



Commission for  
**Communications Regulation**

Response to Consultation and  
Notification to European Commission

**Response to Consultation and Notification to  
European Commission – Wholesale voice call  
termination on individual mobile networks**

(Response to Consultation Document 03/127a)

<b>Document No:</b>	<b>04/62a</b>
<b>Date:</b>	<b>8<sup>th</sup> June, 2004</b>

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## 1 Executive Summary

- 1.1 The new communications regulatory framework requires that ComReg define relevant markets appropriate to national circumstances, in particular relevant geographic markets within its territory, in accordance with the market definition procedure outlined in the *Framework Regulations*.<sup>1</sup> In addition, ComReg is required to conduct an analysis of the relevant markets to decide whether or not they are effectively competitive.
- 1.2 The *Framework Regulations* further require that the market analysis procedure under Regulation 27 of those Regulations be carried out as soon as possible after ComReg defines a relevant market, which takes places as soon as possible after the adoption, or subsequent revision, of the Recommendation on relevant product and service markets (“the *Relevant Markets Recommendation*”) by the Commission.<sup>2</sup> In carrying out market definition and market analysis, ComReg must take the utmost account of the *Relevant Markets Recommendation* and the Commission's *Guidelines on Market Analysis and Significant Market Power* (“*The SMP Guidelines*”).<sup>3</sup>
- 1.3 As part of this process, ComReg issued a consultation document (ComReg Document No. 03/127a) outlining its preliminary views on the wholesale mobile voice call termination market. This document summarises the issues raised in ComReg’s original consultation and provides ComReg’s conclusions. ComReg Consultation Document No. 04/62b, which is to be read in conjunction with this document, outlines ComReg’s proposals on the implementation of the remedies proposed in this document.
- 1.4 The EU Commission recommends, in its *Relevant Markets Recommendation*, that NRAs should analyse the relevant market for “voice call termination on individual mobile networks”.<sup>4</sup> The Commission has based its conclusion on several factors,<sup>5</sup> including:
  - the role of the "calling-party-pays" (“CPP”) principle;<sup>6</sup>
  - a lack of demand-side substitution at the retail and wholesale levels, including an analysis of the feasibility of re-routing possibilities, the role

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<sup>1</sup> European Communities (Electronic Communications Networks and Services)(Framework) Regulations 2003 (S.I. No. 307 of 2003).

<sup>2</sup> Regulations 26 and 27 of S.I. 307 of 2003.

<sup>3</sup> 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”).

<sup>4</sup> This market corresponds to that referred to in Annex I (2) of the Framework Directive.

<sup>5</sup> Explanatory Memorandum to the Relevant Markets Recommendation.

<sup>6</sup> Under CPP, the party making the call to a mobile phone pays the full cost for calling a mobile handset. The mobile user receiving the call incurs no charge for receiving it. An alternative to CPP is RPP (Receiving Party Pays) which applies in the USA. Under RPP the calling party pays the standard price for a comparable call to a fixed phone and the mobile user receiving the call pays the cost of terminating the call over the mobile part of the network - often the same price as if the mobile user was making an outgoing call.

Notification - Wholesale voice call termination on individual mobile networks of buyer power, the possible internalisation of call externalities and / or the price sensitivity of mobile users;

- a lack of supply-side substitution at the wholesale level; and
- the inability of mobile operators to price discriminate between individual mobile terminals.

- 1.5 Having taken into consideration responses received as part of the consultation process, it is ComReg's view that the relevant product market is voice call termination on the individual network of each MNO, while the geographical market is the territory of the Republic of Ireland. There are currently no viable competitive substitutes at the wholesale level for the termination of mobile voice calls by individual MNOs, whether measured from the supply-side or the demand-side. The current method of charging for termination by MNOs (the CPP principle) perpetuates the fact that consumers are in general price-inelastic about mobile voice termination charges, further insulating individual MNOs from price competition.
- 1.6 Having conducted a market analysis on the relevant market, it is ComReg's view that each MNO in Ireland, namely Vodafone, O<sub>2</sub>, Meteor and '3', should be designated as having SMP in the relevant market for the termination of voice calls on their respective mobile networks in Ireland.
- 1.7 ComReg is minded that the remedies most appropriate to address the market failure identified in the relevant markets are transparency, non-discrimination, and cost-orientation. In support of the above remedies, ComReg believes that it may be appropriate to impose Accounting Separation and Cost Accounting remedies. These remedies are aimed at resolving the competition problems that are occurring in this relevant market, such as the lack of sufficient constraints on the mobile operators to ensure that their voice call termination charges are set at an efficient level.
- 1.8 ComReg believes that there are a number of options for implementing the remedies. In that regard, ComReg is consulting in more depth in the accompanying document (04/62b) on the detailed implementation of the remedies outlined in this document.

## 2 Introduction

### Objectives under the Communications Regulation Act 2002

- 2.1 Subsection 1(a) of Section 12 of the Communications Regulation Act 2002 outlines the objectives of ComReg in exercising its functions. These are, in relation to the provision of electronic communications networks, electronic communications services and associated facilities:
- (i) to promote competition
  - (ii) to contribute to the development of the internal market, and
  - (iii) to promote the interests of users within the European Union.
- 2.2 This review is in line with the objectives set out in the Communications Regulation Act 2002, in particular as ComReg seeks to promote competition and ensure that end-users derive the maximum benefit in terms of price, choice and quality. ComReg has also had regard to the regulatory objectives as set out by the Communications Regulation Act 2002 act and the Ministerial Directions of February 2003 and March 2004.<sup>7</sup>

### Regulatory Framework

- 2.3 Four sets of Regulations,<sup>8</sup> which transpose into Irish law four European Community directives on electronic communications networks and services,<sup>9</sup> entered into force in Ireland on 25 July 2003. The final element of the EU electronic communications regulatory package, the *Privacy and Electronic*

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<sup>7</sup> Directions by the Minister for Communications Marine and Natural Resources to the Commission for Communications Regulation under S.13 of the Communications Regulation Act 2002 (21 February, 2003) (26 March, 2004)

<sup>8</sup> Namely, the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 (S.I. No. 307 of 2003), ("the Framework Regulations"); the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations, 2003 (S.I. No. 306 of 2003), ("the Authorisation Regulations"); the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003 (S.I. No. 305 of 2003), ("the Access Regulations"); the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2003 (S.I. No. 308 of 2003), ("the Universal Service Regulations").

<sup>9</sup> The new regulatory framework for electronic communications networks and services, comprising of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, ("the Framework Directive"), OJ 2002 L 108/33, and four other Directives (collectively defined in the Framework Directive as "the Specific Directives"), namely: Directive 2002/20/EC of the European Parliament and of the Council on the authorisation of electronic communications networks and services, ("the Authorisation Directive"), OJ 2002 L 108/21; Directive 2002/19/EC of the European Parliament and of the Council on access to, and interconnection of, electronic communications networks and services, ("the Access Directive"), OJ 2002 L 108/7; Directive 2002/22/EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services, ("the Universal Service Directive"), OJ 2002 L 108/51; and the Directive 2002/58/EC of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector, ("the Privacy and Electronic Communications Directive"), OJ 2002 L 201/37.

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*Communications Directive*, was transposed into Irish law on 6 November 2003.

- 2.4 The new communications regulatory framework requires that ComReg define relevant markets appropriate to national circumstances, in particular relevant geographic markets within its territory, in accordance with the market definition procedure outlined in the *Framework Regulations*.<sup>10</sup> In addition, ComReg is required to conduct an analysis of the relevant markets to decide whether or not they are effectively competitive.<sup>11</sup> Where it concludes that the relevant market is not effectively competitive (*i.e.*, where there are one or more undertakings with significant market power (“SMP”)), the *Framework Regulations* provide that it must identify the undertakings with SMP in that market and impose on such undertakings such specific regulatory obligations as it considers appropriate.<sup>12</sup> Alternatively, where it concludes that the relevant market is effectively competitive, the *Framework Regulations* oblige ComReg not to impose any new regulatory obligations on any undertaking in that relevant market.<sup>13</sup> If ComReg has previously imposed sector-specific regulatory obligations on undertakings in that relevant market, it must withdraw such obligations and may not impose new obligations on those undertaking(s).<sup>14</sup>
- 2.5 The *Framework Regulations* further require that the market analysis procedure under Regulation 27 be carried out subsequent to ComReg defining a relevant market, which is to occur as soon as possible after the adoption, or subsequent revision, of the *Relevant Markets Recommendation* by the European Commission.<sup>15</sup> In carrying out market definition and market analysis, ComReg must take the utmost account of the *Relevant Market Recommendation* and the Commission's Guidelines on Market Analysis and Significant Market Power (“*The SMP Guidelines*”).

## ComReg procedure

- 2.6 ComReg has collected market data from a variety of internal and external sources, and from consumer surveys, in order to thoroughly carry out its respective market definition and market analysis procedures based on established economic and legal principles, and taking the utmost account of the *Relevant Markets Recommendation* and the *SMP Guidelines*.
- 2.7 On October 22nd 2003, ComReg issued a six week national consultation on its review of the market for wholesale voice call termination on individual mobile networks. Interested parties were asked to submit comments by December 3rd 2003 on a number of questions pertaining to ComReg’s preliminary findings. ComReg received submissions from six respondents listed below by the close of the

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<sup>10</sup> Regulation 26 of S.I. 307 of 2003

<sup>11</sup> Regulation 27 of S.I. 307 of 2003

<sup>12</sup> Regulation 27(4) of S.I. 307 of 2003

<sup>13</sup> Regulation 27(3) of S.I. 307 of 2003

<sup>14</sup> Regulation 27(3) of S.I. 307 of 2003

<sup>15</sup> Regulations 26 and 27 of S.I. 307 of 2003

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The six respondents to the Consultation were:

- ALTO
- *eircom*
- MCI
- Meteor
- O<sub>2</sub>
- Vodafone

2.8 ComReg thanks all respondents for their submissions. Having considered the views of all respondents, ComReg sets out in this document its conclusions regarding the market review for this market. Comments relevant to each consultation question are addressed in the following sections (all questions are numbered as they were in the original consultation document). All responses received are available for inspection (with the exception of material supplied on a confidential basis) at ComReg's office.

2.9 This document is ComReg's notification to the European Commission as required under Article 7(3) and 7(4) of the Framework Directive.

## **Liaison with Competition Authority**

2.10 There is a requirement on National Regulatory Authorities (NRAs) to co-operate with National Competition Authorities (NCAs) throughout the process of market definition and analysis.<sup>16</sup> In December 2002, ComReg signed a co-operation agreement with the Competition Authority for a period of three years.<sup>17</sup> To facilitate market review decision-making, a Steering Group including a representative from the Competition Authority was established by ComReg. Through this forum, the Competition Authority has been informed and involved throughout the market review decision making process. The views of the Competition Authority are contained in Annex B.

## **Structure of document**

2.11 The remainder of this consultation document is structured as follows:

- Section 3 presents ComReg's determination on the definition of the mobile voice call termination market. This section consists of a review of the market definition procedure and its scope, as well as demand- and supply-side assessments at the wholesale and retail level;
- Section 4 presents ComReg's market analysis of the mobile voice call termination market and presents ComReg's determination on whether this market is effectively competitive;

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<sup>16</sup> Article 16(1) of the Framework Directive and Regulation 27(1) of the Framework Regulations

<sup>17</sup> ComReg Document No. 03/06

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- Section 5 presents ComReg's determination on those undertakings with significant market power in the mobile voice call termination market;
- Section 6 discusses the Regulatory Impact Assessment (RIA) that ComReg proposes to carry out in relation to this market;
- Section 7 outlines at a high level ComReg's proposed market remedies under the new regulatory framework;
- Annex A contains the Notification of Draft Measures;
- Finally Annex B contains the views of the Competition Authority.

### 3 Relevant Market Definition

#### Background

- 3.1 The *Framework Regulations* require ComReg to define relevant markets appropriate to national circumstances, in particular the relevant geographic markets within Ireland, in accordance with the market definition procedure outlined in the *Framework Regulations*. This obligation applies to both the relevant markets identified in the *Relevant Markets Recommendation* and to additional relevant markets that ComReg may consider to merit investigation. In accordance with the *Framework Regulations*, the market definition exercise must be carried out in accordance with the principles of competition rules and must take “utmost account” of the *Relevant Markets Recommendation*, as well as the *SMP Guidelines*.<sup>18</sup>
- 3.2 In Section 3 of the Consultation, ComReg set out its preliminary conclusions with regard to the market definition of the market for wholesale voice call termination on individual mobile networks. A number of questions were asked in that consultation regarding ComReg’s preliminary conclusions on the market definition and the evidence used to form those preliminary conclusions. This section discusses the market definition issues as set out in section 3 of that consultation, the views of the respondents, and then outlines ComReg’s position.

#### Scope of Review

##### Summary of consultation issue

- 3.3 ComReg’s consultation paper put forward the view that the services under review in this examination were those for the termination of voice calls on a mobile network. Additionally, consistent with the principle of technology neutrality, ComReg believed that the termination of voice calls on a 3G network should be included in the scope of this market.

##### Consultation question 1

**Q. 1. Do you agree with the scope of ComReg’s review of wholesale mobile termination services? Please elaborate on your response.**

##### Responses to question 1

- 3.4 ComReg received five responses to this consultation question. Two respondents agreed with the precise scope of ComReg’s review and three respondents disagreed.
- 3.5 The three respondents who disagreed with the scope of ComReg’s review all argued that the scope was too narrow and that the market review should incorporate all mobile services, e.g. access, origination and termination.

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<sup>18</sup> Regulation 27

- 3.6 These respondents argued that mobile termination formed part of a cluster of services and should not be simplistically analysed as a stand-alone service without adequate consideration of its inter-relationship with other mobile services. Competition for customers was said to lead to linkages in the pricing of these various services, as mobile operators priced termination so as to be able to provide attractive offers on the retail market. In that regard, any gross margins made in the termination market were said to be competed away in the retail market through lower prices paid by mobile subscribers. Additionally, these respondents argued that the presence of fixed and common costs made it inefficient to supply a termination service in isolation. Therefore, these respondents felt that it was not possible to look at a market for wholesale voice call termination in isolation without considering the knock-on impacts of regulation on other services and on mobile take-up.
- 3.7 One respondent elaborated further upon the above point, by highlighting the need to balance the interests of mobile subscribers and callers in terms of social benefit enjoyed by the public. This respondent believed that the narrow scope of ComReg's review made it difficult to see how ComReg would properly consider whether the current termination rates operated for or against the public interest. Additionally, ComReg needed to consider the broader impact of the regulation of termination services on investment and innovation, including 3G services.
- 3.8 Of the two respondents which agreed with ComReg's proposed scope of review, one suggested that ComReg should also analyse the wholesale data call termination market on mobile networks, and specifically the Wholesale SMS termination market, using the Article 7 procedure from the Framework Directive.<sup>19</sup> This respondent believed that the same market conditions applied for SMS call termination on individual mobile networks as applied to the market for wholesale voice call termination, and that the analysis and reasoning undertaken by ComReg in this exercise were applicable to the market for SMS call termination at the wholesale level. This respondent added that data call termination on fixed networks in Ireland was subject to the same regulatory regime as voice call termination on fixed networks. Thus, the failure to review wholesale SMS call termination on mobile networks was said to contravene the principle of technological neutrality and to perpetuate asymmetric regulation between fixed and mobile networks in Ireland.

### **ComReg's position**

- 3.9 ComReg is aware that the bundle of services sold at the retail level consists of access, origination and termination services. However, ComReg is also aware that these services are based upon wholesale inputs. The EU Commission, in its list of relevant markets,<sup>20</sup> outlined the markets that NRA should review. The three listed relevant markets, which together include access, origination and termination, are:

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<sup>19</sup> Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive).

<sup>20</sup> Commission Recommendation On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services. C(2003)497

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- The wholesale market for voice call termination on individual mobile networks
- The wholesale market for access and call origination on public mobile networks
- The wholesale national market for international roaming on public mobile networks

3.10 ComReg is obliged to carry out market reviews in accordance with EU and national legislation. In that regard, EU guidance on the relevant markets provides the best starting point for its review of the sector. However, ComReg does not simply accept these market definitions as being necessarily appropriate or sufficient for Ireland, and has carried out a number of tests to assess the boundaries of the definition, including demand and supply side substitution. These were thoroughly analysed in the consultation and are further expanded upon throughout this document.

3.11 In carrying out its market review, ComReg emphasises that the provision of voice call termination at the wholesale level is a product that can be and is purchased on an individual basis. ComReg therefore believes that it is correct to focus on this individual service as the starting point for the market definition exercise. By applying market definition tests, including demand and supply side substitution, ComReg assesses whether the market definition proposed by the Commission is applicable in the particular circumstances of the Republic of Ireland.

3.12 ComReg acknowledges that the regulation of voice call termination at the wholesale level can affect the broader market for retail mobile services, and will take this into account where appropriate (e.g., in its consideration of effective competition and in the selection of remedies). Additionally, it should be noted that ComReg has already begun its analysis of the access and call origination market (see ComReg 04/05), which also involves an analysis of competitive conditions at the retail level.

3.13 With regard to the suggestion made by one respondent that ComReg analyse the wholesale data call termination market on mobile networks, and specifically the wholesale SMS termination market, using the Article 7 procedure under the Framework Directive, ComReg believes that there are certain aspects of the SMS call termination market that are likely to be similar to the voice call termination market. ComReg reserves its right to investigate this matter further.

### **Conclusion**

3.14 Having reviewed the responses, ComReg believes that the scope of its review should be focused on the wholesale market for voice call termination services, as outlined in the consultation. However, ComReg recognises that the regulation of wholesale voice call termination services can affect other mobile services and will therefore take this into consideration, both in terms of its assessment of whether the relevant market is effectively competitive, and in terms of any remedies that are proposed to be applied.

