSP (absent SMP), it would potentially[298] be open to 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.

6.61 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 Numbering Conventions[299], 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[300].

6.62 As has been ComReg's position to date[301], ComReg does not accept that the existence of its dispute resolution function, and its resulting power to determine a non-SMP MSP's MTR in the context of an interconnection dispute, is something

[297] See paragraph 1.16.

[298] Having regard to ComReg's statutory functions and objectives in relation to interconnection.

[299] See footnote 31.

[300] See Condition 3.2.2 (4) of the Numbering Conventions.

[301] See for example, paragraphs 4.68 to 4.79 of Consultation on Market Analysis relating to wholesale voice call termination on H3GI's network, ComReg Document 07/01, 11 January 2007; and paragraph 4.151 to 4.164 of Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/06, Response to Consultation and Draft Decision, 8 January 2008; paragraph 4.18 of Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/92, Decision 05/08, 1 December 2008.

which would negate any MSP'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 relating to their consideration, under Article 7 of the Framework Directive, of the imposition by National Regulatory Authorities of both SMP obligations pursuant to findings of SMP following a market analysis and the imposition of SMP type obligations on non-SMP undertakings pursuant to the exercise of dispute resolution functions. Such European Commission decisions[302] clearly highlight its view that regulatory intervention in relation to the level of MTRs by non-SMP undertakings 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.

6.63 The UK's Competition Appeal Tribunal (CAT) 2005 judgement[303] (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 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. ……"*[304]

6.64 In further considering the role of dispute resolution and its impact on the assessment of CBP, a regulatory dispute determination governing the MTR 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

[302] See Cases PL/2010/1127, PL/2011/1273.

[303] Case No: 1047/3/3/04, [2005] CAT 39. Available on www.cattribunal.org.uk.

[304] See paragraph 138(b) of the 2005 CAT Judgement.

concerning the level of a non-SMP MSP's MTR. ComReg's view is that the imposition of any price control on non-SMP operators 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.

6.65 Notwithstanding the above, ComReg has further considered the issue in relation to actual regulatory practice as it has occurred in Ireland to date. ComReg has not, through the dispute resolution process, imposed non-SMP type price control or other obligations on MSPs pursuant to Regulation 6(2) of the Access Regulations. A December 2009 determination[305] by ComReg concerning a dispute raised by H3GI regarding, *inter alia*, the alleged failure by TMI to negotiate its MTR (the 'TMI Dispute Determination') is somewhat informative, of course having regard to the circumstances of the case and the then prevailing market conditions. TMI had not at the time been designated with SMP. Within the TMI Dispute Determination ComReg considered a wide range of potential options as to the appropriate means of establishing an acceptable pricing level for TMI's MTR in the context of securing 'end-to-end connectivity'. This included consideration as to whether, absent an SMP designation, the imposition of an SMP type cost orientation obligation on TMI was appropriate[306]. ComReg ultimately found that such an approach was not warranted as it would be in excess of the minimum necessary intervention to effectively resolve the particular dispute. The final dispute determination noted that, in the course of the period of the investigation TMI voluntarily proposed (although possibly in the knowledge of the outcome of the dispute determination which had been previously provided to the parties in draft form for comment) to reduce its MTRs from their initially proposed level to within 0.4% of H3GI's then MTR. In view of this, ComReg determined[307] that since TMI's revised MTR was appropriate, further regulatory intervention to resolve the dispute was unnecessary. 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.

[305] Final determination in dispute between H3GI and TMI, ComReg Document 09/98, December 2009.

[306] See paragraph 296 of the TMI Dispute Determination.

[307] See paragraph 374 of the TMI Dispute Determination.

6.66 Overall, for the reasons outlined in paragraphs 6.57 to 6.65, ComReg considers that the actual or potential impact of dispute resolution is not a factor for consideration in terms of its actual or potential impact on the bargaining dynamic between parties and ultimately CBP.

Other criteria considered in the CBP assessment

6.67 ComReg also considers that there are a number of other factors which are relevant to the assessment of the bargaining strength of parties. Such factors include:

- The degree to which a purchaser of MVCT represents an important outlet for the seller;
- The degree to which a purchaser of MVCT is a well informed and price sensitive buyer; and
- Evidence of CBP through analysing actual negotiations.

6.68 The above factors are discussed in paragraphs 6.69 to 6.83 below and later in the context of CBP assessments in the specific Relevant MVCT Markets.

Size of the buyer and its relative importance to the seller

6.69 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 MVCT purchased from an MSP relative to total purchases of MVCT from the same MSP. The degree to which a high share of MVCT purchases is concentrated amongst one or more buyers could also be relevant.

6.70 In addition, the size of the buyer's subscriber base may also influence its buyer power as it may be important for the MSP to have interconnection[308] with the buyer to ensure the MSP's subscribers can receive calls from and make calls to buyer's subscribers. However, the same may also be said of the buyer given it would, for reputational and other reasons, also wish to ensure that its subscribers can receive calls from and make calls to an MSP.

6.71 The size of the buyer and its relative importance to the seller is also likely to be dynamic over time, particularly having regard to the growth in the subscriber bases of the respective parties, the growth and trends in actual or potential termination purchased by a buyer and the growth and trends in the level of termination traffic purchased by an MSP off another interconnected party. For example, as an MSP's customer base grows, it may become somewhat more difficult for a MVCT purchaser to refuse or delay interconnection with the MSP (and purchase MVCT) given it will likely have both an increasing need for its subscribers to contact the MSP's subscribers as well an increase in the potential volume of incoming traffic from the MSP.

[308] Such interconnection can occur directly between the respective networks, of indirectly with the purchaser interconnecting with that MSP through a third party transit arrangement.

6.72 Arising from the above, it is possible that a new entrant MSP relative to an established MSP would find it more important to ensure that it had obtained interconnection to other undertakings that have a significant customer base. In the knowledge of this, the bargaining power of larger networks purchasing MVCT in interconnection negotiations with new entrant MSPs could potentially be enhanced.

6.73 Overall, having regard to the nature of the interconnection arrangements established with MSPs, to identify the largest buyers of an MSP's MVCT and their relative importance to the MSP, ComReg considers the following:

- the share MVCT supplied by a particular MSP that is purchased by individual Service Providers directly interconnected with the MSP and trends over time;
- the size of each of the MVCT buyers' subscriber bases relative to the MSP's subscriber base and trends over time; and
- the growth in the level of termination traffic exchanged between the parties and trends over time.

Credible alternative sources of MVCT supply for the buyer

6.74 The strength of buyer power in MVCT negotiations can also be influenced by the degree to which it can credibly refuse to purchase or delay in purchasing MVCT. 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 MVCT (existing sources or 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 MVCT supply given the Relevant MVCT Market is defined at the individual MSP level.

6.75 However, were the MVCT seller to seek to refuse or delay direct interconnection, the buyer may have an alternative means of indirectly[309] interconnecting to the MSP through a third party transit provider that already has achieved interconnection with the MSP at an agreed an MTR. For example, Eircom is directly interconnected with all of the MSPs (save for Lycamobile and TMI, who also utilise O2/Liffey Telecom for transit arrangements) and can, through its transit service, provide an alternative indirect means for an undertaking to

[309] 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 MSP, 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 MSP, the MTR to be charged under a direct interconnection agreement, the cost of using transit services of a third party to provide indirect interconnection and the MTRs being charged by the MSP to this third party transit provider.

achieve termination with a particular MSP[310]. However, such access is also currently provided on foot of regulation[311] and the question arises whether this would continue on the same terms and conditions absent regulation[312].

6.76 Similarly, were Eircom to refuse to allow an MSP to interconnect to it (although as noted in paragraph 6.54, this is not a likely scenario given it is subject to SMP regulatory obligations in various fixed interconnection markets), an MSP could also avail of indirect interconnection to Eircom via a third party transit arrangement (such as through BT). While the utilisation of such indirect interconnection alternatives is 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), it would somewhat weaken the relative bargaining power of the parties, given it could undermine the credibility of threats of refusal to supply (or delay supply).

The price sensitivity of the buyer

6.77 It is likely that most individual MVCT buyers will be well informed about the price of MVCT, in particular, having regard to the existing arrangements for publication of MTRs via the Eircom Switched Transit and Routing Price List, as well as through buyers being informed through contractual price notification arrangements.

6.78 Other factors that may impact the degree of price sensitivity of buyers include:

- The level of the MTR and its proportion to the overall cost faced by the originating Service Provider in providing a retail call to a mobile, i.e. if the level of the MTR accounts for a reasonably large proportion of a Service Provider's cost in offering a call to a mobile number, it is more likely to be sensitive to any movements in the level of the MTRs 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

[310] When traffic is handed over by Eircom to an MSP, an MSP does not discern Eircom's own traffic from the traffic also being handed over by Eircom to the MSP on behalf of another Service Provider as part of a transit arrangement. The same would hold for other FSPs handing over traffic directly to MSPs.

[311] Market Analysis –Interconnection Market Review Wholesale Call Origination & Transit Services, ComReg Decision 04/07, ComReg Document 07/80, October 2007.

[312] Additionally, such third party transit arrangements are not likely in themselves to constrain the level of the MTR charged.

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.

6.79 ComReg takes the preliminary view that given the significant differences between MTRs and fixed termination rates and, having regard to differences in the relative exchange of termination traffic between individual FSPs and MSPs, FSPs are likely to be sensitive to MTRs given that they represent a more significant cost input to the calculation of the retail price of fixed to mobile calls.

Review of interconnection contracts for supply of MVCT and evidence of negotiations

6.80 As part of the statutory information requests[313] issued to Service Providers, ComReg sought copies of and details associated with the MVCT supply agreements/contracts (the 'MVCT Agreements') put in place between individual MSPs and the main individual FSPs purchasing MVCT, as well as MVCT Agreements between MSPs themselves. ComReg also sought details such as:

(a) whether MVCT Agreements contained any specific clauses/provisions associated with the amendment of MTRs, termination of the MVCT Agreement etc.; and

(b) whether, in accordance with any amendment provisions in MVCT Agreements, any MSPs had received requests to amend MTRs and what response, if any, had been given.

6.81 Based on the information provided, ComReg has reviewed the factual evidence of any bilateral or other negotiations in relation to MVCT interconnection arrangements, including the level of MTRs. In so doing, it should be noted that such evidence is considered against the backdrop of regulation, namely, that Vodafone, O2 and Meteor have been subject to price regulation since October 2005[314], with H3GI having been subject to price regulation[315] since December 2008. Neither TMI nor Lycamobile are subject to any form of SMP regulation, including with respect to the level of their MTRs.

6.82 The review shows that an MSP typically has between 2 and 6 bilateral MVCT Agreements with other parties (over 25 individual direct MVCT Agreements exist), with some such agreements also extending to contractual arrangements for the provision of other interconnect services such as, transit and/or fixed termination arrangements. There are also a number of FSPs who, rather than

[313] See footnote 89.

[314] These parties were designated with SMP in July 2004, with a price control remedy of cost orientation subsequently imposed in October 2005 along with an MTR price cap.

[315] H3GI was designated with SMP in December 2008, with a price control remedy also imposed in the form of an MTR price cap and a glide path of further MTR reductions to take place (activating upon the earlier of a 5% market share trigger or 6 months following the SMP decision).

interconnecting directly with MSPs, do so via third party transit arrangements[316]. Additionally, some MSPs do not interconnect directly with other MSPs or FSPs and, instead, rely on a transit provider arrangement.

6.83 Given the multiplicity of MVCT Agreements, the extension of such agreements to other services (sometimes on a reciprocal basis), transit arrangements to enable the purchase of MVCT indirectly, and the impact of existing SMP regulation to date, an analysis of interconnect negotiations/bargaining dynamic and its effect on CBP is complex. It could conceivably involve an analysis of each direct bilateral interconnect relationship as well as indirect interconnect arrangements. In view of this, ComReg has focused its analysis on the two largest buyers of MVCT from each of the MSPs. Where this does not include Eircom, ComReg has also reviewed its position on the bargaining dynamic, given it is the largest FSP in the State and purchases MVCT not only for its own use but also on behalf of other Service Providers having regard to its provision of a range of wholesale call conveyance/transit services to other Service Providers that are not directly interconnected with MSPs.

Assessment of CBP

6.84 In paragraphs 6.84 to 6.248 below, ComReg assesses whether there is evidence that a buyer of MVCT has exercised effective CBP having regard to the factors and range of criteria set out in paragraphs 6.47 to 6.83 above.

6.85 It is worth noting at the outset that, in response to statutory information requests and, in subsequent follow-up meetings and correspondence, ComReg sought the views of MSPs as to whether, in their experience, any CBP was or could be exercised and whether this was or could be effective in mitigating any SMP and the ability of MSPs to sustain increases in MTRs above those consistent with a competitive outcome. The views of MSPs received are summarised at the start of each assessment below and considered in the following analysis of whether effective CBP has or is likely to be experienced by each of the MSPs identified above as potentially having SMP.

Assessment as to whether H3GI has experienced or could experience effective CBP

6.86 Given H3GI's position in the market, ComReg does not consider it likely that effective CBP has been or could be exercised upon H3GI. Nevertheless, ComReg considers the position below.

Response to Statutory Information Requests and meetings

6.87 H3GI, in response to a statutory information request and subsequent meetings referred to above, expressed the view that that it had faced significant CBP in its interconnect negotiations. In offering evidence of such, H3GI referred to

[316] Such transit arrangements may be due to commercial reasons such as the party having insufficient outbound mobile call volumes to an MSP to justify investment in the establishment of direct interconnect links. Instead, the party purchases transit services (at a cost) from third parties who have direct interconnection with the relevant MSP.

information it had previously provided to ComReg as part of the analysis of the Relevant MVCT Markets in 2007/2008 prior to the adoption of ComReg Decision D05/08. No new or additional information was provided by H3GI in support of its position.

Size of the buyer and its relative importance to the seller

6.88 H3GI currently has some [✂[redacted]] direct MVCT supply agreements with other undertakings, with the two largest[317] buyers of MVCT from H3GI being Eircom and Vodafone. H3GI also has direct interconnect agreements with [✂[redacted]] FSPs for the purchase of fixed termination and other services.

6.89 Having regard to the interconnection arrangements described above, to identify the largest buyers of H3GI's MVCT and their relative importance to H3GI, ComReg considers the factors identified in paragraph 6.73.

6.90 ComReg has considered the share[318] of supplied MVCT that is purchased by individual Service Providers directly interconnected with H3GI and trends over time. Vodafone and Eircom account for the largest shares of MVCT purchased from H3GI. As at H2 2011, Vodafone accounted for some [✂[redacted]%][319] of the total share of H3GI-provided MVCT, having risen from [✂[redacted]%] in H2 2009[320]. In absolute terms, over the period H2 2007 to H1 2011 (the 'Relevant Time Period'), the volume of Vodafone's purchases of MVCT from H3GI have also increased by some [✂[redacted]%].

6.91 Eircom, on the other hand, accounted for [✂[redacted]%] of H3GI-provided MVCT as at H2 2011[321], having fallen from [✂[redacted]%] in H1 2007. In absolute terms, over the Relevant Time Period, Eircom's purchases of MVCT from H3GI have declined by [✂[redacted]%]. Some of the decline in Eircom's share of MVCT purchased may be somewhat explained by the establishment and use of direct interconnection between Vodafone and H3GI in H1 2009, which resulted in Vodafone reducing its reliance on Eircom in its capacity as a transit provider in facilitating Vodafone's indirect purchase of MVCT from H3GI.

[317] The size of buyer is measured here and elsewhere by reference to the volume of MVCT minutes purchased.

[318] Unless otherwise stated, throughout this Consultation Paper shares are measured according to the volumes of MVCT minutes purchased. Shares also exclude the MSP's self-supplied MVCT (i.e. on-net termination).

[319] Over the entire period H2 2007 to H1 2011 (the 'Relevant Time Period'), Vodafone accounted for approximately [✂[redacted]%] of the total share of MVCT purchased from H3GI, still making it one of the top two purchasers of MVCT from H3GI.

[320] H3GI only signed a direct interconnection agreement with Vodafone in H2 2008, with active interconnection paths being enabled some time after this. Prior to this Vodafone interconnected to H3GI through Eircom and purchased MVCT from H3GI through its Eircom transit arrangement. Based on figures provided by Vodafone for H2 2007, at [✂[redacted]%] its share of termination purchased from H3GI remained broadly the same as at H2 2009 (although in absolute terms was lower).

[321] Over the entire period H2 2007 to H1 2011 (the 'Relevant Time Period'), Eircom accounted for approximately [✂[redacted]%] of the total share of MVCT purchased from H3GI, still making it one of the top two purchasers of MVCT from H3GI.

6.92 ComReg has also considered the size of each of the largest MVCT buyers' subscriber bases relative to the H3GI's subscriber base and trends over time. Vodafone and Eircom have substantial mobile and fixed line subscriber bases[322] respectively, and these exceed those of H3GI[323]. ComReg considers that, while it would likely be an important consideration for H3GI to ensure its subscribers can make calls to both Vodafone and Eircom (given their size in subscriber terms), notwithstanding the asymmetry in subscriber base size, the same can also be said for Vodafone and Eircom in interconnecting with H3GI. ComReg also recognises that given Eircom provides wholesale services[324] to other Service Providers which allow such Service Providers to interconnect indirectly with H3GI (and vice versa), the importance of Eircom and H3GI achieving interconnection with each other is also likely to be further heightened. For example, Eircom's transit business is dependent to a certain extent on its ability to provide onward interconnection to H3GI.

6.93 In addition, as noted in paragraphs 3.21 to 3.33, since H3GI's launch and in line with the growth in its subscriber base, it has also experienced an increase in the percentage share of its traffic which is now on-net, thereby implying a general decrease in the share of off-net traffic destined for subscribers on other networks and, therefore, a consequential reduction in its general reliance on the provision of termination services by other networks. However, ComReg has examined the specific level of termination traffic purchased by H3GI from Vodafone and Eircom and trends over time. These trends could also impact on negotiations between respective networks to terminate traffic with each other, including, for example, a impact of retaliatory threat by Vodafone or Eircom to refuse to allow H3GI terminate its traffic on their networks. It has been observed that, between H2 2007 and H1 2011, H3GI's absolute level of termination purchased from Vodafone has increased by [✂[redacted]%], which suggests that H3GI will consider it important to interconnect with and purchase termination from Vodafone. Vodafone may also view the resultant terminating revenues as commercially relevant and this could influence their negotiating position. Over the same period, H3GI's absolute level of termination purchased from Eircom declined by some [✂[redacted]%], which also suggests to ComReg that the importance to H3GI of interconnecting with and purchasing termination from Eircom has somewhat declined.

6.94 Overall, Vodafone and Eircom are large purchasers of MVCT from H3GI and, therefore, are presumably important to H3GI in terms of termination traffic revenues received. While the figures suggest an increasing demand from

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[322] As at Q4 2011 Vodafone had [✂[redacted]] mobile telephony subscribers, whereas Eircom had some [✂[redacted]**]** fixed telephony subscribers (figures based on responses provided to ComReg for its Quarterly Data Reports).

[323] As at Q4 2011 H3GI had [✂[redacted]] mobile telephony subscribers having grown from [✂[redacted]] in H2 2007 (representing an increase of **[✂[redacted]%]**.

[324] Such services include Carrier Pre-Selection (CPS), Single Billing-Wholesale Line Rental (SB-WLR) and transit interconnection services.

Vodafone customers to call subscribers on the H3GI network over the Relevant Time Period (and therefore a likely increase in the importance to H3GI of Vodafone as a buyer of its termination), Eircom's importance as a buyer of MVCT has likely declined somewhat, as its share and overall volume of termination purchased from H3GI has fallen.

6.95 It is ComReg's view that, given the absolute volume of termination purchased individually by both Vodafone and Eircom, along with the size of their respective subscriber bases, it is unlikely that either of such Service Providers would now, or in the future, credibly refuse to handover their traffic to H3GI as it would result in their subscribers not being able to make calls to H3GI subscribers. ComReg acknowledges that there would likely be some point at which the potential level of an MTR which could be sought by H3GI could result it the possibility of refusals by Vodafone and Eircom to purchase termination. However, we have already identified that there are no alternative sources of MVCT supply on an MSP's network. Generally, subscribers of a Service Provider expect to be able to call another Service Provider's subscribers and, absent an ability to call H3GI subscribers, it would likely generate some degree of negative customer perception for Vodafone and Eircom, including a potential loss of business through subscribers switching to other Service Providers. The commercial incentives of Eircom and Vodafone to interconnect with and purchase MVCT from H3GI are now likely to have strengthened, particularly having regard to the increased size of H3GI's subscriber base and the volume of traffic Eircom and Vodafone terminate on H3GI's network.

6.96 Overall, it is ComReg's preliminary view that H3GI will consider Vodafone and Eircom to be important buyers of its MVCT service. Equally so, Eircom and Vodafone will likely consider it somewhat important to purchase MVCT from H3GI (although not necessarily at any price). Having regard to the growth in H3GI's subscriber base and the traffic volumes exchanged between the parties, it is ComReg's view that Vodafone's and Eircom's bargaining power in interconnection negotiations with H3GI is likely to have been somewhat diminished over time and this position is likely to continue having regard to any subsequent growth of H3GI's subscriber base and the growth in the relative exchanges of interconnection traffic between these Service Providers.

Price sensitivity of the buyers

6.97 As indicated in paragraph 6.77 to 6.79 both Vodafone and Eircom are likely to be price sensitive buyers of MVCT, particularly given they have a number of interconnection agreements in place with other Service Providers, including MSPs, and have significant commercial experience in this regard. Both Eircom and Vodafone pay H3GI (and other undertakings) for terminating their traffic and H3GI pays both Vodafone and Eircom for terminating its traffic.

6.98 If the volume of traffic flows between H3GI and Vodafone and H3GI and Eircom were to be similar and termination rates were to be the same (or only different having regard to objective cost differences), then the net termination payments would be broadly the same and could limit the degree of sensitivity of Vodafone and Eircom to the MTRs charged by H3GI for MVCT. However, over the Relevant Time Period, ComReg has observed that there was an asymmetry of traffic flows with H3GI terminating [✂[redacted]%][325] more minutes on Vodafone's network than vice versa. As noted in Table 14, H3GI's MTRs have ranged between 47% and 95% above Vodafone's MTR. Having regard to the level of the asymmetric traffic flows and the relative differences in MTRs (including that each party's MTRs form a significant cost input to the other's retail charges for calls to mobiles), H3GI is, therefore, a net beneficiary in termination revenue terms relative to Vodafone. These factors, in ComReg's view are likely to contribute to making Vodafone a price sensitive buyer of H3GI's termination and may influence its bargaining approach in interconnection negotiations with H3GI.

6.99 ComReg has also examined the position between H3GI and Eircom. Over the Relevant Time Period, ComReg has observed that there were asymmetric traffic flows, with Eircom terminating [✂[redacted]%][326] more minutes on H3GI's network than vice versa. As noted in paragraphs 6.53 to 6.56, Eircom's FTRs are subject to price regulation, and currently range[327] between 0.11 cent and 0.24 cent. H3GI's current regulated MTRs range from 7.38 cent at peak times to 1 cent at off-peak/weekend times and are currently between 32 and 7 times greater than Eircom's FTRs[328]. Having regard to the level of the asymmetric traffic flows and the relative differences in MTRs and FTRs, H3GI is a net beneficiary in interconnection revenue terms relative to Eircom. In addition, H3GI's MTRs also represent a significant input cost to Eircom's and Vodafone's determination of their retail charges for calls to mobiles.

6.100 Furthermore, both Eircom's and Vodafone's price sensitivities will also likely be heightened based on their ability to compare differences between H3GI's MTRs and the MTRs they pay to other MSPs which, in many cases, are substantially lower.

6.101 In light of the above, it is ComReg's view that both Vodafone and Eircom are likely to be price sensitive buyers of H3GI's MVCT. However, when considered alongside the factors discussed in relation to the size of Vodafone and Eircom as buyers of H3GI MVCT and their relative importance to H3GI, such price sensitivities, in themselves, are not likely to be a distinguishing factor which would materially affect the relative bargaining power between the parties in interconnection negotiations. However, given Eircom is subject to SMP regulation

[325] Figure based on the total volume, over the Relevant Time Period, of minutes terminated by Vodafone on H3GI and the total volume of minutes terminated by H3GI on Vodafone.

[326] Figure based on the total volume, over the Relevant Time Period, of minutes terminated by Eircom on H3GI and the total volume of minutes terminated by H3GI on Eircom.

[327] Eircom's primary Fixed Termination Rates (FTRs) differ between peak (0.2443 cent), off-peak (0.1350 cent) and weekend (0.1185 cent) times and are published on www.eircomwholesale.ie. FTRs correct as at 22 May 2012.

