



Commission for  
**Communications Regulation**

Response to Consultation & Consultation on Draft Decision

**Market Analysis -Wholesale voice call termination  
on Hutchison 3G Ireland's mobile network**

(Response to Consultation Document 07/01)

<b>Document No:</b>	<b>08/06</b>
<b>Date:</b>	<b>8<sup>th</sup> January 2008</b>

All responses to this consultation should be clearly marked:-  
"Reference: Submission re ComReg 08/06" as indicated above,  
and sent by post, facsimile, e-mail or on-line at [www.comreg.ie](http://www.comreg.ie)  
(current consultations), to arrive on or before 5.30pm, 12<sup>th</sup>  
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Please note ComReg will publish all respondents' submissions  
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## 1 Executive Summary

- 1.1 On 11 January 2007, ComReg issued a national consultation on its review of the wholesale market for the termination of mobile voice calls on Hutchison 3G Ireland's ("H3GI") mobile network.<sup>1</sup>
- 1.2 The five responses to consultation were provided by:
- Eircom Ltd.,
  - Hutchison 3G Ireland Ltd.,
  - Meteor Ltd.,
  - O<sub>2</sub> Communications (Ireland) Ltd., and
  - Vodafone (Ireland) Ltd.
- 1.3 ComReg thanks all respondents for their submissions. Having examined the views of all respondents, ComReg sets out in this document its conclusions in respect of the market analysis process.

### Termination Services

- 1.4 The services under examination in this review are those for the termination of voice calls on H3GI's mobile network. A terminating network is the network to which a customer who receives a call is directly connected. In Ireland, when a call is made to a mobile phone, whether from a fixed line or from a mobile on another network, the call passes from the originating operator to the terminating operator. The terminating operator charges a fee for connecting the call to its customers which is known as a termination charge. For the purposes of this response to consultation, the termination charge is a mobile termination rate ("MTR"). The MTR is paid by the originating operator and passed on to the caller in the retail price it pays for a call.
- 1.5 Having carried out a review of this market in accordance with its obligations under the Framework Regulations<sup>2</sup>, for the reasons outlined below, ComReg is of the view that there is a relevant product market for wholesale voice call termination on H3GI's mobile network in the geographic market of the Republic of Ireland.
- 1.6 The wholesale market for voice call termination on individual mobile networks has the following characteristics:
- The relevant market is an individual network market;

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<sup>1</sup> ComReg (2007) Market Analysis - Consultation on Wholesale Voice Call Termination on Hutchison 3G Ireland's Mobile Network, Document 07/01, January.

<sup>2</sup> European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003.

## Wholesale voice call termination on Hutchison 3G Ireland's mobile network

- Other mobile telephony services are not in the same market as voice termination services on H3GI's network; and
- Mobile voice call termination services are technology neutral, that is they include voice termination services over 2G and 3G networks.
- ComReg proposes to define the associated retail market for voice calls terminating on an individual mobile network based on the following principles:
  - The role of calling party pays principle ("CPP") is important in the market definition procedure;
  - Consumers may have an overall knowledge of the cost of their bills but not necessarily of the exact cost of making specific types of calls;
  - A caller would not substitute making a mobile to fixed ("M2F") call for a mobile to mobile ("M2M") call to a sufficient degree;
  - A caller would not substitute making a M2M call for a fixed to mobile ("F2M") call to a sufficient degree;
  - Substituting an on-net call for an off-net call or a call from a fixed phone would not act as a constraint on a mobile network operator's ("MNO's") mobile termination charges;
  - Incentives for using multiple SIM cards do not exist given the CPP principle and historic customer behaviour patterns;
  - SMS is not substitutable to a sufficient degree for making a voice call;
  - Shortening calls or requesting a call-back is not substitutable to a sufficient degree for making a voice call;
  - Making a VoIP call is not substitutable to a sufficient degree for making a voice call on a mobile network;
  - Called parties are not unduly concerned about the cost others have to pay to contact them and would not switch networks in response to an increase in termination rates; and
  - Communities of interest would not act as a constraint on an MNO's mobile termination charges.

1.7 The geographic market is the Republic of Ireland.

1.8 Having analysed the competitive characteristics of the market, as defined above, ComReg is of the view that H3GI enjoys a position of single dominance in the market for wholesale voice call termination services on its mobile network. This is based on the following reasons:

- H3GI has 100% share in the relevant market. There is no existing competition in this market, and due to the high and non-transitory barriers to entry derived from the market definition, there is no prospect of potential competition over the period of this review.
- ComReg carried out a detailed analysis of the recent economic framework as presented by Binmore & Harbord (“B&H”)<sup>3</sup>. ComReg is of the view that the B&H model makes a valuable contribution, particularly due to its emphasis on the bargaining dynamic, which ComReg has examined in detail. However, ComReg’s principal reservation regarding the model is that its predicted outcomes and the arguments for Eircom possessing sufficient countervailing buyer power (“CBP”) do not fit the empirical evidence. H3GI was not forced to accept termination rates that are very close to the average of the other MNO’s rates, which is one of the main predictions of a version of the B&H model. The factual record shows H3GI obtaining prices well above the overall level in the mobile sector, which is consistent with significant market power (“SMP”).
- Furthermore, it appears that H3GI’s rates are sustainable, as firstly there has been no concrete move to re-negotiate these rates despite a mechanism in the interconnect agreement with Eircom to provide for their review, and secondly there has been continuing reductions in termination rates by the regulated mobile operators in Ireland. As such, it seems highly probable that it will be able to sustain these rates going forward over the period of the review.
- ComReg is of the view that the commercial incentives and regulatory obligations to engage in interconnect negotiations also potentially constrain Eircom in the exercise of CBP and that given the importance of facilitating end-to-end connectivity for customers, it would be more constrained in any future set of negotiations when H3GI has an established, and growing, subscriber base in place. While the impact of the dispute resolution procedure is uncertain, the evidence does not indicate that Eircom used it to its advantage. Rather Eircom appears to have been open to reaching an agreement with H3GI prior to its launch on the Irish market.