## **The relevant product market**

- 3.15 The purpose of the market definition procedure is to identify in a systematic way the competitive constraints that providers of Electronic Communications Networks and Services (ECNS) encounter; thereby facilitating the subsequent market analysis procedure. According to the European Court of Justice,<sup>21</sup> a relevant product market comprises all products or services that are sufficiently interchangeable or substitutable, not only in terms of their objective characteristics, their prices or their intended use, but also in terms of the conditions of competition, common pricing constraints and/or the structure of supply and demand for the product in question.
- 3.16 The following sections of the review considered issues relating to demand-side substitution at a wholesale and retail level. Demand-side substitutability refers to the extent to which customers can substitute other services or products for those in question.

## **Demand-side substitution**

- 3.17 ComReg has outlined that the CPP principle applicable to mobile communications services in Ireland and elsewhere in Europe plays an important role in the market definition procedure. The CPP principle means that the party making the call, *i.e.*, the calling party, rather than the party receiving the call, *i.e.*, the called party, pays the entire cost of the call at the retail level. This results in the mobile call termination charge being included in the originating operator's cost base and in its retail prices. This leads to a disconnect between the calling party paying for the voice call, and indirectly, for the mobile voice termination charge, and the called party who selects the terminating operator and who thereby can influence the level of the termination charge (*i.e.*, the caller pays, but the mobile subscription is decided by someone else).

## **Demand-side substitution at a wholesale level**

### **Summary of consultation issue**

- 3.18 ComReg took the view that there were no feasible demand-side substitutes at the wholesale level, as operators wishing to terminate a call to a mobile number had no choice other than to terminate this call on the network to which that number is assigned.
- 3.19 To try and terminate a call on a network other than the one that was being called would currently result in the call being unsuccessful.

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<sup>21</sup> See, for example, Case 322/81, Michelin v. Commission [1983] ECR 3461, as well as the Commission Notice on the definition of relevant markets for the purposes of Community competition law ("the Commission Notice on Market Definition"), OJ 1997 C 372/3, and the SMP Guidelines.

## **Consultation question 2**

**Q. 2. Do you agree that there are currently no technically or economically feasible demand-side substitutes at the wholesale level? Please elaborate on your response and provide economic evidence in support.**

### **Responses to question 2**

- 3.20 The responses to this question varied. Two respondents disagreed with ComReg's analysis that there were currently no technically or economically feasible demand-side substitutes at the wholesale level for the voice call termination market, while three respondents agreed. One of the three respondents who agreed believed that this analysis was irrelevant, given that ComReg employed the incorrect market definition. This respondent suggested that ComReg should analyse the possible demand-side substitutes for mobile services as a whole and not purely for termination services.
- 3.21 The two respondents who disagreed with ComReg's analysis argued that there were prospective demand-side substitutes at both the wholesale and retail levels.
- 3.22 One respondent stated that any market analysis needed to be forward-looking and that the market definition must be undertaken on an explicitly prospective basis under the new regulatory framework.<sup>22</sup> In their opinion, prospective substitutes included Voice over IP (VOIP), 3G, Instant Messaging (IM) and Electronic Numbering (ENUM).
- 3.23 The other respondent believed that a number of competitive threats or substitutes currently existed that constrained its ability to leverage call termination with regard to incoming calls from fixed numbers. In particular, the use of SMS to trigger a call back from a fixed line and the usage of mobile gateways to allow price-sensitive users to have their calls re-routed as an on-net call were said to be two such substitutes.

### **ComReg's position**

- 3.24 ComReg agrees that any market review exercise has to consider both the current and prospective situation and has taken a forward-looking timeframe into consideration for this market review.
- 3.25 Of the prospective substitutes identified by the respondents, ComReg notes that these generally relate to possible retail substitutes. Additionally, ComReg notes that the respondents listed these prospective substitutes in the discussion of the questions dealing with substitution at the retail level. ComReg therefore believes it is more appropriate to consider these prospective substitutes in the section which deals with demand-side substitution at a retail level (see paragraph 3.27 to 3.68). However with regard to such prospective substitutes, ComReg notes that one of the MNOs acknowledges that given the market definition of termination services, it agrees that

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<sup>22</sup> Framework Directive, recital 27.

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there are no feasible substitutes for mobile voice call termination on the network of the subscriber.

## **Conclusion**

3.26 Having reviewed the responses, ComReg maintains its original position that there are no current or prospective feasible demand-side substitutes for mobile voice call termination at the wholesale level over the timeframe of this review. An operator wishing to terminate a call to a mobile number can only terminate it on the network to which that number is assigned. To attempt to terminate this call on another network would currently result in the call being unsuccessful.

## **Demand-side substitutability at the retail level: calling party behaviour**

3.27 As part of its investigation of the boundaries of competition for mobile termination services, ComReg has considered various aspects of customer behaviour at the retail level, because the level of customer awareness, including price sensitivity, appears to have a material impact on the level of competitiveness at the wholesale level. In this regard ComReg considered two issues:

- Awareness of calling a mobile number, the identity of the MNO and the price of the call; and
- The use of alternative services.

### **(a) Awareness of calling a mobile number, the identity of the MNO and the price of the call**

#### **Summary of consultation issue**

3.28 ComReg believed that, in order for callers to be price sensitive, it must be possible for them to be aware that they are calling mobile numbers and be able to identify the networks of the called parties via these numbers. ComReg presented evidence from an independent consumer survey conducted by Amárach<sup>23</sup> which illustrates that over four-fifths (83%) of respondents are “always aware” or “usually aware” of whether they are calling a fixed or mobile network from a fixed network. When calling a mobile network from a fixed network, seven in ten respondents (71%) said that they are “always aware” or “usually aware” of what mobile network they are calling. When making a call from a mobile phone to another mobile phone, seven in ten respondents (69%) said that they are “always aware” or “usually aware” of whether they are calling a mobile on the same network.

3.29 In any event, awareness of the identity of the network called does not necessarily equate to price sensitivity. For callers to be price sensitive, callers must also be aware of the price of a call. Results from the *Amárach* survey, show that when fixed line consumers were directly asked how much they thought it cost to call a mobile phone from a landline during peak periods on a week day, the average amount cited was 40c, significantly higher than the actual cost of such a call, while 37% of those

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<sup>23</sup> Amárach Fixed and Mobile survey, carried out July / August 2003.

Notification - Wholesale voice call termination on individual mobile networks respondents did not reply with a figure, but simply answered “don’t know”.

3.30 While there is currently a significant awareness of the identity of the called network, awareness of prices appears to be low. According to the *Amárach Survey*, over half of respondents (53%) are unaware of the cost of making a peak time call from a landline to a mobile phone, while 42% have some idea of the cost, with 4% claiming to know exactly how much it costs.<sup>24</sup> ComReg’s consumer survey of February 2003 conducted by TNS MRBI revealed that 53% were unaware of any cost difference in calling another mobile network compared to calling somebody on the same mobile network.<sup>25</sup>

3.31 Overall, there appears to be a reasonably high awareness of the type of calls users are making but a low awareness of the cost of calls.

### **Consultation question 3**

**Q. 3. Do you agree that callers to a mobile have a high awareness that they are calling a mobile number and/or a particular mobile network?  
Please elaborate on your response and provide economic evidence in support.**

### **Responses to question 3**

3.32 All respondents agreed that callers to a mobile have high awareness that they are calling a mobile number and/or a particular network. One respondent added that even with the introduction of Full Mobile Number Portability (FMNP), it is reasonable to expect that callers will continue to know which network they are calling in the majority of cases, as the majority of calls are made in the context of repeated calling relationships.

### **ComReg’s position**

3.33 ComReg agrees with the respondents that callers to a mobile have high awareness that they are calling a mobile number and/or a particular network.

### **Conclusion**

3.34 ComReg remains of the view that callers to a mobile have high awareness that they are calling a mobile number and/or a particular network. ComReg's conclusions in this respect might, however, be affected by the impact of FMNP in the future.

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<sup>24</sup> The average amount cited by those who claimed to know exactly how much it cost was 49c, significantly higher than the actual cost.

<sup>25</sup> ComReg Document No 03/29c.

#### **Consultation question 4**

**Q. 4. Do you agree that there is evidence of low consumer awareness of the costs of calling mobile networks? Please elaborate on your response and provide economic evidence in support.**

#### **Responses to question 4**

- 3.35 Two respondents agreed with ComReg that there is low awareness of the cost of calling mobile networks, as supported by evidence from the *Amárach* study.
- 3.36 Of the other three respondents who answered this question, one respondent added that, in its experience, consumers will be more aware of the relative level of prices than of the actual level of prices. Therefore, in its opinion, while consumers may not be aware of the actual price, they will still be aware of whether a fixed to mobile call is more expensive, for instance, than a fixed to fixed call.
- 3.37 Another respondent believed that ComReg failed to acknowledge the importance of spending patterns. If a customer's spend of €20 a week on their mobile service increased for the same level of calling, then this respondent believed that this customer would question the level of charges attributable to particular services. In addition, this respondent believed that the detailed billing available to fixed line customers of *eircom* would increase the level of awareness of costs of calls to each mobile network.
- 3.38 One respondent disagreed with ComReg's conclusion that there is low awareness of the costs of calling mobile networks. This respondent believed ComReg had drawn unjustified conclusions from the survey evidence, as the consumer survey did not give any thought to the mechanics of how consumers actually decide the quantity of calls they are to make. This respondent believed that it was unreasonable to expect consumers to have complete and detailed knowledge of individual call prices and that this knowledge was not a prerequisite for customers being able to respond to changes in usage patterns or call prices. Rational customers were unlikely to expend time and effort to find out about prices which were not critical to their decision-making. In its view, behavioural responses to surprises in regular bills must also be considered and were likely to be the predominant mechanism by which consumers demonstrate price sensitivity.
- 3.39 This respondent also provided publicly available evidence from Australia<sup>26</sup> and the UK<sup>27</sup> that suggested that callers to mobiles are price elastic to a reasonable extent, with their price elasticity ranging from -0.3 to -0.8 for fixed-to mobile calls at different times of the day.

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<sup>26</sup> Access Economics 1998, "Review of Price Controls on Telstra", Prepared for the Department of Communications and the Arts, August, Canberra.

<sup>27</sup> Estimation of Fixed-to-Mobile Price Elasticities, 8 May 2001, available at <http://www.dotecon.com/images/reports/elastftm.pdf> or from BT's website.

### **ComReg's position**

- 3.40 ComReg agrees with the respondents that consumers are more likely to have a greater awareness of the costs of their regular bills and the relative level of prices as opposed to the cost of individual calls.
- 3.41 In relation to price elasticity, this is a measure of customers' responsiveness to price changes. Price elasticities are expected to be negative, as a rise in price generally reduces the quantity demanded. The more negative the value, the more sensitive demand is to price changes; a product with an own-price elasticity of between 0 and -1.0 is regarded as relatively insensitive to price changes (price-inelastic) and a product with an own-price elasticity of less than -1.0 (for example, -1.5) is sensitive to price changes (price-elastic). With regard to the price elasticity evidence for fixed-to-mobile calls provided by one of the respondents to this consultation, ComReg notes that these figures represent that consumer demand for fixed to mobile calls is relatively insensitive to price changes (i.e. inelastic), which is in line with the original survey evidence presented by ComReg.

### **Conclusion**

- 3.42 Taking on board the respondents' views, ComReg believes that consumers have a global knowledge of the cost of their bills, and might be able to use this information to respond accordingly. However, awareness of total costs by itself is not enough to prompt consumers to use substitutes. For this to happen, there must exist, at the very least, available substitutes. The question now is whether the consumer response is practical and whether it has any material impact on the provision of termination services.

## **(b) The use of alternative services**

### **Summary of consultation issue**

- 3.43 In order for a price-sensitive caller base to be able to act as a competitive constraint on mobile termination rates, it will be necessary that such a subscriber can bypass mobile termination rates by selecting alternative means of communication. ComReg's consultation paper examined a number of possible demand-side substitutes that are available at the retail level and which might arguably constrain the ability of an MNO to raise its termination charges. The following possible substitutes were examined:

- Making calls to a fixed number;

- 3.44 Fixed-to-fixed and mobile-to-fixed calls, in theory, have the potential to constrain mobile call termination charges, as these call types eliminate the payment of a call termination charge to a mobile operator. However, this option would ignore the fundamentally different nature of fixed and mobile telephony (e.g., mobile numbers are associated with individuals on the move and not necessarily fixed locations).

- Making mobile-to-mobile off-net calls as substitutes for fixed-to-mobile calls;

3.45 It is currently true that the substitution between fixed-to-mobile calls and mobile off-net calls is unlikely to constrain mobile call termination charges at the wholesale level, as a terminating MNO does not discriminate on price between fixed and mobile originating operators. Additionally, the nature of calls originating from mobile networks is different to those from fixed networks, as consumers may use their mobile phone to make calls on the move and not necessarily at fixed locations.

3.46 In addition, the retail price of a mobile off-net call is generally considerably higher than a fixed-to-mobile call: For example, if we consider Vodafone Light and Active, two post-paid tariffs offered by Vodafone, the price for an off-net mobile call during peak time is equal to 50c and 45c respectively (Vat inclusive ) per minute. On the other hand, a review of the standard tariffs offered by Eircom for fixed to mobile calls during peak times reveals a retail price between 23c and 29c (Vat inclusive) per minute.<sup>28</sup>

- Making mobile on-net calls as substitutes for mobile off-net calls or fixed-to-mobile calls;

3.47 While acknowledging that the nature of mobile originated calls is different to those from fixed networks, it is also instructive to explore whether a mobile on-net call might be substitutable for a fixed-to-mobile call or a mobile off-net call. Mobile on-net calls are generally cheaper than mobile off-net calls and comparable to, if not cheaper than, fixed-to-mobile retail charges. The subscription package, the time and the day, e.g., weekday or weekend, will influence the call charges in this regard. For example, if one considers Vodafone’s Light, Active and Extra tariff packages, the following tariff structure can be observed:

**Table 1: Vodafone Light, Active and Extra Tariff Plans**

<i>Per Minute call charges applicable once inclusive bundle has been used (Cents Vat Inclusive) –</i>									
	To fixed phone			To on net mobile phones			To off net mobile phones		
	Peak	Off – Peak	Weekend	Peak	Off – Peak	Weekend	Peak	Off – Peak	Weekend
Light	50	15	15	30	15	15	50	30	30
Active	45	15	15	15	15	15	45	30	30
Extra	38	15	15	15	15	15	38	30	30

Source: [www.vodafone.ie](http://www.vodafone.ie) (22<sup>nd</sup> October 2003)

3.48 The provision of lower tariffs for mobile on-net calls not only does not constrain mobile call termination charges at the wholesale level, but arguably preserves the level of those charges (by influencing a customer's choice of mobile operator while at the same time taking advantage of price insensitivity for termination on other networks). The effect of lower mobile on-net calls to preserve customer loyalty could be increased further where mobile communities of interest are involved, particularly as members of such communities may be less inclined to switch network operators so as not to lose the benefits of lower on-net retail charges. ComReg is therefore of the view that the extent of substitution between mobile on-net calls and

<sup>28</sup> Prices quoted for *eircom* options bronze and silver tariff plans. Call to Vodafone, O<sub>2</sub> and Meteor mobiles cost 23.1c, 25.1c and 29.2c respectively per minute.

Notification - Wholesale voice call termination on individual mobile networks fixed-to-mobile calls or mobile off-net calls is insufficient at this time to constrain mobile termination charges, particularly as the availability of mobile on-net calls as a substitute is limited, due to the fact that mobile users are distributed amongst several mobile networks.

3.49 The substitution of mobile on-net calls for mobile-to-mobile off-net calls also requires the calling and called parties to be on the same network or for the calling party to use multiple SIM cards. However, ComReg views this alternative solution as cumbersome and time-consuming, while many MNOs continue to network-lock their handsets in any event. In addition, while ‘automatic’ substitution is theoretically possible, no mechanism to instruct the called party’s phone to switch networks automatically has as yet been developed, nor is it likely to be developed during the timescale of this review.

- Sending text messages via short messaging service (“SMS”);

3.50 In certain circumstances such as short conversations, sending a text messages may be a substitute for a voice call. While text messages via SMS can be seen to be a partial substitute for a voice call to a mobile number, the potential for delay, the limited number of characters conveyed (i.e., currently 160 alphanumeric characters per text) and the market evidence suggesting complementarity rather than substitutability, have lead ComReg to conclude that text messages are not complete substitutes for a voice call to a mobile number at this time. According to the *Amárach* Survey, only 18% of respondents use mobile text messaging “on a daily basis” in lieu of fixed calls, while 35% do so “several times a week” and 30% of respondents “never” do so. In addition, only a relatively small share of respondents would contact a friend or family member who owns a mobile phone by mobile text messaging. In any event, as MNOs provide both SMS and voice call termination services, ComReg considers that they are in a position to ensure that these services do not competitively constrain each other.

- Making a short call to request the called party to call back;

3.51 Calls based on call-back solutions or shortened time periods are not genuine alternatives, as their use is extremely limited and there is no evidence to suggest that they have had an impact on mobile termination charges. According to the *Amárach* Survey, no respondent would ask a friend or family member to call them back on the basis of a two minute call, while only 2% of respondents would do so on the basis of a five minute call. ComReg considers that there are emerging services that have the potential at least to be considered as alternatives to voice calls. Such technologies include unified messaging services, voice over IP and multimedia messaging services (“MMS”). However, these services have yet to be, or have just been, commercially launched in Ireland. Consequently, the take-up of these services is limited at this time and there is a lack of market evidence to assess their impact on mobile call termination charges.

- Shortening calls altogether

3.52 The likelihood of shortening calls altogether is not seen as a genuine alternative for consumers. According to the *Amárach* survey, 65% of consumers stated that it

Notification - Wholesale voice call termination on individual mobile networks makes no difference to their call behaviour in terms of the time they spend on a call to someone on the same network as them.