[328] As noted in Table 11, H3GI's weighted average MTR has ranged between 14.14 and 7.82 cent, whereas over the same period Eircom's peak/Off-peak and Weekend Fixed terminations rates have never been above 0.319/0.174/0.155 cent respectively.

in the fixed termination market (and other interconnection markets), its bargaining power in interconnection negotiations with Vodafone would be somewhat lessened[329] relative to that of H3GI.

Evidence of bargaining power from interconnection negotiations

6.102 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between H3GI and Eircom on the one hand, and H3GI and Vodafone on the other.

6.103 As noted in paragraph 6.87, H3GI, in response to a statutory information request, indicated that it had experienced CBP and, in offering evidence of such, referred back to information previously provided to ComReg as part of the analysis of the Relevant MVCT Markets in 2007/2008. At that time ComReg considered[330] the evidence and arguments presented by H3GI, and ultimately found that while it had experienced some CBP, that such CBP was not sufficient to mitigate its market power in the MVCT market. H3GI was consequently designated with SMP. While H3GI has offered no new evidence to support its position that it has experienced effective CBP, ComReg considers below the factual circumstances regarding H3GI's position in the market since its previous designation with SMP in 2008.

6.104 H3GI has long established interconnection arrangements with other MSPs as well as with FSPs for the supply/purchase of MVCT and the purchase of fixed termination (and transit) since its entry to the market in 2003. This is likely, in ComReg's view, to have enhanced H3GI's interconnection bargaining position relative to when it first entered (or was seeking to enter) the market since the threat to delay or refuse interconnection no longer seems credible.

6.105 As noted in paragraph 6.95, given H3GI's scale (in subscriber and incoming termination traffic volume terms) and that there are no alternative credible sources of MVCT supplied by H3GI, ComReg's view is that it would be difficult for Eircom or Vodafone (notwithstanding they are likely to be price sensitive buyers) to now credibly refuse to handover traffic to H3GI subscribers[331]. Direct interconnection agreements exist between Vodafone and H3GI, and Eircom and H3GI, for the purchase (and sale) of termination, and since H2 07 there has been no evidence or suggestion presented to ComReg that either of such parties have

[329] For the reasons outlined in paragraphs 6.53 to 6.56 above.

[330] 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 (section 4, pages 30 to 49) 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 (section 4 page 37 to 82) and Market Analysis: Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/92, Decision 05/08, 1 December 2008 (section 4 page 11 to 16).

[331] This does not necessarily imply that Vodafone and Eircom would be willing to purchase MVCT from H3GI at any MTR level/price.

threatened to cease existing interconnection arrangements or to refuse to hand over their traffic to H3GI for termination.

6.106 If Vodafone and Eircom were to refuse to allow H3GI to terminate its traffic on their networks, then it is noted that H3GI has transit arrangements with at least one other FSP who would be in a position to provide indirect access to the networks of Vodafone and Eircom, thereby enabling H3GI to purchase termination at the rate obtained by the transit provider.

6.107 It is also worth noting that, Eircom, by virtue of its SMP price control and other obligations in various fixed interconnection markets[332], would be unable to influence the bargaining dynamic through retaliatory increases in its FTRs or to refuse to allow H3GI to interconnect with it. In general, while Eircom could potentially increase its retail prices for calling mobile subscribers, ComReg considers that the commercial incentive to do so could, at a certain point, be somewhat weakened given it could potentially give rise to competitive distortions[333] between Eircom (and other FSPs) and MSPs, in particular, regarding the retail supply of fixed to mobile calls and mobile to fixed calls. ComReg notes that Eircom's standard retail prices for calls to H3GI (and TMI) subscribers currently differ from Eircom's standard retail prices for calls to Vodafone, O2 and Meteor subscribers. ComReg suggests that this is likely to be somewhat attributable to the fact that H3GI's (and TMI's) MTR are considerably higher than other MSP's MTRs. In spite of Eircom having differentiated its retail prices for calls to H3GI subscribers, it does not appear to have explicitly impacted H3GI's MTR setting behaviour.

6.108 Similarly, it would be possible for Vodafone to respond to a H3GI increase in its MTRs (above those consistent with a competitive outcome) by imposing a retaliatory increase in its own MTRs (assuming Vodafone is not subject to SMP regulation in accordance with the 'modified greenfield approach') or by passing it through to retail subscribers in the form of retail price increases. However, Vodafone's current off-net retail pricing does not differ based on the identity of the called party's MSP and while it could do so in the future, this would likely have to be considered having regard to broader factors such as retail marketing and billing arrangements.

6.109 However, given the level of asymmetry of the termination traffic flows between the parties[334], the now established 'any network' structure of retail mobile (pre-pay and post-pay) pricing tariffs (which would be undermined by a move to differentiate retail prices for calling particular networks) and the potential negative effects for Vodafone arising from any response by its subscribers to the retail price increases (potentially also resulting in distortions in competition between

[332] See paragraphs 6.53 to 6.56.

[333] Even if Eircom were to absorb the increased MTR (rather than passing it on to its retail customers), these competitive distortions would still exist given it raises Eircom's costs.

[334] See paragraph 6.98.

MSPs), these potential responses from Vodafone are, in ComReg's view, unlikely to materially impact the bargaining dynamic with H3GI. Indeed, notwithstanding differences in MTR levels amongst MSPs to date, including asymmetries between H3GI's MTRs and Vodafone's MTRs, Vodafone's off-net retail call charges are not differentiated according to the called party's MSP.

6.110 ComReg has examined whether there have been (albeit in the presence of regulation) any negotiations with H3GI regarding its existing MTRs and/or interconnection arrangements. As a backdrop to this, ComReg has reviewed H3GI's interconnection agreements with Vodafone and Eircom and notes that, while such agreements contain clauses governing amendments to and termination or suspension of the respective agreements, no substantive amendments have been made to them in the period following H3GI's existing SMP designation (or indeed for some time prior to this). Furthermore, where changes have been made to H3GI's MTRs (which form one part of the relevant terms and conditions in the interconnection agreements) over the Relevant Time Period (and implemented pursuant to the interconnection agreements), these appear to have been driven solely by MTR changes stemming from regulatory pressure/intervention by ComReg, rather than in response to any pressure or requests for MTR reductions from MVCT purchasers[335], including Vodafone and Eircom. Even in the presence of such regulatory pressure, over the Relevant Time Period, H3GI had a wide margin of discretion to set MTRs that were lower than those actually charged or indeed to reduce them over a shorter timeframe. This was not done.

6.111 Overall, in the Relevant Time Period, no meaningful evidence has been provided by H3GI (or others) to ComReg which would suggest that buyers of MVCT, including Eircom and Vodafone, have sought to force down MTRs through contractual provisions in interconnection agreements or indeed threaten to cease existing interconnection arrangements.

6.112 In light of the above and, in the context of interconnection negotiations between H3GI and Vodafone, and H3GI and Eircom, insufficient evidence has been presented to ComReg to suggest that the exercise of CBP has or would sufficiently constrain H3GI in its ability to set its MTRs above the level consistent with a competitive outcome.

Preliminary conclusion on effectiveness of CBP on H3GI's market power

6.113 Having regard to the discussion in paragraphs 6.87 to 6.112 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert sufficient CBP such that, absent regulation, it would sufficiently constrain H3GI's ability to set its MTRs above the level consistent with a competitive outcome, i.e. there is insufficient CBP to prevent H3GI acting in the Relevant MVCT Market independently of competitors, customers and consumers.

[335] According to information provided to ComReg by H3GI (both in response to statutory information requests and at subsequent meetings), there were no requests made to H3GI for MTR changes by buyers of H3GI MVCT.

Assessment as to whether Vodafone has experienced or could experience effective CBP

6.114 Given Vodafone's position in the market ComReg does not consider it likely that effective CBP has been or could be exercised upon Vodafone. Nevertheless, ComReg considers the position below.

Response to Statutory Information Requests and meetings

6.115 Vodafone, in response to a statutory information request and subsequent meetings referred to above, expressed the following views on CBP. In summary, Vodafone indicated that if the MVCT market is defined at the individual network level (which it currently is), then the nature of the market is such that each MSP is the sole supplier of MVCT with respect to its subscribers. As subscribers of all Service Providers will attach a high importance to the ability to make calls to and receive calls from subscribers of other Service Providers, Service Providers will need to meet such subscriber needs by ensuring interconnection with other Service Providers. Vodafone also expressed the view that this is particularly the case where the terminating Service Provider has a material number of subscribers (presumably the greater the number of subscribers the more likely it is for a Vodafone subscriber to contact a subscriber of the other Service Provider). As a consequence, Vodafone considered that any CBP that may exist would not be sufficient to negate the ability of an MSP to sustain MTRs above the competitive level.

6.116 ComReg notes Vodafone's position, which appears to suggest that any CBP would not be effective in terms of its ability to constrain Vodafone in setting its MTRs above the level consistent with a competitive outcome.

Size of the buyer and its relative importance to the seller

6.117 Vodafone currently has [✂[redacted]] MVCT supply agreement with other undertakings, with the two largest buyers of MVCT from Vodafone being Eircom and O2. Vodafone also has interconnection agreements with [✂[redacted]] FSPs for the purchase of fixed termination and other services.

6.118 ComReg has considered the share[336] of supplied MVCT that is purchased by individual Service Providers directly and indirectly interconnected with Vodafone and trends over time. Eircom and O2 account for the largest shares of MVCT purchased from Vodafone.

6.119 As at H2 2011, Eircom accounted for [✂[redacted]%][337] of the total share of Vodafone-provided MVCT, having declined from [✂[redacted]%] in H2 2007. In

[336] Unless otherwise stated, throughout this Consultation Paper shares are measured according to the volumes of MVCT minutes purchased. Shares also exclude the MSP's self-supplied MVCT (i.e. on-net termination).

[337] Over the entire period H2 2007 to H1 2011 (the 'Relevant Time Period'), Vodafone accounted for approximately [✂[redacted]%] of the total share of MVCT purchased from H3GI, still making it one of the top two purchasers of MVCT from H3GI.

absolute terms, over the period H2 2007 to H1 2011 (the 'Relevant Time Period'), Eircom's purchases of MVCT from Vodafone have also declined[338] by [✂[redacted]%].

6.120 O2, on the other hand, accounted for [✂[redacted]%] of Vodafone-provided MVCT as at H1 2011[339], having been broadly at a similar level of [✂[redacted]%] in H2 2007. In absolute terms, over the Relevant Time Period, O2's purchases of MVCT from Vodafone have also declined by [✂[redacted]%].

6.121 ComReg has also considered the size of each of the largest MVCT buyers' subscriber bases relative to the Vodafone's subscriber base and trends over time. Both Eircom and O2 have substantial fixed line and mobile subscriber bases[340] respectively, although these individually do not exceed those of Vodafone[341].

6.122 Notwithstanding the decline over the Relevant Time Period in the absolute volume of termination purchased by both Eircom and O2 from Vodafone, they are likely to remain sizable (in subscriber terms and in terms of the volume of termination minutes purchased) and important buyers of MVCT for Vodafone. The commercial incentives of Eircom and O2 to interconnect with and purchase MVCT from Vodafone are now likely to be strong and it is unlikely that either of such Service Providers could credibly refuse to handover their traffic to Vodafone as it would result in their subscribers not being able to make calls to Vodafone subscribers. Indeed, there has been no evidence or suggestion presented to ComReg that either Eircom or O2 has threatened to terminate existing interconnection arrangements or to handover termination traffic to Vodafone, in particular, concerning the level of the MTR[342] being charged by Vodafone. As a consequence, threats by Eircom or O2 to refuse to interconnect or hand over traffic to Vodafone are not likely to be sufficiently credible such that it would rebalance the bargaining dynamic between the parties.

6.123 Overall, for Vodafone, it is ComReg's preliminary view that the size of Eircom and O2 as buyers of Vodafone-supplied MVCT and their relative importance to Vodafone are not likely to be distinguishing factors which would significantly rebalance the relative bargaining power between the parties in interconnection

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[338] Some of the decline in Eircom's share of MVCT purchased may be somewhat explained by the establishment and use of direct interconnection between Vodafone and other undertakings, which resulted in such other undertakings reducing their reliance on Eircom in its capacity as a transit provider in facilitating indirect purchase of MVCT from Vodafone.

[339] Over the entire period H2 2007 to H1 2011 (the 'Relevant Time Period'), Eircom accounted for approximately **[**✂[redacted]%**]** of the total share of MVCT purchased from H3GI, making it still one of the top two purchasers of MVCT from H3GI.

[340] As at Q4 2011 Eircom had [✂[redacted]] fixed telephony subscribers, whereas O2 had [✂[redacted]**]** mobile telephony subscribers (figures based on responses provided to ComReg for its Quarterly Data Reports).

[341] As at Q4 2011 Vodafone had [✂[redacted]] mobile telephony subscribers having fallen from [✂[redacted]] in H2 2007.

[342] This does not necessarily imply that Eircom and O2 would be willing to purchase MVCT from O2 at any MTR level/price.

negotiations. However, given Eircom is subject to SMP regulation in the fixed termination (and other interconnection markets), its bargaining power in interconnection negotiations with Vodafone would be somewhat lessened[343] relative to that of Vodafone.

Price sensitivity of the buyer

6.124 ComReg's view is that both Eircom and O2 are likely to be price sensitive buyers of MVCT from Vodafone given their experience and commercial knowledge of the market. If the volume of traffic exchanged between Eircom and Vodafone and O2 and Vodafone were to be similar and termination rates were to be the same, then the net termination payments would be broadly similar and could potentially limit the degree of sensitivity of Eircom and O2 to the MTRs charged by Vodafone for MVCT.

6.125 In this regard, over the Relevant Time Period, ComReg has observed that there was a low asymmetry of termination traffic flows between O2 and Vodafone with O2 terminating [✂[redacted]%][344] more minutes on Vodafone's network than vice versa. As noted in Table 11, Vodafone's and O2's weighted average MTRs have been broadly similar over the Relevant Time Period (and have been symmetric since H1 2009). However, these MTR levels are those that have prevailed in the presence of regulation. Having regard to the level of the asymmetric traffic flows and the current absence of relative differences in MTRs (each party's MTRs form a significant cost input to their retail mobile to mobile call charges), Vodafone is likely to be a marginal net beneficiary in MVCT revenue terms relative to O2. However, given the level of the differences in termination traffic flows, on balance, O2 and Vodafone are likely to currently face relatively similar price sensitivities as buyers of each other's MVCT services and, consequently, it is ComReg's preliminary view that this is unlikely to materially rebalance the relative bargaining dynamic between the parties. On an absent regulation and a forward looking basis, if Vodafone and O2 were to have the ability to determine their own MTRs, given the low level of asymmetry of traffic flows, there would likely be incentives for the parties to set symmetric[345] or near symmetric MTRs (but not necessarily at cost), the result of which would be that net termination payments to each other[346] would be balanced.

6.126 ComReg has also examined the exchange of traffic flows between Eircom and Vodafone and, over the Relevant Time Period, has observed that there was an

[343] For the reasons outlined in paragraphs 6.53 to 6.56 above.

[344] Figure based on the total volume, over the Relevant Time Period, of minutes terminated by O2 on Vodafone and the total volume of minutes terminated by Vodafone on O2.

[345] Each party would know that if one raised its MTRs to the other, that the other could implement a corresponding retaliatory MTR increase.

[346] However, while such an outcome could apply with respect to Vodafone and O2 (assuming symmetric traffic flows and similar MTRs), the same may not be the case for other purchasers of MVCT from Vodafone, in particular, Service Providers who do not have symmetric exchanges of interconnection traffic and charge reciprocal termination charges.

asymmetry of traffic flows, with Eircom terminating [✂[redacted]%][347] more minutes on Vodafone's network than vice versa. As noted in paragraph 6.99, Eircom's FTRs are subject to price regulation, and currently range between 0.24 cent and 0.11 cent. Vodafone's current regulated MTRs range from 5.22 cent at peak times to 2.64 cent at off-peak/weekend times and are currently[348] between 16 and 17 times greater than Eircom's FTRs (notwithstanding objective cost difference justifications). Having regard to the level of asymmetric traffic flows and the relative differences in MTRs and FTRs, Vodafone is, therefore, currently a net beneficiary in termination revenue terms relative to Eircom. MTRs also represent a significant input cost to Eircom's determination of its retail fixed to mobile call charges. These related factors, in ComReg's view, are likely to contribute to making Eircom a price sensitive buyer of Vodafone's termination.

6.127 In light of the above, it is ComReg's view that both Eircom and O2 are likely to be price sensitive buyers of Vodafone's MVCT. However, when considered alongside the factors identified, such price sensitivities, in themselves, are not likely to be a distinguishing factor which would materially rebalance the relative bargaining power between the parties in interconnection negotiations.

Evidence of bargaining power from interconnection negotiations

6.128 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between Vodafone and Eircom on the one hand, and Vodafone and O2 on the other.

6.129 At the outset, it is worth noting that Vodafone has made no suggestion or offered evidence to suggest that it has experienced effective CBP. Indeed, Vodafone appears to suggest in its response to the statutory information request and subsequent meetings[349] that, given its scale and the definition of a network market, it has not been nor could it be subject to the exercise of effective CBP.

6.130 ComReg's view is that given Vodafone's, Eircom's and O2's respective scales (in subscriber and termination purchase/sale volume terms), it is and will continue to be sufficiently important for Vodafone to interconnect with Eircom and O2 as it is/will be for Eircom and O2 to interconnect with Vodafone. As a consequence, potential threats by the parties to refuse to interconnect/purchase termination would unlikely be credible. Vodafone has long-established interconnection agreements in place with Eircom since 1999 (for the supply of MVCT and purchase of fixed termination) and with O2 (for the supply/purchase of MVCT) since 2001. It would be difficult for Eircom and O2 (notwithstanding that Eircom is likely a more price sensitive buyer than O2) to now refuse to handover their traffic

[347] Figures based on the total volume, over the Relevant Time Period, of minutes terminated by Eircom on Vodafone and the total volume, over the Relevant Time Period, of minutes terminated by Vodafone on Eircom.

[348] As noted in Table 11, Vodafone's weighted average MTR has ranged between 9.59 and 4.12 cent, whereas over the same period Eircom's peak/off-peak and weekend FTRs have never been above 0.319/0.174/0.155 cent respectively.

[349] See paragraphs 6.115 and 6.116.

to Vodafone subscribers or to refuse to terminate Vodafone's subscriber traffic on their networks.

6.131 Similar to the reasons discussed in paragraph 6.106, given Eircom's provision of fixed termination is regulated it cannot, having regard to Vodafone's MTR level (currently or absent regulation), seek to impose a retaliatory FTR increase or refuse to allow interconnection for fixed termination services. This in ComReg's view somewhat weakens Eircom's bargaining position relative to Vodafone in interconnection negotiations.

6.132 Were Eircom or O2 to seek to refuse to purchase MVCT from Vodafone then the matter would fall to be addressed through ComReg's complaint/dispute resolution process[350] or potentially through an investigation into compliance with general obligations.

6.133 ComReg has, nevertheless, examined whether there have been (albeit in the presence of regulation) any negotiations with Vodafone regarding its existing MTRs and/or interconnection arrangements. Vodafone's interconnection agreements with Eircom and O2 contain clauses governing amendments to and termination/suspension of the respective agreements and ComReg has been informed that no substantive amendments have been to them in this regard. Furthermore, where changes have been made to Vodafone's MTRs (or indeed Eircom's FTRs or O2's MTRs) over the Relevant Time Period and implemented pursuant to the relevant interconnection agreements, these appear to have been driven solely by MTR changes stemming from regulatory pressure/intervention by ComReg, rather than in response to any pressure or requests for MTR reductions from MVCT buyers[351], including Eircom and O2. Even in the presence of such regulatory pressure, over the Relevant Time Period, ComReg notes that Vodafone had a wide margin of discretion to set MTRs that were lower than those actually charged or indeed to reduce them over a shorter timeframe. However, this was not done. The actual evidence available does not suggest to ComReg that either Eircom or O2 sought to negotiate down MTRs.

6.134 In light of the above and, in the context of interconnection negotiations between Vodafone and Eircom, and Vodafone and O2, insufficient evidence has been presented to ComReg to suggest that the exercise of CBP has or would sufficiently constrain Vodafone in its ability to set its MTRs above the level equivalent to that in a competitive outcome.

Preliminary conclusion on effectiveness of CBP on Vodafone's market power

6.135 Having regard to the discussion in paragraphs 6.114 to 6.134 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert

[350] See paragraphs 6.57 to 6.66 regarding the role of dispute resolution and consideration of it in assessing CBP. Each case would potentially fall to be examined in its own right and on its merits.

[351] According to information provided to ComReg by Vodafone (both in response to statutory information requests and at subsequent meetings), there were no requests made for MTR changes by purchasers of Vodafone MVCT.

sufficient CBP such that, absent regulation, it would sufficiently constrain Vodafone's ability to set its MTRs above the level consistent with a competitive outcome, i.e. there is insufficient CBP to prevent Vodafone acting in the Relevant MVCT Market independently of competitors, customers and consumers.

Assessment as to whether O2 has experienced or could experience effective CBP

6.136 Given O2's position in the market ComReg does not consider it likely that effective CBP has been or could be exercised upon O2. Nevertheless, ComReg considers the position below.

Response to Statutory Information Requests and meetings

6.137 O2, in response to a statutory information request and subsequent meetings referred to previously, indicated that, against the backdrop of regulation to date, CBP had not been and was not likely to be a factor that impacted their MTR setting behaviour, particularly given their size and the period of time they had been operating within the market. O2 also expressed the view that there are a number of retail substitutes that indirectly constrain the ability of a MSP to set its MTRs above the competitive level.

6.138 ComReg notes O2's position, which appears to suggest that any CBP would not be effective in constraining the ability of O2 to set its MTRs at levels above those that would occur in a competitive outcome. ComReg has already considered the strength of indirect constraints on the definition of the wholesale market[352], as well as on competition within it, and has set out its preliminary view that such constraints are insufficient to impact competition within the Relevant MVCT Market.

Size of the buyer and its relative importance to the seller

6.139 O2 currently has [✂[redacted]] MVCT supply agreements with other undertakings, with the two largest buyers of MVCT from O2 being Eircom and Vodafone. O2 also has interconnection agreements with [✂[redacted]] FSPs for the purchase of fixed termination and other services. O2 also offers transit services to other MSPs[353].

6.140 ComReg has considered the share of supplied MVCT that is purchased by individual Service Providers directly and indirectly interconnected with O2 and trends over time. As at H2 2011, Eircom accounted for [✂[redacted]%] of the total share of O2-provided MVCT, having declined from a share of [✂[redacted]%] in H2 2007. In absolute terms, over the period H2 2007 to H1 2011 (the 'Relevant Time Period'), Eircom's purchases of MVCT from O2 have also declined[354] by [✂[redacted]%] but are nonetheless substantial.

[352] See paragraphs 4.97 to 4.214 and 6.38and 6.39.

[353] For example, Lycamobile.

[354] Some of the decline in Eircom's share of MVCT purchased may be somewhat explained by the establishment and use of direct interconnection between O2 and other undertakings, which resulted in such other undertakings reducing their reliance on Eircom in its capacity as a transit provider in facilitating indirect purchase of MVCT from Vodafone.

6.141 Looking at Vodafone, it accounted for [✂ [redacted] %] of the share of O2-provided MVCT as at H1 2011, having grown from [✂ [redacted] %] in H2 2007. In absolute terms, over the Relevant Time Period, Vodafone's purchases of MVCT from O2 have also declined by [✂ [redacted] %].

6.142 ComReg has also considered the size of each of Eircom's and Vodafone's subscriber bases[355] relative to O2's subscriber base and all have substantial fixed line and/or mobile subscriber bases. As a consequence, ComReg considers that it would be similarly important for O2 to interconnect with Eircom and Vodafone as it is for Eircom and Vodafone to interconnect with O2 given that their respective subscribers will consider it important to make calls across these networks.

6.143 Notwithstanding the decline over the Relevant Time Period in the absolute volume of O2 MVCT purchased by both Eircom and Vodafone, they remain sizable (in subscriber terms and in terms of the volume of MVCT minutes purchased) and important buyers of MVCT from O2. O2 also purchases a significant amount of termination from Eircom and Vodafone[356]. As such, the commercial incentives of Eircom and Vodafone to purchase MVCT from O2 are currently likely to be strong and it is unlikely that either Eircom or Vodafone could currently credibly refuse to handover their traffic to O2[357] (as it would result in their respective subscribers not being able to make calls to O2). There has also been no evidence or suggestion presented to ComReg that either Eircom or Vodafone has threatened to terminate existing interconnection arrangements or to purchase MVCT from O2, in particular, concerning the level of the MTR being charged by O2. Absent regulation, these commercial incentives are likely to persist to a certain degree.