1.9 On balance based on an examination of the SMP criteria of relevance, ComReg’s view is that, in addition to the 100% market share, there are high and non transitory barriers to entry and the evidence does not indicate that there is sufficient CBP in this market. Accordingly, ComReg is of the view that H3GI be designated as having SMP in the market for wholesale voice call termination on its mobile network.

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<sup>3</sup> Binmore K. & Harbord D. (2005), Bargaining over Fixed to Mobile Termination Rates: Countervailing Buyer Power as a Constraint on Monopoly Power, Journal of Competition Law and Economics, Volume 1 (3).

- 1.10 According to the European Commission's SMP Guidelines<sup>4</sup> the purpose of imposing *ex ante* obligations on undertakings designated as having SMP is to ensure that undertakings cannot use their market power to restrict or distort competition in the relevant market, or to lever market power into an adjacent market.
- 1.11 The SMP Guidelines make it clear that the designation of SMP, without imposing any regulatory obligations, is inconsistent with the provisions of the new regulatory framework, notably Article 27 (4) of the Framework Regulations.
- 1.12 ComReg has identified potential competition problems in the market for wholesale voice call termination on H3GI's network associated with single market dominance and, as such, remedies are required to address these problems.
- 1.13 Having designated an undertaking with SMP, ComReg is obliged to impose obligations listed in Articles 9 to Article 13 inclusive of the Access Directive<sup>5</sup> which are as follows:
- Obligation of transparency;
  - Obligation of non-discrimination;
  - Obligation of accounting separation;
  - Obligation of access to, and use of, specific network facilities; and
  - Price control and cost accounting obligations.
- 1.14 ComReg has identified a range of obligations to be imposed on H3GI in the market defined in this review. These obligations are transparency, non-discrimination and price control. ComReg believes that the range of obligations to be imposed on H3GI 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.

### **Submissions**

- 1.15 ComReg welcomes submissions from all interested parties on the text of the Draft Decision Instrument which is attached as Annex A.
- 1.16 All responses should be sent by fax, post, facsimile, email or on-line as indicated on the cover page of this document to arrive on or before 5.30pm Tuesday 12<sup>th</sup> February 2008.

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<sup>4</sup> European Commission (2002) 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.

<sup>5</sup> Article 8(2) of the Access Directive.

## 2 Introduction

- 2.1 The new EU electronic communications regulatory framework requires that ComReg define relevant communications 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. In addition, ComReg is required to conduct an analysis of the relevant markets to decide whether or not they are effectively competitive.<sup>6</sup>
- 2.2 The Framework Regulations further require that the market analysis procedure under Regulation 27 be carried out as soon as possible after ComReg defines a relevant market, which takes place as soon as possible after the adoption, or subsequent revision, of the European Commission's Recommendation on relevant product and services markets ("the Relevant Markets Recommendation")<sup>7</sup>. In carrying out market definition and market analysis, ComReg must take the utmost account of the European Commission's Recommendation and the Commission's Guidelines on Market Analysis and the Assessment of Significant Market Power ("the SMP Guidelines")<sup>8</sup>.
- 2.3 ComReg adopted the approach set out in the European Commission's Recommendation as its starting point for defining the relevant product market, such that the review was concerned with the wholesale market for voice call termination on individual mobile networks.
- 2.4 ComReg conducted an analysis of the relevant market to decide whether or not it is effectively competitive. ComReg used a wide range of criteria including market share, potential competition, barriers to entry and expansion, countervailing buyer power and also conducted a prospective analysis of the relevant market.
- 2.5 Where ComReg 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>9</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.

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<sup>6</sup> Regulation 27 of the Framework Regulations.

<sup>7</sup> European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services. It should be noted that this is the second edition of the European Commission's Recommendation and that it amends the first edition of 11 February 2003. Certain electronic communications markets, no longer considered susceptible to *ex ante* regulation by national regulatory authorities, have now been removed from the European Commission's Recommendation of 17 December 2007. However, the market for voice call termination on individual mobile networks is one that remains susceptible to *ex ante* regulation and is identified as market number 7 therein.

<sup>8</sup> European Commission (2002) 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.

<sup>9</sup> Regulation 27(4) of the Framework Regulations.



If ComReg has previously imposed sector-specific SMP obligations on undertakings in a market, the maintenance of existing obligations or creation of new SMP obligations on undertakings without SMP is inconsistent with the regulatory framework. It must withdraw such obligations and may not impose new obligations on those undertaking(s).<sup>10</sup>

- 2.6 This document also contains the draft decision instrument setting out the SMP obligations to be imposed on operators who are designated with SMP. The draft decision instrument is set out in Annex A.
- 2.7 This market review is in line with ComReg's objectives as set out in Section 12 of the Communications Regulation Act 2002, which are to promote competition, contribute to the development of the internal market and ensure that end-users derive the maximum benefit in terms of price, choice and quality.