- And manually substituting the SIM card of the called party;

3.53 Manually substituting the SIM of the called party is not considered by ComReg to be a real alternative, as this is not a feasible option for the consumer. For this to happen, the called party would have to be aware that the calling party is trying to/ about to make a call to them so that they would insert an alternative SIM card into their handset. As stated previously, some handsets in Ireland are network-locked to the mobile network operator from which the mobile subscriber has purchased its handset. In order to insert a SIM card of another mobile network operator into this handset, the mobile subscriber would first have to remove this network-lock.

3.54 From an analysis of these possible substitutes, ComReg concluded that alternative means of communicating between a caller and a mobile number are insufficient at this point in time to be able to constrain mobile termination charges at the wholesale level.

### **Consultation question 5**

**Q. 5. Do you consider current or future alternative means of calling a mobile number as having the ability to impose a competitive constraint on mobile voice call termination charges at the wholesale level? If so, please provide a reasoned response.**

### **Responses to question 5**

3.55 Two respondents agreed with ComReg's analysis, with one of these respondents highlighting that its agreement was predicated upon the existence of a narrowly defined voice call termination market (with which it did not agree). This respondent added that it did not consider that using a fixed line to either originate or terminate a call was a valid substitute for using mobile access technology.

3.56 Two respondents disagreed with ComReg's analysis.

3.57 One of these respondents agreed that, while the CPP externality was an important consideration in the perception that there was little constraint on mobile termination rates, the "effects" of CPP need not be characterised as a market failure. In relation to the retail market for fixed-to-mobile calls, this respondent was concerned at the lack of effective competition in the fixed residential market. It believed that it could influence fixed operator retail pricing behaviour through the implementation of incentive-based interconnection charging, e.g., using a discount scheme based upon volumes of traffic. In relation to this option, this respondent believed that a non-discrimination remedy acted as a deterrent to the commercial development of such charges.

3.58 This respondent also argued that there were mechanisms available to disgruntled callers to mobile that, if appropriately stimulated, could have a significant impact on calling behaviour. It suggested that a call-back solution implemented under the following circumstances would exert pressure on termination rates:

- The mobile customer would need to be willing to call the caller back;
- Callers would need to know all relevant prices;
- Mobile consumers would need to accredit value to direct termination.

3.59 The other respondent who disagreed with ComReg's analysis believed that there were both current and potential substitutes to calling a mobile. This respondent presented UK-sourced data, which was said to suggest that call-back behaviour already occurred and that its prevalence would increase if the differential between inbound and outbound calls were to increase. Thus, it was argued that call-back constituted a constraint on increases to termination rates. This respondent also argued that there were other possible substitutes in the form of sending an e-mail, making calls in the reverse direction and so on. In the near future, this respondent argued that the range of substitutes was likely to widen significantly, with the introduction of services such as Instant Messaging (IM), Push-to-Talk and the convergence of SMS, MMS, e-mail and IM, which had already begun to happen.

3.60 This respondent also believed that ComReg's views on substitutability were at odds with competition law, insofar as it appears that ComReg was requiring all subscribers to be price-sensitive as opposed to marginal customers. The effect of this was that in the mobile telephony industry, where there were low marginal/high fixed costs, any loss of revenues closely corresponded to a loss of profits. Thus, this respondent believed that it was possible for services to be close substitutes, with one service constraining the price of the other, while at the same time only a small minority of customers of one service are required to be able to switch to the other service in response to a price change.

### **ComReg's position**

3.61 ComReg notes that one of the respondents has suggested that the removal of a non-discrimination remedy would allow it to offer volume discount incentives to fixed operators on termination, and thus in its opinion increase competition for fixed-to-mobile calls in the fixed retail market. ComReg will consider this issue further in any consultation on appropriate remedies for this market.

3.62 Other respondents suggested that there are a range of possible substitutes at the retail level that provide constraints on voice call termination. These ranged from current substitutes such as call-back and SMS to more forward looking services such as ENUM, VOIP and IM.

3.63 With regard to the use of call back as a mechanism to constrain termination rates, this would only be effective if it occurred in sufficient numbers. While one respondent supplied UK-based data on the usage of call-back, ComReg remains unconvinced that call back places a constraint on termination rates. Additionally, ComReg notes that one respondent acknowledges that a number of circumstances

Notification - Wholesale voice call termination on individual mobile networks have to implemented before it believes that call-back would exert pressure on termination rates. The likelihood of these circumstances being implemented in significant volumes by customers is small over the timeframe of this review.

- 3.64 On SMS, ComReg believes that SMS is not a complete substitute for voice calls, particularly as the length of the voice call increases. Additionally ComReg notes that SMS is not a real-time service, unlike mobile voice calls, but works on a store and forward basis. Furthermore ComReg believes that as SMS termination is offered by the same MNO that offers voice call termination services, the MNO could set charges for SMS termination in such a way as to avoid any competitive pressure on its charges for voice termination. Therefore ComReg believes that SMS services do not provide a constraint on voice call termination services.
- 3.65 With regard to the more forward looking services, such as ENUM, VOIP and IM, the respondents did not provide detailed information on why these are constraints, but merely stated that these may be constraints in the near future. Thus ComReg remains unconvinced about the ability of these technologies to constrain termination services within the timeframe of this review. Additionally ComReg notes that one of the MNOs agreed that there are currently no effective substitutes, given ComReg's definition of the market.
- 3.66 In relation to substitutability ComReg notes that the size of the marginal customer base would have to be large enough to constrain the setting of mobile voice call termination rates. The respondent presented no evidence in relation to the size of the marginal customer group or the effects that it would have on the setting of mobile termination rates.
- 3.67 Therefore overall, ComReg does not consider the alternative substitution possibilities outlined by respondents as realistic alternatives to calling a mobile phone.

## **Conclusion**

- 3.68 ComReg remains of the position that there are currently no effective substitutes to calling a mobile and does not see any prospective substitutes as providing a constraint to the setting of voice termination rates over the period of this review.

## **Demand-side substitutability at the retail level: called party behaviour**

### **Summary of consultation issue**

- 3.69 In the consultation document, ComReg concluded that the behaviour of the called party was insufficient to act as a competitive constraint on mobile termination charges. In reaching this conclusion, ComReg considered whether mobile users were price-sensitive to inbound mobile voice calls and whether mobile operators are likely to introduce services addressing the price sensitivities of certain user groups. ComReg considered that the Calling Party Pays (CPP) principle contributed to end-users being relatively insensitive to the price of inbound calls. Additionally ComReg

Notification - Wholesale voice call termination on individual mobile networks considered that the effect of “Closed User Groups” (CUGs) on mobile termination charges in the Republic of Ireland was limited, as the mobile operators could address the price sensitivities of these customer segments via a number of means, including the ability to offer CUGs lower on-net pricing, while increasing termination charges to less price-sensitive users.

(a) Mobile users are less price-sensitive to inbound mobile voice calls.

3.70 When consumers were asked to rate the importance of different factors in influencing their decision when choosing a mobile phone package, the cost that others pay to contact them was considered very important by 31%, while 28% considered this as not important. This is compared to over 60% of respondents who rated the cost of line rental, ability to control expenditure and geographic network coverage as very important. If consumers are not concerned about the cost others pay to contact them then there is little incentive for mobile operators to reduce termination charges.

3.71 The *Amárach Survey* shows that changing a mobile network so as to be on the same mobile network with someone to whom one often speaks is not a concern to Irish mobile users. Only 5% of respondents said they have chosen a mobile network or changed to a new network for this reason.

*“Mobile communities of interest”*

3.72 ComReg has further examined whether the emergence of so-called “mobile communities of interest” or “closed user groups” (“CUGs”) generates, or is likely to generate, an effective competitive constraint on wholesale mobile voice call termination charges, particularly as a result of them being bypassed in favour of cheaper mobile on-net tariffs.

3.73 The creation of such groups leads to the internalisation of mobile calling charges, as users become increasingly attracted to the mobile networks of their family, friends and those with whom they share an economic interest. Indeed, mobile users are likely to be attracted to mobile networks on the basis of on-net/off-net mobile price differentials.

3.74 ComReg, however, considers that there are several reasons why the effect of CUGs on mobile termination charges in Ireland is limited:

(i) there is little evidence to suggest that mobile users select their networks on the basis of CUGs, thereby amounting to an insufficient body of price sensitive users able to constrain wholesale voice termination charges;

(ii) mobile operators have the ability to address CUGs through lower on-net pricing, while increasing termination charges to less price-sensitive users; and

(iii) current termination charges remain unaffected by CUGs. Indeed, it is likely that CUGs do not affect termination charges for mobile on-net calls, as MNOs designated

Notification - Wholesale voice call termination on individual mobile networks as having SMP for public mobile telephone networks and services have a non-discrimination obligation. Similar views concerning the competitive constraints of mobile communities of interest were echoed by the Competition Commission in its latest review of mobile termination charges in the UK.<sup>29</sup>

- (b) Mobile operators are likely to introduce services addressing the price sensitivities of certain customer segments

3.75 ComReg has observed that, to the extent that a minority of mobile subscribers are price-sensitive to the cost of incoming calls (including larger corporate customers), MNOs have largely sought to neutralise the pressure that price-sensitive mobile subscribers could in theory exert on termination rates by offering such users more favourable terms than the majority of their customers, usually in the form of differential retail tariffs (especially through retail on-net tariff packages).

3.76 The emergence of "GSM gateways" into the Irish marketplace allows some price-sensitive customers to save money on private fixed line calls to mobile phones, by converting fixed-to-mobile calls into mobile-to-mobile 'on-net' calls.<sup>30</sup> This is achieved by programming a PABX<sup>31</sup> to automatically route calls dialled to mobile numbers to the GSM gateway which then sets-up an 'on-net' mobile to mobile call to complete the call. The purpose of the GSM gateway is to avoid the higher charges of fixed-to-mobile calls (since it bypasses the PSTN) and to exploit the lower tariffs of mobile-to-mobile calls within the same network, *i.e.* 'on-net' calls. However, the use of such gateways is likely to be confined to a small number of business users and they are unlikely to act as a competitive constraint on mobile pricing.

3.77 If mobile users could receive their incoming calls on mobile networks other than the one to which they subscribe for making outbound calls, this could put some pressure on mobile voice termination charges. For that form of substitution to take place, however, the called party must be able to switch its handset between different networks. This would be possible through the use of multiple SIM cards.

3.78 A subscriber can have a mobile phone with an internal dual SIM cardholder that allows him to switch from one network to another. However, to exert some pricing pressure on the MNO the subscriber should be, by default, on the network with cheap voice call termination charges and would only switch to the other network to make cheap outbound calls. It is doubtful that such an incentive currently exists given the prevailing CPP arrangement and historical customer behaviour patterns

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<sup>29</sup> Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O<sub>2</sub>, Orange and T-Mobile for terminating calls from fixed and mobile networks, which was presented to the Director General of Telecommunications in December 2002.

<sup>30</sup> See ComReg information document of February 2003 at <http://www.comreg.ie/fileupload/publications/comreg0315.pdf>.

<sup>31</sup> Private Automatic Branch exchange – an automatic telephone switching system for providing access to the public telephone system. A PABX usually serves a single commercial entity and is located on its premises.

Notification - Wholesale voice call termination on individual mobile networks under that arrangement.

- 3.79 Having regard to the factors outlined above in terms of the price sensitivity of mobile users to inbound mobile voice calls and the fact that mobile operators are likely to introduce call termination services addressing certain customer segments, ComReg is of the view that demand-side substitutability at the retail level from the called parties perspective is limited.

### **Consultation question 6**

**Q. 6. Do you agree that the behaviour of mobile users is insufficient to act as a competitive constraint to mobile voice termination charges? Please provide a reasoned response and support your view with empirical evidence.**

### **Responses to question 6**

- 3.80 Two respondents agreed with ComReg's position while three respondents disagreed.
- 3.81 One respondent who agreed with ComReg believed that the practices of mobile operators, whereby the retail tariffs for on-net calls were below the Mobile Termination Rate, was precisely the behaviour that endorsed ComReg's findings. This respondent called upon ComReg to introduce an appropriate set of regulatory obligations to prevent instances of such "unfair cross-subsidy" in vertically integrated firms.
- 3.82 One respondent agreed with ComReg's position, but only when the voice call termination issue was taken in isolation. However, this respondent added that this did not mean that voice call termination charges were unconstrained. This respondent believed that Mobile to Mobile (M2M) termination rates set in a reciprocal manner could act as a constraint, as mobile operators would wish to set low M2M termination rates, as these charges affect its own cost and retail tariff structure. Additionally, this respondent believes that, as substitution for fixed telephony services grows, the lower termination rates of the fixed telephony operators would provide a considerable cost advantage with which the mobile operators would have to compete.
- 3.83 One respondent believed that there were several factors that exerted competitive pressure on call termination, including: the evidence of widespread closed user groups who were likely to be concerned about the costs of calls made to them; the evidence of increasing substitution activities such as SMS; and dynamic technological developments such as dual SIMs, fixed-line SMS capability and future VoIP arbitrage.
- 3.84 One respondent disagrees with ComReg's analysis and believes that the totality of the constraints arising from (i) the behaviour of callers to mobile, (ii) the behaviour of mobile customers and (iii) actual and near-term prospective supply-side

Notification - Wholesale voice call termination on individual mobile networks substitutes, are sufficient to eliminate any incentive caused by CPP for competing mobile operators to raise termination rates to inefficient levels. It believes that the history of low termination rates in the Republic of Ireland demonstrates the importance of these constraints and the need for proper country-specific empirical analysis.

- 3.85 This respondent added that it believes that a mobile subscriber's behaviour is affected by the cost of being called and that they do care about receiving calls. It believes that mobile operators must price their services in a way that is attractive to customers overall and balances the cost of ringing out and ringing in.
- 3.86 With regard to the cost of being called, this respondent believes that there are three distinct mechanisms by which mobile subscribers may care about the cost of being called. These are: (1) call externalities, i.e. users enjoy a benefit from being called; (2) repeated calling relationships – this respondent suggested that calls between two numbers in any direction are substitutes and that these represent a large proportion of call volumes and often cross network boundaries; and (3) closed user groups – a consumer will take into account the network of family and friends when choosing a mobile network and therefore has a direct economic stake in the cost of being called.

### **ComReg's position**

- 3.87 ComReg notes that the respondents have listed a number of possible competitive constraints on the mobile voice call termination market ranging from those directly related to the called party to the totality of constraints in the market. ComReg will deal with each of these issues separately.
- 3.88 With regard to the constraints exerted directly by the called party on mobile voice call termination, a number of possible mechanisms were cited. Firstly, it was claimed that users enjoy a benefit from being called and that this can place a constraint on termination, as the volume of calls received would decrease with an increasing termination price. However, evidence from a number of consumer surveys show that when selecting a mobile package, the price which other people pay to call them is not one of the most important factors for them. The *Amárach* survey revealed that most consumers were not concerned with the price others paid to call them. 40% were sometimes concerned, 22% were rarely concerned, while 28% were never concerned.
- 3.89 Secondly, one respondent mentioned that the repeated call relationship represents a large proportion of calls in their network and often crosses network boundaries. While this may show that mobile users call a select group of numbers frequently, this does not mean that these mobile users place any pressure on termination charges.
- 3.90 Thirdly a number of respondents cited the existence of Closed Users Groups (CUGs) as a mechanism that shows that customers take into account the network of family and friends in choosing a network. ComReg recognises the existence of CUGs in the market, but believes that CUGs do not exert a competitive constraint on termination rates, as the existence of CUGs allows the mobile network operators to address the

Notification - Wholesale voice call termination on individual mobile networks needs of the price sensitive users via lower on-net prices.

3.91 Thus ComReg does not believe that the called party constraints listed by the MNOs place a sufficient constraint on termination rates.

3.92 With regard to the totality of constraints, ComReg does not believe that this is sufficient over the time period of this review. ComReg believes that substitutes such as SMS and VoIP do not currently put a sufficient constraint on termination rates, as discussed in response to Question 5. With regard to the level of mobile-to-fixed convergence, ComReg's market definition exercise has concluded that fixed services are not included in the market for mobile services. Thus ComReg believes that mobile-to-fixed convergence is not of a sufficient level to place an effective constraint on termination rates. Finally, with regard to the suggestion that M2M termination rates set in a reciprocal fashion would place a constraint on termination rates, little if any evidence has been provided by this respondent to back up this claim. It would equally be argued that reciprocal termination rates provide a disincentive for operators to drive down their competitor's termination rates (and hence costs down), as their own termination revenues would equally be affected. Overall ComReg believes that the data provided by the respondents is not sufficient to convince it that there are sufficient constraints in the market. This issue is considered further in the market analysis sections of this document (see the sections dealing with consultation questions 10, 11, & 12).

3.93 Finally, ComReg notes that one of the respondents encourages it to introduce a set of regulatory obligations that would prevent potential "unfair cross-subsidy", such as the fact that the retail tariffs for on-net calls are lower than the mobile termination rate. ComReg will consider this issue further in any consultation on appropriate remedies for this market.

## **Conclusion**

3.94 ComReg maintains its original position that the behaviour of mobile subscribers is insufficient to act as a constraint to mobile termination rates.

## **Supply-side substitutability**

3.95 Supply-side substitution is said to occur when, in response to a rise in the price of a particular product or service, suppliers of other products or services switch, without the need for significant new investments, to supplying the product whose price has risen within a reasonable timeframe (thereby rendering the price increase unprofitable).

## **Summary of consultation issue**

3.96 Supply-side substitution is said to occur when, in response to a rise in the price of a particular product or service, suppliers of other products or services switch, without the need for significant new investments, to supplying the product whose price has risen within a reasonable timeframe (thereby rendering the price increase unprofitable). ComReg considers this timeframe to be equivalent to a year, as is

Notification - Wholesale voice call termination on individual mobile networks generally considered to be the appropriate timeframe under competition law. Consideration therefore, has been given to whether there are means by which supply-side substitution can occur (*i.e.*, means by which a voice call could be terminated on a network other than that of the MNO to which the called party subscribes for access and origination services). ComReg has considered whether a competing supplier would in fact be forthcoming (mere hypothetical supply-side substitution will not be sufficient) but has concluded that this is an unlikely scenario in the absence of other forms of regulatory intervention.