6.144 Overall, for O2, it is ComReg's preliminary view that the size of Eircom and Vodafone as buyers of O2-supplied MVCT and their relative importance to O2 are not likely to be distinguishing factors which would materially rebalance the relative bargaining power between the parties in interconnection negotiations. However, given Eircom is subject to SMP regulation in the fixed termination market (and other interconnection markets), its bargaining power in interconnection negotiations with O2 would be somewhat lessened[358] relative to that of Vodafone.

Price sensitivity of the buyer

6.145 As noted previously, ComReg's view is that both Eircom and Vodafone are likely to be price sensitive buyers of O2 MVCT given their experience and commercial

[355] See footnotes 340 and 341.

[356] In H1 2011 O2 purchased [✂ [redacted] million] minutes of termination on Eircom's network and [✂ [redacted] million] minutes of termination on Vodafone's network.

[357] This does not necessarily imply that Vodafone and Eircom would be willing to purchase MVCT from O2 at any MTR level/price.

[358] For the reasons outlined in paragraphs 6.53 to 6.56 above.

knowledge of the market. The degree of such sensitivity potentially depends on the volume of net traffic flows between these individual Service Providers and O2, as well as the relative level of termination rates charged to each other.

6.146 Over the Relevant Time Period, ComReg has observed that there was an asymmetry of traffic flows between Eircom and O2, with O2 purchasing [✂ [redacted] %] more termination minutes on Eircom's network than vice versa. O2's MTRs are currently[359] between 19 and 23 times greater than Eircom's regulated[360] FTRs. Having regard to the level of asymmetric traffic flows and the relative differences in MTRs and FTRs, O2 is currently a net beneficiary in termination revenue terms relative to Eircom. This, coupled with the fact that MTRs represent a significant input cost to Eircom's determination of its retail fixed to mobile call charges, is likely to contribute to making Eircom a price sensitive buyer of O2's MVCT. However, given the overall volume of traffic exchanged between the parties, these price sensitivities in themselves are not likely to materially rebalance the relative bargaining dynamic between Eircom and O2.

6.147 ComReg has also examined the position between Vodafone and O2 and, over the Relevant Time Period, ComReg has observed that traffic flows were almost symmetric with O2 terminating [✂ [redacted] %][361] more minutes on Vodafone's network than vice versa. Having regard to the level of the asymmetric traffic flows and the current absence of relative differences in MTRs, O2 and Vodafone are likely currently to face relatively similar price sensitivities as buyers of each other's MVCT services and, as such, they are not likely to materially rebalance the relative bargaining dynamic between the parties.

<u>Evidence of bargaining power from interconnection negotiations</u>

6.148 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between O2 and Eircom on the one hand, and O2 and Vodafone on the other.

6.149 O2 has made no suggestion or offered evidence to ComReg to suggest that it has experienced effective CBP. O2 appears to suggest in its response to the statutory information request and subsequent meetings that, given its size and the period of time it has been operating within the market, no parties would be able to exercise effective CBP in interconnection negotiations with them.

6.150 Similar to the points raised in paragraph 6.130, given O2's, Eircom's and Vodafone's scale (in subscriber and termination purchase/sale volume terms), it

[359] O2's current regulated MTRs range from 5.68 cent at peak times to 2.09 and 2.12 cent at off-peak and weekend times respectively. Eircom's FTRs are subject to price regulation, and currently range between 0.24 cent and 0.11 cent.

[360] As noted in Table 11, over the Relevant Time Period, O2's weighted average MTR has ranged between 9.59 and 4.02 cent, whereas over the same period Eircom's peak/off-peak and weekend FTRs have never been above 0.319/0.174/0.155 cent respectively.

[361] Figure based on the total volume, over the Relevant Time Period, of minutes terminated by O2 on Vodafone and the total volume of minutes terminated by Vodafone on O2.

is and will likely continue to be commercially important for O2 to interconnect with Eircom and Vodafone as it is/will be for Eircom and Vodafone to interconnect with O2 (particularly when there are no alternative sources of supply). As such, the credibility of threats by the parties to refuse to interconnect would likely be diminished somewhat. O2 has long established interconnection agreements with Eircom since 2004 (for the supply of MVCT and purchase of fixed termination) and with Vodafone (for the supply/purchase of MVCT) since 2009[362]. It would be difficult for Eircom or Vodafone (notwithstanding that Eircom is likely a more price sensitive buyer than O2) to now refuse to handover traffic to O2 subscribers[363] or to credibly refuse to terminate O2's subscriber traffic on their networks.

6.151 Similar to the reasons discussed in paragraph 6.106, given that Eircom's fixed termination is regulated it cannot, having regard to O2's MTR level (currently or absent regulation), seek to impose a retaliatory FTR increase or refuse to allow interconnection for fixed termination services. This in ComReg's view somewhat weakens Eircom's bargaining position relative to O2.

6.152 Were Eircom or Vodafone to refuse to purchase MVCT from O2 then the matter would more likely than not fall to be addressed through ComReg's complaint/dispute resolution process[364].

6.153 ComReg has, nevertheless, examined whether there have been (albeit in the presence of regulation) any negotiations with O2 regarding its existing MTRs and/or interconnection arrangements. O2's interconnection agreements with Eircom and Vodafone contain clauses governing amendments to and termination/suspension of the respective agreements and ComReg has been informed that no relevant substantive amendments have been to them. Furthermore, where changes have been made to O2's MTRs (or indeed Eircom's FTRs or Vodafone's MTRs) over the Relevant Time Period and implemented pursuant to the relevant interconnection agreements, these appear to have been driven solely by MTR changes stemming from regulatory pressure/intervention by ComReg, rather than in response to any pressure or requests for O2 MTR reductions from MVCT buyers[365], including Eircom and Vodafone. Even in the presence of such regulatory pressure, over the Relevant Time Period, O2 had a wide margin of discretion to set MTRs that were lower than those actually charged or indeed to reduce them over a shorter timeframe. However, this was not done. The evidence available does not suggest to ComReg that either Eircom or Vodafone sought to force down O2 MTRs through contractual provisions in

[362] Prior to this O2 had indirect interconnection with Vodafone through a transit provider.

[363] This does not necessarily imply that Vodafone and Eircom would be willing to purchase MVCT from O2 at any MTR level/price

[364] See paragraphs 6.57 to 6.66 regarding the role of dispute resolution and consideration of it in assessing CBP. Each case would potentially fall to be examined in its own right and on its merits.

[365] According to information provided to ComReg by O2 (both in response to statutory information requests and at subsequent meetings), there were no requests made to O2 for MTR changes by purchasers of O2 MVCT.

interconnection agreements or indeed to threaten to cease existing interconnection arrangements.

6.154 In light of the above and, in the context of interconnection negotiations between O2 and Eircom and O2 and Vodafone, insufficient evidence has been presented to ComReg to suggest that the exercise of CBP has or would sufficiently constrain O2 in its ability to set its MTRs above the level consistent with that in a competitive outcome.

<u>Preliminary conclusion on effectiveness of CBP on O2's market power</u>

6.155 Having regard to the discussion in paragraphs 6.136 to 6.155 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert sufficient CBP such that, absent regulation, it would sufficiently constrain O2's ability to set its MTRs above the level consistent with a competitive outcome, i.e. there is insufficient CBP to prevent O2 acting in the Relevant MVCT Market independently of competitors, customers and consumers.

<u>Assessment as to whether Meteor has experienced or could experience effective CBP</u>

6.156 Given Meteor's position in the market ComReg does not consider it likely that effective CBP has been or could be exercised upon Meteor. Nevertheless, ComReg considers the position below.

6.157 In addition, given that Meteor is a wholly owned subsidiary of Eircom and the consequential level of control held by Eircom over Meteor, ComReg considers that a CBP analysis of the bargaining dynamic between these parties would be meaningless.

<u>Response to Statutory Information Requests and meetings</u>

6.158 Meteor, in response to a statutory information request and subsequent meetings referred to in paragraph 6.85 above, expressed the view that CBP would not be sufficient to prevent an MSP MVCT supplier from profitably raising its MTRs above the competitive level. Their rationale was that the demand for MVCT was unlikely to be impacted, as if the buyer raised its retail rates (to offset the increase in MTRs), it would place itself at a competitive disadvantage. Furthermore, if other MSPs responded (to the first MSP increasing its MTRs) by increasing their MTRs, the first MSP would forego some, but not all, of the profit arising from its MTR increase due to its increased retail input costs. Meteor noted that the MSP MVCT supplier would still earn profit from a price increase in respect of the supply of MVCT to FSPs (ComReg assumes that this is because FSPs cannot retaliate with termination rate increases in the same manner as MSPs). Meteor also stated that the impact of CBP was not a relevant factor in their MTR setting behaviour and that they had not experienced any significant exercise of CBP in respect of Service Providers purchasing MVCT from them.

<u>Size of the buyer and its relative importance to the seller</u>

6.159 Meteor, a wholly owned subsidiary of Eircom, currently has [✂[redacted]] MVCT supply agreements with other undertakings, with the two largest buyers of MVCT from

Meteor being O2 and Vodafone. Meteor also has interconnection agreements with [✂ [redacted]] FSPs for the purchase of fixed termination and other services.

6.160 ComReg has considered the share of supplied MVCT that is purchased by individual Service Providers directly and indirectly interconnected with Meteor and trends over time. As at H2 2011, O2 accounted for [✂ [redacted]%] of the total share of Meteor-provided MVCT, having increased from a share of [✂ [redacted]%] in H2 2007. In absolute terms, over the period H2 2007 to H1 2011 (the 'Relevant Time Period'), O2's own purchases of MVCT from Meteor have increased by [✂ [redacted]%].

6.161 Looking at Vodafone, it accounted for [✂ [redacted]%] of the share of Meteor-provided MVCT as at H1 2011, having grown from [✂ [redacted]%] in H2 2007. In absolute terms, over the Relevant Time Period, Vodafone's own purchases of MVCT from Meteor have also declined by [✂ [redacted]%].

6.162 ComReg has also considered the size of each of O2's and Vodafone's subscriber bases[366] relative to Meteor's subscriber base and all are substantial. As a consequence, ComReg considers that it would be similarly important for Meteor to interconnect with O2 and Vodafone as it is for O2 and Vodafone to interconnect with Meteor.

6.163 Over the Relevant Time Period the volume of Meteor MVCT purchased by both O2 and Vodafone has increased (and is likely related to the increase in Meteor's subscriber base over this period). O2 and Vodafone are sizable (in subscriber terms and in terms of the volume of MVCT minutes purchased) and important buyers of MVCT from Meteor. Meteor also purchases a significant amount of MVCT from O2 and Vodafone[367].

6.164 The commercial incentives of Meteor, O2 and Vodafone to interconnect with each other are likely to be strong and it is unlikely that either O2 or Vodafone could credibly refuse to purchase MVCT from Meteor (as it would result in their respective subscribers not being able to make calls to Meteor subscribers). Indeed, there has been no evidence or suggestion presented to ComReg that either O2 or Vodafone has threatened to terminate existing interconnection arrangements or to handover termination traffic to Meteor, in particular, concerning the level of the MTR[368] being charged by Meteor. Absent regulation, these commercial incentives are also likely to persist to a certain degree.

6.165 Overall, for Meteor, it is ComReg's preliminary view that the size of O2 and Vodafone as buyers of MVCT and their relative importance to Meteor are not likely to be distinguishing factors which would materially rebalance the relative bargaining power between the parties in interconnection negotiations.

[366] See footnotes 340 and 341.

[367] In H1 2011 Meteor purchased [✂ [redacted]] million minutes of MVCT on O2's network and [✂ [redacted]] million minutes of MVCT on Vodafone's network.

[368] This does not necessarily imply that Vodafone and O2 would be willing to purchase MVCT from Meteor at any MTR level/price.

Price sensitivity of the buyer

6.166 As noted previously, both O2 and Vodafone are likely to be price sensitive buyers of MVCT, with the degree of such sensitivity in this case potentially depending on the volume of net traffic flows between these individual networks and Meteor, as well as the relative level of termination rates charged to each other.

6.167 Over the Relevant Time Period, ComReg has observed that there was an asymmetry of traffic flows, with Meteor purchasing [✂ [redacted]%] fewer minutes of MVCT from O2 than vice versa. ComReg has also examined the position between Meteor and Vodafone and has observed that, over the Relevant Time Period, there was an asymmetry of traffic flows, with Meteor purchasing [✂ [redacted]%] fewer MVCT minutes from Vodafone than vice versa.

6.168 Having regard to the level of the asymmetric traffic flows, their volumes and the current absence of relative differences in MTRs[369], it is ComReg's view that O2 and Vodafone are likely to be price sensitive buyers of MVCT, although such sensitivities are unlikely to be materially different[370] to those faced by Meteor when considered in the context of their relative purchases of each other's MVCT services. As such, price sensitivity is not likely to materially rebalance the relative bargaining dynamic between the parties.

Evidence of bargaining power from interconnection negotiations

6.169 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between Meteor and O2 on the one hand, and Meteor and Vodafone on the other.

6.170 Meteor has made no suggestion or offered evidence to ComReg to suggest that it has experienced effective CBP. In fact, Meteor has effectively indicated that given its size and the period of time it has been operating within the market, that no parties would be able to exercise effective CBP in interconnection negotiations with it.

6.171 Given Meteor's, O2's and Vodafone's scale (in subscriber and termination purchase/sale volume terms), it is and will continue to be sufficiently important for Meteor to interconnect with O2 and Vodafone as it is/will be for O2 and Vodafone to interconnect with Meteor As such, threats by the parties to refuse to interconnect would unlikely be credible (particularly when there are no alternative sources of supply). Were O2 or Vodafone to refuse to purchase MVCT from

[369] See Table 11 for MTRs.

[370] While there are asymmetries in traffic flows, having regard to the share of Vodafone and O2 purchases of Meteor MVCT relative to Vodafone's and O2's overall MVCT purchases, it is not likely to be material. In this regard, over the Relevant Time Period [✂ [redacted]%] of Vodafone's overall MVCT purchases (including those from other MSPs) were from Meteor, with O2's share of overall MVCT purchases from Meteor being [✂ [redacted]%].

Meteor then the matter would fall to be addressed through ComReg's complaint/dispute resolution process[371].

6.172 Meteor has long established interconnection agreements, having interconnection with O2 since 2004 (for the supply and purchase of MVCT) and with Vodafone (for the supply/purchase of MVCT) since 2000. It would be difficult for Vodafone and O2 to now refuse to handover traffic to Meteor subscribers or to refuse to terminate Meteor's subscriber traffic on their networks.

6.173 ComReg has also examined whether there have been (albeit in the presence of regulation) any negotiations with Meteor regarding its existing MTRs and/or interconnection arrangements. While Meteor's interconnection agreements with O2 and Vodafone contain clauses governing amendments to and termination/suspension of the respective agreements, ComReg has been informed that no substantive relevant amendments have been made to them. Furthermore, where changes have been made to Meteor's MTRs (or indeed O2's or Vodafone's MTRs) over the Relevant Time Period and implemented pursuant to the relevant interconnection agreements, these appear to have been driven solely by MTR changes stemming from regulatory pressure/intervention by ComReg, rather than in response to any pressure or requests for Meteor MTR reductions from MVCT buyers[372], including O2 and Vodafone. Even in the presence of such regulatory pressure, over the Relevant Time Period, Meteor had a wide margin of discretion to set MTRs that were lower than those actually charged or indeed to reduce them over a shorter timeframe. However, this was not done. The evidence available does not suggest to ComReg that either O2 or Vodafone sought to force down Meteor MTRs through contractual provisions in interconnection agreements or indeed to threaten to cease existing interconnection arrangements.

6.174 In light of the above and, in the context of the review of any evidence of interconnection negotiations between Meteor and O2, and Meteor and Vodafone, insufficient evidence has been presented to ComReg to suggest that the exercise of sufficient CBP has or would sufficiently constrain Meteor in its ability to set its MTRs above the level consistent with that which would occur in a competitive outcome.

<u>Preliminary conclusion on effectiveness of CBP on O2's market power</u>

6.175 Having regard to the discussion in paragraphs 6.156 to 6.174 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert sufficient CBP such that, absent regulation, it would sufficiently constrain Meteor's ability to set its MTRs above the level consistent with a competitive

[371] See paragraphs 6.57 to 6.66 regarding the role of dispute resolution and consideration of it in assessing CBP. Each case would potentially fall to be examined in its own right and on its merits.

[372] According to information provided to ComReg by Meteor (both in response to statutory information requests and at subsequent meetings), there were no requests made to Meteor for MTR changes by purchasers of Meteor MVCT.

outcome, i.e. there is insufficient CBP to prevent Meteor acting in the Relevant MVCT Market independently of competitors, customers and consumers.

Assessment as to whether TMI has experienced or could experience effective CBP

6.176 Given TMI's position in the market ComReg does not consider it likely that effective CBP has been or could be exercised upon TMI. ComReg considers the position below.

Response to Statutory Information Requests and meetings

6.177 TMI, in response to a statutory information request and subsequent meetings referred to previously, indicated that a 2007 H3GI dispute[373] concerning the MTRs proposed by TMI at its service launch was evidence that CBP does exist. However, TMI also suggested that given it was no longer in a start up situation, it was uncertain whether the same situation would pertain today. It also suggested that were it to seek to increase its MTR (above existing rates) then it would most likely give rise to a dispute and would require a regulatory determination by ComReg. More recently, TMI has also suggested that an MTR reduction in February 2012[374] was partially in response to pressure from some MSPs to reduce its rates.

Size of the buyer and its relative importance to the seller

6.178 TMI currently has [✂[redacted]] MVCT supply agreements with other undertakings, with the two largest buyers of MVCT from TMI being O2 and Eircom. TMI also has interconnection agreements with [✂[redacted]] FSPs for the purchase of fixed termination and other services.

6.179 ComReg has considered the share of supplied[375] MVCT that is purchased by individual Service Providers directly and indirectly interconnected with TMI and trends over time. As at H1 2011, O2 accounted for [✂[redacted]%] of the share of TMI-provided MVCT, having fallen slightly from [✂[redacted]%] in H2 2007. In absolute terms, over the period H1 2009 to H1 2011 ("TMI Relevant Time Period"), O2's own absolute purchases of MVCT from TMI have increased by [✂[redacted]%].

6.180 Over the same period, Eircom accounted for [✂[redacted]%] of the total share of TMI-provided MVCT, having increased from a share of [✂[redacted]%] in H1 2009[376].

[373] See paragraphs 6.22(c), 6.29 and 6.65 for earlier discussion on the dispute, including ComReg dispute determination ComReg Document 08/98, December 2009.

[374] See Table 11. TMI reduced its 13.8 cent to 12.55 cent, representing a reduction of approximately 9%.

[375] Some of the figures in the initial periods below must be interpreted with some caution given the low volumes of TMI provided termination in its initial retail launch period (TMI's retail launch occurred in October 2007).

[376] While TMI signed an interconnect agreement with Eircom in Q4 2007, interconnect traffic exchange only commenced in H1 2009.

In absolute terms, Eircom's own purchases of MVCT from TMI have increased by [✂[redacted]%] in the TMI Relevant Time Period.

6.181 Over the TMI Relevant Time Period, the volume of TMI termination purchased by both O2 and Eircom has increased (and is likely related to the increase in TMI's subscriber base over this period) and they are sizable (in subscriber terms and in terms of the volume of MVCT minutes purchased) and important buyers of MVCT from TMI. TMI also purchases termination from O2 and Eircom[377]. In view of the above, the commercial incentives of TMI and O2, and TMI and Eircom, to interconnect with each other are likely to be reasonably strong and have increased over time. Although, ComReg notes the strength of these commercial incentives would be somewhat lower in comparison to larger MSPs given the relative scale of TMI's subscriber base[378]. It is unlikely, in the presence of existing interconnection arrangements, that either O2 or Eircom could currently credibly refuse to handover their traffic to TMI[379] (as it would result in their respective subscribers not being able to make calls to TMI subscribers). Absent regulation, on a forward looking basis, it is ComReg's view that these commercial incentives to interconnect are also likely to persist to a certain degree and, as TMI's subscriber base grows further, may increase.

6.182 ComReg has also considered the size of each of O2's and Eircom's subscriber bases[380] relative to TMI's[381] subscriber base and all three are substantial. However, TMI's subscriber base is lower in comparison to that of O2 and Eircom. Nevertheless, ComReg considers that given the respective parties' subscriber numbers, they will consider it somewhat important to interconnect with each[382] other owing to the fact that consumers expect to be able to call subscribers of other Service Providers and the consequential need for Service Providers to ensure as wide as possible interconnection with other Service Providers.

6.183 However, ComReg also acknowledges that prior to and shortly after TMI's entry to the market in 2007, it is possible that the bargaining dynamic may have been influenced by TMI's then non-existent/low subscriber base, with the bargaining dynamic potentially being marginally balanced in favour of Eircom and O2. TMI may have been under some pressure to ensure interconnection with these parties, as a successful launch of its retail services could have been predicated to a certain extent on the ability of its customers to make calls to and receive

[377] In H1 2011 TMI purchased an estimated [✂[redacted]] million minutes of termination on Eircom's network (most of this was via indirect interconnection through a through a third party transit provider) and [✂[redacted]] million minutes of termination on O2's network.

[378] See discussion at paragraph 6.182 below.

[379] This does not necessarily imply that Eircom and O2 would be willing to purchase MVCT from TMI at any MTR level/price.

[380] See footnotes 340 and 341.

[381] As at Q4 2011 TMI had [✂[redacted]] mobile telephony subscribers. TMI first launched its retail services in November 2007 so had no subscribers before this.

[382] Although not necessarily at any level of MTR.

calls from subscribers of other Service Providers. However, was this to have been the case, it was not reflected in any material degree of constraint being imposed on the level of MTRs charged by TMI.

6.184 Overall, for TMI, the size of Eircom and O2 as buyers of MVCT and their relative importance to TMI are not likely, in themselves, to be distinguishing factors which would materially affect the relative bargaining power between the parties in interconnection negotiations.

Price sensitivity of the buyer

6.185 As noted previously, in general, both O2 and Eircom are likely to be price sensitive buyers of MVCT, with the degree of such sensitivity in this case potentially being influenced by the volume of net traffic flows between these individual Service Providers and TMI, as well as the relative level of termination rates charged to each other.

6.186 The growth in the purchase of MVCT by the parties has already been discussed in paragraphs 6.179 and 6.180 above. Over the TMI Relevant Time Period, ComReg has also observed that traffic flows were close to being symmetric, with TMI purchasing [✂ [redacted]%] more minutes of MVCT from O2 than vice versa. ComReg has also examined the position between TMI and Eircom and has observed that there was a considerable asymmetry of traffic flows, with TMI purchasing [✂ [redacted]%] fewer termination minutes from Eircom than vice versa.

6.187 Eircom is also likely to be a more price sensitive buyer (than O2) of TMI's MVCT, in particular, given the significant asymmetry in traffic flows between the parties, the asymmetry[383] between respective termination rates charged to each other and because TMI's MTRs likely represent a significant input cost to Eircom's fixed to mobile (to TMI subscribers) retail call charges.[384]

6.188 There are also currently substantial differences between TMI's and O2's MTRs[385], with TMI's weighted average MTR currently 212% greater than that of O2. Given the differences in MTRs (and TMI's MTR will likely represent a significant input cost to O2's retail call prices) and the near symmetric traffic flows between the parties, it is ComReg's view that O2 is and will likely be a price sensitive buyer of TMI MVCT.

6.189 Both O2's and Eircom's price sensitivities will also likely be heightened based on the ability of each to compare differences between TMI's MTRs and the MTRs they pay to other MSPs which, in all but one case, are substantially lower. To the

[383] As noted in Table 11, over the Relevant Time Period, TMI's weighted average MTR has ranged between 14.3 and 12.55 cent, whereas over the same period Eircom's peak/off-peak and weekend FTRs have never been above 0.319/0.174/0.155 cent respectively.

[384] This may explain to some degree why Eircom's retail charges for calls to TMI (and H3GI) subscribers (29.71c peak, 21.15c off-peak, 17.16c weekend) are higher than its retail charges for calls to other MSPs' subscribers (21.33c peak, 15.14c off-peak, 10.19c weekend).

[385] See Table 11 for MTRs and Table 15 for percentage differences between TMI's MTRs and the MTRs charged by other MSPS.

extent that differences between TMI's MTRs and those charged by other MSPs continue grow in the future, then it is likely that this would further perpetuate Eircom's and O2's price sensitivities.

6.190 Overall, ComReg considers that both Eircom and O2 are likely to be price sensitive buyers of TMI MVCT and, having regard to paragraph 6.185 to 6.187 above, when considered alongside other factors such as the commercially driven incentives to interconnect, such price sensitivities in themselves are not likely to materially rebalance the relative bargaining dynamic between the parties in interconnection negotiations.

Evidence of bargaining power from interconnection negotiations

6.191 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between TMI and O2 on the one hand, and TMI and Eircom on the other.