### **Market Review Process**

- 2.8 ComReg collected market data from a variety of internal and external sources, including users and providers of electronic communications networks and services, consumer surveys and other national regulatory authorities ("NRAs"), in order to carry out thoroughly its respective market review procedures based on established economic and legal principles, and taking the utmost account of the European Commission's Recommendation and the SMP Guidelines.
- 2.9 In previous consultations (ComReg Documents 03/126 and 04/62a) and SMP Decision D9/04 ComReg defined 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 Hutchison 3G Ireland ("H3GI"). However, the Electronic Communications Appeals Panel ("ECAP") Decision 02/05, issued on 26 September 2005, effectively resulted in H3GI not having SMP. ComReg issued a national consultation on its new market review of wholesale voice call termination on H3GI's mobile network on 11 January 2007.<sup>11</sup> ComReg received detailed submissions from the five respondents listed below by the close of the consultation period:

- Eircom Ltd,
- Hutchison 3G Ireland Ltd.,
- Meteor Ltd.,
- O<sub>2</sub> Communications (Ireland) Ltd., and
- Vodafone (Ireland) Ltd.

- 2.10 This response to consultation document now sets out ComReg's views on the market for wholesale voice call termination on H3GI's mobile network, having taken into consideration the views of respondents.

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<sup>10</sup> Regulation 27(3) of the Framework Regulations.

<sup>11</sup> ComReg Document 07/01

2.11 Comments relevant to each consultation question are addressed in the relevant sections. All responses received will be published on the ComReg website (with the exception of material supplied on a confidential basis).

### **Timeframe**

2.12 The timeframe of this review is approximately two years from the date of publication of the Decision Notice.

### **Liaison with the Competition Authority**

2.13 ComReg consulted with the Competition Authority in relation to its findings on the market for wholesale voice call termination on H3GI's mobile network and provided the Competition Authority with a summary of these findings. The Competition Authority having considered these findings and discussed them with ComReg concluded that they were appropriate.

### **Structure of this Document**

2.14 The remainder of this document is structured as follows:

- **Section 3** presents ComReg's conclusions on the definition of the relevant market for wholesale voice call termination on H3GI's network;
- **Section 4** presents ComReg's market analysis of the relevant market and presents ComReg's view on whether the market is effectively competitive;
- **Section 5** lists those undertakings that have been designated with SMP in the relevant market;
- **Section 6** presents ComReg's view on the appropriate obligations to impose in this market;
- **Section 7** presents the Regulatory Impact Assessment conducted for the relevant market;
- **Annex A** sets out the Draft Decision Instrument;
- **Annex B** contains notification of the draft measures to the European Commission;
- **Annex C** includes a glossary of terms used in the document;
- **Annex D** provides a summary and analysis of an economic paper by Binmore and Harbord;

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- **Annex E** provides a chronology of negotiations between H3GI and other operators (confidential);
- **Annex F** assesses the appropriate SMP criteria to be considered in the competition assessment for this market; and
- **Annex G** contains a diagram of indirect termination i.e. via a transit operator.

2.15 Information that is confidential/commercially sensitive has been redacted from this document and where relevant, this has been indicated throughout.

### 3 Relevant Market Definition

#### Introduction

- 3.1 In carrying out market definition and market analysis, ComReg must take the utmost account of the European Commission's Relevant Markets Recommendation and the Commission's SMP Guidelines. In addition, ComReg considers the Commission's Notice on the Definition of the Relevant Market ("Notice on Market Definition")<sup>12</sup> and any relevant competition case law or decisions.
- 3.2 As its starting point for defining the market, ComReg adopted the Commission's approach in the Relevant Markets Recommendation in which the Commission recommends that national regulatory authorities ("NRAs") should analyse the relevant wholesale market for voice call termination on individual mobile networks.<sup>13</sup>
- 3.3 The definition of the relevant market is a dynamic task.<sup>14</sup> Thus the market definition and analysis considers both current market conditions and any potential developments that may take place on a prospective basis, i.e. over the next two years at a minimum.
- 3.4 The definition of the relevant market concentrates on identifying constraints on the price-setting and commercial behaviour of operators. These constraints comprise demand substitution and supply substitution. ComReg takes into account a range of measures, in assessing the effectiveness of demand and supply substitution for the purposes of defining the relevant market, including the SSNIP test where practicable.<sup>15</sup> The market definition exercise is concerned with the likely competitive response of a body of customers,<sup>16</sup> which is not necessarily the majority of customers, and the likely response of alternative suppliers.
- 3.5 The relevant market is defined in terms of both product and geographic dimensions. According to the European Court of Justice<sup>17</sup> a relevant product market comprises all products or services that are sufficiently interchangeable or substitutable, not only in

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<sup>12</sup> European Commission, Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law, OJ [1997] C372/5.

<sup>13</sup> This market corresponds to that referred to in Annex I(2) of the Framework Directive.

<sup>14</sup> In accordance with the SMP Guidelines ComReg must "conduct a forward looking, structural evaluation of the relevant market, based on existing market conditions", paragraph 20.