- 3.97 Wholesale supply-side substitution could come most easily from other MNOs. However, this would require handsets to be transferable between networks for termination purposes. While GSM handsets roam across networks, it is currently not possible for the network originating a call to select the network on which the call will terminate.
- 3.98 ComReg was of the view that there are no operators in the Republic of Ireland currently providing voice call termination services that could provide effective supply-side substitution at the wholesale level. In addition, it appears that any such provider would be dependent on the network of the MNO to which the called party is connected for termination.
- 3.99 Having considered the factors above, ComReg is of the view that there are currently no supply-side substitutes for mobile termination services.

### **Consultation question 7**

**Q. 7. Do you agree that there is no supply-side substitution at the wholesale level? Please elaborate on your response.**

### **Responses to question 7**

- 3.100 Three respondents agreed with ComReg, with one of these respondents agreeing only on the basis of the market definition employed by ComReg (with which it did not agree), while another of these respondents highlighted that it believed the analysis and reasoning by ComReg in this section to be equally applicable to the market for SMS call termination at the wholesale level.
- 3.101 The remaining two respondents disagreed. One respondent stated that it believed that there are technological and market developments that are likely to provide additional and material constraints on the setting of voice termination rates in the near term. Developments such as VoIP, 3G, IM and ENUM (See question 5) were also said to be able to act as supply side substitutes in the near future.

### **ComReg's position**

- 3.102 ComReg notes that the responses to this question did not raise any appreciably new issues, as the issue of prospective substitutes has already been raised and discussed in earlier questions, albeit from a demand-side substitutability perspective. In line

Notification - Wholesale voice call termination on individual mobile networks with ComReg's position in response to earlier questions posed in this consultation (see the sections dealing with questions 2 and 5), ComReg believes that the technological developments outlined by one respondent are not feasible substitutes for the termination of a call on a mobile network. Additionally, ComReg notes that one of the MNOs agrees with ComReg's supply side substitutability analysis, given ComReg's definition of the market. Therefore overall, ComReg maintains its position that there is no alternative to the termination of a call to a particular subscriber on an individual mobile network.

## **Conclusion**

3.103 ComReg maintains the view that there is no supply-side substitution at the wholesale level.

## **The relevant geographic market**

### **Summary of consultation issue**

3.104 A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas.<sup>32</sup> On the basis of this definition, ComReg took the view that the relevant geographic market for the provision of mobile voice call termination services by individual mobile operators was the Republic of Ireland.

### **Consultation question 8**

**Q. 8. Do you agree that the relevant geographic market for the wholesale provision of mobile voice call termination services is on individual mobile networks in Ireland? Please expand on your response.**

### **Responses to question 8**

3.105 Four respondents agreed that the geographic scope of the market was national. One of these respondents, however, noted a growing trend to all-Ireland pricing which means that the geographic scope of this market will be further extended in the future. It believes that ComReg should monitor this development.

3.106 One respondent disagreed with ComReg's position and believed that the geographic scope of the market should be extended to an island of Ireland market given a number of elements, including the existence of island of Ireland Tariffs.

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<sup>32</sup> See the Commission Notice on Market Definition, SMP Guidelines, ComReg Document No 02/117 - Information Notice on Market Analysis and Data Collection and United Brands v. Commission, [1978] ECR 207, for additional guidance.

### **ComReg's position**

3.107 With regard to the suggestion that the relevant geographic market is an island of Ireland market, ComReg is aware that some operators have introduced island of Ireland tariffs. However these tariffs are at the retail level, while the relevant geographic market discussed in this section is at the wholesale level. In addition these tariffs are not automatically applied; they are one of a number of tariff options that a user may select as part of their package.

3.108 ComReg maintains its view that the relevant geographic market is the Republic of Ireland, due to the similarities of competitive conditions across the country. All operators have national licences, have national coverage requirements and offer geographically uniform termination rates.

### **Conclusion**

3.109 ComReg maintains its view that the relevant geographic market is the territory of the Republic of Ireland.

### **Preliminary conclusions**

#### **Summary of consultation issue**

3.110 ComReg presented the following preliminary conclusions:

3.111 There are currently no viable competitive substitutes at the wholesale level for the termination of mobile voice calls by individual MNOs, whether measured from the supply-side or the demand-side. Other existing bypass opportunities, such as the use of GSM gateways,<sup>33</sup> might partially dilute the full impact of high termination charges for a marginal number of subscribers, but do not meet the relevant legal and economic criteria for them to qualify as complete product substitutes for voice termination on mobile networks under the market definition exercise.

3.112 Although the current method of charging for termination on MNOs (the CPP principle) has arguably contributed to the growth of the mobile market in Europe, it perpetuates the fact that consumer demand for mobile voice call termination is price-inelastic, further insulating individual MNOs from price competition. Although changing consumer behaviour may in the future generate greater price sensitivity for consumers in relation to termination services, available data suggests that, as yet, such changes in consumer behaviour have not had a material competitive impact on mobile voice call termination charges.

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<sup>33</sup> It should be noted that ComReg has issued an information notice on the use of GSM Gateways in 2003. In this information notice, ComReg believes that consumer and business usage of GSM Gateways is licence exempt, but that operator usage as a form of interconnection is not acceptable. Operators should establish proper interconnection paths.

[http://www.comreg.ie/\\_fileupload/publications/comreg0315.pdf](http://www.comreg.ie/_fileupload/publications/comreg0315.pdf)

- 3.113 There are separate wholesale markets for the termination of mobile voice calls on the networks of each MNO in the Republic of Ireland, namely: Vodafone; O<sub>2</sub>, Meteor and '3'. With respect to each relevant product market, there is only one seller of the services in question, although there are multiple purchasers.
- 3.114 The relevant product market is voice call termination on the networks of each MNO, while the geographical market is the territory of the Republic of Ireland.

### **Consultation question 9**

**Q. 9. Do you agree with the above preliminary conclusions regarding the market definition exercise? Please provide a reasoned response.**

### **Responses to question 9**

- 3.115 Three respondents disagreed with ComReg's preliminary conclusions relating to market definition, while two respondents agreed.
- 3.116 One respondent outlined that it believed that there are currently no viable competitive substitutes (supply- or demand-side) at the wholesale level for the termination of mobile voice calls by individual mobile operators in the Republic of Ireland; consumers are price-inelastic to mobile voice termination charges, and consumer behaviour has not had an impact on voice call termination charges.
- 3.117 Those who disagreed argued that the correct market is a market for the provision of mobile services. These respondents believe that mobile termination is not a service that is provided in isolation but is instead provided as a bundle of mobile services. Market realities are said to force operators to compete for a bundle of services including access, origination and termination. Additionally, these respondents believe that their replies to the specific questions on market definition have provided evidence to support their arguments.
- 3.118 Two respondents did not believe that ComReg has undertaken the necessary analysis to conclude that termination on each network is a market in its own right. One respondent added that it believed that this conclusion is only reasonable if constraints on the setting of termination rates are immaterial. These respondents added that the history of low termination rates in the Republic of Ireland suggested that these constraints must be extremely effective.

### **ComReg's position**

- 3.119 The issue of whether the relevant market is a broad market for mobile services or just a market for termination services was discussed in question 1. From the discussion of that question and the analysis provided in relation to the other questions in this section, ComReg believes that the market for voice call termination services on individual mobile networks is the relevant market for this review.

3.120 Regarding the respondents' concerns about the depth of analysis which ComReg has undertaken to conclude that termination on each mobile network is a market in its own right, ComReg believes that it has carried out an in-depth analysis into this market, and has followed the standard steps required to define a market. Additionally, ComReg notes that responses to this consultation process have not introduced any substantially new facts or considerations.

## **Conclusion**

3.121 The relevant market, as outlined in the Commission's Recommendation, is appropriate to the national circumstances of the Republic of Ireland. There is a relevant product market for the termination of voice calls on the individual mobile network of each operator in the Republic of Ireland.

3.122 ComReg's current views on market definition remain consistent with those expressed in the consultation.

3.123 As the calling party pays ("CPP") the entire price for a mobile voice call, there is a disconnect between the person paying for the calls (and so, indirectly, for the termination charge) and the person who makes the choice of the terminating network and could thereby influence the level of the termination charge (i.e. the called party).

3.124 The overall effect of this CPP arrangement in the relevant retail markets is that, while MNOs have an incentive to keep the price of those services required and paid for by the subscriber at a level to attract and retain customers, they have less incentive to keep the price of calls to mobiles from other fixed or mobile networks low.

3.125 In the wholesale market, the effect of the CPP arrangement is similar. For fixed-to-mobile calls, the MNO has little incentive to keep voice call termination charges low, because the fixed operator will pay a high charge as it has a commercial interest in ensuring that all calls made by its subscribers are terminated. For off-net mobile-to-mobile calls (i.e., from one MNO's network to another), the MNOs pay each other for termination of calls and because, in effect, lowering termination charges would lower a competitors costs without any offsetting benefit to the MNO, there is little incentive to keep termination charges low.

3.126 Overall, ComReg considers that the current CPP arrangements provide each MNO with the ability and the incentive to set its voice call termination charges above the competitive level.

3.127 ComReg also considers that no adequate wholesale supply- or demand-side substitutes currently appear to exist for the termination of calls to the subscribers of a specific MNO. Current technology does not allow the termination of a call to a mobile other than on the network of the MNO to which the called party subscribes. This appears unlikely to change in the near future. At the retail level, at present, there are no effective alternatives for callers that could act as a constraint on termination charges. In addition, callers appear to have limited awareness of the cost of calling mobiles. There is a minority of mobile users that displays a higher elasticity to the

Notification - Wholesale voice call termination on individual mobile networks price on incoming calls. The MNOs have, however, separated these users by offering them special tariffs, thus preventing this group from putting any effective pressure on the generality of termination charges levied on fixed operators and other MNOs. Technological conditions and the behaviour of called and calling parties may change over time, but ComReg believes that this is extremely unlikely to happen in the time period of this review. Hence, ComReg believes that, at present, there are separate markets for voice termination on each mobile network.

3.128 ComReg's conclusion is therefore that the provision of wholesale voice call termination by each individual mobile network operator constitutes a separate economic market and that the geographic extent of each network is also the geographic extent of each relevant market. In reaching its conclusion, ComReg has followed the Commission's criteria for defining relevant markets, as outlined in its *SMP Guidelines*. ComReg has also taken the utmost account of the Commission's Recommendation on relevant product and service markets.

## 4 Relevant Market Analysis

### Background

4.1 Having first identified a relevant market relating to voice call termination on individual mobile telephone networks in the Republic of Ireland, ComReg is required to conduct an analysis of whether the market is effectively competitive by reference to whether any given undertaking or undertakings is/are deemed to hold SMP in that market. Recital 27 of the *Framework Directive* states that a relevant market will not be effectively competitive “where there are one or more undertakings with significant market power”. Regulation 25(1) of the *Framework Regulations* states that:

“A reference in the these Regulations, the Access Regulations, the Authorisation Regulations or the Universal Service Regulations to an undertaking with significant market power is to an undertaking designated as such by the Regulator under Regulation 27(4) where the Regulator is satisfied that, in relation to any relevant market, such undertaking (whether individually or jointly with others) enjoys a position which is equivalent to dominance of that market, 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.”

4.2 Accordingly, an undertaking may be deemed to have SMP either individually or jointly with other undertakings in a relevant market. In addition, where an undertaking has SMP on a relevant market, it may also be deemed to have SMP on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.<sup>34</sup>

4.3 ComReg is obliged under the *Framework Regulations* to assess SMP in accordance with European Community law and to take the “utmost account” of the *SMP Guidelines*.<sup>35</sup> In particular, while acknowledging that individual network definitions imply that, currently, each MNO is a single supplier of call termination services to its customer base in each market, the Commission emphasises that ComReg should consider whether there is any countervailing bargaining power that would render any non-transitory price increase above the competitive level unprofitable for each mobile operator.

4.4 The *SMP Guidelines* state that the existence of a dominant position cannot be established on the sole basis of large market shares, and that NRAs should undertake a thorough and overall analysis of the economic characteristics of the relevant market before coming to a conclusion as to the existence of significant market power.<sup>36</sup> However, the *SMP Guidelines* state that according to established case-law, very large market shares – in excess of 50% - are in themselves, save in exceptional

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<sup>34</sup> Framework Regulations, Regulation 25(3).

<sup>35</sup> Regulation 25(2).

<sup>36</sup> *SMP Guidelines*, Paragraph 78.

Notification - Wholesale voice call termination on individual mobile networks circumstances, evidence of the existence of a dominant position.<sup>37</sup> In this case, given that each MNO has 100% market share in the relevant product market, it is not necessary for ComReg to examine the exhaustive list of additional SMP criteria. Those criteria considered to be most relevant in this case on the issue of SMP are discussed below.

## **Absence of Potential Competition**

### **Summary of consultation issue**

4.5 The threat of market entry, either on a long-term or “hit and run” basis, is one of the main competitive constraints on incumbent firms in a relevant market, at least where such entry can be shown to be highly probable, timely and appreciable. ComReg has analysed the degree to which potential competition might act as a competitive constraint in the relevant market. Considering that each MNO is a monopoly provider of voice termination on its network, ComReg has concluded that potential competition will not provide an effective competitive constraint on the relevant wholesale market for voice call termination on individual mobile networks in the Republic of Ireland, at least in the short to medium term. Based on the responses of market actors in Ireland and on ComReg’s knowledge of existing or pending technological developments, there do not appear to be any viable alternatives to allow for any operator other than the terminating MNO to terminate voice calls to subscribers on its network.

4.6 Furthermore even if entry did occur it would not affect the fact that each operator has 100% of the market for terminating calls on its network.

### **Consultation question 10**

**Q. 10. Do you agree that potential competition will not provide an effective competitive constraint on the relevant wholesale market for voice call termination on individual mobile networks in Ireland, at least in the short to medium term? Please provide a reasoned response.**

### **Responses to question 10**

4.7 Three respondents disagreed with ComReg’s analysis, while two respondents agreed.

4.8 One respondent acknowledged that it is difficult to see how there could be entry by a new player into providing termination on a specific network that already exists. This respondent argued that a more relevant question to ask would be whether there are potential technological developments that could allow access to a mobile subscriber for the termination of voice calls or the provision of other services that are substitutes for making a voice call to the mobile subscriber in question. This respondent believed that there are a range of such technological developments (see the prospective developments outlined in the sections dealing with Question 2, 5 and

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<sup>37</sup> SMP Guidelines, Paragraph 75.

7).

- 4.9 One respondent believed that ComReg is looking at the wrong market, as it is competition in the mobile services market that it should be looking at rather than the limited voice call termination market. It questioned ComReg's analysis of high barriers to entry, as there is said to exist easy entry for an MVNO either with '3' as it has a licence condition to offer a service to an MVNO as a condition of its 3G license, with an existing 2G operator, or where there is a mobile network operator licence available. Additionally, it believed that even if the number of mobile operators was fixed at four for the short-medium term, the current operators in the market are able to impose/impart competitive constraints on the tariffs charged by one another for the bundle of mobile services.

### **ComReg's position**

- 4.10 In general all the respondents seemed to agree that it is difficult for a new entrant to provide voice call termination services on a network that already exists. However, some respondents argued that ComReg should look at a wider market (e.g. a market for mobile services) and should consider whether there are potential developments that could provide substitutes for voice call termination. ComReg has assessed these considerations earlier in this document, and concluded that the relevant market for this review is the voice call termination market and that potential technological developments will not provide an effective constraint on termination rates over the time period of this review.
- 4.11 Therefore considering that all respondents generally accept that any new entrant would only be able to provide termination on its network, ComReg remains of the view that any potential competition would not act as a competitive constraint on the relevant market for wholesale voice call termination.

### **Conclusion**

- 4.12 ComReg believes that potential competition will not provide an effective competitive constraint in the relevant market for wholesale mobile voice call termination over the period of this review.

### **Absence of or low countervailing buying power**

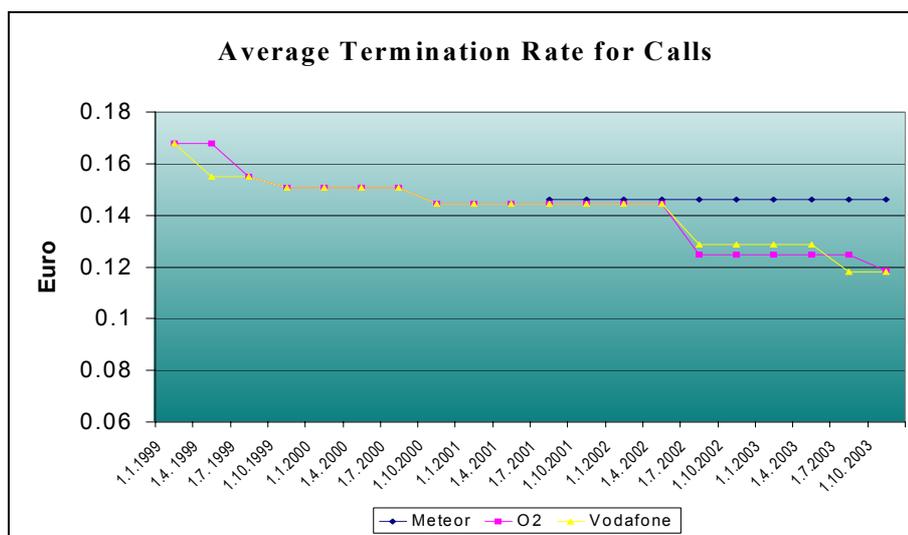
#### **Summary of consultation issue**

- 4.13 If an MNO engages in practices that are potentially exploitative, customers and consumers might in theory be able to exert countervailing power against such practices. This section evaluated the likelihood and or existence of countervailing buying power in termination markets, and also identified under what circumstances wholesale or retail customers can influence the behaviour of the supplier.
- 4.14 ComReg believes that the economic evidence suggests that there does not exist at this time sufficient countervailing buyer power to act as a competitive constraint, either at the wholesale or retail level, regarding the relevant wholesale market for

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voice call termination services on individual mobile networks in Ireland.