6.192 However, as noted in paragraph 6.177, TMI indicated to ComReg that a 2007 H3GI dispute concerning the MTRs proposed by TMI at its service launch was evidence that CBP does exist. As previously highlighted[386], ComReg issued a determination[387] with respect to this H3GI-TMI dispute ('TMI Dispute Determination') in December 2009. However, TMI also suggested that given it was no longer in a start up situation, it was uncertain whether the same situation would pertain today. Given TMI has referred specifically to the dispute as evidence of CBP, ComReg also considers this below, before then considering whether O2 and Vodafone have exercised any effective CBP. We also consider whether any other parties have done so based on evidence available.

6.193 The 2007 H3GI dispute essentially related to the level of TMI's proposed MTRs for the termination of incoming calls from H3GI subscribers, along with an alleged failure to negotiate interconnection. In view of TMI's proposed MTRs, H3GI was refusing to interconnect directly with TMI and hand over its subscribers' calls to TMI subscribers. It should be recalled that TMI was not then (and is not currently) designated with SMP. Given ComReg's published TMI Dispute Determination sets out a detailed analysis of the issues, it is not intended to revisit in detail in this Consultation Paper all of the matters raised in the 2007 H3GI dispute. However, given the issues raised are informative to the assessment as to whether TMI has experienced effective CBP, ComReg has reviewed the evidence submitted by H3GI and TMI in the course of the dispute resolution process, including evidence in relation to the negotiations between H3GI and TMI concerning the establishment of interconnection.

[386] See paragraphs 6.22(c), 6.29 and 6.65, for earlier discussion on the H3GI dispute.

[387] See ComReg dispute determination ComReg Document 08/98, December 2009 (the 'TMI Dispute Determination').

6.194 Prior to ComReg's acceptance[388] of the 2007 H3GI dispute, both the parties engaged with each other in an effort to reach commercial agreement regarding interconnection, including in relation to TMI's MTRs. A chronology of the correspondence and communications between the parties has been summarised in the TMI Dispute Determination[389].

6.195 ComReg has also reviewed other documentation submitted[390] by TMI in the course of the dispute resolution process, including meeting minutes of the TMI Board and a TMI steering committee at which matters concerning TMI's MTRs were discussed.

C.1 Based on the above, it is ComReg's view that the following represents the intentions/motivations of the respective parties in their interconnection negotiations.

- [✂ [redacted]
- [redacted]

[redacted]

[redacted]

[redacted]

[388] The H3GI dispute was submitted in 2007 but was accepted by ComReg in January 2008 following the clarification of a number of issues.

[389] See paragraphs 13 to 19 of the TMI Dispute Determination.

[390] Supplied by TMI to ComReg in February 2008.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

- [redacted] ✂]

6.196 Based on the above, ComReg's view is that H3GI is a well informed and price sensitive buyer of MVCT and that, in its interconnection discussions with TMI, it was clearly trying to negotiate a lower MTR. In so doing, at that time H3GI sought to bring pressure to bear on the situation by threatening and ultimately refusing to hand over its subscriber traffic to TMI and sought to have the matter resolved via dispute resolution with ComReg.

6.197 ComReg is also of the view that TMI considered it important to interconnect with H3GI, however, perhaps less so than for other larger Service Providers (in subscriber volume terms) such as Eircom. In the negotiations, TMI was aware that H3GI threatened to refuse to interconnect/purchase TMI MVCT and that it could do so if TMI maintained its position on the level of its MTRs. Prior to ComReg's intervention, TMI ultimately took the decision not to lower its MTRs.

6.198 It is also clear that both parties also explored alternative pricing arrangements but there was failure to reach agreement on these.

6.199 As noted in paragraphs 6.22(c), 6.29 and 6.65, shortly prior to the publication of ComReg's TMI Dispute Determination[391], in November 2009, TMI voluntarily proposed to H3GI that it would amend its MTRs with effect from 1 December 2010 and subsequently reduced its weighted average MTRs from 14.3 cent to 13.8 cent[392].

6.200 While H3GI sought to exercise CBP to force TMI to reduce its MTRs, having regard to the outcomes described above, ComReg's view is that this was not effective in that it did not, absent regulation, sufficiently constrain TMI's ability to set its MTRs above the competitive level. Indeed, TMI's MTRs have, until relatively recently, remained at the same level since December 2009, a point to which we return in paragraph 6.203 (and elsewhere) below.

6.201 ComReg has also examined whether there have been any other negotiations with TMI regarding its MTRs and/or interconnect arrangements. In July 2011 ComReg sought details (including copies of correspondence) from TMI of any negotiations between TMI and other Service Providers concerning the level of its MTRs. Based on the information provided by TMI the following facts were evident:

- Eircom wrote to TMI in January 2011 requesting TMI to lower its MTRs in line with the MTR reductions that were being made by other MSPs.
- In June 2011 Vodafone wrote to TMI also requesting a reduction in its MTRs and indicated that given current market conditions, due to both the absolute and relative levels of TMI's MTR pricing, it was no longer economically feasible for Vodafone to continue to purchase MVCT from TMI at the then current price levels. Vodafone indicated that it was considering its position and invited TMI to propose alternative MTR pricing for consideration and which was in line with MTR pricing generally.

6.202 TMI subsequently responded[393] to both the above requests and in each case TMI declined to grant the requested reduction. In examining the documentation in

[391] ComReg issued the TMI Dispute Determination on 18 December 2009.

[392] See Table 11 for specific peak, off-peak and weekend MTRs.

[393] TMI responded to Eircom in January 2011 and to Vodafone in July 2011.

paragraph 6.201 above, TMI's apparent rationale for refusing to lower its MTRs can be summarised as follows:

(a) TMI had already reduced its MTRs since launch as market conditions had required it.

(b) TMI believed its MTRs were reasonable when compared to other MTRs in the market.

(c) TMI is participating in ComReg's review of the MVCT market (now the subject of this Consultation Paper) and that it considered it reasonable to await the outcome of this before making further decisions in relation to the level of its MTRs.

6.203 Subsequently (and as noted in paragraph 6.22(c)), in December 2011 TMI notified service providers that it intended to reduce its MTRs by approximately 10% with effect from 1 February 2012. TMI made ComReg aware of its intention to make MTR reductions in December 2011[394] and, on foot of this, ComReg sought from TMI a copy of any TMI Board of Directors' meeting minutes and associated papers which dealt with this consideration of TMI's MTR reductions. These were duly provided by TMI with the details set out below.

- [✂ [redacted]
- [redacted]].

6.204 In examining the documentation identified in paragraph 6.203 above, TMI's apparent rationale for its December 2011 MTR reductions (to take effect in February 2012) can be summarised as follows:

(a) Pressure from Eircom and Vodafone to reduce its MTRs.

(b) ComReg's market analysis process and the potential for regulatory intervention on foot of this or through disputes being raised by other Service Providers.

(c) Maintaining a reasonable MTR in light of the two points above, with TMI seeking to reduce its MTRs in line with MTR movements by other MSPs and, in doing so maintaining the same relative MTR differential.

6.205 ComReg also met[395] with TMI (at TMI's request) to discuss the intentions behind its MTR reductions (including future plans), with this largely being as outlined in paragraph 6.204 above.

[394] On foot of email queries from ComReg to TMI for an update as to whether there had been any further negotiations between TMI and Service Providers regarding its MTRs, TMI indicated at that time that some MTR changes were expected in the coming weeks. TMI subsequently made changes to its MTRs as noted in the discussion below.

[395] A meeting took place on 11 January 2012.

6.206 The documentation in paragraph 6.201 clearly gives an insight into Vodafone's and Eircom's position on TMI's MTRs, namely, they considered them to be too high, particularly in comparison to MTRs charged by other MSPs.

6.207 Similarly, the intent behind the TMI MTR negotiating position in dealing with Eircom's and Vodafone's requests for MTR reductions is also evident .TMI clearly initially refused to reduce its MTRs on foot of the specific requests from Eircom and Vodafone. Based on the actual bargaining dynamic between TMI and Eircom and TMI and Vodafone, as well as the recent MTR reduction announced in December 2011, ComReg's would note the following:

(a) Prior to the recent MTR reduction announced in December 2011, the only time that TMI reduced its MTRs was in the course of ComReg's consideration of the H3GI dispute, with its weighted average MTR then being reduced by 3.5%.[396]

(b) In H1 2011 TMI's MTRs were between 49% and 157% higher than other MSP's MTRs. Notwithstanding the reductions announced in December 2011, this gap has further increased to between 60% and 212%, the result of which means that TMI's MTRs are significantly above those of other MSPs.

(c) In August 2011, after ComReg became aware of TMI's responses to Eircom and Vodafone, it informed TMI that ComReg's analysis of the MVCT market should not prevent TMI from negotiating with any party regarding its MTRs[397].

(d) The MTR reductions announced in December 2011 appear to have been largely driven by concerns regarding potential regulatory intervention rather than resulting primarily from direct pressure from Eircom and Vodafone.

(e) Even in the presence of any such regulatory pressure, over the TMI Relevant Time Period, TMI has (given it does not have SMP) had a wide margin of discretion to set its MTRs that were lower than those actually charged or indeed to reduce them over a shorter timeframe. However, this was not done.

6.208 Having regard to the actual negotiations above, it is ComReg's view that the strength of the buyer power exerted by Eircom and by Vodafone on TMI (ComReg accepts some CBP was exerted) has not been particularly effective in that, notwithstanding the MTR reductions by TMI to date, such buyer power has not constrained TMI from setting its MTRs above the level associated with a competitive market outcome.

6.209 ComReg has also reviewed the position with respect to O2 given it is one of the largest purchasers of MVCT from TMI. The evidence available does not suggest to ComReg that O2 sought to force down TMI's MTRs through the exercise of contractual provisions in interconnection agreements governing amendments of MTRs or indeed to threaten to cease existing interconnection arrangements. ComReg also notes that TMI is a 50:50 joint venture between O2 and Tesco

[396] See paragraph 6.199 above.

[397] The TMI Dispute Determination.

Ireland, and ComReg considers that such a relationship would (and would continue to) condition the bargaining dynamic between these parties, such that it is not likely to be a material issue that would negatively impact upon interconnection negotiations, i.e. there is some incentive for O2 to ensure the commercial success of TMI and it would be unlikely that it would undermine this through refusals to interconnect or delaying interconnection or bargaining to achieve lower MTRs.

6.210 On a forward looking basis, given the scale (in subscriber and termination purchase/sale volume terms) of TMI, Eircom, O2, H3GI and Vodafone, it will likely continue to be sufficiently important for the parties to exchange terminating traffic, such that it is unlikely to materially rebalance the bargaining dynamic between TMI and the other parties. TMI also has long established interconnection agreements, having interconnected with Eircom and O2 in 2007. TMI does not have direct interconnection in place with H3GI or Vodafone, with TMI and Vodafone, and TMI and H3GI, purchasing termination from each other through third party transit arrangements.

6.211 It would likely be difficult, on technical grounds, for any of the above parties to now refuse to handover traffic to TMI subscribers or to refuse to terminate TMI's subscriber traffic on their networks. Eircom by virtue of its SMP obligations in the fixed termination market would be unable to refuse to allow TMI to terminate its traffic on Eircom's network and notwithstanding TMI's direct refusal to Eircom to negotiate its MTRs, no such threat from Eircom was made. Similarly, in spite of TMI's refusal to lower its MTRs, Vodafone also did not actually decline to hand its traffic to TMI, although it appears to be evident from its correspondence that it was contemplating a review of the matter.

6.212 Were any party to refuse to purchase MVCT from TMI then the matter would, absent SMP, fall to be addressed initially through ComReg's complaint/dispute resolution process[398] or through possible compliance investigation in relation to any relevant obligations.

6.213 In light of the above and, in the context of the review of actual interconnection negotiations with TMI on its MTRs, insufficient evidence has been presented to ComReg to suggests that the exercise of CBP has sufficiently constrained or would sufficiently constrain TMI's ability to set its MTRs above the level consistent with that which would occur in a competitive outcome.

Preliminary conclusion on effectiveness of CBP on TMI's market power

6.214 Having regard to the discussion in paragraphs 6.176 to 6.213 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert sufficient CBP such that, absent regulation, it would sufficiently constrain TMI's ability to set its MTRs above the level consistent with a competitive outcome, i.e.

[398] See paragraphs 6.57 to 6.66 regarding the role of dispute resolution and consideration of it in assessing CBP. Each case would potentially fall to be examined in its own right and on its merits.

there is insufficient CBP to prevent TMI acting in the Relevant MVCT Market independently of competitors, customers and consumers.

Assessment as to whether Lycamobile has experienced or could experience effective CBP

6.215 As noted in paragraph 3.5, Lycamobile has not yet entered the retail market but is expected to do so in [✂[redacted]], which will be within the timeframe to be covered by this forward looking analysis of the Relevant MVCT Market(s). Nevertheless, while Lycamobile has not commenced the exchange of traffic with other Service Providers, its wholesale interconnection arrangements to facilitate its retail entry are at an advanced stage. Having regard to the arrangements to date and for the reasons outlined below, ComReg's assessment is that Lycamobile has not experienced effective CBP.

Response to Statutory Information Requests and meetings

6.216 Lycamobile, in response to a statutory information request and subsequent discussions indicated that it has experienced CBP in its MTR negotiations with Vodafone, with the result that its initially proposed MTRs were not accepted. As a consequence, interim MTRs were agreed with Vodafone[399] that were below the level initially proposed by Lycamobile, with agreement that such interim MTRs would apply pending the outcome of the analysis by ComReg of the Relevant MVCT Markets.

Size of the buyer and its relative importance to the seller

6.217 Lycamobile is directly interconnected with O2 only (which hosts Lycamobile's MVNO arrangement). O2 also provides transit services to Lycamobile to facilitate the routing of outbound traffic from Lycamobile to other Service Providers and inbound traffic from other Service Providers to Lycamobile[400]. Lycamobile has indicated that once its traffic volumes justify it, it intends to interconnect with other Service Providers directly.

6.218 As Lycamobile is not yet operational, ComReg does not yet have any MVCT volume figures upon which to base an assessment of the largest buyers of Lycamobile MVCT or an assessment of the largest sellers of termination to Lycamobile. However, it is reasonable to assume that Lycamobile may wish to have direct interconnection with Eircom given its large subscriber position in the fixed retail market and its position as provider of certain key wholesale services to other Service Providers. In addition, it is also reasonable to assume that Lycamobile would also wish to have interconnection with Vodafone given its size and subscriber base. Given Lycamobile has a commercial relationship with O2

[399] See Table 11 for Lycamobile specific peak, off-peak and weekend MTRs. As discussed in paragraph 6.31, Lycamobile has agreed lower MTRs with Vodafone only, with the published MTRs being charged to all other Service Providers.

[400] O2 provides Lycamobile with outbound transit services associated with Lycamobile's purchase of termination from other Service Providers, such as [✂[redacted]].

for its MVNO arrangements, it is also reasonable to assume that direct interconnection with O2 was desirable, although the incentives[401] of the parties in this regard are likely to have been broadly similar in view of the MVNO arrangement itself. As a consequence, it is ComReg's view that O2 would be unlikely to seek to exert effective CBP on Lycamobile given the existence of the MVNO arrangement.

6.219 While Eircom and Vodafone[402] both have substantial subscriber bases[403], Lycamobile, as a soon to be new retail entrant, has no subscribers as of yet. In view of this, it is possible that the MTR bargaining dynamic between Lycamobile and Eircom, and between Lycamobile and Vodafone, could have been somewhat more weighted in Eircom's and Vodafone's favour, given Lycamobile would likely be under some pressure to ensure its subscribers could make calls to and receive calls from Eircom and Vodafone subscribers, as this would likely be an important element in achieving a successful retail launch. Any threats by Eircom[404] or Vodafone to refuse to handover their traffic to Lycamobile (or accept calls from Lycamobile subscribers) as part of the MTR negotiation process could therefore be somewhat credible when set against the likely Lycamobile need to achieve a successful retail launch. However, the asymmetry in the bargaining dynamic would likely diminish somewhat over time as Lycamobile's subscriber base grows and/or once it has launched its retail services (with or without interconnection with Eircom or Vodafone).

6.220 An impacting factor here would also likely be the recognition by the parties that the matter could potentially be referred to ComReg for a determination through its dispute resolution powers with, for example, ComReg's approach in resolving similar disputes[405] and the period taken for any such determinations possibly influencing the parties' negotiation strategies.

6.221 There has been no evidence or suggestion presented to ComReg that Eircom, in negotiations, threatened to refuse to hand over its subscriber traffic to

[401] Given O2 has entered into a wholesale MVNO arrangement with Lycamobile, the incentive for O2 to support interconnection and other wholesale arrangements is likely to be sufficiently strong such that it would be unlikely that it would undermine this through refusals to interconnect or by delaying interconnection. As a consequence the bargaining dynamic between O2 and Lycamobile is unlikely to be materially imbalanced.

[402] ComReg has chosen to examine whether either Eircom or Vodafone has or is likely to exercise effective CBP given that they are likely to be the most significant purchasers of MVCT from Lycamobile (based on the position with respect to their purchases of MVCT from other MSPs). While O2 would also likely be a significant purchaser of MVCT from Lycamobile, given the commercial relationship between these parties in the context of the MVNO arrangement, it is not considered likely that O2 would have incentives to exercise effective CBP.

[403] See footnotes 340 and 341.

[404] We have already noted previously that Eircom could not refuse accept inbound termination traffic given it has SMP in the fixed termination market.

[405] The extent, if any, that similar disputes could be relevant to future issues would have regard to the prevailing legislative and market circumstances, as well as the particulars of each case.

Lycamobile, in particular, concerning the level of the MTR being charged by Lycamobile (we return later to a review of actual interconnection negotiations). However, as noted above, Lycamobile submits that Vodafone did exert sufficient pressure to require Lycamobile to lower its MTRs below those originally proposed in negotiations (this is considered further in paragraphs 6.228 to 6.245 below).

6.222 Overall, for Lycamobile, the size of Eircom and Vodafone and their relative importance to Lycamobile (particularly in the initial launch period) may be distinguishing factors which could affect the relative bargaining power between the parties in interconnection negotiations. We return to the materiality of this as evidenced by the actual negotiations in paragraphs 6.228 to 6.245 below.

Price sensitivity of the buyer

6.223 As noted previously, in general, both Eircom and Vodafone are likely to be price sensitive buyers of MVCT, with the degree of such sensitivity potentially influenced by the volume of net traffic flows exchanged between these individual Service Providers, as well as the relative level of termination rates charged to each other. In the absence of any actual traffic exchange with Lycamobile it is not possible to examine these aspects in detail. However, it is reasonable to assume that Lycamobile, as a new entrant will have few subscribers on or after its initial retail launch and, therefore, would more likely than not have net traffic outflows to each of Eircom and Vodafone[406].

6.224 Apart from the above, we have already noted in Table 16 and paragraph 6.31 that the blended average MTRs to be charged by Lycamobile to Eircom currently range between 76% and 243% higher than the blended average MTRs charged by other MSPs to Eircom. Vodafone has negotiated lower MTRs with Lycamobile which currently range between [✂[redacted]%] and [✂[redacted]%] higher than other SMP MSPs' (i.e. O2, Meteor and H3GI) MTRs, but are [✂[redacted]%] lower than TMI's MTRs.

6.225 Having regard to the likely asymmetry in traffic flows between Lycamobile and Eircom, and between Lycamobile and Vodafone, the asymmetry between the respective termination rates charged to each other and because Lycamobile's MTRs likely represent a significant input cost to Eircom's and Vodafone's retail call charges to Lycamobile subscribers, it is ComReg's view that Eircom and Vodafone will likely be price sensitive buyers of Lycamobile MVCT.

6.226 Both Eircom's and Vodafone's price sensitivities will also likely be heightened based on their individual ability to compare differences between Lycamobile's MTRs and the MTRs paid to other MSPs which, in all but one case, are substantially lower. To the extent that differences between Lycamobile's MTRs and those charged by other MSPs continue to grow in the future, then it is likely that this would further heighten Eircom's and Vodafone's price sensitivities and

[406] This is because the smaller the number of Lycamobile subscribers, the greater the probability that such subscribers will be calling subscribers of another Service Provider.

between H1 2011 and now, we have already observed an increase in such differences.

6.227 Overall, ComReg considers that both Eircom and Vodafone are likely to be price sensitive buyers of Lycamobile MVCT and, having regard to paragraph 6.223 to 6.226 above, when considered alongside other factors such as the likely asymmetry in traffic flows and Lycamobile's new entrant position, such price sensitivity may be a factor that could potentially impact the relative bargaining dynamic between the parties in interconnection negotiations.

Evidence of bargaining power from interconnection negotiations

6.228 ComReg has, based on information available, examined the actual relative bargaining positions in interconnection negotiations between Lycamobile and Eircom on the one hand, and Lycamobile and Vodafone on the other.

6.229 Lycamobile has not suggested or presented any evidence to suggest that Eircom sought to exercise any effective CBP[407]. As noted in paragraph 6.216, Lycamobile indicated that it had experienced CBP in its MTR negotiations with Vodafone with the result that its initially proposed MTRs were not accepted. ComReg, therefore, considers the evidence available with respect to Lycamobile's negotiations with Vodafone below and whether effective CBP was exercised.

6.230 In July 2011, ComReg issued a series of statutory information requests to each of Vodafone, O2 and Lycamobile requesting specific information and copies of correspondence both between the parties and internally within each party concerning MTR negotiations. Details of such information of relevance to ComReg's assessment of CBP are set out below.

6.231 In May 2011, Lycamobile wrote[408] an introductory letter to a number of Service Providers (including Vodafone)

- to announce Lycamobile's intentions to launch in the Irish market in July 2011.
- to request the relevant Service Providers to open Lycamobile's number ranges on their networks in order to facilitate interoperability of calls (and SMS where appropriate) to/from Lycamobile subscribers – certain details to facilitate this were provided.
- to indicate that it was not currently establishing direct interconnection (although was open to doing so) and was using O2 as a transit provider. As a consequence, where direct interconnection existed between the Service Provider and O2 all calls would be routed through O2 to Lycamobile. Where

[407] A review of the evidence, including a series of emailed communications between O2 (acting as a transit provider for Lycamobile) and Eircom in the period 20 June 2011 to 30 June 2011 shows that an amended interconnection agreement was agreed and signed between the O2 and Eircom concerning Lycamobile's MTRs. Eircom subsequently opened up Lycamobile's number ranges on its network in August 2011.

[408] Letter from Lycamobile dated 24 May 2011.

no direct interconnection existed between the Service Provider and O2, calls were to be routed to Eircom who would route them to O2 which, in turn would hand the traffic to Lycamobile.

- to announce Lycamobile's proposed flat rate MTR of 13.79 cent

6.232 On foot of the above introductory letter there followed a significant amount of correspondence between Lycamobile and other Service Providers and between O2 (acting on behalf of Lycamobile given its transit provider role) and other Service Providers. Much of this correspondence is uncontroversial[409] in the context of the assessment of CBP within this Consultation Paper. However, in order to help assess the actual bargaining dynamic between Lycamobile and other Service Providers in relation to Lycamobile's MTRs, ComReg has reviewed several communications, in particular

- communications between Lycamobile and O2 (acting on behalf of Lycamobile);
- communications between Lycamobile and Vodafone; and
- communications between Lycamobile and other Service Providers.

6.233 Based on the above, it is ComReg's view that the following summarises the key aspects of adopted positions in the interconnection negotiations between O2 (acting as a transit agent for Lycamobile) and Vodafone, and between Lycamobile and Vodafone.

(a) [✂ [redacted]

[redacted]

(b) [redacted]

[409] For example, much of the correspondence with Service Providers related to the project/process management relating to the opening up of Lycamobile number ranges on other Service Providers' networks and the carrying out of associated interoperability testing.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

(c) [redacted] ✂]

6.234 As noted above, in the course of the negotiations between Vodafone and Lycamobile regarding its MTRs, in September 2011 Lycamobile submitted a complaint to ComReg. This complaint was ultimately closed[410] by ComReg once the interim agreement on MTRs was reached.

[410] See details at http://www.comreg.ie/_fileupload/File/375_Case%20Summary.pdf.

6.235 ComReg has also reviewed documentation provided in response to statutory information requests in relation to internal communications within each of Lycamobile, O2 and Vodafone concerning Lycamobile's MTR.