<sup>15</sup> The SSNIP test tries to ascertain whether customers purchasing a particular product or service would switch to readily available substitutes, or to suppliers located elsewhere, if a hypothetical monopoly supplier were to impose a small (in the range of 5% to 10%) but significant, non-transitory price increase above the competitive level. The test is concerned with identifying whether a sufficient degree of substitution would take place such as to render that small but significant price increase unprofitable. For additional guidance, see the Commission's Notice on Market Definition, the SMP Guidelines and ComReg (2002) ComReg Information Notice on Market Analysis and Data Collection, Document 02/117, December.

<sup>16</sup> See, for example, Case 85/76, *Hoffman-La Roche & Co. A. G. v. Commission*, [1979] ECR 461, as well as Case 66/ 86, *Ahmed Saeed Flugreisen v. Zentrale zur Bekämpfung unlauteren Wettbewerbs*, [1989] ECR 803.

<sup>17</sup> See, for example, Case 322/81, *Michelin v. Commission* [1983] ECR 3461, as well as the Commission's Notice on Market Definition and the SMP Guidelines.

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 products in question.

- 3.6 A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in which the conditions of competition are sufficiently homogeneous and distinguishable from neighbouring areas because the conditions of competition are appreciably different in those areas.<sup>18</sup>
- 3.7 Any market review exercise has to consider both the current and prospective situation and ComReg has considered a forward-looking timeframe for this market review.

### **The Irish Mobile Market Structure**

- 3.8 There are four mobile network operators ("MNOs") in the mobile market in Ireland, namely, Vodafone, (previously Eircell); O<sub>2</sub>, which launched in 1997 (previously Esat Digifone); Meteor, which launched in 2001; and H3GI, which commercially launched 3G services in Ireland in September 2003 and in July 2005 offered a full suite of 3G services. The market shares of Vodafone, O<sub>2</sub>, Meteor, and H3GI are 44.9%, 33.1%, 18.4% and 3.6% respectively for retail mobile services, measured in terms of total subscribers.<sup>19</sup> In November 2007, Tesco Mobile, a mobile virtual network operator ("MVNO"), entered the Irish market.
- 3.9 Since the introduction of Irish mobile services, the penetration rate has maintained a strong upward trend and now stands at 114%.<sup>20</sup> The profile of the mobile market is predominately pre-paid, with pre-paid subscribers accounting for 74% of all active mobile subscriptions.<sup>21</sup>

### **Termination Services**

- 3.10 The services under examination in this review are those for the termination of voice calls on an individual mobile network. A terminating network is the network to which a consumer who receives a call is directly connected. In Ireland, as shown in Figure 3.1 below, when a call is made to a mobile phone, whether from a fixed line or from a mobile on another network, the call passes from the originating operator to the terminating operator.<sup>22</sup> The terminating operator charges a fee for connecting the call to its subscribers; this is known as a termination charge. For the purposes of this consultation, the termination charge is a mobile termination rate ("MTR"). The MTR is paid by the originating operator and passed on to the caller in the retail price it pays for a call.

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<sup>18</sup> For additional guidance see the Commission's Notice on Market Definition; SMP Guidelines; ComReg (2002) ComReg Information Notice on Market Analysis and Data Collection, Document 02/117, December; and United Brands v. Commission, [1978] ECR 207.

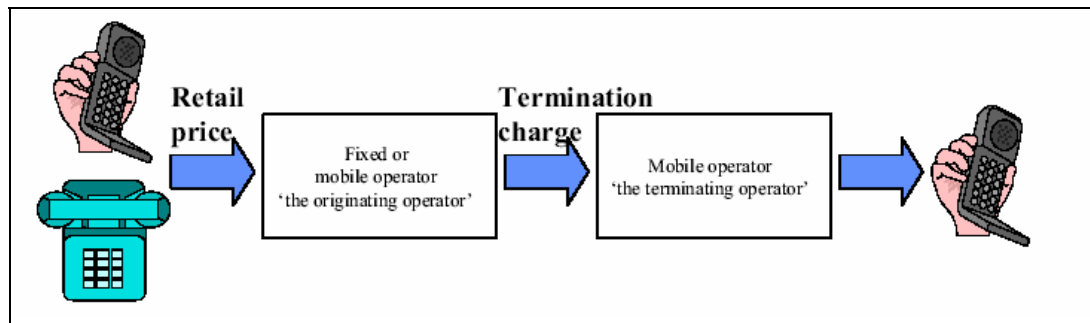
<sup>19</sup> ComReg (2007) Irish Communications Market: Key Data Report, December 2007, Document 07/106, page 42.

<sup>20</sup> Ibid, page 33.

<sup>21</sup> Ibid, page 35.

<sup>22</sup> See Annex G for an illustration of how this termination charge would arise if the call was routed via a transit operator.

**Figure 3.1: How a termination charge or MTR arises**



### Relevant Product Market

3.11 As stated above, as its starting point for defining the market, ComReg adopted the European Commission's Recommendation which recommends that NRAs should analyse the relevant wholesale market for voice call termination on individual mobile networks.

3.12 In ComReg Document 07/01, ComReg addressed the following issues in relation to delineating the relevant product market, firstly from the wholesale level, followed by the retail level:

#### Wholesale

- Is the market an individual network market;
- Is mobile termination part of a wider mobile market; and
- Are voice calls terminated on a 3G network in the same market as voice calls terminated on a 2G network?