- 4.15 As regards countervailing bargaining power at the wholesale level, buyer power could potentially be exerted on the MNOs selling wholesale termination services by fixed network operators and by other MNOs. These operators have to purchase terminating services in order to enable their customers to make calls to end users connected to the network of the mobile operator supplying the terminating services. *eircom* is a major customer of the mobile network operators in Ireland.
- 4.16 As shown in Figure 1 both O<sub>2</sub> and Vodafone reduced their termination rates a number of times from 1999 onwards.

**Figure 1: Average Termination rates for calls<sup>38</sup>**



Source: ComReg and *eircom* Switched Transit Routing and Price List – version 22

- 4.17 Countervailing buyer power exists where large customers have the ability within a reasonable timeframe to resort to credible alternatives, e.g. not to purchase or to retaliate. *eircom* does not have the alternative not to purchase, as it is obliged to provide interconnection to all operators, nor does it have much scope to retaliate – its ability to raise prices to consumers, thereby reducing fixed-to-mobile calls and reducing the mobile operator’s revenue, is limited by the fact that its retail services are price capped; at the wholesale level its termination rates are subject to the principle of cost-orientation. Furthermore since June 2002 *eircom* has passed on all of O<sub>2</sub>’s and Vodafone’s mobile termination rate reductions suggesting that its countervailing buyer power may be decreasing.
- 4.18 Overall the above points suggest that *eircom*’s countervailing buyer power was not the dominant factor in Vodafone and O<sub>2</sub>’s most recent mobile termination rate reductions.

<sup>38</sup> Development over time for Vodafone and O<sub>2</sub> (Distribution: Peak: 54%; Off-Peak: 30%; Weekend: 16% (Distribution is a estimation of the distribution of the total termination minutes)

4.19 With regard to the regulatory pressure which was exerted on O<sub>2</sub> and Vodafone termination rates, Table 2 shows the dates on which Vodafone and O<sub>2</sub> were designated as holding SMP in the public mobile telephony market and the national market for interconnection.

**Table 2 SMP Designations**

	<i>Mobile public telephone network and /or services market</i>	<i>National market for interconnection</i>
October 1998 <sup>39</sup>	Vodafone	
December 1999 <sup>40</sup>	O <sub>2</sub>	Vodafone
July 2001 <sup>41</sup>		O <sub>2</sub>

Source: ComReg

4.20 As shown in Table 2, the regulatory obligations on Vodafone and O<sub>2</sub> have increased over time, particularly since July 2001, when both O<sub>2</sub> and Vodafone were designated with SMP in the national market for Interconnection. Evidence since July 2001 suggests that regulatory pressure is now a more significant factor than countervailing buying power or self-interest in the setting of termination rates. This is supported by the fact that Meteor has not reduced its mobile termination rates in line with those reductions of Vodafone and O<sub>2</sub>.

4.21 Overall the above suggests that regulatory pressure, and not countervailing bargaining power or self-interest, is the dominant factor in the mobile termination reductions of the Irish mobile operators, particularly since June 2001. Without regulatory pressure MNOs have less of an incentive to lower their termination rates.

4.22 The ability of retail customers to be able to exert countervailing buyer power on monopoly providers, particularly in light of the prevailing CPP charging principle, is limited. As regards the ability of large corporate users to act as a competitive constraint, ComReg believes that this pressure is currently limited, and is not sufficient, of its own accord, to reduce mobile termination rates to the competitive level.

4.23 ComReg concluded that there is nothing to indicate that there exists any countervailing market power such as to exert any competitive pressure on MNOs to lower their termination rates to a competitive level.

<sup>39</sup> ComReg Document No. D4/98

<sup>40</sup> ComReg Document No. D15/99

<sup>41</sup> ComReg Document No. D10/01

**Consultation question 11**

**Q. 11. Do you agree that there is nothing to indicate that there exists any countervailing market power such as to exert any competitive pressure on MNOs to lower their termination rates to a competitive level? Please provide a reasoned response.**

**Responses to question 11**

4.24 Three respondents disagreed with ComReg's preliminary analysis, while two respondents agreed.

4.25 One respondent, a fixed network operator, agreed with ComReg's analysis and added that it does not have any countervailing buyer power with respect to MTRs precisely because each MNO has 100% market share on its own network and because the choice of network on which calls are terminated is determined by the mobile number called and the network to which the called party subscribes. It has never had any ability to force individual customers to terminate calls on any particular network.

4.26 This respondent is of the view that the driver for voluntary reductions in MTRs by the two largest mobile operators in the Republic of Ireland has not been competition, but has been motivated by self-interest, driven in turn by increased competition for customers as the penetration rate moved towards saturation. However this respondent did not provide evidence to support this view.

4.27 Of those that disagreed one of the respondents acknowledged that in the absence of regulation, fixed to mobile call termination charges may be set above efficient levels, as competition between mobile operators forces each party to maximise the consumer surplus, whilst the "calling party pays" principle means that the cost of a F2M call is not paid by the individual who chooses to subscribe to the mobile network. Despite this, the respondent believes that there a number of pressures that prevent mobile operators setting termination charges in the absence of a response from competitors and customers, including:

- The increasing importance of mobile to mobile off-net calls. Mobile operators will wish to set low M2M termination charges because, to the extent that an operator's M2M termination charges are reciprocal, they will affect its own cost and retail tariff structure.
- A requirement to maximise the consumer surplus of mobile subscribers. Mobile subscribers benefit by being able to make and receive off-net calls. The volumes of both of these types of calls are likely to be adversely affected by an increase in termination rates, thus leading to a reduction in consumer surplus. In a competitive market, an operator will seek to set charges in its basket of services that maximise consumer surplus.

#### Notification - Wholesale voice call termination on individual mobile networks

- A requirement to compete with fixed to fixed services. Fixed operators have lower termination rates, thus putting downward pressure on mobile termination rates.

4.28 One respondent believed that there are strong incentives for bargaining amongst operators to moderate their termination rates, as reflected in the history of modest termination rates in the Republic of Ireland.

- Mobile operators must negotiate termination rates with all interconnected parties, and thus these parties are able to exert significant bargaining power in these negotiations. This respondent believed that if it increased its termination rates, this would be likely to lead to a similar response from its interconnected parties, thus leading to a situation where it would pay a higher termination rate itself.
- *eircom* has an incentive to keep termination rates low as it reduces the ability of mobile operators to cut outbound call prices and subscription charges. This reduces the extent of competition from mobile operators for fixed line traffic and customers.

4.29 This respondent also disagreed with ComReg's assertion that regulatory pressure has been the principal catalyst for MTR reductions. From its experience dating back to 1997, it believes that strong commercial pressure from the incumbent fixed line operator for year-on-year reductions has been more important.

4.30 This respondent also fundamentally disagreed with the view that in a competitive marketplace MNOs would set termination charges that reflect the "cost" of terminating calls. It did not believe that this concept, i.e. the "competitive level of call termination", was meaningful. It believed that the view that the price of a service corresponds to its long run incremental costs would only be justified where the service under consideration is provided on a stand-alone basis and where economies of scope are absent. The notion of call termination being competitively supplied on a stand-alone basis is said to be "absurd"; it is argued that call termination can only be provided once there is an established relationship with the mobile customer. It believes that if ComReg wishes to establish a benchmark level for call termination charges, it would have to take into account the nature of competitive interaction between mobile operators, the nature of the service bundle they provide, the restrictions under which they set their prices, and the impact of changing call termination rates on the various users of a mobile network, taking into account a balance of interests.

4.31 One respondent believed that it does not have countervailing buyer power on its own network and therefore fails the dominance test. It believed that ComReg did not adequately address the competitive dynamics in the market nor the relative differences in size of network between it and its competitors. It believed that these factors result in an imbalance of power between the various parties.

4.32 This respondent believed that if there was no countervailing market power, then it should have been able to set its termination rates above charges of the two incumbent operators at network launch. Additionally, the fact that its termination charges have remained static since launch is by no means a sufficient indication of dominance. It

Notification - Wholesale voice call termination on individual mobile networks believed that ComReg should have instead investigated its ability to raise termination rates and to sustain profitably on this increase over a period of 12 months. This respondent believed that it would not be possible for it to do this, as it would face commercial retaliation from other entities with whom it interconnects and it is likely to receive bad publicity from increases in retail prices for calls to its customers. These factors are said to make it difficult for it to sustain any increase in termination rates.

4.33 This respondent also stressed that it is party to interconnection agreements that constrain its ability to raise its charges. It believed that any unilateral attempt to raise prices would be rejected because of constraints imposed by existing interconnection agreements. This respondent also believed that *eircom* has the balance of power over it, as *eircom* as the monopoly operator provides numerous essential services and thus enjoys a much broader commercial relationship.

### **ComReg's position**

4.34 In the above section the respondents have presented various arguments showing in their view that there is countervailing buyer power that exerts competitive pressure on mobile termination rates. In summary, the respondents believe that constraints come from a variety of forms including:

- Reciprocal M2M termination rates;
- A requirement to maximise consumer surplus for their mobile subscribers;
- Mobile to Fixed Competition;
- Interconnection partners and particularly *eircom*.

4.35 **Reciprocal M2M termination rates:** ComReg agrees that reciprocal mobile termination rates can affect a mobile operator's costs and retail tariffs. However ComReg does not believe that this will encourage mobile operators to set low M2M termination rates. It could have the opposite effect of encouraging mobile operators to increase M2M termination rates. This strategy could be used to directly influence the retail tariffs of competitors in the mobile market and could cause potential margin squeeze issues. Additionally, ComReg notes that this potential constraint would only cover M2M termination and not F2M termination rates.

4.36 **Maximising Consumer Surplus:** In a competitive market ComReg recognises that mobile operators may set charges that maximise the consumer surplus for their subscribers. Mobile operators may find it more beneficial for subscriber growth to raise the termination rate above cost as this may enable the mobile operator to pass on benefits to their subscribers in other parts of the mobile basket including free or lower rental. In effect, higher termination charges are to some degree undone by increased competition for subscribers.

4.37 ComReg recognises that the welfare implications of high termination charges are complex. However, ComReg believes that an increase in termination charges above cost to encourage market participation may not be welfare enhancing. There is no evidence to suggest that consumers benefit from increased termination charges. The practice of subsidising handset would appear to be significantly reduced.

Furthermore, a potential adverse effect of above cost termination rates can also be to increase the price of fixed to mobile calls to end users. Irrespective of the distributional issue, ComReg maintains its position that currently there is insufficient competitive constraint on mobile voice call termination rates. The optimal mobile voice call termination rate should be cost-based. The issues are further elaborated on in the market analysis section of this paper and where appropriate in discussing the remedies for this market.

- 4.38 **Mobile to Fixed Competition:** ComReg acknowledges that increasing convergence of fixed and mobile services may eventually lead to competition between fixed and mobile services. However, ComReg does not believe that competition between fixed and mobile services during the timeframe of this review will be such as to place a sufficient constraint on the mobile markets.
- 4.39 **Interconnected parties, particularly *eircom*:** ComReg believes that interconnected parties may be able to exert some pressure on the mobile termination rates. Looking at the history of termination rate movements in the Republic of Ireland dating back to 1997, the respondents had varying views on the drivers for these reductions. One respondent believed that strong commercial pressure from *eircom* was the principal driver of MTR reductions, while *eircom* itself believed that self-interest is the main motivation. This seems to suggest that the history of reductions in MTRs appears to be driven from a combination of pressures including self-interest, regulatory and interconnection partners.
- 4.40 In this section ComReg notes two other separate arguments put forward by the respondents.
- 4.41 One respondent believed that due to differences in size between networks, it does not have countervailing buyer power on its network, as demonstrated by the fact that at launch it set termination rates at the same level as the two existing mobile operators. It added that the fact its termination rates have remained static since launch is, in its opinion, not a sufficient sign of dominance. ComReg notes this respondent's viewpoint. However, considering that the relevant market for termination services is on an individual network basis, ComReg believes that individual MNOs have countervailing buyer power over other operators with regard to the termination of calls to subscribers on its network, irrespective of the size of their network. However ComReg believes that issues, such as the size of the network, are important to take into consideration when considering remedies in this market.
- 4.42 One respondent fundamentally disagreed with ComReg's concept of "the competitive level of call termination", as it believes that the notion of call termination being supplied on a standalone basis is "absurd". In this regard, this respondent set out a number of views which it believes should be taken into account if ComReg wishes to establish a benchmark level. ComReg notes the respondent's views and will consider them if a benchmark level for termination is determined. ComReg believes that the competitive level is a price that is equal to the costs of an efficient operator.

## **Conclusion**

4.43 ComReg does not believe that there is sufficient countervailing buyer power to act as a constraint to mobile termination rates.

## **Pricing and Profitability**

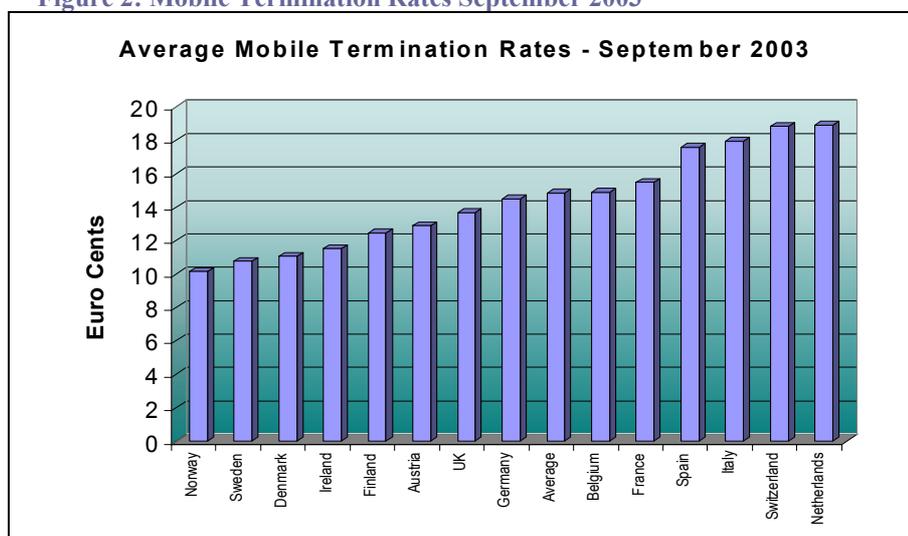
### **Summary of consultation issue**

4.44 ComReg presented evidence of the profitability of mobile operators, their current termination rates and their rates benchmarked against European operators.

#### **(a) *International benchmark***

4.45 In the absence of a model providing cost-oriented charges, a comparison of the level of mobile termination charges in the Irish market with those of other relevant countries can be useful. Such a comparison, (see figure 2), suggests that Ireland fares relatively well compared to most other European jurisdictions. However the mobile termination charges in other relevant countries as shown in figure 2 do not necessarily reflect the cost-oriented mobile termination rate in those countries. For example, in the UK, OFTEL has conducted cost modelling exercises and concluded that their existing mobile termination charges are significantly above cost.<sup>42</sup> If similar findings are concluded elsewhere, this suggests that existing mobile termination charges in other countries are likely to be significantly above costs.

**Figure 2: Mobile Termination Rates September 2003**



Source: Ovum

4.46 Under a perfectly competitive economic model, the consistent generation of supernormal profits by an operator in a particular market is generally regarded as reflecting the fact that this operator is not subject to any effective competitive restraint. Practically, if an operator can maintain a high level of profits overtime against a level of cost that would emerge in a competitive market, this would indicate that an operator has market power in the said market. However, any

<sup>42</sup> See e.g. OFTEL, Review of mobile wholesale voice call termination markets EU Market Review, 15 May 2003, paragraph 4.17.

Notification - Wholesale voice call termination on individual mobile networks assessment of market power to an individual operator involves the consideration of profits and efficiency together. SMP on a particular market could also be found even in the absence of super normal profits at an operator level. For example, an SMP operator may set prices higher than the competitive level but earn low profits because it operates inefficiently.

4.47 In an effectively competitive market, prices should reflect efficiently incurred costs including the cost of capital. Given the difficulties associated with estimating the competitive level of costs, however, other surrogate measures for profitability levels have been relied on. One such measure is Rate of Return on Capital Employed (ROCE).

4.48 This ratio can be calculated in a number of different ways. In this case, most of the goodwill has been excluded because normally only the fixed assets and working capital of the company are used by regulators when assessing the level of return. The ratio is also based on the addition of long term debt and equity, since the relationship between the two is the financing decision of an individual parent company. The figures are also calculated using consolidated Irish statutory accounts based on the Historical Cost Convention and not on Current Cost Accounting or Long Run Incremental Cost numbers.

4.49 The factors listed above should be taken into account in interpreting the data in table 3. It should be noted that this is an indication of overall profitability of the respective Irish groups rather than profitability for the provision of wholesale termination services.

**Table 3: Rate of Return on Capital Employed**

	<i>Rate of Return on Capital Employed</i>			
	1999	2000	2001	2002
Vodafone	26%	35%	32%	31%
O <sub>2</sub>	-16%	-18%	8%	24%

Source: ComReg

4.50 ROCE that persistently and significantly exceeds the cost of capital could indicate that prices charged by particular mobile network operators are higher than would be found in an effectively competitive market. Table 3 shows the ROCE for Vodafone and O<sub>2</sub> on an Irish group basis from 1999 up to 2002.<sup>43</sup> Whilst ComReg acknowledges that the ROCE of Vodafone and O<sub>2</sub> apply to the total company, it believes that these are relatively high. This is based on research from Cullen International that indicates that the highest determined cost of capital, albeit solely in the "network" area, is 19.5% (Belgium) while the lowest is 12% (UK).<sup>44</sup>

<sup>43</sup> The table above excludes Meteor as it did not have any operations in 1999 and 2000. It's ROCE for 2001 and 2002 is negative.