6.236 The main internal communications within Lycamobile in relation to its MTR negotiations with Vodafone can be summarised as follows:

- [✂ [redacted]

[redacted]

- [redacted] ✂]

6.237 The main internal communications within Vodafone in relation to its MTR negotiations with Lycamobile can be summarised as follows:

- [✂ [redacted]

[redacted]

[redacted]

- [redacted]✂]

6.238 Having regard to paragraphs 6.231 to 6.237 it is ComReg's view that the motivation of the parties in the context of the bargaining dynamic can be characterised as follows:

- Vodafone was refusing to purchase MVCT from Lycamobile on the basis that it considered Lycamobile's MTRs to be uneconomic, having regard to the current level and likely future trends in MTRs charged by other MSPs in the market. Vodafone was also concerned at the impact Lycamobile's MTRs might have on competition in the retail market and at the wholesale level amongst MSPs. As a consequence, it sought to bring pressure to bear on Lycamobile to agree to lower its MTRs to [✂[redacted]].
- Lycamobile, as it had not been designated with SMP, considered it could set its MTRs at a level of its choosing. Lycamobile considered the TMI Dispute Determination to be a basis upon which it could, absent regulation, set its MTRs and, in proposing its actual MTRs on the basis of its interpretation of this, considered it would limit the possibility of regulatory intervention (either from ComReg directly or on foot of a dispute).
- In the negotiations, a number of alternative MTR pricing proposals were discussed between Vodafone and Lycamobile with the ultimate MTRs being agreed with Vodafone on an interim basis.
- All other Service Providers, apart from Vodafone, have not disagreed with Lycamobile's initially proposed MTR levels and the evidence provided does not suggest any substantive attempts by any of these other Service Providers to negotiate lower Lycamobile MTRs[411].
- Both Vodafone and Lycamobile were conscious of ComReg's analysis of the MVCT market (now set out in this Consultation Paper), with the parties

[411] TMI did raise a query regarding the basis for the MTRs and this was duly addressed by Lycamobile.

ultimately agreeing that the interim MTR agreement would be subject to the outcome of this market analysis.

- Both Vodafone and Lycamobile were each aware of the possibility of the potential for the disagreement to be escalated to ComReg for a determination, with Lycamobile ultimately submitting a compliant which was subsequently withdrawn once the interim agreement was reached.
- Lycamobile considered it important for its retail launch to have Vodafone purchase MVCT from it, although the absence of this would not delay its retail launch.

6.239 Based on the above, ComReg's view is that Vodafone, being a well informed and price sensitive buyer of MVCT, was in its interconnection discussions with Lycamobile clearly trying to negotiate a lower MTR. In so doing, Vodafone sought to bring pressure to bear on the situation by threatening not to hand over its subscriber traffic to Lycamobile. Such threats by Vodafone were, therefore, somewhat credible, although the possibility of regulatory intervention by ComReg on non-SMP regulatory obligation grounds was contemplated by the parties. Depending on the individual party's view of the timeliness of any such regulatory intervention[412] as set against the timeframe for Lycamobile's retail launch, it is possible that the credibility of Vodafone's threat to refuse to purchase Lycamobile MVCT could be somewhat undermined.

6.240 ComReg is also of the view that Lycamobile considered it important for Vodafone to purchase its MVCT, however, with both parties aware of the potential for dispute resolution and potential SMP regulation. It is also clear that the parties sought to negotiate and, in doing so, explored alternative pricing arrangements. Ultimately, there was failure to reach agreement on these.

6.241 ComReg also held a number of discussions[413] with Lycamobile regarding its analysis of the MVCT market, including its approach in setting its MTR. In so doing, ComReg made Lycamobile aware that it was not in any way approving Lycamobile's proposed MTRs and that the TMI Determination was not necessarily a basis upon which Lycamobile should seek to set its MTRs. In particular, ComReg noted that the TMI Dispute Determination pertained to the specific circumstances of the parties to that dispute and the then prevailing circumstances. ComReg also noted that MTRs of MSPs had declined significantly since then, save for TMI (who has not to date been designated with SMP).

6.242 Based on the above, it is ComReg's preliminary view that Vodafone clearly has exercised some degree of CBP, the effect of which has been to reduce

[412] Were any party to refuse to refuse to purchase MVCT from Lycamobile then the matter would, absent SMP, fall to be addressed initially through ComReg's complaint/dispute resolution/compliance process. See paragraphs 6.57 to 6.66 regarding the role of dispute resolution and consideration of it in assessing CBP.

[413] For example, ComReg held conference calls with Lycamobile on 4 May 2011 and 14 July 2011.

Lycamobile's initially proposed MTRs to [✂[redacted] cent], representing a reduction of [✂[redacted]%]. However, all other buyers of MVCT from Lycamobile will pay its initial MTRs of 13.79 cent. However, it is ComReg's preliminary view that the degree of CBP exercised by Vodafone alone is not effective in that, absent regulation, it did not, nor is it likely to, sufficiently constrain Lycamobile's ability to set its MTRs above the level consistent with a competitive market outcome. Indeed, as noted in Table 16 and paragraph 6.31 the MTRs being charged by Lycamobile to Vodafone still remain between [✂[redacted]%] and [✂[redacted]%] higher than SMP MSPs' (i.e. Vodafone, O2, Meteor and H3GI) MTRs and [✂[redacted]%] lower than TMI's (who has not to date been designated with SMP) MTRs. Lycamobile's 13.79 cent MTR charged to all other parties is between 76% and 243% higher than the blended average MTRs of MSPs designated with SMP and 10% above those of TMI, who has not to date been designated with SMP. These differences (including the difference between the charges to be levied on Vodafone on the one hand, and other buyers on the other) suggest to ComReg that Lycamobile has the ability to set its rates above a competitive market outcome level and that this is likely to continue to be the case going forward.

6.243 Having regard to the actual negotiations outlined in the paragraphs above, it is ComReg's view that the strength of the buyer power exerted by Eircom and by Vodafone (ComReg accepts some CBP was exerted by Vodafone) has not been effective in that, notwithstanding the MTR reductions by Lycamobile for Vodafone, CBP has not sufficiently constrained, nor is it likely to sufficiently constrain, Lycamobile from setting its MTRs above a competitive market outcome level.

6.244 On a forward looking basis, as Lycamobile's subscriber base grows on foot of its retail launch, it is ComReg's view that it will become increasingly important for the parties to exchange terminating traffic, such that any imbalance in the bargaining dynamic between Vodafone and Lycamobile (or indeed between Lycamobile and other MVCT buyers) will decline.

6.245 In light of the above and, in the context of the review of actual interconnection negotiations with Lycamobile in relation to its MTRs, insufficient evidence has been presented to ComReg to suggest that the exercise of sufficient CBP has constrained or would sufficiently constrain Lycamobile's ability to set its MTRs above the level equivalent to that which would occur in a competitive market outcome.

Preliminary conclusion on effectiveness of CBP on Lycamobile's market power

6.246 Having regard to the discussion in paragraphs 6.214 to 6.245 above, ComReg's preliminary view is that no undertaking is likely to be in a position to exert sufficient CBP such that, absent regulation, it would sufficiently constrain Lycamobile's ability to set its MTRs above the level consistent with a competitive market outcome, i.e. there is insufficient CBP to prevent Lycamobile acting in the Relevant MVCT Market independently of competitors, customers and consumers.

Overall preliminary conclusion on assessment of CBP

6.247 In paragraphs 6.84 to 6.246 above, ComReg has carried out an assessment of the impact posed by strong buyers on the competitive behaviour of each of the suppliers in the Relevant MVCT Markets identified in paragraph 5.78.

6.248 ComReg's preliminary conclusion is that the level of any CBP held by any of the MVCT purchasers identified is unlikely to be sufficiently effective such that it would, absent regulation, prevent the individual abilities of Vodafone, O2, Meteor, H3GI, TMI and Lycamobile to set their MTRs above the level which would occur in a competitive market outcome.

SMP Designation

6.249 In this section 6 and Appendix C, ComReg has considered a wide range of factors to identify whether any undertaking enjoys a position of SMP in each of the Relevant MVCT Markets identified in paragraph 5.78. These factors have included

- existing competition in the Relevant MVCT Markets;
- potential competition in the Relevant MVCT Markets; and
- the strength of any Countervailing Buyer Power

6.250 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.

6.251 On the basis of its assessment, ComReg's preliminary view is that each of the Relevant MVCT Markets is not effectively competitive and the MSP operating in each Relevant MVCT Market, as identified below, should be designated as having SMP:

- Wholesale MVCT supplied by Vodafone Ireland Limited;
- Wholesale MVCT supplied by Telefónica Ireland Limited (including Liffey Telecom Limited);
- Wholesale MVCT supplied by Meteor Mobile Communications Limited;
- Wholesale MVCT supplied by Hutchison 3G Ireland Limited;
- Wholesale MVCT supplied by Tesco Mobile Ireland Limited; and
- Wholesale MVCT supplied by Lycamobile Ireland Limited.

6.252 Having established this, ComReg now goes on to consider competition problems in the Relevant MVCT Markets.

Q. 8. Do you agree with ComReg's assessment of SMP and the associated proposed 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 evidence supporting your views.

7 Competition Problems and Impacts on Competition and Consumers

Overview

7.1 In this section ComReg now seeks to identify those competition problems which, absent regulation, could potentially arise in the Relevant MVCT 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 problems.

7.2 In section 5, ComReg identified six separate Relevant MVCT Markets. In section 6, ComReg set out its view that, in accordance with Regulation 27(4) of the Framework Regulations, none of the Relevant MVCT Markets is effectively competitive and has designated six separate MSPs as having Significant Market Power (SMP), thereby meaning that each such MSP has the ability to act independently of its competitors, customers and consumers.

7.3 In accordance with Regulation 27(4) of the Framework Regulations, where an undertaking is designated as having a position of 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 MVCT 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 MVCT 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 given that MSPs have been identified on a preliminary basis with SMP in the Relevant MVCT 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 MVCT 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 MVCT 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
- leveraging its market power into adjacent vertically related markets by engaging in exclusionary practices.

7.8 In considering the types of competition problem which could arise, ComReg has also been guided by experience in the market. 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.

Exploitative practices

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 higher than normal profits to be earned. These higher profits effectively create a wealth transfer from the consumer to the firm with market power. It is ComReg's preliminary view that an MSP having SMP in the Relevant MVCT Market(s) 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 relevant service.[414]

7.11 The Relevant MVCT 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 MSP from behaving, to an appreciable extent, independent of its customers, competitors or consumers, including in relation to its MVCT pricing behaviour.

7.12 In the absence of regulation, it is ComReg's preliminary view that each SMP MSP has the ability to charge excessive prices for termination services in the Relevant MVCT Market. This would raise input costs to other rival MSPs and Fixed Service Providers (FSPs), could ultimately result in raised prices to consumers for making calls to mobiles and potentially restricting FSPs sales of F2M calls to subscribers of the terminating MSP and. Such excessive pricing

[414] 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*".

would thus, not only exploit consumers making calls to mobiles, but might also harm or distort competition where the excessively priced MVCT input distorts competition in related downstream markets, e.g. in retail markets where MSPs or FSPs rely on the upstream MVCT input.

7.13 Excessive pricing may also reduce the incentive for productive efficiencies or to innovate (or hinder innovation). Absent competitive pressures in the Relevant MVCT Market, incentives to minimise costs are decreased, particularly given such costs can be recovered through MTRs. Incentives for innovation could also be reduced, for example, in relation to more advanced forms of interconnection (such as IP interconnection) as these could potentially erode the excessive profits earned though less efficient forms of access. Some incentives may also exist for a strategy to reduce investment in network elements, services and associated facilities specifically associated with the supply of MVCT, particularly where it results in degraded quality or supply capacity constraints for buyers.

7.14 To address the potential for excessive pricing in the Relevant MVCT Markets, ComReg considers that *ex ante* regulation is required. ComReg considers that *ex post* competition law would be unsuitable in preventing excessive pricing[415], 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 MVCT Markets, which are 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.

7.15 As noted in the analysis in section 6[416], the MTRs of Vodafone, O2, Meteor and H3GI are currently regulated via a voluntary glide path arrangement, whereas TMI’s and Lycamobile’s MTRs have not been regulated to date. ComReg‘s view is that this analysis has demonstrated that each of the proposed SMP MSPs have the ability and incentive to engage in excessive pricing. Absent regulation, MTRs would not likely be reduced to a competitive level. Price control and related non-discrimination obligations are, therefore, considered justified by ComReg to ensure appropriate MTRs are set at levels that are reflective of the underlying

[415] 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.

[416] See paragraphs 6.19 to 6.32. We have also noted in the CBP analysis in section 6 that the potential for Service Providers to refuse to purchase MVCT from some MSPs (notably TMI and Lycamobile) when such MSP seek high MTRs.

cost of providing MVCT and that there is not difference[417] in the charging of such MTRs to other Service Providers.

7.16 A separate consultation will issue shortly, which will run parallel to this market analysis, and will consider the appropriate methodology for setting MTRs of those MSPs designated as having SMP arising from this current market analysis.

Vertical Leveraging

7.17 Where an integrated operator has SMP in one market which has links with other adjacent markets either at a similar (horizontal) or different level (vertical) in the production or distribution chain, the SMP operator may attempt to transfer (leverage) its market power to such vertically or horizontally 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.

7.18 Given the individual nature of the Relevant MVCT Markets, competition problems associated with vertical leveraging are more probable. Vertical leveraging arises where a vertically integrated operator has dominance (i.e. SMP) at one level in the production or distribution chain (e.g. the Relevant MVCT Market) and can potentially transfer this market power into downstream (and potentially competitive) market(s) where it is also active or in closely related markets and engage in exclusionary or other conduct which aims to reduce or distort competition in markets. This would mean that a vertically integrated MSP that has SMP in the Relevant MVCT Market may have the incentive to use this market power to affect the competitive conditions in related retail markets where competitors rely on this key MVCT input, such as the in retail mobile market or fixed markets (where FSPs are providing their customers with the ability to call subscribers of particular MSPs). This could result in a distortion of or reduction in competition in these retail markets resulting in harm to consumers, potentially in the form of higher prices, lower output/sales, reduced quality or consumer choice.

7.19 An example of such exclusionary conduct can include refusal to supply access to MVCT. A refusal to deal/denial of access to MVCT 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 MVCT or associated facilities, seeking unreasonable terms and conditions associated with such access. It could also include unwarranted withdrawal of access already granted.

7.20 Absent regulation, 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 SMP MSP and access to MVCT, purchasers of MVCT must also provide information to the SMP MSP on matters such as their own network configuration

[417] For example, as noted in paragraph 6.242 Lycamobile is charging Vodafone a different MTR than is being charged to other Service Providers.

and/or call traffic patterns. In these situations, the MSP 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 MSPs may also discriminate in the quality treatment of a competitor's traffic terminating with the SMP MSP relative to the SMP MSP's treatment of its own on-net traffic. SMP MSPs could also discriminate on price grounds whereby, absent objective justifications, different undertakings operating in equivalent circumstances are charged different MTRs. This could particularly be the case in respect of MTRs levied on smaller or new entrant MSPs or FSPs.

7.21 Exclusionary conduct may also be apparent in the use of other pricing behaviours. A vertically integrated operator which has SMP at the wholesale level and provides a wholesale input on which other operators rely to compete in a downstream market could price its upstream and downstream services in such a way as to impede effective downstream competition due to an insufficient margin between wholesale and retail prices, i.e. a margin squeeze[418] may exist. For example, absent regulation, the level of the MTR charged by an MSP to another undertaking may be such that the margin between the MTR charged to that undertaking and the same MSP's retail price for an on-net call may, having regard to objective cost differences, be insufficient to cover the MSP's retail costs. However, such a competition problem may be mitigated in the presence of an appropriate price control obligation such as cost-orientation.

7.22 ComReg's preliminary analysis has indicated that each of the MSPs in the Relevant MVCT Markets has SMP. ComReg therefore suggests that each such MSP, as a vertically-integrated undertaking, would have the ability and incentive to leverage its market power in the Relevant MVCT Market into related downstream markets thereby reducing or distorting competition to the detriment of consumers. In these circumstances, robust obligations of transparency, non-discrimination, access and price control are justified.

Impacts of Competition Problems on Consumers and Competition

7.23 Having considered the general type of competition problems which have the potential to occur in the Relevant MVCT Markets, ComReg further discusses below the impact of such issues on competition and consumers.

7.24 Competition concerns in relation to excessive termination charges are not limited to the issue of excess profits (arising from excessive MTRs) for MSPs. As call termination is a situation of two-way access, where termination rates are both a revenue and an expense for Service Providers, the level of MTRs can have

[418] 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 two. The relevant questions in this context are (i) whether the spread between wholesale and retail prices cover the retail costs of the dominant firm and (ii) whether the dominant firm is free to avoid the margin squeeze on its own initiative.

important competitive and distributional implications for those Service Providers which make more outgoing termination payments than they receive. The level and structure of MTRs can also lead to inefficient retail pricing structures which, in turn, can distort consumer choice/demand.

7.25 Broadly, as MTRs are part of the cost base for an off-net call to a mobile (whether originating from another MSP or FSP), excessive MTRs would likely result in such off-net calls being priced inefficiently high at the retail level, with terminating MSPs also potentially using the excessive MTR profits earned to cross subsidise[1] and selectively lower the price of some of their own retail services (such as access, handset or on-net call prices). This theory is known as a 'waterbed' effect, whereby, due to the two-sided nature of calls markets, the excessive profit earned from MVCT may be partially or (depending on the intensity of retail competition) entirely competed away at the retail level through the pass-through of these profits into lower retail prices, such as on-net retail tariffs. A 2011 analysis by Genakos and Valletti[419] has stated that a 10% decrease in MTRs resulted in mobile prices of the terminating MSP increasing between 2% to 15%, with an average price increase of 5%. The authors thus note that the waterbed effect, while significant, is not complete in that, MTR rents are not entirely passed through to lower retail prices, with some of the excess profit earned being retained by the MSP. Similarly the MSPs do not pass all of the MTR reductions through to higher retail prices. The authors also find that the waterbed effect is more diluted for pre-paid than for billpay customers. Furthermore, they acknowledge that their analysis falls short of showing the precise channels that may have lead to an increase in mobile retail bills following regulatory cuts of termination rates.[420]

7.26 Even if the waterbed effect exists, MTRs set above an efficient level of costs can still have important competitive and distributional impacts for fixed operators and smaller mobile operators with large traffic outflows to other more established mobile networks. In this regard, consumers would face inefficient signals on the pricing of on-net mobile calls, off-net mobile to mobile calls and fixed to mobile calls. These effects can lead to increased use of on-net mobile calls (and other services), as well as consumers being deterred from making off-net calls to mobiles[421], with such facilities being provided by MSPs and FSPs. This could

[1] Depending on the intensity of retail competition and/or the ability to successfully price discriminate at the retail level, MSPs may decide to retain the excessive profit earned and not cross-subsidise retail services.

[419] Depending on the intensity of retail competition and/or the ability to successfully price discriminate at the retail level, MSPs may decide to retain the excessive profit earned and not cross-subsidise retail services.

[420] The Genakos and Valletti research focuses on identifying the impact of fixed-to-mobile termination rate reductions on mobile retail prices but acknowledges that the effect of reducing mobile-to-mobile termination rates is less clear given that such reductions may also impact the intensity of competition in retail mobile markets.

[421] Excessive MTRs also, therefore, reduce the level of demand for MVCT supplied by the SMP MSP.

have the effect of distorting competition amongst MSPs[422] and between FSPs and MSPs. In particular, consumer choices would be distorted between mobile and fixed calling services due to differences in the relative retail prices of fixed to mobile and mobile to mobile call services that do not reflect the underlying costs involved in providing MVCT. Consumers that make large amounts of on-net mobile to mobile calls are, in effect, subsidised by consumers who make off-net calls (whether originating from other MSPs or FSPs).[423]

7.27 These distorted pricing signals could also result in other distributional concerns amongst consumers, whereby certain customers that make a lot of off-net mobile to mobile calls or fixed to mobile calls are disadvantaged vis-à-vis those customers that make mostly on-net mobile to mobile calls or receive calls to their mobiles. In this regard, even to the extent that some or all of the profit earned from excessive MTRs is passed on by MSPs to their retail subscribers in the form of lower prices, subscribers of FSPs are still disadvantaged given they do not receive such benefits.

7.28 Competition between MSPs could also be reduced, particularly, with respect to smaller or new entrant MSPs, whose subscribers are more likely than not to make more off-net than on-net calls (given the size of their subscriber base). In these circumstances, excessive MTRs may foreclose a new entrant MSP

7.29 Excessive pricing can also reduce MSPs' incentives to innovate and increase efficiency, as inefficient MTRs are paid for by competitors and, in turn, by consumers.

7.30 Asymmetries between MSPs' MTRs that are not justified based on objective cost differences can also distort competition amongst MSPs as the higher MTR creates a cross-subsidy and can simultaneously reduce other MSPs' investment incentives.

7.31 Excessive MTRs may also somewhat[424] 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). This may be particularly so depending

[422] Competition between larger and smaller (or new entrant) MSPs could also be reduced or distorted, particularly given the latter's subscribers are more likely than not to make more off-net than on-net calls (given the size of their subscriber base). Paragraphs 3.29 to 3.35 have shown that smaller and more recent entrant MSPs have a higher percentage of off-net traffic than larger and longer established MSPs.

[423] There is economic literature which indicates that a regulatory policy focused on waterbed effects may be damaging to competition and may reduce welfare. This is due to the fact that above-cost termination rates and on-net/off-net price differentials may create so called tariff-mediated network externalities making large mobile networks more attractive to consumers than smaller mobile networks and also fixed networks. See *David Harbord, Marco Pagnozzi, Università di Napoli Federico, January 2008, On-Net/Off-Net Price Discrimination and 'Bill-and-Keep vs. 'Cost-Based Regulation of Mobile Termination Rates'*.

[424] Retail pricing flexibility is not solely determined by MTRs, but would also be impacted by retail costs and other network costs associated with the provision of the services (such as call origination etc.).

on, for example, differences between MTRs and Fixed Termination Rates (FTRs), or indeed the level of asymmetries between MTRs.

Preliminary conclusion on competition problems

7.32 In summary, ComReg's preliminary view is that, absent regulation, there is the potential and incentive for an SMP MSP in the Relevant MVCT Market to engage in exploitative and exclusionary behaviours which would impact 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 both justified and necessary.

Q. 9.	**Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Relevant MVCT 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.**

8 Remedies

Approach to Specifying and Implementing Remedies

8.1 In section 7, ComReg identified a range of competition problems and competition/consumer impacts that, absent regulation, could arise in the Relevant MVCT Markets by virtue of a MSP 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 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

(e) 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[425];

(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.

[425] 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.

8.5 The considerations set out in paragraphs 8.2 to 8.4 above 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.

8.6 Apart from the above, in considering the imposition of remedies on SMP MSPs, ComReg has also taken the following into account:

- the European Regulators Group (ERG[426]) common position on the approach to appropriate remedies in the electronic communications networks and services regulatory framework[427];
- 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 services (the "Comments Letters");
- the European Commission's 2009 Termination Rate Recommendation[428]
- the European Commission's '2005 Accounting Separation and Cost Accounting Recommendation'[429].

8.7 ComReg sets out below its proposed approach to regulation within the Relevant MVCT Markets.

Option of No Regulation

8.8 ComReg has considered whether the option of de-regulation/regulatory forbearance is appropriate in the Relevant MVCT Markets.

8.9 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 MVCT 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.

[426] 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

[427] 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. Please note that BEREC is currently working on up-dating this ERG Common Position. No date for completion of this work has yet been announced.

[428] See footnote 8.

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

8.10 In view of this, absent the imposition of any remedies within the Relevant MVCT Markets, it is ComReg's view that such markets would not likely function effectively. For example, in the context of interconnection negotiations between MSPs and other undertakings (including other MSPs), access could be denied or effectively refused, (resulting in subscribers of one undertaking not being able to contact the subscribers of another) and/or MTRs could be set at an excessive level (even where commercial agreement on interconnection has been reached).

8.11 It is ComReg's preliminary view that the option of regulatory forbearance in each of the Relevant MVCT 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 MVCT Markets and the associated competition problems. ComReg sets out its preliminary views on these issues below.

Proposed Remedies for the Relevant MVCT Markets

8.12 As noted in paragraphs 1.19, Vodafone, O2, Meteor and H3GI have been subject to SMP regulation in the wholesale mobile voice call termination markets to date and, as a consequence, have been subject to resultant specific regulatory obligations. Neither TMI nor Lycamobile have to date been subject to SMP regulation and are not currently subject to SMP remedies.

8.13 ComReg set out below its preliminary views on the imposition of regulatory obligations in each of the Relevant MVCT Markets.

Access Remedies

Overview

8.14 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.

8.15 Regulation 12(2)(a) to 12(2)(j) and Regulation 12(3) of the Access Regulations provide that ComReg can impose additional access obligations.

8.16 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

(f) the provision of pan-European services.

Existing Access Remedies

8.17 Each of Vodafone, O2 and Meteor has had a range of access obligations currently imposed upon them by virtue of their existing designations with SMP. These include obligations to:

- meet reasonable requests for access to specified network elements, facilities or both such elements and facilities;
- negotiate in good faith with undertakings requesting access;
- not withdraw access to facilities already granted;
- ensure that all reasonable requests for access are expedited in a fair, reasonable and timely manner.