#### Retail

- Are callers aware of when they are calling a mobile network and the price of making calls;
- The likelihood of customers making a mobile to fixed ("M2F") call instead of a mobile to mobile ("M2M") call;
- Making a M2M call instead of a fixed to mobile ("F2M") call;
- Making an on-net mobile to mobile call as an effective substitute for making an off-net mobile call or a fixed to mobile call;
- Using multiple mobile subscriptions;
- Are SMS services an effective substitute for making a voice call;

- Shortening a call or requesting a call back;
- Is making a call over Voice over IP an effective substitute for a mobile voice call;
- Choice of Network; and
- Communities of Interest/Closed User Groups

3.13 ComReg also considered the scope of the geographic market.

3.14 ComReg sought respondents' views on whether they agreed with the market definition. ComReg's proposals as set out in ComReg Document 07/01 are summarised under the heading "Consultation Proposal", followed by any views expressed by respondents and a conclusion is subsequently drawn by ComReg, having taken into consideration respondents' views.

### **Product Market Definition: Wholesale Level**

Is the market an individual network market?

#### *Consultation Proposal*

3.15 ComReg was of the view that the product market definition should be wide enough to include termination to all mobile numbers on H3GI's mobile network. ComReg was of the view that this was a more sensible definition than a narrow product market based on each individual mobile number as there are similar conditions of competition for all numbers in the network. A common pricing constraint applies to voice call termination for all subscribers to an individual mobile network.

3.16 A purchaser of wholesale termination, that is an operator that wished to terminate a call to a mobile number on a specific network, would not have any available substitutes for the service. Any attempt to terminate the call on another MNO's network would currently result in the call being unsuccessful. While operators may have the option to terminate voice traffic on the mobile network either directly or indirectly via national and/or international transit (depending on interconnection agreements), the termination charge is identical. According to information received from H3GI that was the case whether the originating operator was a fixed or mobile operator.

3.17 The need to direct traffic to a specific mobile number ensured there was no demand-side substitute service available at the wholesale level to an operator that seeks to terminate its traffic on a mobile number situated on a specific mobile network.

3.18 On the supply-side, effective substitution would occur if, in response to a small but significant rise in the price of a particular product or service, existing suppliers of other products or services could switch, without the need for significant new investments, to supplying the product whose price has risen within a reasonable timeframe and would be reasonably likely to do so in practice (thereby rendering the price increase unprofitable). ComReg was of the preliminary view that the relevant

timeframe is equivalent to a year, generally the appropriate timeframe under competition law. Consideration therefore was given to whether there were means by which supply-side substitution could occur (i.e., whether there are ways by which a voice call could be terminated on any network rather than on the specific mobile network to which the called party subscribes for access and origination services). ComReg examined in ComReg Document 07/01, three possible avenues from which supply-side substitution could occur which are summarised below.

- 3.19 **Other Mobile Network Operators (“MNOs”)**: It could be argued that wholesale supply-side substitution could in theory come most easily from other MNOs that have the necessary infrastructure and expertise in termination services. However, as ComReg understood, it was not currently possible for the network originating a call to select the network on which the call will terminate because of technical difficulties in taking control of the handset and lack of access to handset/SIM details.
- 3.20 **Mobile Virtual Network Operators (“MVNOs”)**: Arguably some of the technical difficulties with supply side substitution could be overcome by the routing of calls to a MVNO that provided termination to its customers directly and had an ability to select a network to terminate calls based on differing termination charges. However, ComReg considered a number of significant technical changes would be required before an MVNO would be able to control the network to which its customers were connected at any time and to communicate with its customers' SIM cards (to change networks).
- 3.21 **Wireless Networks (WiFi, WiMax)**: It could be argued that supply-side substitution could also conceivably arise from those operators developing services over wireless networks such as WiFi or WiMax technologies.<sup>23</sup> Further, these types of operators could potentially provide voice calls in competition with the MNOs and indirectly constrain, to a degree, mobile voice call termination charges, by offering an alternative service to mobile.
- 3.22 ComReg was of the preliminary view that, although availability of wireless network services in Ireland had grown in recent years, the coverage of these operators tended to be limited geographically mainly to the larger cities of Dublin and Cork. Furthermore, WiFi coverage tended to be in isolated "hotspot" locations, such as hotels and airports, resulting in subscribers losing coverage when travelling between these hotspot locations. While it was clear that technological developments were (and are) taking place, some of which may not have involved the levying of a termination charge (in its current form), ComReg was of the preliminary view that the evidence suggested their widespread deployment in Ireland was too speculative and their commercial impact relatively uncertain during the period of this review. For example, Credit Suisse forecasted that such technologies would not have a mass market impact until 2008-2009<sup>24</sup> and another report highlighted how, even if calls could be routed over internet protocol (“IP”) networks, it would still not avoid

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<sup>23</sup> A nomadic system that allows wireless users to connect to the network with mobility within a close range to a cell/hot-spot, but not as they move from location to location as in a mobile system. Wi-Fi is an example of a nomadic technology.