<sup>44</sup> <http://www.cullen-international.com/documents/cullen/prindex.cfm> - Date October 2003.

- 4.51 Vodafone's current ROCE level at 31% appears high - sustained at high levels or rising over a period of time in question – in the absence of some explanation of how such high ROCE figures might reflect productive or distributive efficiencies. Furthermore, O<sub>2</sub> current ROCE at 24% also appears high. These current ROCE figures may reflect high profits for the provision of mobile services as a whole and may be indicative of the fact that competition for the overall business at the retail level and wholesale level is not yet fully effective. Were the market at the retail level fully competitive, excess profits for wholesale voice call termination could in theory be competed away at the retail level.
- 4.52 Meteor's ROCE is consistent with the early stages of development of a network showing no operating profit. A network-based business faces considerable initial and outgoing investment and it may be several years before there are operating profits.

### **Consultation question 12**

**Q. 12. Do you agree that there is evidence of market behaviour supporting the preliminary conclusion that MNOs are not subject to constraints from competitors, customers or consumers to lower their termination rates to a competitive level? Please provide a reasoned response.**

### **Responses to question 12**

- 4.53 Three respondents disagreed with ComReg's analysis, while two respondents agreed. The respondents who disagreed with ComReg added the following:
- 4.54 One of the respondents believed that it is not possible for mobile operators to increase termination rates with a view to generating excess profits as it believed that it is only possible to generate excess profits in this way if the operator is dominant in the market for all mobile services (access, origination and termination). It stated that termination rates are one part of the overall bundle of mobile services. The prices for each element are linked, so that profits from one service are, in a competitive market, competed away in the bundle as a whole. This respondent believed that the retail market is effectively competitive, as is said to be evidenced by a number of factors including the rapid reduction in its market share following the introduction of competition, the absence of barriers to expansion and switching and the high degree of price rivalry witnessed in the market, as well as continuing and ongoing market entry.
- 4.55 This respondent, however, acknowledged that due to the demand characteristics of mobile termination (i.e., the termination charge being paid by subscribers to a different network and the relative price inelasticity of fixed to mobile calls), mobile operators may have an incentive to set F2M termination rates above the economically efficient level (i.e., the level that maximises total consumer welfare). However, it again argued that the profits earned from termination charges will be used to subsidise subscription and outgoing call charges.

4.56 Finally, this respondent believed that the evidence presented by ComReg relating to ROCE is fundamentally flawed both in the calculation of those figures and in the interpretation of those figures. It believed that the appropriate approach to measuring economic profitability is to use the internal rate of return (IRR) or net present value (NPV) measures<sup>45</sup>. This respondent also added that:

- There are special factors that distort the comparison between ROCE and the cost of capital. This respondent, for example, leases a significant number of its assets.
- Even when properly measured, the existence of excess profits does not necessarily equate with the existence of market power e.g., sources of advantage include: (1) an operator's customer mix; and (2) superior levels of efficiency.
- To assess market power in the mobile industry, the only measure of profitability that should be considered is the profitability of the industry as a whole over a significant time period. It believes that only the 2002 ROCE figure could be interpreted as representing profits significantly above the WACC.

4.57 One respondent argued that where there may be discretion over the jurisdiction in which profits are declared, profits may be declared in an operating company whose jurisdiction may enjoy favourable tax rates meaning that profits may be overstated.

4.58 One respondent argued that mobile operators do not earn excessive profits across the cluster of services they offer and that the broader mobile market is competitive. With regard to ComReg's discussion of profitability and its use as an indicator of market power, it is argued that this is internally inconsistent, and this respondent's view is that this involves a clear misapplication of finance theory. Furthermore, this respondent states that there are a number of other firms, in other industries, who exhibit ROCE experiences similar to that of itself in 2002-3, yet these are not classed as being non-competitive.

4.59 It believed that that there is no evidence at all of persistently excessive profitability, as it believes that ComReg has used a single year's estimate of its return on capital employed as being indicative of potential market power, despite the fact that the only other evidence supplied indicates periods of very low and even negative returns. It believed that the problem with ignoring the "persistence" element of the test is that, by not taking into account the multi-year nature of investment in a mobile telephony network, findings are likely to be biased towards over-regulation. Additionally, it believed that it is also important to note that, even where high profitability proves to be persistent, there may be reasons that it is not "excessive". Factors such as above average productivity growth or successful past innovation may provide alternative legitimate explanations for high profitability, without any need to rely on the possession of market power.

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<sup>45</sup> For example see Assessing profitability in competition policy analysis, Office of Fair Trading, Economic Discussion Paper 6, UK, July 2003.

- 4.60 It added that a more appropriate framework for profitability analysis is the measurement of the internal rate of return<sup>46</sup> over the life of the firm, as this framework takes explicit account of the time horizon necessary for productive investments to generate a return, but this respondent does not present any data to support this assertion.
- 4.61 It also argued that ComReg's analysis has failed to take a holistic view and that it has therefore failed in its analysis. It is argued that any intervention affecting call termination rates needs to consider the balance of interests between mobile subscribers and calling parties. Any reduction in penetration would entail a loss of network externalities and so have a cost significantly greater than simply the lost consumer surplus of those mobile subscribers who were priced off the network.
- 4.62 One respondent noted that even though it has made no profits to date, it is still determined to have SMP.

### **ComReg's Position**

- 4.63 In general, the respondents presented distinct arguments to this question in relation to what is known as the "Waterbed Effect" and the calculation of ROCE. ComReg will deal with each one of these separately.
- 4.64 **"Waterbed" Effect:** The first argument presented to ComReg deals primarily with an argument known as the "waterbed" effect. The respondents believed that it is not possible for them to generate excess profits by increasing termination rates, as any profits made on termination services are competed away in the market for all mobile services, i.e. the market for access, origination and termination. However it should be noted that one respondent has acknowledged that mobile operators have the incentive to set F2M termination rates above the efficient level and that the demand characteristics of F2M termination may need to be examined separately to M2M termination.
- 4.65 Considering the above arguments, ComReg does not believe that subsidising mobile customers across the broad ranges of services at the retail level at the expense of subscribers who call mobile numbers, and thus incur termination charges, is either efficient of itself or likely to lead to broader competitive results. The reasoning for this is set out below and is considered in terms of the broad issues, F2M issues, and M2M issues.
- 4.66 Broad issues with the "waterbed" effect:  
ComReg recognises that both M2M off-net and F2M calls incur a termination charge due to the CPP principle that is applicable in the mobile market. Arguments put forward from the respondents have suggested firstly that any excess profits made in termination are competed away at the retail level and secondly that subsidising mobile retail services via termination revenues is efficient and maximises consumer welfare. ComReg will now investigate both of these claims.

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<sup>46</sup> Or, equivalently, the Net Present Value of cash flows.

- 4.67 Taking the argument that excess profits in the termination market are competed away at the retail level, ComReg is unconvinced that this is the case. ComReg's market analysis consultation on the Access and Call Origination Market<sup>47</sup> has presented evidence for the broad mobile market. This consultation presents preliminary conclusions that price competition in the Republic of Ireland has stagnated over the last number of years and that the profits of O<sub>2</sub> and Vodafone have increased over time. Overall this evidence casts doubt on the assertions of the respondents that any profits generated in the termination market are competed away at the retail level.
- 4.68 With regard to the argument that subsidising mobile retail services via termination revenues is efficient and maximises consumer welfare, ComReg believes that there are many factors to suggest otherwise.
- 4.69 Firstly ComReg believes that the mobile market is now mature as evidenced by the fact that the Republic of Ireland currently has a mobile penetration of 87%. Given this level of penetration, ComReg is unconvinced that the consumer welfare gained by increasing mobile penetration further will outweigh the costs incurred via termination rates set above the efficient level. In this regard, ComReg notes that the mobile operators themselves have reduced the average handset subsidies significantly over the last number of years as the penetration rate has increased.
- 4.70 Secondly, given the high level of mobile penetration, it appears that MNOs are now focussing on retaining customers as well as attracting new customers. While the mobile operators may argue that it is necessary to use termination revenues to maintain their current customer base, ComReg is unconvinced whether this is an efficient outcome, particularly when considering fixed to mobile call termination.
- 4.71 Finally, with regard to this issue, ComReg considers that high termination rates may hinder Service Provider and MVNO competition, as the network services costs may be set at too high a level for them to compete effectively. This could therefore reduce overall consumer welfare particularly where Service Provider or MVNO competition can bring benefits to the market.
- 4.72 F2M issues:  
ComReg believes that by setting MTRs above the efficient level, there is a transfer of wealth from the FNOs to the MNOs, when a F2M call is made. ComReg is aware that MNOs may argue that the FNO's customers can benefit from this transfer via increased competition in the mobile market. However ComReg remains unconvinced of this argument and believes that this argument does not hold when:
- The FNO customer does not have a mobile subscription. In this case the FNO subscriber cannot receive a benefit from increased competition in the mobile market, as he/she does not have a mobile subscription;
  - The customer has both a fixed and mobile subscription, but makes more F2M calls than M2M on-net calls. In this scenario, the costs (the level of F2M calls) to the customer will be greater than the benefits (the level of M2M on-net calls) he/she receives;

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<sup>47</sup> ComReg Document 04/05

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- There are mobile subscribers who do not have a fixed subscription. In this scenario, an individual mobile subscriber will receive benefits but not incur any costs themselves;

4.73 Additionally, there are other important factors that ComReg believes support the case for setting F2M termination rates at an efficient level. Of particular note here is the argument that a F2M termination rate set above the efficient level will distort traffic use away from the most efficient levels for both the fixed and mobile networks. It would arguably increase the level of traffic from mobile networks, while decreasing the level of traffic from fixed networks. This may not be the most efficient outcome in terms of utilising the most efficient technology to complete the call.

#### 4.74 M2M issues:

ComReg is aware that the arguments for setting the M2M termination rate at the efficient level differ from those for the F2M scenario. Indeed a number of respondents have suggested that M2M termination rates set in a reciprocal fashion are a sufficient constraint to ensure an efficient outcome. While this is something that ComReg will take into consideration in any remedies that are proposed for this market, ComReg is aware that setting M2M termination rates in a reciprocal manner could cause problems when:

- There is a traffic imbalance between the MNOs. In such a case one MNO receives more termination revenue from the other and therefore benefits from M2M termination rates set above the efficient level; and
- The size of MNOs differs substantially. In such a scenario, a smaller MNO will have a higher percentage of off-net calls per average subscriber than a larger MNO. Where the M2M termination rate is set above the efficient level, this could potentially restrict the smaller MNO's ability to compete in the retail market. This is particularly relevant in the Irish market context where O<sub>2</sub> and Vodafone have 95% market share between them.

#### 4.75 Summary on “waterbed” effect:

ComReg believes that both M2M and F2M termination rates should be set at the efficient level. ComReg does not support the view that the subsidising of mobile customers in the retail arm at the expense of those subscribers who do not have a mobile phone is either efficient of itself or likely to lead to broader competitive results. Moreover, ComReg's preliminary conclusions concerning the access and origination market indicates that the subsidisation said to be taking place has not resulted in a retail market which displays the usual signs of fierce competition.

4.76 **ROCE:** The second argument put forward by the respondents in this section relates to the manner in which ComReg calculated profits for the mobile operators based upon ROCE calculations and the interpretation of that data.

4.77 A number of respondents criticised ComReg use of ROCE alone as a measure of profitability. These respondents believed that there are a number of other indicators of profitability such as IRR and DCF. ComReg notes the respondent's views and believes that no one measure can be taken as a definitive representation of

Notification - Wholesale voice call termination on individual mobile networks profitability. ComReg believes that ROCE provides a good indication of the returns made in a business and has the advantage that it can be compared to the weighted average cost of capital.

- 4.78 However where possible, ComReg believes that it is preferable to use a number of measures, such as ROCE, IRR and DCF, in order to obtain a view on profitability. On the basis of the comments provided by the respondents ComReg has reviewed and updated its ROCE calculations and carried out a basic DCF analysis. The DCF analysis confirms ComReg's original assertions that Vodafone and O<sub>2</sub> are achieving high returns for the overall business as compared to their cost of capital. Additionally, ComReg believes that there is potential for O<sub>2</sub> and Vodafone to continue to make high returns in the future given the strength of the market, their most recent reported results and their relative position in that market place.
- 4.79 Regarding the comments made by the respondent in relation to the link between excess returns and SMP, ComReg believes that ROCE figures provide a good indication of the returns made in a business. However, ROCE figures indicating excess or not excessive returns have not been used by ComReg to solely substantiate any conclusions regarding the existence of SMP for voice call termination. Other factors, as discussed throughout the market analysis section of this document, have been assessed by ComReg. In this regard, ComReg notes that individual firm efficiencies may lead to greater returns for this firm as compared to its competitors.
- 4.80 Regarding the suggestion by one respondent that it should not be designated with SMP as it has not made profits to date, ComReg believes it is important to re-emphasise that the ROCE figures presented relate to the overall profitability of the respective Irish groups rather than profitability for the provision of wholesale voice call termination services. Therefore it is possible that firms which currently have a negative ROCE for the overall business may have a positive ROCE for the provision of voice call termination services. Additionally, it is important to re-emphasise the point above that ROCE figures have not been used by ComReg to solely substantiate any conclusions regarding the existence of SMP for voice call termination.
- 4.81 Finally, one respondent made comments about a comparison between ROCE and the cost of capital, and it believed that there are special factors, such as the leasing of a significant number of assets, which distort the comparison for this respondent. ComReg does not accept that there are significant leased assets disclosed in the Statutory Financial Statements for this respondent. Even if there were leased assets disclosed in such statements, ComReg believes that this would not affect the comparison between ROCE and cost of capital to any significant level. The reasoning for this is that the cost of leasing these assets would include profits on such leasing. If the capital employed was understated as a result of such leasing, then the profits would also be understated, thus mitigating the effect of the exclusion of any leased assets.
- 4.82 The final argument put forward in this section is that one respondent believes that it should not be designated as having SMP in this market, when it has made no profits to date. ComReg is aware that this operator has yet to make profits in the mobile

Notification - Wholesale voice call termination on individual mobile networks market, but also notes that the figures present are the figures for the mobile business and not just the returns for the voice call termination service.

## **Conclusion**

- 4.83 In this regard, profitability figures indicate excess returns, but have not been solely used to substantiate any conclusion regarding the existence of SMP for mobile voice call termination.
- 4.84 ComReg maintains its position that MNOs are not subject to competitive constraints to lower termination rates from competitors, customers or consumers.

## **Preliminary conclusions**

### **Summary of consultation issue**

- 4.85 ComReg put forward the preliminary conclusion that each MNO in Republic of Ireland, namely, Vodafone, O<sub>2</sub>, Meteor and '3', should be designated as having SMP in the relevant market for the termination of voice calls on their respective mobile networks.
- 4.86 The identification of the relevant market as the market for voice call termination services on individual mobile networks and its subsequent market analysis indicates evidence of a market failure insofar as market forces are unable to constrain the pricing of mobile call termination services.
- 4.87 In the period until the next market review, when considering foreseeable technological developments and anticipated customer behaviour, there is nothing to suggest to ComReg that the SMP enjoyed by these MNOs with respect to the termination of calls on their own networks will be diluted in any meaningful way in the absence of appropriate and proportionate ex ante regulatory measures. This conclusion is without prejudice to the particular obligations which might be imposed by ComReg on each SMP-designated MNO in its relevant product market.
- 4.88 There is nothing to indicate that there exists countervailing buyer power such as to exert any competitive pressure on MNOs to lower their termination rates in response to competitive pressures.
- 4.89 From the factors outlined above, ComReg is of the view that MNOs in the Republic of Ireland are not subject to constraints from competitors, customers or consumers to lower their termination rates.

### **Consultation question 13**

**Q. 13. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response.**

### **Responses to question 13**

4.90 Two respondents agreed with ComReg's preliminary conclusion. One respondent agreed with the preliminary conclusions for O<sub>2</sub> and Vodafone, but was concerned that ComReg had not fulfilled its obligations with regard to carrying out comprehensive dominance tests for designating Meteor and '3'. Given the potential impact of the process on new entrants, in its view it is vital that ComReg carries out a complete analysis.

4.91 Three respondents disagreed with ComReg's preliminary conclusions.

4.92 One respondent presented evidence said to support its view that countervailing buyer power and existing regulation deprive it of the freedom of action that is necessary for market dominance according to the Article 14 test.<sup>48</sup> This respondent stated that it continues to make a negative return on the wholesale side of its business and that its current termination rate is below cost. Finally, it believed that ComReg has used an unprecedented assumption that all mobile operators are the same and that market power is equal among all operators.

4.93 In addition to the points raised in specific questions throughout the consultation, one respondent believed there is important evidence concerning the extent of constraints on the setting of termination rates that is not given sufficient weight by ComReg. In this regard, it is argued that ComReg should reconsider its findings based on the history of termination rates in the Republic of Ireland and the prospective impact of mobile number portability.

4.94 One respondent added that it cannot enjoy the freedom of action that characterises dominance under the case-law of the European Court of Justice, due to competition from other MNOs. If it reduced its call termination charges, it would be subject to a disadvantage as:

- other MNOs would not be required to reduce their charges to such a level;
- if they declined to do so, those MNOs would be able to offer discounted prices funded out of excess call termination revenues which it could not match and, therefore ,
- competing MNOs would be at a competitive advantage in attracting new subscribers and in winning customers away from it.

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<sup>48</sup> Article 14 of the Framework Directive, a test to determine whether an entity enjoys "a position of economic strength affording it the power to act to an appreciable extent independently of competitors, customers and ultimately consumers".