8.18 H3GI has not, to date, had an obligation to provide access, imposed upon it. Neither TMI nor Lycamobile has been designated with SMP to date and, consequently neither TMI nor Lycamobile has had access (or other) SMP related obligations imposed upon it. However, each of H3GI, TMI and Lycamobile currently provide or has offered to provide access to MVCT on a commercial basis.

Proposed Access Remedies

8.19 As identified in section 6, other undertakings are wholly dependent on having access to MVCT and associated facilities supplied by SMP MSPs in order that that their subscribers can make calls to mobile subscribers. In section 7, ComReg identified that an SMP MSP has the ability and incentive to refuse or effectively refuse to provide interconnection and access to MVCT 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 MVCT 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[430] between SMP MSPs and buyers of MVCT, particularly given factors such as the absence of credible alternative sources of supply of MVCT.

8.20 A denial of interconnection and access to MVCT 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 MSPs and other undertakings purchasing MVCT 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.

8.21 ComReg notes that smaller or new entrant MSPs providing MVCT (who have lower subscriber numbers or relative traffic flows with other Service Providers) may face lower incentives (than larger and more established MSPs) to refuse/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 MSPs may effectively refuse/delay access (by extending negotiations or imposing unreasonable terms and conditions such as excessive MTRs), particularly with respect to undertakings of a similar size and/or those with which they are directly competing in the downstream retail market.

8.22 In the above circumstances, absent an obligation to provide access, the matter would fall to be considered by ComReg through its complaint/dispute resolution or compliance functions, all of which would occur after the fact, take time[431] to resolve, be specific to the bilateral circumstances between the relevant parties and not, thereby contributing to regulatory certainty amongst market players and, as a consequence, would be damaging to downstream competition and ultimately consumers. Such case-by-case interventions by ComReg would be inefficient and ineffective in resolving the broader competition problem of denial/delayed access by an SMP MSP. In this regard, it is worth noting that the European Commission has made comments[432], under Article 7/7a of the Framework Directive, on the imposition by National Regulatory Authorities of both SMP obligations pursuant to findings of SMP following a market analysis and the imposition of SMP type obligations on non-SMP undertakings pursuant to the exercise of dispute resolution functions. Such European Commission decisions

[430] ComReg has considered the impact of CBP in section 6 in the context of SMP.

[431] Including time for ComReg to consider the dispute, along with possible public consultation and notification to the European Commission.

[432] See European Commission 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, all of which related to MVCT markets.

clearly highlight the need for effective remedies, including the imposition of access (and other) obligations on all MSPs found to have SMP.

8.23 ComReg considers that the access obligations set out below should, therefore, be imposed upon all SMP MSPs as these obligations will promote regulatory predictability and ensure that SMP MSPs operating in similar market circumstances are treated, from a regulatory perspective, in an equivalent fashion, thereby contributing to consistency.

8.24 The specific access remedies it is proposed to impose on SMP MSPs are discussed below.

Requirement to provide access to MVCT and Associated Facilities

8.25 ComReg considers that a requirement on the SMP MSPs to provide access is needed to facilitate competition in downstream markets. ComReg proposes that SMP MSPs will be required to meet all reasonable requests from other undertakings for the provision of access and, in so doing, shall provide, access to MVCT (being interconnection) and access to associated facilities.

8.26 Associated facilities include access to the Mobile Number Porting Centralised Database (the 'MNPCD')[433] which is under the collective control of MSPs. ComReg considers that the ability for other undertakings to have efficient and effective read only[434] access to the information is necessary to facilitate the accurate and efficient routing of voice calls to ported mobile numbers and, therefore, MVCT. Given the existence of MNP, a mobile number can now be retained by subscribers when switching their service to another MSP. Absent the availability of access to the MNPCD, originating Service Providers directly interconnected with MSPs will have no direct means of knowing to which terminating MSP a call should be routed. This could result in inefficient routing of a call (say to an MSP who is not providing the retail service to the subscribers, with this MSP then having to access the MNPCD and route the call to the correct MSP). This results in additional transit or other costs being incurred by the originating Service Provider. ComReg considers that read only access to the MNPCD is, therefore, necessary for call routing purposes and that MSPs should ensure that, from technical and operational perspectives, the management of the MNPCD and the provision of such access to it is facilitated in a timely, reasonable and efficient manner consistent with other obligations proposed elsewhere in this section 8.

[433] This is a database over which MSPs have (effective or contractual) control, which facilitates mobile number portability and contains the list of ported mobile numbers and associated details, including voice call and other routing details. It provides undertakings, including MSPs, with access to the information necessary for accurately routing voice calls to ported mobile numbers.

[434] By 'read only', ComReg means the ability to view but not amend details contained on the MNPCD.

8.27 ComReg has set out below its consideration of all factors listed in paragraph 8.16 above, in respect of the proposed access obligations (and those obligations discussed in paragraphs 8.29 to 8.40 below).

- *Technical and economic viability of using or installing competing facilities*: In sections 5 and 6 ComReg has identified the Relevant MVCT 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 MVCT Markets (related to control of infrastructure not easily duplicated), using or installing competing facilities to provide MVCT is not likely to be technically or economically feasible. Similarly, given final routing details for calls to mobile numbers are dependent on individual MSPs (through the MNPCD), originating Service Providers have no technical or economically viable means of installing competing facilities. Each of the MSPs proposed to be designated with SMP (arising from this review) provide or have offered to provide interconnection and access to MVCT (albeit in some cases in the presence of regulation) and to the MNPCD. It is therefore technically feasible for these MSPs to provide these services.

- *Feasibility of providing access in relation to capacity available*: Access to MVCT and access to associated facilities are currently provided by MSPs, 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 MSPs 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[435], 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 8.65 to 8.88 below), ComReg will be mindful of facilitating the development of effective and sustainable competition to the benefit of consumers without compromising efficient entry and investments decisions of undertakings. ComReg will ensure that, in setting an appropriate price control, SMP MSP's recover those efficiently incurred costs which are relevant to the provision of access to MVCT and associate facilities.

[435] 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".

- *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 MSPs engaging in exploitative or exclusionary behaviours in the Relevant MVCT Markets (absent regulation). These include, *inter alia*, excessive pricing and other behaviours which would give rise to distortions in downstream competition amongst MSPs or between MSPs and FSPs. ComReg considers that imposing access (and other obligations) in the Relevant MVCT Markets will safeguard the 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 of the provision of access to MVCT and access to associated facilities in the Relevant MVCT 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 MVCT 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 mobile subscriber will require access to MVCT.

8.28 In view of the above, ComReg's preliminary view is that obligations to provide access to MVCT 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 and for the reasons set out in the discussions below[436] 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

8.29 Pursuant to Regulation 12(2)(b) of the Access Regulations, ComReg proposes to impose an obligation on all SMP MSPs to negotiate in good faith with undertakings requesting access to MVCT and access to associated facilities in the Relevant MVCT 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 MSPs and other undertakings in relation to access, particularly given the identified competition problem that SMP MSPs have the ability and incentive to expressly or constructively refuse to provide MVCT to an undertaking requesting access. It will also somewhat address imbalances between the

[436] See paragraphs 8.50, 8.64 and 8.72.

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 MVCT and associated facilities, thereby promoting the development of downstream competition, to the benefit of consumers.

8.30 ComReg also notes that the obligation to negotiate in good faith implies that the responsibility rests with a SMP MSP 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."*

8.31 ComReg, therefore, proposes that should an access request be refused, the objective criteria for refusing same should be provided by the SMP MSP to the requesting undertaking at the time of refusal (see further discussion starting at paragraph 8.37 below). This will also improve regulatory effectiveness and efficiency should any complaint/dispute be raised with ComReg, as it will provide a useful audit trail for compliance monitoring purposes.

8.32 In ComReg's view, this remedy does not impose any significant additional burden on SMP MSPs 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

8.33 Pursuant to Regulation 12(2)(c) of the Access Regulations, ComReg proposes to impose an obligation on all SMP MSPs 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.

8.34 Having regard to the competition problems identified in section 7, ComReg has identified that an SMP MSP would have the ability and incentive to delay/refuse access to MVCT 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 MSPs. ComReg recognises that a balance needs to be struck between the investments of SMP MSPs in providing MVCT and the investments made by buyers of MVCT in availing of it. However, ComReg considers that the proposed remedy, requiring that SMP MSPs 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

8.35 Pursuant to Regulation 12(2)(e) of the Access Regulations, ComReg proposes to impose an obligation on all SMP MSPs to grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of services or virtual network 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 MVCT and access to associated facilities, interoperability of networks and services is ensured. This would also apply in the context of access to the MNPCD.

8.36 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

8.37 Pursuant to Regulation 12(3) of the Access Regulations, ComReg proposes to impose an obligation on all SMP MSPs that access to MVCT and access to associated facilities should be provided in a fair, reasonable and timely manner.

8.38 In this regard, and as noted in paragraphs 8.30 and 8.31 above, ComReg is also proposing to impose an obligation on all SMP MSPs 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).

8.39 Both of the proposed remedies above are intended to address competition problems associated with the denial (actual or constructive) of access to MVCT, as well as to minimise the scope for discriminatory treatment of undertakings by ensuring a consistency in the treatment of requests for access.

8.40 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 evidence supporting your views.

Proposed Non-Discrimination Remedies

Overview

8.41 As noted in the Access Directive[437], 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.

8.42 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
- 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.

8.43 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

8.44 Each of Vodafone, O2, Meteor and H3GI has, by virtue of their existing SMP designation, had a range of non-discrimination obligations imposed upon them. Broadly speaking, these include obligations to:

(a) ensure that they apply equivalent conditions in equivalent circumstances to undertakings to which they supply MVCT; and

(b) ensure that the services and information provided to undertakings are provided under the same conditions and of the same quality as the SMP MSPs provide for their own services or those of their subsidiaries or partners.

8.45 Neither TMI nor Lycamobile has been designated with SMP to date and, consequently have not had non-discrimination obligations imposed upon them.

Proposed non-discrimination remedies

8.46 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 MSP has the ability and incentive to engage in such behaviours which can impact upon downstream competition and consumers. For example, SMP MSPs could offer different MTRs, terms and conditions and service quality, to different buyers (whether other MSPs or FSP). Equally so an

[437] Recital 17 of the Access Directive.

SMP MSP could degrade inbound traffic from other undertakings relative to its own terminating traffic.

8.47 As a consequence, ComReg is proposing to require that all SMP MSPs:

(a) apply equivalent conditions, including in respect of MTRs or other charges, in equivalent circumstances to other undertakings requesting or being provided with access (including access to MVCT and associated facilities); and

(b) ensure that access (including access to MVCT and associated facilities) and information are provided to all other undertakings under the same conditions and of the same quality as the SMP MSP provides to itself or to its subsidiaries, affiliates or partners.

8.48 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 MSP. For example, if information or a service is provided by an SMP MSP following a request from one undertaking, the SMP MSP 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 next 2-3 years (such as IP interconnection), particularly with the development of 4G networks, and ComReg considers that where new forms of interconnection or information in relation to this are provided by an SMP MSP to one undertaking, that the SMP MSP should treat other undertakings in a similar manner.

8.49 ComReg has considered whether the non-discrimination obligations should be applied specifically to self-supplied termination and MVCT supplied to other undertakings, particularly in light of the competition problem of excessive pricing. In the context of the specific circumstances of the Relevant MVCT 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 an elimination of the risk of excessive pricing by ensuring MTRs are cost oriented, then the risks of competition problems[438] arising as a consequence of MTR differences between self-supplied termination and MVCT supplied to other undertakings, and the impact of such MTR differences on downstream competition through differences in on-net/off-net pricing, would appear to be minimised.

8.50 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

[438] Such as margin squeeze or predation and the impact in terms of restrictions or distortions of downstream competition.

denial of access problems or poor service quality issues could still remain in the presence of a non-discrimination obligation.

8.51 ComReg considers that the imposition of the above non-discrimination obligations are both proportionate and justified having regard to the competition problems identified. All currently designated SMP MSPs have some form of non-discrimination obligations imposed upon them, and ComReg does not consider it to be objectively justified to adopt an alternate approach for those MSPs it is now proposed to designate for the first time with SMP.

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 evidence supporting your views.

Proposed Transparency Remedies

Overview

8.52 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.

8.53 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

8.54 Each of Vodafone, O2 and Meteor has, by virtue of their existing SMP designation, had a range of transparency obligations imposed upon them. These include obligations to:

(a) file all signed interconnection agreements with ComReg;

(b) publish advance notification of MTR changes on their websites and inform affected undertakings prior to them coming into effect;

(c) publish (and keep updated) a reference offer on their website;

(d) make publicly available information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices in respect of the services and facilities covered by access obligations

8.55 H3GI also has more limited transparency obligations imposed upon it, namely, only those obligations identified in (b) and (d) in paragraph 8.54 above.

8.56 Neither TMI nor Lycamobile has been designated with SMP to date and, consequently they have not had transparency obligations imposed upon them. However, each of these MSPs currently publishes advance notification of MTR changes[439].

Proposed transparency remedies

8.57 In section 7, ComReg identified that an SMP MSP 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. A transparency obligation is also 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 MSP'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.

8.58 As noted in the Access Directive[440], 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 MVCT 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.

8.59 ComReg considers that all SMP MSPs should be required to comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate access to MVCT and promote effective competition in downstream markets. In this regard ComReg is proposing that each SMP MSP shall be required to do the following:

(a) to make publicly available and keep updated on its website a Reference Interconnect Offer (the "RIO") which is the standard offer of contract for access to MVCT and associated facilities.

(b) to ensure that the RIO is sufficiently unbundled in order that OAOs availing of access are not required to pay for services or facilities which are not necessary for the access requested.

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[439] Such publication typically takes place via the Eircom Switched Transit and Routing Price List (STRPL) as well as directly communicating MTR changes to interconnected parties.

[440] Recital 16 of the Access Directive.

(c) to make MTRs publicly available and publish such MTRs in an easily accessible manner on its publicly available website. In so doing, it shall publish a notice of its intention to amend its MTRs 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 MTRs, a description of the proposed new MTRs and the date on which such new MTRs 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 MVCT and access to associated facilities, written notification of its intention to amend its MTRs. Such written notification is to be provided not less than 35 calendar days in advance of the date on which any such MTR amendment comes into effect. Such notice is also to at least include a statement of the existing MTRs, a description of the proposed new MTRs and the date on which such new MTRs are proposed to come into effect.

8.60 ComReg considers that the 35 calendar day timeframe for advance notification of MTR changes should achieve an appropriate balance between the need for MSPs to be able to make changes speedily, while also recognising the requirements for MVCT purchasers to factor such changes into retail and wholesale pricing decisions and any related billing system changes/developments. In particular, given many MVCT purchasers do so via indirect interconnection through third party wholesale transit or carriage arrangements[441], the wholesale billing systems of such third party's will require amendment to give effect to MTR changes. This may also involve such third parties providing notification to their wholesale customers.

8.61 The above transparency obligations will also need to be implemented by SMP MSPs in a manner that is consistent with other obligations such as those relating to access, non-discrimination and price control.

8.62 In view of current notification arrangements (both arising from SMP obligations or commercial practice) in relation to contract management between MSPs and other undertakings, as well as existing MTR publication arrangements, ComReg does not consider that the implementation of the above obligations would place a disproportionate burden on SMP MSPs. ComReg does recognise that the RIO obligations will require some greater levels of implementation burden than say pricing publication obligations and, in recognition of this, ComReg has proposed that the RIO be published within 3 months following the effective date of ComReg's decision on the MVCT market analysis.

8.63 ComReg has decided that the existing requirement on Meteor, O2 and Vodafone to file a copy of all signed interconnection agreements with ComReg is no longer warranted. This is because it would ultimately be up to each individual SMP MSP

[441] For example, Eircom through its SMP obligations to offer CPS, SB-WLR and transit services provides MVCT purchasers with indirect access to MVCT services.

to ensure that the commercial agreements it enters into for the supply of MVCT meet the regulatory obligations eventually imposed. ComReg can also use its alternative information gathering powers to request such information should it be necessary to, for example, investigate issues of compliance.

8.64 ComReg has also 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 evidence supporting your views.

Price Control and Cost Accounting Remedies

Overview

8.65 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[442].

8.66 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[443].
- ensure that any cost recovery mechanism or pricing methodology that ComReg imposes serves to promote efficiency and sustainable competition and maximise consumer benefits[444].

8.67 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)

[442] Pursuant to Regulation 13(1) of the Access Regulations.

[443] Pursuant to Regulation 13(2) of the Access Regulations.

[444] Pursuant to Regulation 13(3) of the Access Regulations.

and promote efficiency and sustainable retail competition while maximising consumer benefits.

8.68 The European Commission's 2009 Termination Rate Recommendation provides guidance to NRAs regarding the regulatory treatment of MTRs (and FTRs), and ComReg is required to take the utmost account of this is when establishing price control remedies.

Regulation to date

8.69 Each of Vodafone, O2, Meteor and H3GI has, by virtue of their existing SMP designation, been subject to a price control obligation of cost orientation to date[445]. Only Vodafone and O2 have been subject to a cost accounting obligation. However, having regard to the voluntary glide path[446] approach to reducing MTRs that has been in place to date, this obligation has not been specified in detail.

8.70 Neither TMI nor Lycamobile have been subject to a price control or cost accounting obligation given the absence of any SMP designation upon them to date.

Proposed price control and cost accounting remedies

8.71 In section 6[447] and 7 ComReg has identified that SMP MSPs have the ability and incentive to set their prices associated with access to MVCT at an excessive 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 MSPs is justified and proportionate.

8.72 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.

8.73 ComReg intends to carry out a separate, but near parallel, consultation on the detailed nature and implementation of the specific nature of the proposed price control obligation of cost orientation (the 'Separate Pricing Consultation'). This is expected to issue shortly and will take utmost account of the 2009 Termination Rate Recommendation. Having regard to the eventual specification of the detailed specification of the cost orientation remedy, ComReg considers that an obligation of cost accounting may not be necessary. However, ComReg may revisit the matter further once a decision on the precise nature of the cost orientation remedy has been finalised as part of the Separate Pricing Consultation. It may consider at that stage (or at some later stage) that it is appropriate to impose a cost accounting obligation.

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[445] See earlier discussion at paragraphs 6.22(a) to (d).

[446] See paragraph 6.22.

[447] See, in particular, paragraphs 6.19 to 6.33 for evolution of MTRs to date.

8.74 In view of the above, in this current Consultation Paper, ComReg proposes only to impose a price control remedy of cost orientation. It is intended that the outcomes arising from this current Consultation Paper and the Separate Pricing Consultation will ultimately dovetail in timing terms to form ComReg's ultimate detailed specification and decision on these matters.

Price control remedies

8.75 Given the risk of price-related identified competition problems deriving from an SMP position in the Relevant MVCT Markets, ComReg proposes that each SMP MSP should be subject to a cost-orientation obligation with respect to access to MVCT and associated facilities, the detailed specification of which will be determined through the Separate Pricing Consultation. A consistent approach to price control in the form of cost orientation for SMP MSPs, all of which provide national coverage, 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.

8.76 ComReg also considers that imposing a cost-orientation obligation on all SMP MSPs provides regulatory certainty to each party, as well as to buyers of MVCT who purchase this service from several MSPs. In doing so, it will minimise the scope for disputes/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 MSPs, the significant majority of which have operations in other European countries.

8.77 A cost-orientation obligation, once specified in detail, will also reduce the magnitude of the effects of any undue on-net/off-net price discrimination through excessive MTRs, while at the same time continuing to allow retail pricing flexibility.

8.78 In this regard, absent regulation, ComReg has observed[448] that both TMI and Lycamobile, notwithstanding their size or duration within the market, have priced their MVCT services persistently above the level of other MSPs and at a level significantly above that which would pertain in a competitive market outcome. ComReg has also observed, albeit in the presence of regulation, that MSPs currently designated with SMP also have had the ability to set their MTRs above a competitive level[449]. Given the impact of such behaviour on competition and consumers, ComReg sees no objective reason to distinguish its approach in setting a price control for MVNOs from the price control approach for other MSPs, particularly given such a remedy is designed to address the same competition problem.

[448] See earlier discussion at paragraphs 6.22(c) and (d).

[449] See footnote 445.

8.79 ComReg will further consider proportionality issues associated with the imposition of particular forms of cost-orientation on all SMP MSPs in the Separate Pricing Consultation. In so doing, ComReg will in accordance with Regulation 13 of the Access Regulations, also consider the relevant investment made by the SMP MSPs and allow 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.

8.80 ComReg would note that, insofar as access to the MNPCD is concerned[450], the treatment of costs associated with Mobile Number Portability ('**MNP**') was considered by ComReg in 2007 in the Number Portability Cost Orientation Decision[451]. To the extent that any charges associated with the provision of access to the MNPCD (as an associated facility to the provision of MVCT) have not already been addressed in that Number Portability Cost Orientation Decision, it is proposed that such charges will also be subject to the cost orientation obligation set out in this current Consultation Paper and will be considered further either in the Separate Pricing Consultation or thereafter.

8.81 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 MTRs) are derived from costs, including a reasonable rate of return on investment, will rest with the MSP concerned.

Cost accounting remedies

8.82 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 MSPs provision of MVCT. 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. Having regard to the detailed nature of the price control obligation that is ultimately specified in the Separate Pricing Consultation, to support the effectiveness of such obligations, ComReg does not currently consider it necessary and justified to impose a cost accounting obligation.

8.83 While ComReg has proposed imposing a cost orientation obligation, the detailed nature of this is to be considered as part of the Separate Pricing Consultation. As such and having regard to the outcome in relation to the detail of the cost orientation obligation, a cost accounting obligation may in fact not be necessary.

[450] See paragraph 8.26.

[451] See Response to Consultation and Specification on Number Portability in the Fixed and Mobile Sectors, ComReg Document 07/98, Decision D05/07, November 2007 (the '**Number Portability Cost Orientation Decision'**).

8.84 As noted in paragraph 8.81 above, ultimately the burden of proof will rest on MSPs to show that their MTRs are derived from costs. Furthermore, for the purpose of calculating the cost of efficient provision of MVCT 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 MSPs. 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.

8.85 Each of the four existing MSPs currently designated with SMP are likely to have accounting systems for normal business purposes which should be sufficient to provide a certain level of financial granularity to ComReg when required.

8.86 ComReg would note that each of the proposed SMP MSPs would only be subject to regulation in one wholesale market (as distinct from other circumstances where Eircom[452], which has a cost accounting obligation, is present in 6 regulated wholesale markets). This further raised proportionality considerations with respect to such MSPs.

8.87 With regard to MVNO SMP MSPs, ComReg considers that, notwithstanding the nature of their accounting systems, it would not be proportionate to impose any cost accounting obligations on them given the nature and scale of their operations and the likely burden involved.

8.88 Given the specific circumstances of the Relevant MVCT Markets, the recourse to Regulation 13(4) above and the as yet undermined detailed nature of the proposed cost orientation obligation, ComReg does not consider it to be proportionate or necessary, at this point, to impose an obligation to maintain appropriate cost accounting systems on any SMP MSP.

8.89 Having regard to the outcome of the consideration of the specific nature of the cost orientation obligation through the Separate Pricing Consultation, ComReg may further consider the requirement for a cost accounting obligation.

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 evidence supporting your views.

[452] In this regard, ComReg notes that Eircom's Accounting Separation and Cost Accounting obligations imposed in other regulated markets require them to have in place a well defined, transparent and verifiable transfer charging system to demonstrate non-discrimination and to calculate internal costs and revenues, including those between Eircom and Meteor (a subsidiary). See Accounting Separation and Cost Accounting Review of Eircom Limited, Response to Consultation and Decision, ComReg Document 10/67, Decision D08/10, August 2010.

Accounting Separation Remedies

Overview

8.90 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.

8.91 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

8.92 Only Vodafone and O2 have had obligations imposed upon them in relation to accounting separation. Such obligations were only specified in principle, with detailed requirements never having been ultimately specified. Neither Meteor nor H3GI were subject to accounting separation obligations, largely on grounds of proportionality.

Proposed accounting separation remedies

8.93 In general, the purpose[453] 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.

8.94 Subject to the implementation of an appropriate price control obligation (to be considered in the Separate Pricing Consultation), ComReg does not consider it appropriate or proportionate at this point to impose an obligation on SMP MSPs to maintain separated accounts. Having regard to the competition problems identified in section 7 and the particular circumstances of the Relevant MVCT Markets[454], it is ComReg's view that the imposition of an accounting separation obligation at this stage may be excessively burdensome and costly for SMP MSPs to comply with and may therefore represent a disproportionate approach to resolving issues such as excessive pricing (and their impacts on downstream markets) particularly, in light of the alternative proposed obligations identified in

[453] See Article 1 of the European Commission's Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC).