<sup>24</sup> Credit Suisse Equity Research, Sector Review: Battle for the Home, 26 September 2005 & Credit Suisse Fatphone, The threat of VoIP to mobile, 3 March 2006.



mobile termination charges if the particular call is to be terminated to a mobile number.<sup>25</sup>

- 3.23 A further limitation to other wireless network operators offering some form of potential supply substitution, was that it relied on the called party being sensitive to the price of inbound calls so they would be prepared to incur some cost to reduce the price of calling them, for example by purchasing a WiFi/cellular handset. As was detailed in ComReg Document 07/01, at the retail level, mobile users did not appear overly sensitive to the price of incoming calls. Based on the evidence presented in ComReg Document 07/01, ComReg was of the preliminary view that wireless networks offered portability but not mobility and would not be able to offer effective supply-side substitutability to voice termination of MNOs' calls within the timeframe of this review.

#### *Views of Respondents*

- 3.24 Two respondents were of the view that the market should not be confined to individual networks but should rather include all MNOs. No detailed argumentation was provided in support of this.

#### *ComReg's Position*

- 3.25 ComReg notes that the wholesale market for voice call termination on individual mobile networks is included as one of the relevant markets in the European Commission's Recommendation. Further, ComReg's analysis found no viable demand or supply-side substitutes to termination on individual mobile networks over the timeframe of the review and as such considers the relevant market is the wholesale market for mobile termination services on individual mobile networks and in this instance H3GI's mobile network.

#### *Conclusion*

- 3.26 ComReg is of the view that the relevant wholesale market for mobile termination services is an individual mobile network market and, in this case, is for wholesale call termination on H3GI's mobile network as there are no feasible demand or supply-side substitutes.

Is mobile termination part of a wider mobile services market the market an individual network market?

#### *Consultation Proposal*

- 3.27 ComReg considered it appropriate to take as a starting point the fact that there were separate markets for wholesale voice call termination on individual mobile networks. However, ComReg also examined whether termination was part of a cluster market incorporating all mobile services. This could potentially be the case if MNOs competed on the price of a bundle of mobile services offered and not on the price of each single service. Under that scenario a MNO would not be able to raise the price of termination without reducing the price of other services in the bundle. Otherwise,

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<sup>25</sup> Credit Suisse Equity Research, Analyst Report: Insights from Band X co-founder, 3 May 2006.

depending on the level of competition in the overall mobile market, consumers might switch to another operator in response to a rise in the price of the bundle of mobile services. ComReg considered such a wider market definition that encompassed all mobile services would only be viable if mobile subscribers were concerned about the cost of subscribers of other networks calling them, which as is outlined further in the paragraphs below, does not appear to be the case under the CPP. ComReg was of the preliminary view that MNOs did not compete for subscribers on the price of incoming calls to mobiles. ComReg emphasised that the provision of voice call termination at the wholesale level was a product that was, and could be, purchased on an individual basis and thus the appropriate market definition was not that of a cluster of mobile services.

- 3.28 However, ComReg recognised that the regulation of wholesale voice call termination services could affect other mobile services and would take this into consideration, both in terms of its assessment of whether the relevant market was effectively competitive, and in terms of any remedies to be applied.

#### *Views of Respondents*

- 3.29 Three respondents expressed the view that mobile call termination should be considered in the context of a cluster market definition for mobile services. One of these respondents argued that it was incorrect to identify separate markets for individual elements of a bundle unless each element could be provided on a stand-alone basis. Following on from this they stated that call termination was not a service that was provided in isolation as no MNO was able to provide call termination services without also offering outbound services since: i) the presence of fixed and common costs rendered it inefficient to supply a termination service in isolation; and ii) there was little attraction in subscribing to a mobile network on which customers could only receive calls and so little demand would exist for a termination-only service.
- 3.30 They further maintained that the prices of outgoing calls were intrinsically linked to the prices charged for call termination and as such if operators increased termination rates these gains would be competed away through reduced retail charges for subscription and outgoing calls (i.e. 'the waterbed effect').<sup>26</sup> Arising from this they noted that ComReg must be guided in its definition of the appropriate wholesale market by reference to the market reality at the retail level where MNOs offered a bundled product incorporating access, origination and call termination.

#### *ComReg's Position*

- 3.31 ComReg emphasises that it is not appropriate to delineate the market on the basis of a bundle of mobile services since (although no MNO offers solely call termination services at the retail level) the provision of voice call termination at the wholesale level is a product that can be, and often is, purchased on an individual basis by originating MNOs. In relation to market conditions at the retail level, it is of note that the respondent appears to be referring to an instance where MNOs as a whole determined to increase their termination rates. Under such circumstances all their

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<sup>26</sup> For a discussion of this issue, see M. Armstrong and J. Wright (2007) Mobile Call Termination, September, Available at <http://else.econ.ucl.ac.uk/papers/uploaded/255.pdf>

costs would presumably be increased and a fall off in mobile usage in general may occur (depending on a number of factors including the level of increase in the termination rates, the complexion of outgoing calls i.e. on-net, off-net, fixed etc).

- 3.32 However, as outlined above based on the absence of feasible demand or supply-side substitutes, ComReg's view is that the relevant wholesale market for mobile termination services is an individual mobile network market. In this context, as outlined further below, arising from the CPP principle, termination rates do not directly increase the costs of the customers of the operator who set the rates. Rather they serve to increase the costs to the originating operators who connect calls from their customers to that operator's subscribers. Thus, it is difficult to see how any bundle of retail services offered by the terminating operator to its own subscribers would be influenced to any significant degree by the price it sets for wholesale call termination on its own network. As such, MNOs do not compete for subscribers on the basis of the price for incoming calls to mobiles. ComReg considers that it is not appropriate to broaden the market definition to encompass a bundled product.<sup>27</sup>

#### *Conclusion*

- 3.33 ComReg remains of the view that mobile voice call termination on an individual mobile network is a separate market from that of other mobile services.