4.95 Additionally, it believed that the competition in the retail market for mobile services ensures that any profits that an operator receives from call termination will be competed away in the outgoing market. Thus, a non-transitory increase in call termination rates will not lead to a permanent increase in the operator's overall level of profits.

### **ComReg's position**

4.96 ComReg believes that it has carried out a comprehensive market analysis and dominance test for all operators in this market including the smaller operators such as '3' and Meteor. With regard to the potential impact that this may have upon such operators, ComReg will take such issues into consideration in selecting appropriate remedies.

4.97 Two respondents believed that they did not enjoy the freedom of action that is necessary for market dominance according to Article 14 of the Framework directive and under case-law of the European Court of Justice. ComReg's conclusions as regards the existence of SMP are consistent with the concept of "dominance", as understood under Community case law and under Article 14 of the Framework Directive. Far from convincing ComReg that the market is effectively competitive, the acknowledgement by one of the MNO respondents that a lowering of termination prices would not be met by a competitive response confirms the fact that there are no effective competitive restraints for the termination of voice calls on individual mobile networks.

4.98 With regard to one respondent's comment that ComReg had not given enough weight to the history of termination rates in the Republic of Ireland and the impact of mobile number portability, ComReg believes that it has fully discussed and considered the development of the Republic of Ireland's termination rates over time. With regard to the prospective impact that mobile number portability may have upon this market, ComReg believes that this is likely to reduce the ability of retail consumers to identify the network on which a call will terminate, and thus potentially reduce the ability of retail customers to place a constraint on termination rates.

### **Conclusion**

4.99 Having reviewed the responses to the market analysis, ComReg considers that Vodafone, O<sub>2</sub>, Meteor and '3' should be designated with SMP in the market for the provision of voice call termination service on their individual networks.

## **5 Designation Of Undertakings With Significant Market Power**

- 5.1 Having regard to the sections above, ComReg considers that, in accordance with the *Framework Regulations*:
- 5.2 Vodafone should be designated as having SMP on the wholesale market for the termination of voice calls on its network in the Republic of Ireland;
- 5.3 O<sub>2</sub> should be designated as having SMP on the wholesale market for the termination of voice calls on its network in the Republic of Ireland;
- 5.4 Meteor should be designated as having SMP on the wholesale market for the termination of voice calls on its network in the Republic of Ireland; and
- 5.5 '3' should be designated as having SMP on the wholesale market for the termination of voice calls on its network in the Republic of Ireland.
- 5.6 A reference in this section to any given undertaking shall be taken to include any undertaking carrying out business activities in the Republic of Ireland where the undertaking is engaged either directly or indirectly in the commercial activities falling within the scope of the relevant market defined in section 3 of this document.

## 6 Regulatory Impact Assessment

- 6.1 This section discusses the Regulatory Impact Assessment (RIA) that ComReg proposes to carry out in relation to this market.

### **Summary of consultation issue**

#### *Legislative Basis*

- 6.2 Regulation 9(1) of the Access Regulations states that: “Where an operator is designated as having significant market power on a relevant market as a result of a market analysis carried out in accordance with Regulation 27 of the Framework Regulations, the Regulator shall impose on such operator such of the obligations set out in Regulations 10 to 14 as the Regulator considers appropriate”. Furthermore, paragraph 21 of the SMP guidelines says, “if NRAs designate undertakings as having SMP, they must impose on them one or more regulatory obligations, in accordance with the relevant Directives and taking into account the principle of proportionality.” ComReg is therefore compelled to impose at least one obligation where an undertaking is designated to have SMP.
- 6.3 ComReg can impose any or a combination of obligations from those obligations listed in Regulation 10 to 14 of the Access Regulations.<sup>49</sup> Under Regulation 9(6) of the Access Regulations, obligations shall be ‘based on the nature of problem identified; be proportionate and justified in the light of the objectives laid down in section 12 of the Act of 2002 and only be imposed following consultation in accordance with Regulations 19 and 20 of the Framework Regulations’.
- 6.4 The regulatory impact assessment is required to assess whether the range of obligations proposed are proportionate and justified and meet ComReg’s objectives in terms of the promotion of competition, the development of the internal market and the promotion of the interests of end-users.

### **Consultation question 14**

**Q. 14. Respondents are asked to provide views on whether the remedies in section 7 are proportionate and justified and offer views on what factors ComReg should consider in completing its Regulatory Impact Assessment in terms of the impacts of these remedies on end-users, competition, the internal single market and technological neutrality, having regard to the different stages of development of market players.**

### **Responses to question 14**

- 6.5 Five of the six respondents offered comments on the remedies proposed and the factors that ComReg should consider in completing its Regulatory Impact

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<sup>49</sup> European Communities (Electronic Communications Networks and Services)(Access) Regulations 2003, S.I No. 305 of 2003.

Assessment. Three respondents did not support the view that the remedies, as outlined, were proportionate and justified. One respondent argued that the need for regulation of mobile termination rates had not yet been proven. It was argued that a system of voluntary reductions of mobile termination rates has been in place for the last two years and has worked well. The move towards a more interventionist approach was questioned. Two respondents supported the remedies outlined as being proportionate and justified.

- 6.6 One respondent raised its concern that there is an inherent risk in the regulation of mobile termination rates. The respondent argued that the impact of regulating voice call termination on outbound prices, subscription charges and penetration, had not been considered in ComReg's analysis.
- 6.7 Three respondents suggested that ComReg should adopt international best practices in conducting its Regulatory Impact Assessment, with respondents referring to the Regulatory Option Appraisal process adopted by Ofcom in the UK.
- 6.8 Two respondents believe that ComReg should, in conducting the Regulatory Impact Assessment, detail all the costs and benefits of the proposed obligations. One respondent argued that the obligations proposed should not impose an unnecessary or disproportionate burden on smaller operators.
- 6.9 One respondent specified that a RIA should take into account the cumulative impact of the costs and benefits of the regime of regulation proposed. This would mean assessing the impact of the set of remedies as a whole and not each obligation in isolation, which is chosen to address a specific competition problem.
- 6.10 One respondent urged ComReg to consider the appropriateness of an obligation, whereby before imposing an obligation, ComReg should show that an obligation is suitable and appropriate.
- 6.11 Specifically, one respondent believed that cost-based rates place too heavy a burden on both ComReg and operators and that the obligation was unlikely to yield substantial benefits due to the relatively small size of the Irish market
- 6.12 One respondent believed that the RIA should consider the adverse impact stemming from the application of differential regulation on individual market participants. While respondents accept that obligations would be introduced where there is a designation of SMP, there is a general concern that the regulatory regime introduced would not be proportionate. In particular, two respondents highlighted the need for consistent application of obligations across all SMP operators, regardless of market size or the relevant stage of development of an SMP operator. Likewise, it was raised by one respondent that the application of remedies should be technology neutral and that remedies should be consistent across different platforms, whether fixed or mobile.

### **ComReg's position**

- 6.13 ComReg notes the respondents' comments and thanks all respondents for their detailed responses to question 14.
- 6.14 With regard to the comment that the need for regulation has not been proven, ComReg believes that the case for regulation of wholesale voice termination on individual networks has been demonstrated to its satisfaction in this market analysis. This conclusion is consistent with the views outlined in the Recommendation.<sup>50</sup> The market analysis has shown that there is insufficient competitive constraint on mobile operators to ensure that their voice call termination charges are set to an efficient level. Following the assessment of the market and having taken on board the views of respondents, ComReg continues to believe that there is market failure in the market for wholesale voice termination on individual networks and hence that regulatory intervention is necessary to ensure that voice call termination charges are set at the efficient level.
- 6.15 In dealing with the comments raised in the consultation, ComReg believes it is best to consider these in two parts. The first part will consider the comments in relation to the factors that ComReg should consider in completing its RIA, while the second part will consider the comments in relation to whether the remedies proposed are proportionate and justified.

#### **Factors ComReg should consider in completing its RIA**

- 6.16 One respondent expressed its fear that there was an inherent risk in the regulation of mobile termination rates, which has not been considered by ComReg. ComReg believes that this is a factor which should be considered in selecting the appropriate remedy. Furthermore, ComReg believes that a robust market analysis, as performed for this market, which identifies the competition problems in this market minimises the risk from regulation, as this process helps to ensure that the appropriate remedies are selected.
- 6.17 Regarding the comments from the respondents that the Regulatory Impact Assessment should conform to best practices and in particular international best practices, this is a standard which ComReg should endeavour to follow. However, national circumstances may make some aspect of international best practice impractical. Therefore, the RIA for this market should be carried out with specific consideration for the Irish Government's White Paper released in January 2004 "Regulating Better: A Government White Paper setting out six principles of Better Regulation".<sup>51</sup> Regarding the use of international best practice for the RIA, the market review process is driven from the EU New Regulatory Framework, and thus inherently the process itself has a large degree of international best practice incorporated into it. Additionally, the ERG and IRG have provided substantial guidance with regard to the ERG Common Position on the approach to appropriate remedies in the new regulatory framework<sup>52</sup> and the IRG Principles of

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<sup>50</sup> Regulations 26 and 27.

<sup>51</sup> Regulating Better: A Government White Paper setting out six principles of Better Regulation". Appendix 1 – Regulatory Impact Analysis.

<sup>52</sup> [http://erg.eu.int/doc/whatsnew/erg\\_0330rev1\\_remedies\\_common\\_position.pdf](http://erg.eu.int/doc/whatsnew/erg_0330rev1_remedies_common_position.pdf)

Notification - Wholesale voice call termination on individual mobile networks  
Implementation of Best Practice on the application of remedies in the mobile voice call termination market.<sup>53</sup>

6.18 With regard to the issue of ComReg carrying out a cost/benefit analysis in the RIA for each of the proposed obligations, ComReg does not believe that this would be practical, nor indeed necessary. As noted in the White Paper on Better Regulation, it is crucially important to ensure that an RIA does not become an overly bureaucratic exercise and that the practical use of an RIA must take precedence over superficial compliance. Accordingly, ComReg's believes that its application of the Regulatory Impact Assessment should take into account the overall impact of the measures proposed, rather than each of its individual elements (which would achieve little more than "superficial compliance"). ComReg believes that such an approach is proportionate in the circumstances, consistent with the requirements of Community law, and is also consistent with the approach taken by other regulators, such as Oftel (now Ofcom) in the application of its comparable cost/benefit analysis standard<sup>54</sup>.

#### Issues regarding the proportionality and justification of remedies

6.19 In the October Consultation, ComReg provided a brief description of its proposed remedies, with the intention that it would consult on the detail of these proposed remedies at a later stage. ComReg believes that the respondents have provided useful comments in relation to issues that ComReg should consider in assessing the proportionality and justification of remedies. ComReg has considered these issues and taken them into account, where appropriate, in proposing the remedies for this market. ComReg believes that it is appropriate to consider the issue of proportionality and justification of remedies when discussing ComReg's proposed remedies. Section 7 of this document proposes remedies for this market at a high level, while ComReg is consulting on the detail of these proposed remedies in ComReg document 04/62b.

### **Conclusion**

#### ComReg's Regulatory Impact Assessment

- 6.20 The purpose of a Regulatory Impact Assessment is to ensure that ComReg has considered the impact and implications of the regulatory obligations it proposes, upon the designation of SMP. This should be carried out with the purpose of:
- the promotion of competition;
  - the promotion of the interests of users within the Community; and
  - the development of the Internal Market and other technical issues.
- 6.21 These issues should be considered using the principles proposed in "Regulating Better: A Government White Paper setting out six principles of Better Regulation"<sup>55</sup>. The criteria to be considered when undertaking a regulatory impact assessment include:
- Identification or quantification (where possible) of impacts

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<sup>53</sup> <http://irgis.icp.pt/admin/attachs/384.pdf>

<sup>54</sup> Oftel May 2003; Review of mobile wholesale voice call termination.

<sup>55</sup> "Regulating Better: A Government White Paper setting out six principles of Better Regulation". Appendix 1 – Regulatory Impact Analysis.

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- Structured consideration of alternatives to regulation and of different regulatory approaches
- Built-in comprehensive, consultation processes
- Formal consideration of compliance issues

6.22 Regarding the issue of proportionality and justification of ComReg's proposed remedies, ComReg has considered these issues and taken them into account in proposing the remedies for this market. ComReg believes that it is appropriate to consider the issue of proportionality and justification of remedies when discussing ComReg's proposed remedies. Section 7 of this document proposes remedies for this market at a high level, while ComReg is consulting on the detail of these proposed remedies in ComReg document 04/62b.

## 7 Proposed Market Remedies

### **Summary of consultation issue**

- 7.1 In October's consultation, ComReg proposed that the remedies most appropriate to apply in this market are cost-orientation,<sup>56</sup> and non-discrimination,<sup>57</sup> with appropriate supporting obligations to ensure the efficiency of the two principal remedies, relating to cost accounting systems,<sup>58</sup> transparency<sup>59</sup> and accounting separation.<sup>60</sup> Additionally, ComReg expects both Vodafone and O<sub>2</sub> to adhere to their undertakings to reduce their mobile termination rates.<sup>61</sup>
- 7.2 ComReg added that in selecting proportionate and appropriate obligations, factors such as the overall development of the Irish market, including the development of the smaller market players, would be considered. Furthermore, ComReg proposed that 3G networks, which are at a different stage of evolution to 2G networks and represent a form of innovation in the mobile market, should be treated differently to 2G networks. In that regard, ComReg proposed that it may be appropriate to only have the obligation of transparency applying to voice call termination on 3G networks.
- 7.3 ComReg added that it intends to consult fully on these remedies and the way in which they would be implemented in further consultations.

### **Consultation question 15**

**Q. 15. Do you agree with the proposed remedies outlined above? Please elaborate on your response**

### **Responses to question 15**

- 7.4 In general three respondents agreed with the remedies outlined by ComReg while three disagreed with the need for regulation in this market.
- 7.5 One respondent believed that a remedy that involves detailed cost modelling and the necessary additional analysis is inappropriate given the size of the Irish market. It believed that a light-handed approach to regulation is the most appropriate in the Irish context. It suggested that the current approach of negotiated regulation has been successful to date and should continue.

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<sup>56</sup> Regulations 14 of S.I. 305 of 2003

<sup>57</sup> Regulations 11 of S.I. 305 of 2003

<sup>58</sup> Regulations 14 of S.I. 305 of 2003

<sup>59</sup> Regulations 10 of S.I. 305 of 2003

<sup>60</sup> Regulations 12 of S.I. 305 of 2003

<sup>61</sup> ComReg Press Release – Reference PR 280703 ComReg welcomes reductions in mobile termination rates ensuring that Irish rates stay amongst the lowest in Europe.

- 7.6 This respondent however accepted that fixed to mobile termination charges, in the absence of regulatory intervention, may be set above efficient levels. However, it believed that this does not lead to mobile operators earning excess profits but instead leads to subsidies on mobile subscriptions and outgoing call services. Therefore while this respondent is minded to accept some form of cost-based remedy it believes that ComReg should take into account the impact that cost-based termination rates will have on the overall market for mobile services. In setting cost based rates, it believes that these will only be acceptable if they include:
- A Ramsey-based mark-up to account for substantial fixed and common costs present in the provision of mobile telephony; and
  - A further mark-up to account for the positive externalities associated with mobile telephony.
- 7.7 This respondent is also concerned about ComReg's proposal that remedies be applied to operators in a discriminatory manner, dependent upon the size and success of the market participants. It believes that this cannot be justified on financial grounds or on the grounds of economic efficiency. Imposing less rigorous obligations on smaller market participants is akin to rewarding inefficiency, thereby actively promoting and advantaging inefficient operators. It believes that the most appropriate regulatory solution for determining MTRs is to apply a uniform termination rate based upon the appropriately calculated costs of an efficient operator.
- 7.8 One operator believed that remedies are not necessary, given that mobile termination rates in the Republic of Ireland are low as a result of various constraints on the setting of termination rates mitigating the impact of CPP. It believed that the proposed remedies were insufficiently developed to provide useful comments and that ComReg should consider less intrusive alternative remedies in any further consultations. This respondent added that in selecting appropriate and proportionate remedies the burden is on ComReg, under Regulation 9(6) of the Access Regulations to set out the link between market failures and proposed remedies.
- 7.9 This respondent believed that the self-regulation of mobile termination rates in the Republic of Ireland has been successful and that ComReg should explore with the operators whether it is feasible to continue with a programme of voluntary reductions. Additionally, this respondent noted that Meteor and '3' have not indicated a willingness to reduce their termination rates. Therefore, ComReg should focus attention on those operators in the first instance in order to secure reductions in 2004 that would bring these operator's MTRs into line with those of Vodafone and O<sub>2</sub>.
- 7.10 This respondent stated that it is greatly concerned that ComReg could be considering applying less stringent remedies to Meteor and '3' than it does to Vodafone and O<sub>2</sub>. It believed that such a move has no objective basis and constitutes little more than market management by ComReg.
- 7.11 One operator argued that ComReg had not demonstrated a lack of competitiveness which justifies regulating an operator which prices termination below cost in order to

Notification - Wholesale voice call termination on individual mobile networks remain competitive. The regulation of its termination rate could have the effect of removing a competitive player from the market. It believes that smaller operators should not be obliged to engage in the rigorous costing of their networks due to the costs associated with that exercise given their relative scales of operation.

7.12 With regard to the specific remedies which ComReg may impose, this respondent believes that the obligation of:

- Transparency is a complementary tool to the development of the market;
- Non-discrimination should be applied wisely to avoid it becoming a barrier to the development of commercial offerings;
- Accounting Separation represents a considerable regulatory burden for it but notes that separated accounts play a role in the detection of particular abuses;
- Price control and cost accounting obligations are not objectively justified or proportionate to it as its termination rates have always been below costs.

7.13 A respondent outlined that in addition to Regulations 9(6) and 10 to 14 of the Access Regulations ComReg must also take account of the terms of Regulation 6(1).