[454] Given the intended SMP MSPs do not currently supply products/services in several wholesale markets, the potential for horizontal leverage issues to arise is, in ComReg's view, minimised.

the sections above. An appropriately specified cost-orientation obligation (that takes utmost account of the 2009 Termination Rate Recommendation), coupled with non-discrimination obligations, should seek to prevent restrictions or distortions in competition in downstream markets arising from the impact of excessively priced MTRs on off-net retail prices for calling mobile subscribers (and price discrimination with respect to on-net MTRs).

8.95 ComReg also considers that in the specific circumstances of this analysis of the Relevant MVCT Markets, the potential burden of an accounting separation obligation on smaller SMP MSPs, in particular, TMI and Lycamobile who are MVNOs, would likely be more disproportionate than for other SMP MSPs.

8.96 Overall, for the reasons outlined above, ComReg does not, at this time, intend to impose an accounting separation obligation on any SMP MSP. However, the matter will be kept under review having regard to the specification and implementation of the detailed price control (and the possibility of further consideration of any cost accounting obligations in light of this) which will be pursued through the Separate Pricing Consultation.

Q. 14. Do you agree with ComReg's approach not to impose 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 evidence supporting your views.

Overall Preliminary Conclusions on Remedies in the Relevant MVCT Markets

8.97 Having regard to the competition problems identified in section 7 and the discussion in paragraphs 8.1 to 8.95 above, ComReg proposes to impose a range of access, non-discrimination, transparency and price control remedies on all SMP MSPs.

8.98 ComReg has set out these remedies in the form of a Draft Decision Instrument which is attached at Appendix D and respondents are invited to comment on it.

Q. 15. Do respondents agree with ComReg's draft Decision Instrument set out in Appendix D? Do respondents agree with ComReg's Definitions and Interpretations as set out above in Part I of the draft Decision Instrument? 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[455] published by ComReg in August 2007 and takes into account the "Better Regulation" programme[456] and international best practice (for example, considering developments about 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[457] 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 towards a RIA. 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:

Step 1: Describe the policy issue and identify the objectives.

[455] ComReg, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", ComReg Document 07/56a, 10 August 2007 (the '**RIA Guidelines'**).

[456] Department of the Taoiseach, "Regulating Better", January 2004. See also "Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis", June 2009, http://www.taoiseach.gov.ie/eng/Publications/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf.

[457] Ministerial Policy Direction made by the Minister of Communications, Marine and Natural Resources on 21 February 2003.

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 the Taoiseach's Revised RIA Guidelines state that

> *"RIA should be conducted at an early stage and before a decision to regulate has been taken."*[458]

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."*[459]

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 imposing (or not) regulatory remedies 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 voice call termination market on MSPs that have been designated with SMP.

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[458] See paragraph 2.1 of the Revised RIA Guidelines.

[459] 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 8.4 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 the need for the imposition of *ex ante* SMP related regulatory obligations in order to mitigate the exercise of SMP by undertakings and to ensure the development of effective competition within and across communications markets. We have noted previously that the European Commission has established that the wholesale MVCT market is susceptible to *ex ante* regulation and, on this basis, ComReg has carried out the 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 MVCT Markets, followed by a competition analysis within each of these markets. ComReg has proposed designating six MSPs with SMP in each of the separate Relevant MVCT Markets within which they operate. In section 7, ComReg then considered, on the basis of a preliminary SMP finding, the potential for competition problems to arise in the Relevant MVCT Markets over the review period in question. To address these identified competition problems and competition/consumer impacts, ComReg set out and justified in section 8 proportionate regulatory remedies that it proposes to impose on MSPs with SMP.

9.15 As noted above, on the basis of its assessment ComReg's preliminary view is that each of the Relevant MVCT Markets is not effectively competitive and the MSP operating in each Relevant MVCT Market (as identified in paragraph 6.251) should be designated as having SMP. As noted in paragraph 8.2, in order to address identified competition problems, ComReg is required to impose on an operator with SMP such of the obligations (or remedies) set out below:

(a) Access;

(b) Transparency;

(c) Non-Discrimination;

(d) Price Control and Cost Accounting; and

(e) Accounting Separation.

9.16 We also noted in paragraph 8.8 that ComReg is compelled to impose at least one obligation on an SMP MSP where it is designated as having SMP.

9.17 With specific regard to the MVCT market analysis 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 within which MSPs and FSPs, that rely on the upstream MVCT input, operate. In so doing, ComReg is seeking to prevent restrictions or distortions in competition amongst Service Providers, thereby promoting the development of effective competition, to the ultimate benefit of consumers. 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 serve to promote competition amongst MSPs and, to a certain extent, between MSPs and FSPs. These objectives also serve to further the development of the internal market given Service Providers operate in other European jurisdictions and given MVCT is also an input to calls originating abroad but destined for Irish mobile subscribers.

9.18 In pursuing these objectives, ComReg aims to influence the behaviour of SMP MSPs in order to mitigate the potential harmful effects that can arise as a consequence of the exercise of SMP. In this regard, ComReg considers that the regulatory measures that it is proposed in section 8, and further considered in this section 9, should address in a proportionate way the relevant competition problems and the consequential impacts on competition and consumers.

9.19 In section 8, ComReg has considered the impact of the specific nature of regulation considered necessary in the Relevant MVCT Markets and, 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

9.20 ComReg recognises that regulatory measures should be kept to the minimum necessary to address the identified market failure in an effective, efficient and proportionate manner. There are a range of potential regulatory options available to ComReg to address the competition problems in the Relevant MVCT Markets.

9.21 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.[460] Should this be insufficient to address competition problems on its own, ComReg may apply a non-discrimination obligation.[461] If this is still not sufficient, ComReg may next consider the imposition of an access obligation,[462] or accounting separation obligations.[463] The final measure to be considered is the imposition of a price control and cost accounting remedy.[464]

9.22 The question of regulatory forbearance and the incremental imposition of one or more of the above obligations are considered below.

Forbearance

9.23 In the case of the current analysis of the Relevant MVCT Markets, ComReg is required[465] 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 MVCT markets is effectively competitive (or likely to become effectively competitive within the timeframe covered by this review).

9.24 In view of this, absent the imposition of any remedies within the Relevant MVCT Markets, it is ComReg's view that such markets would not likely function effectively. As highlighted in paragraphs 8.8 to 8.11 it is ComReg's preliminary view that the option of regulatory forbearance in each of the Relevant MVCT Markets is not, therefore, appropriate or justified.

Transparency Obligations

9.25 Our preliminary view in section 8 was that a transparency obligation[466] was necessary and would facilitate the development of effective downstream competition. In summary, ComReg has specified transparency remedies involving requirements to publish a Reference Interconnect Offer setting out the contractual terms and conditions and technical basis upon which Service Providers can obtain access to MVCT and associated facilities; and requirements to publish MTRs and provide advanced notice of changes to them.

9.26 ComReg considers that each SMP MSPs should be required to comply with transparency obligations in order to minimise information asymmetries and, therefore, facilitate timely and efficient access to MVCT and associated facilities and to promote effective competition in downstream markets.

[460] Regulation 9 of the Access Regulations.
[461] Regulation 10 of the Access Regulations.
[462] Regulation 12 of the Access Regulations.
[463] Regulation 11 of the Access Regulations.
[464] Regulation 13 of the Access Regulations.
[465] Per Regulation 8(1) of the Access Regulations.

[466] See discussion in paragraphs 8.52 to 8.64.

9.27 However, transparency obligations on their own are not considered by ComReg to be sufficient, as while they allow monitoring and observation of actions, they do not directly affect the actions/ behaviour of SMP MSPs themselves.

Non-Discrimination Obligations

9.28 In our review of competition problems in section 7, we subsequently considered in section 8[467] that a non-discrimination obligation was necessary. In summary, ComReg has specified non-discrimination remedies relating to requirements that SMP MSPs ensure that other Service Providers being provided with MVCT are not treated differently, or that such Service Providers are provided with information or service in a manner different to which the SMP MSP provides to itself.

9.29 Such non-discrimination obligations essentially drive a form of behaviour in the Relevant MVCT Market, by requiring equivalent treatment of Service Providers (with the transparency obligation providing the means of observing that discrimination is not occurring). In view of potential issues of discriminatory treatment (on price or non-price terms), transparency obligations alone would not address such issues. Furthermore, a non-discrimination obligation itself (or coupled with transparency) does not specifically address what type of product or service should be offered, or how it should be offered. Additionally, recourse to a non-discrimination obligation tends to be on an *ex post* basis, so that a Service Provider alleges a breach after the event.

9.30 Thus, the operation of the non-discrimination and transparency obligations alone are considered by ComReg not to be adequate in providing a means of ensuring *ex ante* that SMP MSPs provide access to MVCT and associated facilities, including request for different types of access or providing it in a fair, reasonable and timely manner.

Access Obligations

9.31 In our review of competition problems in section 7 and remedies in section 8[468], we also identified issues related to the actual denial of or effective refusal to provide access to MVCT and associated facilities. While a non-discrimination obligation would be a necessary supporting obligation to address these issues, it is ComReg's preliminary view that it would not on its own, or coupled with transparency obligations, be sufficient.

9.32 An access obligation gives operators the right to request access to MVCT and associated facilities and establishes the principles on which the relevant products and services should be made available. In summary, ComReg has specified access remedies relating to the requirement to provide access to MVCT and associated facilities, and to do so in a fair, reasonable and timely manner (and to provide objective reasons where requests for access are refused); the

[467] See discussion in paragraphs 8.41 to 8.51.

[468] See discussion in paragraphs 8.17 to 8.40.

requirement to negotiate in good faith with Service Providers requesting access to MVCT; the requirement not to withdraw access to facilities already granted; and the requirement to grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of services or virtual network services

9.33 It is ComReg's preliminary view that, such access obligations are a fundamental requirement in the Relevant MVCT Markets and, taking account of the provisions of Regulation 12(1) of the Access Regulations, the absence of such obligations would hinder the development of effectively competitive retail markets by creating restrictions or distortions in competition amongst Service Providers, to the detriment of consumers.

9.34 Such access obligations are therefore considered necessary and appropriate in achieving the objectives of section 12[469] of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations, namely the promotion of competition, contributing to the development of the internal market and protecting the interests of end-users.[470]

Price Control and Cost Accounting Obligations

9.35 In our review of competition problems in section 7, we subsequently considered in section 8[471] whether it is necessary to ensure that wholesale charges for access to MVCT and associated facilities should be subject to price control and cost accounting obligations. In summary, ComReg has proposed imposing requirements that access to MVCT and associated facilities are cost oriented, with the detailed nature of the specific costing methodology to be adopted in light of the cost orientation obligation to be subject to a separate pricing consultation which is expected to be published shortly.

9.36 Given our preliminary view that the MSP operating in each Relevant MVCT Market (as identified in paragraph 6.251) has SMP, there is limited constraint offered by actual competition, potential competition and countervailing buyer power and, as a consequence, an SMP MSP's wholesale prices are not likely to be appreciably constrained in the absence of regulation. In view of this, transparency, non-discrimination and access obligations combined are not sufficient and a cost-orientation obligation is considered necessary to address the issue of excessive pricing. In addition, a benefit of setting MTRs or other charges *ex ante* would be to provide advance certainty for Service Providers when setting their retail prices, particularly given MTRs a re a cost input to call (or other) charges.

9.37 Insofar as cost accounting obligations are concerned, ComReg's preliminary view was that such a remedy would not be necessary, subject to an appropriately specified and implemented cost-orientation obligation, along with the onus being

[469] See discussion at paragraph 9.12 above.

[470] See discussion in paragraph 8.27 above.

[471] See discussion in paragraphs 8.65 to 8.89.

on SMP MSPs to demonstrate their charges are reflective of costs. In view of this, the burden of such a cost accounting obligation was considered to be disproportionate.

Accounting Separation Obligations

9.38 In our review of competition problems in section 7 and the consideration of accounting separation remedies in section 8[472], ComReg's preliminary view was that the imposition of such remedies at this stage may be excessively burdensome and costly for SMP MSPs to comply with and may therefore represent a disproportionate approach to resolving issues such as excessive pricing (and their impacts on downstream markets) particularly, in light of the alternative proposed obligations identified in section 8.

Determine the impacts on stakeholders

9.39 Given that ComReg has proposed designating six MSPs with SMP, as outlined above[473], it is ComReg's view that the option of regulatory forbearance is unwarranted and can be discounted when considering the impact on stakeholders.

9.40 Having regard to the discussion in paragraphs 9.25 to 9.38 above and 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. Having regard to the analysis and assessment of the Relevant MVCT Markets, ComReg has now grouped remedies into three options below for the purpose of considering the incremental impact of each option on stakeholders.

(a) Option A: Impose Transparency, Non-discrimination and Access obligations.

(b) Option B: Impose Transparency, Non-discrimination, Access and Price Control obligations[474].

(c) Option C: Impose a full suite of obligations including Cost Accounting and Accounting Separation obligations.

Option A: Impose Transparency, Non-discrimination and Access obligations

Impact on SMP MSPs	Impact Service Providers	Impact on Consumers

[472] See discussion in paragraphs 8.90 to 8.98.

[473] See discussion in paragraphs 9.23 to 9.24.

[474] In considering Price Control, the impact on stakeholders of a cost orientation obligation is considered. As noted previously, the detailed specification of the cost orientation will be considered in the Separate Pricing Consultation, within which the regulatory impact on SMP MSPs and other stakeholders will further be considered.

Impact on SMP MSPs	Impact Service Providers	Impact on Consumers
Overall, symmetric approach to imposition of obligations should be positive for all MSPs given all treated in a non-discriminatory fashion and it therefore promotes regulatory certainty. Meteor, O2, Vodafone and H3GI all currently have existing obligations regarding transparency and non-discrimination, with the first three MSPs also having access obligations. The incremental burden of the proposed obligations on all such MSPs is not likely to be significant. H3GI, TMI and Lycamobile do not have access obligations, although each of such MSPs currently provide access to MVCT (as well associated facilities) on a commercial basis. The cost of meeting the obligation to provide access to MVCT and associated facilities is not likely to be significant or disproportionate. Similarly, TMI and Lycamobile do not currently have transparency or non-discrimination obligations. However, both such	Overall, symmetric approach to imposition of obligations on SMP MSPs should be positive for all Service Providers by ensuring access is provided to them in a timely fashion, and in a manner which is transparent and consistent, thereby promoting regulatory certainty. Absent a cost orientation obligation, significant risk that Service Providers (including MSPs) would face high MTRs, with potential for retail price flexibility and innovation reduced (such as flat rate or bundles pricing). High MTRs may also result in an effective denial of access to MVCT. Regulatory certainty is reduced given wholesale pricing uncertainty.	By ensuring access to MVCT Service Providers will be able to ensure their subscribers can make calls to MSPs subscribers, Consumers, in particular, those with fixed line phones making F2M calls, likely to face high prices (whether through call or other charges). Consumer making off-net M2M calls may also face higher prices. This can dampen consumers' demand for F2M calls and/or drive consumer calling patters to make more M2M calls than would otherwise be necessary. As high MTRs reduce the ability for Service Providers to innovate on retail pricing (say through bundled plans) it may limit the availability of such plans to consumers.

Impact on SMP MSPs	Impact Service Providers	Impact on Consumers
MSPs would, in normal commercial circumstances, be expected to put in place commercial contracts, terms and conditions and notify MVCT buyers of these, including MTRs and changes to them. Absent obligations regarding price control (cost orientation) SMP MSPs would have flexibility to charge MTRs at a level of their choice, with excess profits earned potentially feeding into the level and structure of MSPs own retail pricing. Excessive MTRs could also result in an effective denial of access to other Service Providers. Withdrawal of existing obligations of cost accounting and accounting separation from Vodafone and O2 are likely to be positive for such MSPs as it reduces regulatory burden upon them. Similarly, the non-imposition of these obligations on H3GI, Lycamobile and TMI would also be positive. MSPs incentives to innovate and increase efficiency or provide alternative forms of access in the Relevant MVCT Market may be		

Impact on SMP MSPs	Impact Service Providers	Impact on Consumers
somewhat reduced as excessive MTRs are paid for by competitors and, in turn, by their customers.		

Option B: Impose Transparency, Non-discrimination, Access and Price Control (cost orientation) obligations

Impact on SMP MSPs	Impact on Service Providers	Impact on consumers
Meteor, O2, Vodafone and H3GI all currently have existing obligations of cost orientation. The incremental burden on such MSPs is, therefore, not likely to be insignificant. As neither TMI nor Lycamobile have, to date been subject to a cost orientation obligation, this will lead to an increased regulatory burden on them. Having regard to the existing level of their MTRs this will likely result in a reduction of such MTRs and a corresponding reduction in wholesale revenues where they are net receivers of termination traffic (although this would be offset having regard to the level of MTRs paid to other MSPs). MSPs may need to change retail pricing structures having regard to any reductions in MTRs. As the precise detail of the cost orientation obligation is to	Increased transparency and certainty over wholesale pricing which addresses negative effects set out in Option A above. More consistent and balanced regulatory approach between MSPs and FSPs providing certainty to market participants, including with respect to investment decisions. As cost orientation consistently applied by other NRAs across Europe on SMP MSPs in those jurisdictions, imposition in Irish market likely to contribute to development of internal market by being consistent. Inefficient cross-subsidies arising from excessive MTRs (between MSPs and between MSPs and FSPs) likely to be reduced.	Negative effects on consumers identified in Option A are likely to be addressed, having regard to Service Provider's behaviour on retail pricing (where reductions in MTRs are not passed through to the retail level, consumers may not receive full benefits). While some retail pricing structural adjustments may occur, cost oriented MTRs can be expected to ultimately translate into lower retail prices for fixed and mobile calls, thereby also making them more affordable for fixed and mobile consumers. Enhanced competition will facilitate the development of innovative services for consumers such flat rate/unlimited offers and encourage the development of converged fixed-mobile services and bundles

Impact on SMP MSPs	Impact on Service Providers	Impact on consumers
be subject to consideration within the Separate Pricing Consultation, the impacts on SMP MSPs and other stakeholders will be considered further within it.		

Scenario C: Impose full suite of remedies including Cost Accounting and Accounting Separation obligations

Impact on SMP MSPs	Impact on OAOs	Impact on consumers
Maintenance of existing obligations of cost accounting and accounting separation on Vodafone and O2 likely to involve some burden. Burden likely to be higher for other MSPs who do not currently have such obligations, in particular, for smaller MSPs such as TMI and Lycamobile. Likely be more disproportionate for the latter MSPs.		

Determine the impacts on competition

9.41 ComReg's preliminary view is that, absent regulation, there is the potential and incentive for an SMP operator in the Relevant MVCT Market 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[475]. ComReg has also highlighted its objectives in regulating the Relevant MVCT Markets in paragraph 9.17 above, in particular, preventing restriction in or distortions of competition in affected retail markets.

9.42 The imposition of appropriate *ex ante* remedies to address such competition problems was discussed and justified in section 8, and each of the specific

[475] See discussion in paragraphs 7.23 to 7.32.

remedies is designed to promote the development of effective competition. This is so, given remedies are to be applied consistently across all MSPs, address the identified impacts of competition problems associated with MSPs having SMP in the Relevant MVCT Markets and, ultimately will be to the benefit of Service Providers by allowing them to compete fairly at the retail level.

Assess the likely impacts and choose the best option

9.43 In the discussion on its proposed approach on remedies throughout this Consultation Paper, ComReg has taken full account of its obligations under Regulation 8(6) of the Access Regulations (including that any proposed remedies are to be based on the nature of the problem identified), as well as its relevant objectives as set out under section 12 of the Communications Regulation Acts 2002 to 2011.

9.44 ComReg has provisionally proposed to impose a range of specific regulatory obligations on SMP MSPs operating within in the Relevant MVCT Markets and, in so doing, has assessed the impact on stakeholders and competition not only in this section 9, but throughout this Consultation Paper.

9.45 Having considered the impacts on stakeholders and competition, including the impact on the development of competition within the internal market, it is ComReg's preliminary view that Option B represents the most justified, reasonable and proportionate of the approaches to regulation within the Relevant MVCT Markets.

9.46 Overall, the regulatory obligations chosen do not unduly discriminate against any one particular MSP in that they are imposed symmetrically and this should provide regulatory certainty and ensure fairer and more balanced retail competition amongst MSPs and Service Providers purchasing MVCT.

9.47 ComReg considers that it has met the requirement to be transparent in its approach by setting out proposed remedies, by, providing the justification for such proposed remedies, and by issuing a detailed and reasoned public consultation on these maters.

9.48 ComReg has given consideration throughout this Consultation Paper to other potential regulatory remedies (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.

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 23 May 2012 to 5 July 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 E.

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[476] and maintain or amend its proposals, as appropriate, including with respect to the draft measures set out in the draft Decision Instrument[477].

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[478].

10.6 ComReg appreciates that many of the issues raised in this 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.

[476] See paragraph 1.23 above.

[477] See Appendix D.

[478] Guidelines on the Treatment of Confidential Information, Response to Consultation, ComReg Document 05/24, March 2005.

Appendix A MVCT Market Research

The March 2011 Market Research has been published separately as ComReg Document 12/46a and is available on ComReg's website at the following link.

http://www.comreg.ie/_fileupload/publications/ComReg1246a.pdf

Appendix B Retail Mobile Pricing Structures

Plan Name	Prepay (P) or Billpay (B) Plan	Plan Pricing Differs by Time of Day[479]	Off-Net Plan Pricing Differs by Service Provider Called[480]	On-Net Pricing Differs to Off-Net Pricing[481]
Vodafone Price Plans[i]				
Vodafone Advantage	P	×	✓ **FSP DR**	✓ **DR**
Vodafone Lifestyle	P	✓ **AC**	×	×
Vodafone Perfect Choice 50 and 100 Plans	B	×	×	✓ **F Weekend Only**
Perfect Choice 200, 400 and 600 Plans (with FREE anytime calls and texts to Vodafone)	B	×	×	✓ **F**[ii]
Vodafone Simply 100, 200 and 400 Plans (SIM only)	B	×	×	✓ **F**
Perfect Choice Access Plus 150, 500 and 700 Plans (with FREE anytime calls and texts to Vodafone)	B	×	×	✓ **F**
Perfect Choice Access 150, 300, 500 and 700 Plans (with FREE anytime calls and texts to Vodafone)	B	×	×	✓ **F**
My Way (12, 24 month commitment)	B	×	×	✓ **F**[iii]

479 This column (throughout Appendix B) captures whether price of making calls differs according to when call is made during peak, off-peak or weekend. ✓=Yes and ×=No. If Yes, then it is also indicated if the difference applies to All Calls (Mobile and Fixed) (AC), Mobile Only (MO), Fixed Only (FO) or to calls to the Same Network (SN) only.

480 This column (throughout Appendix B) captures whether there is a difference in the price of making 'off-net' calls to subscribers of other mobile service providers (MSPs) or fixed service providers (FSPs) (together 'Service Providers') differs. ✓=Yes and ×=No. If Yes, then it is also indicated if this difference applies to one or more Specific Mobile Service Providers (SMSPs) on the one hand, or to FSPs on the other and whether the price is at a Discounted Rate (DR) or is Free (F).

481 This column (throughout Appendix B) captures whether the cost of making a call to a subscriber of the same MSP, on the one hand, is different to the cost of calling a subscriber of a different MSP or FSP. ✓=Yes and ×=No. If Yes, then it is also indicated whether the on-net call price is at a Discounted Rate (DR) or is Free (F).