Are voice calls terminated on a 3G network in the same market as voice calls terminated on a 2G network?

#### *Consultation Proposal*

- 3.34 ComReg proposed that in principle, and consistent with the principle of technology neutrality, there should be no differences between voice calls terminated on a 3G network and voice calls terminated on a 2G network. An originating operator or the calling party would be unable to determine or dictate what type of network technology would terminate any given call and this results in a common pricing constraint. Therefore the scope of the review should encompass termination of voice calls on a 3G mobile network. This view was similar to that of other European NRAs a majority of which have included termination on a 3G network as part of the market for wholesale voice call termination.<sup>28</sup>
- 3.35 H3GI has a 3G only mobile network, although H3GI also has a national roaming agreement with Vodafone that provides its customers with 99.5% population coverage for voice and text services. ComReg considered that while a subscriber to H3GI's network might inadvertently roam onto Vodafone's network as part of the national roaming agreement, the evidence provided to ComReg by H3GI to date suggested that it did not affect the termination rate paid by the originating operator, that is the originating operator was billed at H3GI's termination rates.

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<sup>27</sup> Further, it is of note that as highlighted by one of the respondents this finding is consistent with the market definition exercise carried out in relation to the other MNOs (namely Vodafone, O<sub>2</sub> and Meteor) with regard to wholesale voice call termination on their respective networks (See ComReg Documents 03/126 and 04/62a).

<sup>28</sup> European Commission- Information Society-Telecommunications, Communications and Services: <http://forum.europa.eu.int/Public/irc/infos/eccf/library>

3.36 Notwithstanding this, ComReg recognised that 3G technology was in an earlier stage of development and would consider this when deciding on the appropriateness and proportionality of any regulatory intervention in this market.

*Views of Respondents*

3.37 One respondent noted that having reviewed ComReg's analysis they could see no objective reason for a different market definition applying in respect of H3GI relative to the other MNOs and they agreed that a technology neutral approach was appropriate. They noted that the European Commission had stated,

*"...although 3G retail services might constitute a newly emerging market, which should not be subjected to inappropriate obligations, termination of voice calls on 3G networks is not as such to be considered as a novel service or a newly emerging market."*<sup>29</sup>

*Conclusion*

3.38 ComReg's view is that mobile voice call termination is technology neutral and that voice calls terminated on a 3G network are in the same market as voice calls terminated on a 2G network.

**Conclusion on Product Market Definition: Wholesale Level**

3.39 ComReg's review of the commercial and economic evidence suggests that a relevant market can be identified for the wholesale provision of voice termination services on H3GI's network. ComReg's view is based on the following:

- The relevant market is an individual mobile network market;
- Other mobile telephony services are not in the same market as voice call termination services on an individual mobile network; and
- Mobile voice call termination services are technology neutral, that is they include voice termination services over 2G and 3G networks.

**Product Market Definition: Retail Level**

3.40 To assess whether there are any demand-side substitutes that should be included in the relevant market ComReg considered it was useful to see how retail customers would react to a small but significant increase in termination charges by a hypothetical monopolist and whether this would render any such price increase unprofitable. Of particular importance in this context was the Calling Party Pays ("CPP") principle, which ComReg had stated plays an important role in the market definition procedure. The CPP principle meant that the party making the call, i.e., the calling party, rather than the party receiving the call, i.e., the called party, paid the entire cost of the call at the retail level. The mobile call termination charge was included in the originating operator's cost base and in the retail price charged by the

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<sup>29</sup> Case UK/2003/0040: Wholesale mobile voice call termination comments pursuant to Article 7(3) of Directive 2002/21/EC.

originating operator to its subscribers. The calling party paid for the voice call, which typically included the mobile voice termination charge, and the called party selected the terminating operator and therefore influenced the level of the termination charge. That is the caller paid the termination rate, but the called party decided which mobile operator to subscribe to. ComReg was of the preliminary view that termination rates therefore did not directly raise costs to the customers of the operator that sets the rates rather they tended to raise costs to the originating operators who connected calls from their subscribers to that operator's customers.

- 3.41 Therefore as part of its investigation of the boundaries of competition for mobile termination services, ComReg considered various aspects of consumer behaviour at the retail level because it is relevant to assess how consumers would respond to any change in retail prices resulting from higher wholesale mobile call termination charges and any indirect constraint that may pose at the wholesale level. Bearing in mind the CPP principle, ComReg examined in the retail market definition section of ComReg Document 07/01 both how the person making a call and how the person receiving a call might react to a change in mobile termination price that fed through to the retail price.

Are callers aware of when they are calling a mobile network and of the price of calls?