7.14 This respondent believed that the ultimate outcome of obligations imposed by ComReg should:

- be technology and operator neutral with equal regulation applying to both mobile and fixed operators;
- be consistent and predictable to facilitate greater investment;
- be set on a cost-oriented basis where the costs associated with capital and investment expenditure are recoverable in the termination rate charged.

7.15 It believed that a measured progressive reduction in termination rates could be achieved through a form of co-regulation between industry and ComReg where a network price cap formula (CPI-X) including explicit timelines and a compliance statement is introduced. With regard to each of the potential remedies, this respondent added that the obligations of:

- transparency and accounting separation are necessary pre-requisites to allow ComReg to make informed regulatory decisions;
- access is required to ensure symmetry and to facilitate increased investment; and
- non-discrimination, price control and cost accounting are imperative where operators have dominance. However these obligations should be in the network and wholesale area.

7.16 One respondent commented that it was concerned about the timescale of introduction of regulatory measures for O<sub>2</sub> and Vodafone in this market and added that full cost-orientation must be implemented as soon as possible. This respondent added that the overall regulatory approach must be proportionate and take into account Irish market

Notification - Wholesale voice call termination on individual mobile networks conditions, particularly those of new entrants and smaller mobile players. It believed that cost-accounting and non-discrimination obligations would only seem capable of application in a manner that would impose significant costs on new entrants.

### **ComReg's position**

- 7.17 ComReg thanks the correspondents for the comments they provided on the proposed remedies and the issues that ComReg should consider with regards to their justification and proportionality. In particular, ComReg received some useful comments on a number of generic issues in relation to the high level remedies it proposed in its consultation. These issues which are in relation to forbearance, efficient operator theory, symmetric application of remedies and proportionality are outlined below.
- 7.18 **Forbearance:** Certain mobile operators submitted that they have some of the lowest mobile termination rates in the EU mitigating the need for any direct intervention in mobile termination charges. Having considered the risks to the market of neglecting to intervene where there are potential and persistent competition problems, ComReg believes that simply monitoring the trend in termination charges is not sufficient to address the potential underlying market failure. Any light handed approach can potentially lead to voice call termination charges being maintained above efficient levels for a longer period to the disadvantage of potential competitors and ultimately end users.
- 7.19 While it may be the case that the Irish market is currently experiencing some of the lowest mobile termination rates in the EU, there is currently no evidence to suggest that the existing levels of termination rates are set at efficient levels. The imposition in some form of the accounting separation and or cost accounting system remedies may help to provide such evidence one way or the other thereby ensuing that cost based rates are achieved in the longer term.
- 7.20 **Efficient Operator:** One respondent expressed the view that the most appropriate regulatory solution for determining interconnection tariffs for the Irish 2G operators it to apply a uniform termination rate based upon the appropriately calculated costs of an efficient operator. ComReg believes that there is merit in this proposal. Pricing based on the level of cost of an efficient operator replicates the outcome of a competitive market, and penalises, rather than rewards, productive inefficiency. ComReg believes that the principle of efficient operator's costs promotes competition to the benefit of end users.
- 7.21 Finally, in applying this approach ComReg must consider a number of issues, including proportionality and promotion of competition in the market. In this regard, ComReg may consider setting different time periods for MNOs to reach the uniform target voice call termination charge.
- 7.22 **Symmetric application of remedies:** A number of respondents outlined that remedies should not vary between operators as to do so would be rewarding inefficiency. ComReg believes that remedies should be applied in a similar fashion where appropriate, as the same set of remedies are required to address the same

Notification - Wholesale voice call termination on individual mobile networks competition problems. Thus all operators have SMP on their own networks; if the appropriate remedy is price control then this clearly should apply to all operators. However, in considering the detailed application of these proposed remedies together with any supporting obligation there are a number of issues to consider, including proportionality.

7.23 **Proportionality:** A number of respondents highlighted that the proposed remedies outlined by ComReg may not be proportionate to apply on the smaller mobile network operators. Furthermore, to the extent that ComReg intends to intervene in mobile voice call termination, they would submit that the remedies applied must be at an absolute minimum.

7.24 ComReg recognises that the imposition of proposed measures should be the minimum necessary or the least burdensome measure to achieve efficient wholesale mobile voice call termination charges. ComReg believes that the imposition of Transparency, Non-Discrimination and Cost-Oriented remedies are the minimum necessary to achieve efficient pricing in the mobile voice call termination market.

7.25 Cognisant of the fact that the costs of implementing certain remedies, such as accounting separation or cost accounting systems, may be overly burdensome and disproportionate to impose on smaller operators, ComReg proposes to set a target price based on the costs of an efficient operator. Therefore ComReg believes that it may not be appropriate or proportionate to impose the supporting obligations of accounting separation or cost accounting systems on Meteor and '3'.

## Conclusion

7.26 Having taken on board the views of respondents ComReg believes that the remedies most appropriate to address the competition problems in this market are

- Access
- Transparency;
- Non-discrimination;
- Cost-orientation

7.27 Access, although currently provided by all MNOs, is needed to ensure operability.

7.28 Transparency can assist ComReg and the industry in ascertaining whether SMP operators are meeting their obligations. This can deter potential anti-competitive behaviour from SMP operators as it enables ComReg and the industry to actively monitor SMP behaviour.

7.29 A non-discrimination obligation can ensure that a vertically integrated SMP operator is prevented from acting in such a way as to have a material adverse effect on competition. In the absence of a non-discrimination obligation SMP operators may offer different terms and conditions to different purchasers of their voice call termination services which may have potential anti-competitive effects.

- 7.30 ComReg believes the cost-orientation obligation should be based on the costs of an efficient operator. These remedies may be supported by benchmarking, price controls (including price caps) accounting separation and cost accounting systems.
- 7.31 In terms of the supporting obligations of cost accounting systems and accounting separation, ComReg recognises that in setting a price based on an efficient operator that it may not be necessary to impose such obligations on smaller operators in the market. Due to economies of scale, it is likely that the costs of the larger operators will more closely resemble the costs of an efficient operator. Thus ComReg believes that it may be appropriate only to impose these supporting obligations on the larger operators, namely Vodafone and O<sub>2</sub>.
- 7.32 As stated in the consultation, it was ComReg's intention to consult in greater detail on the proposed remedies for this market. In conjunction with this response to consultation, ComReg has issued a consultation on the proposed remedies for this market [ComReg Consultation Document 04/62b]. This consultation sets out in greater detail the proposed remedies that ComReg believes are appropriate for this market, and seeks views on these detailed proposals. The responses to this consultation have been considered in forming ComReg's proposed remedies in that document

## Appendix A – Notification of Draft Measures Pursuant to Article 7(3) of the Directive 2002/21/EC

Under the obligation in Article 16 of the Directive 2002/21/EC, ComReg, has conducted an analysis of the market for wholesale voice call termination on individual mobile networks in the Republic of Ireland.

Under Article 6 of the Directive 2002/21/EC, ComReg has conducted a national consultation, contained in ComReg document 03/127a. This consultation ran from 22<sup>nd</sup> October 2003 and ended 3rd December 2003. The responses to this consultation have been taken into consideration and ComReg has now reached decisions in market definition, designation of SMP and regulatory obligations, which are contained in ComReg document 04/62a.

ComReg hereby notifies the Commission of its proposed remedies and obligations consistent with Article 7(3) of Directive 2002/21/EC. These remedies and obligations are set out in the attached summary notification form. Under Regulation 27(1), ComReg is required to liaise with the Competition Authority in its definition and analysis of markets. The views of the Competition Authority are attached.

**Section 1 - Market Definition**

**Please state where applicable:**

1.1	<p>The affected relevant product/service market (s).</p> <p>Is this market mentioned in the Recommendation on relevant markets?</p>	<p>Wholesale mobile voice call termination on individual mobile networks.</p> <p>Yes</p>	<p>Page 10-34</p>
1.2	<p>The affected relevant geographic market (s)</p>	<p>The Republic of Ireland</p>	<p>Pages 30 - 31</p>
1.3	<p>A brief summary of the opinion of the national competition authority where provided;</p>	<p>The Authority supports the approach and findings of this market definition exercise.</p>	<p>Pages 72 - 73</p>
1.4	<p>A brief overview of the results of the public consultation to date on the proposed market definition (for example, how many comments were received, which respondents agreed with the proposed market definition, which respondents disagreed with it)</p>	<p>In total six responses were received by the closing date. Three respondents agree with the findings in this consultation, while three respondents disagree. The proposed market definition remains unchanged after the consultation.</p>	<p>Pages 10 - 34</p>
1.5	<p>Where the defined relevant market is different from those listed in the recommendation on relevant markets, a summary of the main reasons which justified the proposed market definition by reference to Section 2 of the Commission's Guidelines on the definition of the relevant market and the assessment</p>	<p>Not applicable</p>	

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	of significant market power <sup>62</sup> , and the three main criteria mentioned in recitals 9 to 16 of the recommendation on relevant markets and Section 3.2 of the accompanying Explanatory Memorandum <sup>63</sup> .		
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**Section 2 - Designation of undertakings with significant market power**

**Please state where applicable:**

<b>2.1</b>	The name(s) of the undertaking(s) designated as having individually or jointly significant market power. Where applicable, the name(s) of the undertaking(s) which is (are) considered to no longer have significant market power	Vodafone, O <sub>2</sub> , Meteor, and '3' have been designated as having significant market power in the wholesale mobile voice call termination markets on individual networks.  A reference in this section to any given undertaking shall be deemed to include that undertaking and any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, the undertaking in question and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities falling within the scope of the relevant markets defined in section 3.	Page 55
<b>2.2</b>	The criteria relied upon for deciding to designate or not an undertaking as having individually or jointly with others significant market power	<ul style="list-style-type: none"> <li>• Market Share</li> <li>• Absence of Potential Competition</li> <li>• Absence of or low Countervailing Buying Power</li> <li>• Pricing and Profitability</li> </ul>	Pages 35 - 54
<b>2.3</b>	The name of the main undertakings (competitors) present/active in the relevant market.	Vodafone, O <sub>2</sub> , Meteor and '3'.	

<sup>62</sup> Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications and services, OJ C 165, 11.7.2002, p. 6.

<sup>63</sup> Commission Recommendation of 11.2.2003 on Relevant Product and Service Markets with 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 ECNs and ECSs, C (2003) 497

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2.4	The market shares of the undertakings mentioned above and the basis of their calculation (e.g., turnover, number of subscribers)	Each operator has 100% share of the market for voice call termination on their individual networks.	Page 35
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**Please provide a brief summary of:**

2.5	The opinion of the national competition authority, where provided	The Authority supports the approach and findings of this analysis exercise.	Page 72 - 73
2.6	The results of the public consultation to date on the proposed designation(s) as undertaking(s) having significant market power (e.g., total number of comments received, numbers agreeing/disagreeing)	Three respondents agreed with ComReg's preliminary conclusions regarding market analysis while three respondents disagreed.	Page 35 - 54

**Section 3 - Regulatory Obligations**

**Please state where applicable:**

3.1	The legal basis for the obligations to be imposed, maintained, amended or withdrawn (Articles 9 to 13 of Directive 2002/19/EC (Access Directive))	<p>The following obligations are proposed:</p> <ul style="list-style-type: none"> <li>• Transparency – Regulation 10</li> <li>• Non-discrimination – Regulation 11</li> <li>• Access to, and use of, specific network facilities – Regulation 13</li> <li>• Cost-orientation – Regulation 14</li> </ul> <p>In addition the following supporting remedies may be required:</p> <ul style="list-style-type: none"> <li>• Accounting Separation – Regulation 12</li> <li>• Cost Accounting Systems – Regulation 14</li> </ul>	Pages 61 - and 66
3.2	The reasons for which the imposition, maintenance or amendment of obligations on undertakings is considered proportional and justified in the light of the objectives laid down in Article 8 of Directive	Such information can be found in sections 6 & 7 of this document.	Pages 56 - 65

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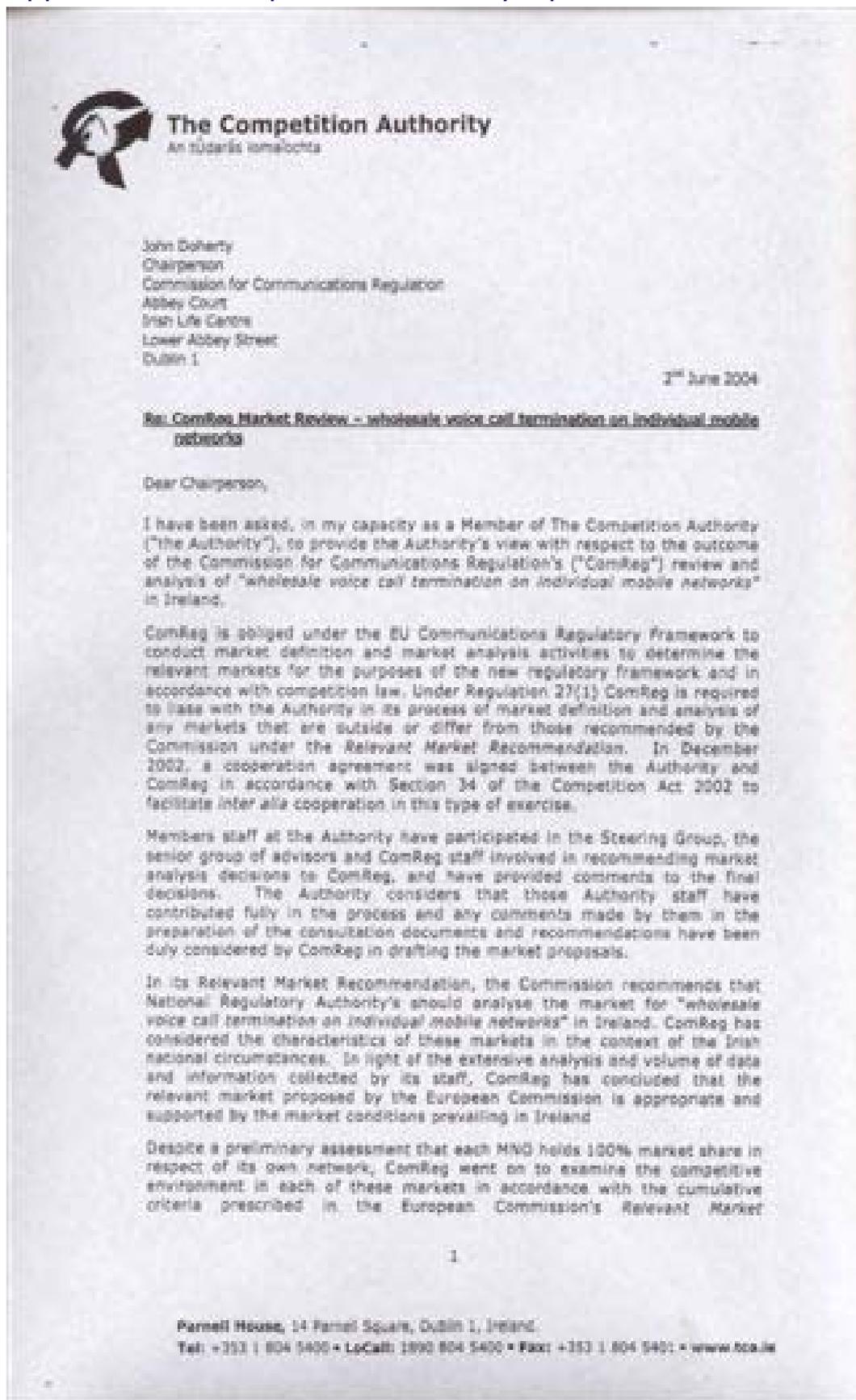
	2002/21/EC (Framework Directive). Alternatively, indicate the paragraphs, sections or pages of the draft measure where such information is to be found		
3.3	If the remedies proposed are other than those set out in Articles 9 to 13 of Directive 2002/19/EC (Access Directive), please indicate which are the 'exceptional circumstances' within the meaning of Article 8(3) thereof which justify the imposition of such remedies. Alternatively, indicate the paragraphs, sections or pages of the draft measure where such information is to be found	Not applicable	

**Section 4 - Compliance with international obligations**

**In relation to the third indent of the first subparagraph of Article 8(3) of Directive 2002/19/EC (Access Directive), please state where applicable:**

4.1	Whether the proposed draft measure intends to impose, amend or withdraw obligations on market players as provided for in Article 8(5) of Directive 2002/19/EC (Access Directive)	Not applicable	
4.2	The name(s) of the undertaking(s) concerned	Not applicable	
4.3	Which are the international commitments entered by the Community and its Member States that need to be respected	Not applicable	

## Appendix B – Competition Authority Opinion



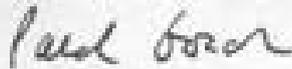
*Recommendation.* ComReg carried out a market analysis, based on an assessment of the competitive environment in each of the markets to establish whether an undertaking in these proposed markets holds Significant Market Power ("SMP").

ComReg concluded that the market is characterised by a lack of effective competition and that Vodafone, O2, Metacair, and 3 should each be designated as holding SMP on the market for wholesale voice call termination on their individual networks. The Authority is of the view that the evidence in this regard supports ComReg's conclusions.

The Authority is of the view that in conducting its market analysis ComReg has defined markets in accordance with competition law and taken due account of the SMP Guidelines issued by the EU Commission in accordance with regulation 27(1) of the Framework Regulations. The Authority is also of the opinion that ComReg's conclusions are appropriate on the basis of the information in its possession.

We would note that Authority's comments are made in the context of the specific provisions of the SMP guidelines relating to the relationship between markets defined for the purposes of ex ante regulation vis-à-vis competition law enforcement. The Authority reserves the right to re-examine any or all of the issues underlying these recommendations in the light of facts and evidence that may arise in specific future cases before it.

Sincerely,



Dr. Paul K. Conradi  
Member, Competition Authority