O2 Price Plans[iv]				
Plan Name	Prepay (P) or Billpay (B) Plan	Plan Pricing Differs by Time of Day	Off-Net Plan Pricing Differs by Service Provider Called	On-Net Pricing Differs to Off-Net Pricing
O2 Experience	P	✗	✓ FSP DR	✓ DR
O2 Experience Plus	P	✗	✗	✓ F
O2 Experience More	P	✗	✗	✗
O2 Clear 50, 175	B	✗	✗	✗
O2 Clear 350 with free O2 to O2 calls / free text extra / free anytime unlimited evening and weekend calls / free anytime landline extra	B	✓AC Weekend only	✓ FSP DR / F	✓[v]
O2 Clear 600 with free unlimited anytime O2 to O2 calls / free any network text extra / free unlimited any network evening and weekend calls / free anytime landline extra	B	✗	✗	✓ F
O2 Clear Unlimited O2 to O2 calls and texts and landline calls	B	✗	✓ FSP F	✓ F
O2 Simplicity 100, 150	B	✗	✗	✓ F
O2 Advance 150, 350, 550, 700 with free unlimited anytime O2 to O2 calls extra, free unlimited evening and weekend calls extra, free unlimited anytime landline calls	B	✗	✗	✓
O2 Clear 50, 175, 350, 600 (SIM only)	B	✗	✗	✗
O2 Clear Unlimited O2 to O2 and landline, O2 calls and texts (SIM only)	B	✗	✓ FSP F	✓ F
O2 Advance 150, 350, 550, 700 (SIM only)	B	✓FO	✗	✗
O2 Advance 350, 550, 700 (Microsim for iPhone 4)	B	✓FO	✗	✗

'48' (O2 trading name) Price Plans[vi]				
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
48's Monthly Membership[vii]	P	×	×	×

Meteor Price Plans[viii]				
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
Anytime Choice includes free Meteor Any Network, Internet & Meteor texts	P	×	×	✓ **DR & F** [ix]
Bill Pay Lite; €10, €30 SIM only	B	×	×	✓ **F**
Bill Pay Smart Lite; €30, €50 SIM only	B	×	×	✓ **F**
Bill Pay Connect 200, 500, 700	B	×	×	✓ **F**
Bill Pay Max	B	×	✓ **FSP**	✓ **F**
Bill Pay Smart 200, 400, Unlimited	B	×	×	✓ **F**

eMobile (Trading name of Eircom/Meteor) Mobile Price Plans[x]				
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
Standard Seven Day	P	×	✓ **FSP**	×
Seven 10; Seven 15	P	×	✓ **FSP**	×
Thirty 20 Free Any Network Texts	P	×	✓ **FSP**	×
Thirty 20 eMobile to eMobile Talk and Text	P	×	✓ **FSP**	×
Select 100, 200, 300, 400, 500	B	×	✓ **FSP**	×
Select Unlimited; Talk and Text	B	×	✓ **FSP**	×

3 Ireland Price Plans[xi]				
Plan Name	**Prepay (P) or Billpay (B) Plan (Note 1)**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
3Pay €10 top ups, €20 top ups or higher	P	✓ **AC Weekend only**	✗	✓**F**
Mini, Classic, Super, Mega Flex	B	✗	✗	✓ **F**
Classic, Super, Mega, Ultimate Flex Max	B	✗	✗	✓ **F**
Mini, Classic, Super, Mega Flex (SIM Only)	B	✗	✗	✓ **F**
Classic, Super, Mega, Ultimate Flex Max (SIM Only)	B	✗	✗	✓ **F**
Flexiflix 15, 25, 45	B	✗	✗	✓ **F**
Flexiflix 15, 25, 45 (SIM Only)	B	✗	✗	✓ **F**

Tesco Mobile Price Plans[xii]				
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
Anyone Anytime	P	×	×	✓ **F**
Anyone Anytime Free €10 Top Up	P	×	×	✓ **F**
Anyone Anytime Free €20 Top Up	P	×	×	✓ **F**
Anyone Anytime Free €30 Top Up	P	×	×	✓ **F**
Free calls, texts, and picture messages (on-net)	P	×	×	✓ **F**
SIM Only (12, 16, 20, 25, 30, 40, 50, 70 Euro Plans)	B	×	×	✓ **F**
Flexible credit capped plan (30, 60, 90 Euro)	B	×	×	✓ **F**
12 – 18 months contract plans	B	×	×	✓ **F**

Blueface Mobile Price Plans[xiii]				
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing Differs by Time of Day**	**Off-Net Plan Pricing Differs by Service Provider Called**	**On-Net Pricing Differs to Off-Net Pricing**
Unlimited UK & Ireland Business Plan €69	B	×	×	✓F
Business Prepay	P	×	×	×

Eircom Pricing – Calls to Mobile Elements[xiv]			
Plan Name	Prepay (P) or Billpay (B) Plan	Plan Pricing for Mobile Differs by Time of Day	Off-Net Plan Pricing Differs by Mobile Service Provider Called
Eircom Talk Anytime	B	✓	✓**DR**
Eircom Talk Off-peak	B	✓	✓**DR**
Eircom Talk Weekend	B	✓	✓**DR**
Eircom Talk add-ons: **Mobile Light 60** **Mobile Extra 150** **eMobile/Meteor 200**	B	×	✓**DR**

UPC Pricing – Calls to Mobile Elements[xv]			
Plan Name	**Prepay (P) or Billpay (B) Plan**	**Plan Pricing for Mobile Differs by Time of Day**	**Off-Net Pricing Differs by Mobile Network Called**
Anytime World	B	✓	✗
Freetime World	B	✓	✗
Home Phone	B	✓	✗

[i] Vodafone: Details correct as of 23 April 2012, as per data sourced from http://www.vodafone.ie/phones-plans/?ts=1335349194770 and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp.

[ii]Vodafone: As an alternative to free anytime on-net Vodafone to Vodafone calls and texts, a subscriber can also select free any network calls and texts to 5 any network numbers.

[iii] Vodafone: Customer chooses amount of minutes, texts and data to be included in the plan, with an additional payment for extra minutes/texts used each month.

[iv] O2: Details correct as of 23 April 2012, as per data sourced from http://www.o2online.ie/o2/shop/plans/ and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[v] O2: Some variants of these plans offer on-net O2 to O2 calls at reduced or free rates, but the majority of the variants on the plans have the same rate for both on-net and off-net calls.

[vi] 48: Details correct as of 23 April 2012, as per data sourced from http://48months.ie/ and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[vii] 48: Unlimited calls and texts to any mobile network, along with a set 20 minutes (cannot purchase excess minutes beyond this) to subscribers of FSPs.

[viii] Meteor: Details correct as of 23 April 2012, as per data sourced from http://www.meteor.ie/ and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[ix] Meteor: Depends on top-up amount.

[x] eMobile: Details correct as of 23 April 2012, as per data sourced from http://www.meteor.ie/, http://www.emobile.ie/ and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[xi] H3GI: Details correct as of 23 April 2012, as per data sourced from http://www.three.ie/products_services/index.html and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[xii] TMI: Details correct as of 23 April 2012, as per data sourced from http://shop.tescomobile.ie/our-price-plans.aspx and http://www.callcosts.ie/mobile_phones/Mobile_Calculator.123.LE.asp

[xiii] Blueface: Details correct as of 23 April 2012, as per data sourced from Blueface.

[xiv] Eircom: Details correct as of 23 April 2012, as per data sourced from http://www.eircom.net/productsServices/pstn/ and http://www.callcosts.ie/home_phones/Home_Phones_Calculator.178.LE.asp

[xv] UPC: Details correct as of 23 April 2012, as per data sourced from http://www.upc.ie/phone/ and http://www.callcosts.ie/home_phones/Home_Phones_Calculator.178.LE.asp.

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Appendix C Other SMP Criteria Considered

C.2 As noted in paragraph 6.12, other factors which could be used to indicate the potential market power of an undertaking 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 MVCT Markets.

Overall size of the undertaking

C.3 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 MVCT Markets, there is only one supplier in each Relevant MVCT Market and, therefore, there are no actual or potential competitors (given significant entry barriers). ComReg does, however, consider this factor to be somewhat relevant in considering the strength and impact of any countervailing buyer power on SMP. This criterion is, therefore, considered of less relevance.

Technological advantages or superiority

C.4 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 MVCT Markets, there is only one supplier in each Relevant MVCT Market (given significant entry barriers) and, therefore, there are no actual or potential competitors. Comparisons amongst competitor technologies have little or no bearing on the assessment of SMP in the Relevant MVCT Markets. This criterion is, therefore, considered of less relevance.

Easy or privileged access to capital markets/financial resources

C.5 Easy or privileged access to capital markets may act as a barrier to entry, however, for the same reasons identified in paragraph C.4 there are absolute barriers to entry and no actual or potential competitors on each Relevant MVCT Market. Capital/financial advantages vis-à-vis competitors do not arise in the Relevant MVCT Markets and this criterion is, therefore, considered of little or no relevance.

A highly developed distribution and sales network

C.6 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. Given MVCT is a wholesale service and is purchased by a relatively small number of authorised undertakings (often through an intermediary transit provider) the nature of the SMP MSP's distribution and sales network is not particularly complex. This criterion is, therefore, not considered of relevant to the assessment of SMP in the Relevant MVCT Markets.

Product or services diversification

C.7 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), MVCT is purchased on a standalone rather than a bundled basis. This criterion is, therefore, considered of less relevance to the assessment of SMP in the Relevant MVCT Markets.

Economies of scale and scope

C.8 Economies of scale refer to reductions in average costs due to an increase in output/production. 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.

C.9 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. 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.).

C.10 For the same reasons identified in paragraph C.4 there are significant barriers to entry in the Relevant MVCT Markets, no actual or potential competitors and, as a consequence 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 MVCT Markets.

Barriers to expansion

C.11 Competition in a market may be more vigorous where entry barriers are lower. For the same reasons identified in paragraph C.4 there are significant barriers to entry in the Relevant MVCT Markets, no actual or potential competitors and, as a consequence, competition is not likely to extend beyond the MSP supplying MVCT. This criterion is, therefore, not considered of relevance to the assessment of SMP in the Relevant MVCT Markets.

Sunk costs

C.12 Sunk costs are costs that once incurred cannot be recovered on exit from the market and can represent an absolute barrier to entry. For the same reasons identified in paragraph C.4 there are significant barriers to entry in the Relevant MVCT Markets, no actual or potential competitors and, as a consequence, this criterion is, therefore, not considered of relevance to the assessment of SMP in the Relevant MVCT Markets.

Appendix D Draft Decision Instrument

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Decision Instrument ("Decision Instrument") is made by the Commission for Communications Regulation ("ComReg") and relates to the market for voice call termination on individual mobile networks as identified by the European Commission in its Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation[1] ("the 2007 Recommendation") and as analysed by ComReg in the document entitled *Market Review: Voice Call Termination on Individual Mobile Networks (Market 7) Decision No. D [], Document No. []*.

1.2. This Decision Instrument is made:

i. Pursuant to and having regard to the functions and objectives of ComReg as set out in Sections 10 and 12 of the Communications Regulation Acts 2002 to 2011[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 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

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[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).

[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.

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 *Consultation Paper and Draft Decision, Market Analysis: Mobile Voice Call Termination on Individual Mobile Networks (Market 7)*, ComReg Document No. [12/XX]; and

vii. Having taken account of the submissions received from interested parties in relation to ComReg Document No. [12/XX] 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 and 13 of the Access Regulations.

1.3. The provisions of ComReg Document No. 12/46 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 MVCT and Associated Facilities;

[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.

"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;

"Associated Facilities" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time, but shall also include, for the avoidance of doubt, the Mobile Number Porting Centralised Database;

"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;

"ComReg" means the Commission for Communications Regulation, established under the Communications Regulation Acts 2002 to 2011;

"Effective Date" means the date set out in Section 16 of this Decision Instrument;

"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;

"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;

"H3GI" means Hutchison 3G 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;

"Interconnection" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time;

"Liffey Telecom" means Liffey Telecom 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;

"Lycamobile" means Lycamobile 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;

"Meteor" means Meteor Mobile 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;

"Mobile Network" means a digital wireless cellular network using radio frequency spectrum in any of the 900 MHz, 1800 MHz and/or 2100 MHz Bands or other radio frequency spectrum bands as assigned by ComReg to an Undertaking from time to time;

"Mobile Number(s)" 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 Mobile Number is a number from the Irish national numbering scheme commencing with the network code 08X, where X can represent any digital character 0-9, except 1. For the avoidance of doubt, Mobile Number shall include both a Mobile Number which is the subject of a Primary Allocation/Reservation and a Mobile Number which is the subject of a Secondary Allocation/Reservation;

"Mobile Number Porting Centralised Database" is a database over which Mobile Service Providers have (effective or contractual) control, which facilitates Mobile Number portability and contains the list of ported Mobile Numbers and associated details, including voice call and other routing details. It provides Undertakings, including Mobile Service Providers, with access to the information necessary for accurately and efficiently routing voice calls to ported Mobile Numbers;

"Mobile Service Provider (MSP)" means an Undertaking providing End-Users with land based/terrestrial publicly available mobile voice telephony services using a Mobile Network;

"Mobile Termination Rate(s) (MTR(s))" means the wholesale charge(s) levied by a Mobile Service Provider for the supply of MVCT;

"Mobile Virtual Network Service(s)" means wholesale voice traffic conveyance and associated services provided by one Mobile Service Provider ('MSP A') to another Mobile Service Provider ('MSP B') which allow Subscribers of MSP B to make and receive mobile voice calls on the Mobile Network of MSP A.

"Mobile Voice Call Termination (MVCT)" means the provision by a Mobile Service Provider of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers in respect of which that Mobile Service Provider is able to set the MTR. For the avoidance of doubt, the provision of MVCT involves the provision of an Interconnection service;

"MVNO Host Network Provider" means the Mobile Service Provider providing the Mobile Virtual Network Service;

"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;

"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 (RIO)" means the offer of contract by a Mobile Service Provider to another Undertaking in respect of MVCT (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 Mobile Service Provider, the specific market relating to that SMP Mobile Service Provider as identified in Sections 4.2.1 to 4.2.6 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;

"Significant Market Power (SMP) Mobile Service Provider" refers to a Mobile 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;

"**Telefónica"** means Telefónica 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, including Liffey Telecom, but excluding, for the purposes of this Decision Instrument, Tesco Mobile;

"Tesco Mobile" means Tesco Mobile 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, but excluding for, the purposes of this Decision Instrument, Telefónica;

"Undertaking" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Vodafone" means Vodafone 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;

"900 MHz Band" means the 880 to 915 MHz band of radio frequency spectrum paired with the 925 to 960 MHz band of radio frequency spectrum;

"1800 MHz Band" means the 1710 to 1785 MHz band of radio frequency spectrum paired with the 1805 to 1880 MHz band of radio frequency spectrum;

"2100 MHz Band" means the 1900 to 1920 MHz band of radio frequency spectrum, and the 1920 to 1980 MHz band of radio frequency spectrum paired with the 2110 to 2170 MHz band of radio frequency spectrum.

3. SCOPE AND APPLICATION

3.1. This Decision Instrument applies to H3GI, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone in respect of activities falling within the scope of the Relevant Markets defined in Section 4 of this Decision Instrument.

3.2. This Decision Instrument is binding upon H3GI, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone 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.

4. MARKET DEFINITION

4.1. This Decision Instrument relates to the market for voice call termination on individual mobile networks, as identified in the 2007 Recommendation and as analysed by ComReg in the document entitled *Market Review: Voice Call Termination on Individual Mobile Networks (Market 7) Decision No. [D…], Document No. [..]*. For the purposes of this Decision Instrument, ComReg identifies six 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 six separate Relevant Markets defined in this Decision Instrument are the markets for the provision, by each of those Mobile 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 4.2.1 to 4.2.6 below:

4.2.1. the provision by H3GI of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which H3GI is able to set the MTR; and

4.2.2. the provision by Lycamobile of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Lycamobile is able to set the MTR; and

4.2.3. the provision by Meteor of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Meteor is able to set the MTR; and

4.2.4. the provision by Telefónica of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Telefónica is able to set the MTR; and

4.2.5. the provision by Tesco Mobile of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers (which are the subject of a Primary Allocation/Reservation and/or a Secondary Allocation/Reservation) in respect of which Tesco Mobile is able to set the MTR; and

4.2.6. the provision by Vodafone of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile 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 Vodafone is able to set the MTR.

4.3. The Relevant Markets are more particularly described in Section […] of the document entitled *Market Review: Voice Call Termination on Individual Mobile Networks (Market 7) Decision No. D [], Document No. [].*

5. DESIGNATION OF MOBILE 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 Mobile Service Providers is individually (and not collectively) designated as having SMP in relation to the Relevant Market on which that Mobile Service Provider operates:

(i) H3GI;

(ii) Lycamobile;

(iii) Meteor;

(iv) Telefónica;

(v) Tesco Mobile; and

(vi) Vodafone.

PART II - SMP OBLIGATIONS IN RELATION TO SMP MOBILE SERVICE PROVIDERS (SECTIONS 6 TO 12 OF THE DECISION INSTRUMENT)

6. GENERAL PROVISIONS REGARDING SMP OBLIGATIONS

6.1. For the purposes of Part II of this Decision Instrument, the Mobile Service Providers identified at Sections 5.1(i) to 5.1(vi) above are referred to individually as the "SMP Mobile Service Provider" and collectively as the "SMP Mobile Service Providers".

6.2. For the purposes of this Decision Instrument, an SMP Obligation applies to an SMP Mobile Service Provider only insofar as and to the extent that such SMP Mobile Service Provider is operating on its Relevant Market.

7. SMP OBLIGATIONS IN RELATION TO MVCT

7.1. ComReg is imposing certain SMP Obligations on SMP Mobile Service Providers in accordance with and pursuant to Regulations 8, 9, 10, 12, and 13 of the Access Regulations, as detailed further in Sections 8 to 12 below.

8. OBLIGATIONS TO PROVIDE ACCESS

8.1. Pursuant to Regulation 12(1) of the Access Regulations, each SMP Mobile 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 Mobile Service Provider shall provide and grant Access to Undertakings to the following particular services and facilities:

(i) MVCT;

(ii) Associated Facilities (including the Mobile Number Porting Centralised Database).

8.3. Without prejudice to the generality of Sections 8.1 and 8.2, each SMP Mobile 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 MVCT 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 MVCT 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 MVCT and Associated Facilities).

9. CONDITIONS ATTACHED TO THE ACCESS OBLIGATIONS

9.1. Pursuant to Regulation 12(3) of the Access Regulations, each SMP Mobile Service Provider shall, in relation to the obligations set out under Section 8 above, grant Undertakings Access (including Access to MVCT 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 MVCT 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 Mobile Service Provider, the SMP Mobile 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.

10. OBLIGATION OF NON-DISCRIMINATION

10.1. Each SMP Mobile 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 MVCT and Associated Facilities).

10.2. Without prejudice to the generality of Section 10.1, each SMP Mobile Service Provider shall:

(i) Apply equivalent conditions, including in respect of MTRs or other charges, in equivalent circumstances to other Undertakings requesting or being provided with Access (including Access to

MVCT and Associated Facilities) or requesting or being provided with information in relation to such Access; and

(ii) Provide Access (including Access to MVCT and Associated Facilities) and information to all other Undertakings under the same conditions and of the same quality as the SMP Mobile 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 Mobile Service Provider.

11. OBLIGATION OF TRANSPARENCY

11.1. Each SMP Mobile 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 MVCT 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 Mobile Service Provider shall make publicly available, and keep updated on its website, a RIO. The RIO shall be sufficiently unbundled so as to ensure that Undertakings availing of Access (including Access to MVCT 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 MVCT 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 MVCT and Associated Facilities) including MTRs and other charges; and

(iii) A description of the technical specifications and network characteristics of the Access (including Access to MVCT and Associated Facilities) being offered.

11.4. Each SMP Mobile Service Provider shall publish its RIO within three (3) months of the Effective Date.

11.5. Without prejudice to the generality of the obligations in Section 11.1 to 11.4, pursuant to Regulation 9(1) and 9(4) of the Access Regulations, each SMP Mobile Service Provider shall make its MTRs publicly available and shall publish such MTRs in an easily accessible manner on its publicly available website. Each SMP Mobile Service Provider shall, unless otherwise agreed with ComReg:

11.5.1. publish a notice of its intention to amend its MTR(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 MTR(s), a description of the proposed new MTR(s) and the date on which such new MTR(s) are proposed to come into effect; and

11.5.2. provide Undertakings with which it has entered into a contract in respect of Access, written notification of its intention to amend its MTR(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 MTR(s), a description of the proposed new MTR(s) and the date on which such new MTR(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 Mobile 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 Mobile 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.

12. OBLIGATION RELATING TO PRICE CONTROL

12.1. Pursuant to Regulation 13(1) of the Access Regulations, each SMP Mobile Service Provider shall be subject to a cost orientation obligation as regards MTRs and prices charged by that SMP Mobile Service Provider to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 8.

12.2. The cost orientation obligation referred to in Section 12.1 shall be subject to the requirements further specified by ComReg in the document entitled [….], Decision No. [D…], Document No. […].

[NOTE: THE NATURE OF THIS COST ORIENTATION REMEDY WILL BE FURTHER SPECIFIED IN THE SEPARATE PRICING CONSULTATION REFERRED TO IN SECTION 8 OF THE CONSULTATION PAPER]

<u>PART III - OBLIGATIONS AND EFFECTIVE DATE (SECTIONS 13 TO 16 OF THE DECISION INSTRUMENT)</u>

13. STATUTORY POWERS NOT AFFECTED

13.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it from time to time under any primary or secondary legislation (in force prior to or after the effective date of this Decision Instrument).

14. WITHDRAWAL OF OBLIGATIONS

14.1. The Decisions set out in ComReg Document No. 04/82 (ComReg Decision D09/04[8]), ComReg Document No. 05/78 (ComReg Decision D11/05[9]) and ComReg Document No. 08/92 (ComReg Decision D05/08[10]) are hereby withdrawn when this Decision Instrument shall take effect.

15. MAINTENANCE OF OBLIGATIONS

15.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to each SMP Mobile 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 Mobile Service Provider shall comply with same.

15.2. If any section, clause or provision or portion thereof contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that section, clause or provision or portion thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining section(s), clause(s) or provision(s) or portion thereof of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument.

16. EFFECTIVE DATE

16.1. The effective date of this Decision Instrument shall be the date of its publication and notification to each SMP Mobile 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 respondents agree with ComReg's draft Decision Instrument set out above? Do respondents agree with ComReg's Definitions and Interpretations as set out above in Part I? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer.**

[8] Market Analysis – Wholesale Voice Call Termination on Individual Mobile Networks, ComReg Document No. 04/82, Decision D09/04, 24 July 2004.

[9] Market Analysis – Mobile Voice Call Termination on Individual Mobile Networks, Imposition of SMP Obligations, ComReg Document 05/78, Decision D11/05, 13 October 2005.

[10] Market Analysis - Voice Call Termination on Hutchison 3G Ireland's Mobile Network, ComReg Document No. 08/92, Decision D05/08, 1 December 2008.

Appendix E Consultation Questions

Q. 1 Do you agree that the above identifies the main relevant developments in the retail mobile market since the previous reviews of the Relevant MVCT 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. 2 Do you agree that ComReg has identified the retail consumer/SME behaviours and retail market characteristics that are most relevant to the analysis of the Relevant MVCT 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 behaviours and retail market characteristics in terms of their potential to impact the Relevant MVCT Markets?

Q. 4 Do you agree with ComReg's preliminary conclusions on the retail product and 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 views.

Q. 5 Do you agree with ComReg's preliminary conclusions on the wholesale MVCT 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 evidence supporting your views.

Q. 6 Do you agree that ComReg's proposed definition of the Relevant MVCT Markets adequately identifies the economic bottleneck represented by mobile voice call termination? 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. 7 Do you agree with ComReg's preliminary conclusions on the wholesale MVCT 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 views.

Q. 8 Do you agree with ComReg's assessment of SMP and the associated proposed 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 evidence supporting your views.

Q. 9 Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Relevant MVCT 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. 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 evidence supporting your views.

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 evidence supporting your views.

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 evidence supporting your views.

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 evidence supporting your views.

Appendix F Glossary of Frequently Used Terms

Acronym	Full Title
BEREC	Body of European Regulators for Electronic Communications
CBP	Countervailing Buyer Power
CP	Calling Party
CPP	Calling Party Pays
ERG	European Regulators Group
EU	European Union
F2F	Fixed to Fixed call
F2M	Fixed to Mobile call
FSP	Fixed Service Provider
FTRs	Fixed Termination Rates
FWALA	Fixed Wireless Access Local Area
H3GI	Hutchison 3G Ireland Limited
HM(T)	Hypothetical Monopolist (Test)
ISDN	Integrated Services Digital Network
M2F	Mobile to Fixed (call)
M2M	Mobile to Mobile (call)
MHz	Megahertz
MNAC	Mobile Network Access Code
MNP	Mobile Number Portability
MNPCD	Mobile Number Porting Centralised Database
MNO	Mobile Network Operator
MoU	Minutes of Use
MSP	Mobile Service Provider
MTR	Mobile Termination Rate
MVCT	Mobile Voice Call Termination
MVNE	Mobile Virtual Network Enabler
MVNO	Mobile Virtual Network Operator
NRA	National Regulatory Authority
O2	Telefonica Ireland Limited

OSP	Originating Service Provider
PSTN	Public Switched Telephone Network
RIO	Reference Interconnect Offer
RNA	Retail Narrowband Access
RP	Receiving Party
SIM	Subscriber Identity Module
SME	Small-to-Medium-size Enterprise
SMP	Significant Market Power
SMS	Short Message Service
SSNIP	Small but Significant Non-transitory Increase in Price
STRPL	Switched Transit and Routing Price List
TMI	Tesco Mobile Ireland Limited
UPC	United Pan-Europe Communications
VoIP	Voice over Internet Protocol
WDMDS	Wideband Digital Mobile Data Service
WPNIA	Wholesale Physical Network Infrastructure Access