*Consultation Proposal*

- 3.42 First, ComReg was of the view that, in order for callers to be price sensitive, it must have been possible for them to know that they were calling mobile numbers and to have been able to identify the networks of the called parties via these numbers. According to evidence from consumer research carried out in 2006, 80% of respondents claimed to be "always" or "usually aware" of whether they were calling a fixed phone or a mobile phone from a fixed network. When calling a mobile phone from a fixed network, 63% of respondents claimed that they "always know" or "usually know" what mobile network they were calling. When making a call from a mobile phone to another mobile phone, 66% of respondents claimed that they "always" or "usually know" whether they were calling a mobile on the same network.<sup>30</sup>
- 3.43 Overall, evidence suggested users had a reasonably high awareness of the type of calls they are making. However, mobile number portability was likely to have an adverse affect on users' ability to identify the called mobile network as the prefix to a mobile number would no longer provide information about the network called. By the end of quarter 3 2007, 1,036,000 customers had ported their numbers since its introduction in June 2003.<sup>31</sup>
- 3.44 ComReg was of the preliminary view that the evidence suggested that users were likely to have an awareness of the overall cost of their regular mobile bill or the relevant cost of calls but that the evidence for awareness of actual prices for a specific call was more mixed. This view was informed by research carried out in

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<sup>30</sup> ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a.

<sup>31</sup> ComReg (2007) Irish Communications Market: Key Data Report, December 2007, Document 07/106, page 43.

2005 that provided evidence that users were aware of the global cost of their bills. Only 9% of mobile users didn't know or refused to say how much they had spent on their mobile phone in the previous month.<sup>32</sup> In relation to the actual cost of calls, in consumer research carried out by ComReg in 2006, 51% of fixed phone users claimed they had some idea of the cost of calling a mobile phone from a landline during peak times on a weekday, with 6% of these claiming to know exactly how much it cost. However, when the same respondents were asked directly the exact price of calling a mobile from a landline during peak times on a weekday, the average amount cited was 44.52%, significantly above the actual cost.<sup>33</sup>

#### *Views of Respondents*

3.45 It is of note that no respondent commented in relation to ComReg's analysis on this issue.

#### *Conclusion*

3.46 On balance, ComReg's view is that there is evidence that consumers have a global knowledge of the cost of their bills but not of the exact costs of making individual calls but if substitutes were available consumers might be able to use the "global" information to respond accordingly to any change in termination rates. However, such knowledge would not be sufficient if appropriate substitutes are not available.

3.47 ComReg further examined in ComReg Document 07/01 whether there were any possible substitutes for consumers if they were willing to adapt their behaviour by seeking alternative means of communication. These issues are summarised below.

#### Making a M2F call instead of a M2M call?

#### *Consultation Proposal*

3.48 ComReg was of the preliminary view that callers would not substitute making a fixed call instead of a M2M call. At the retail level a caller could theoretically substitute making a call to a fixed phone for making a call to a mobile. However, the option would ignore the fundamentally different nature of fixed and mobile telephony whereby mobile numbers are associated with individuals on the move and not necessarily fixed locations. For example, consumer research carried out in 2005 found that over five in ten respondents did not consider the fixed phone as a substitute for a mobile phone. The survey also reported that 76% of mobile users believed that problems would arise if they were not contactable.<sup>34</sup> In addition, consumer research carried out in 2006 asked respondents how they would contact a friend/family member during the day on a weekday for two minutes, when at home/work or either, assuming that the family/friend were contactable by mobile phone, landline and e-mail. The research showed that 49% of the respondents

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<sup>32</sup> ComReg (2006) ComReg Trends Report Q2 2006, July 2006, prepared by Amárach, Document 06/57a.

<sup>33</sup> ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a.

<sup>34</sup> ComReg (2006) ComReg Trends Report Q4 2005, December 2005, prepared by Amárach, Document 06/08a.

preferred to contact the family/friend on their mobile phone. This number fell when the call duration increased with 41% preferring to contact a family/friend member on their mobile if the call was for five minutes.<sup>35</sup> Coupled with this is research showing that approximately 30% of households do not have a fixed line, these types of households would clearly not be able to avail of this type of substitution.<sup>36</sup> Again, perhaps more fundamentally, for this type of substitution to be a viable option, the caller would need to know that the person in question was at their fixed phone and/or the called party would have to be willing to receive calls on their landline vis-à-vis their mobile phone. However, due to the CPP principle it is not clear that the called party would have sufficient incentives to substitute their mobile for their landline for the receipt of calls.

#### *Views of Respondents*

3.49 No respondent commented in relation to this issue.

#### *Conclusion*

3.50 ComReg's view is that at the retail level a caller would not at present substitute making a M2F call for a M2M call to a sufficient degree to render them in the same relevant market.

#### Making a M2M call instead of a F2M call?

#### *Consultation Proposal*

3.51 ComReg was of the preliminary view that fixed phone subscribers would not substitute making a M2M call for a F2M call to a sufficient degree. This issue was examined irrespective of the fact that this substitution would have little effect on mobile termination revenue as based on published wholesale tariffs since MNOs do not currently discriminate on prices charged to mobile and fixed originating operators.

3.52 ComReg was of the preliminary view that there was a price differential between making a call from a M2F line and a fixed to fixed call, and that this would be an important reason as to why a M2M call would not be effectively substitutable for a F2M call at the retail level.

3.53 ComReg acknowledged that it was possible that subscribers with bundles of mobile minutes would make calls to a mobile instead of a fixed line, as these would not experience the price differential. However consumer research carried out in 2005 reported that just 16% of respondents reported to use their mobile instead of their landline to call a mobile when at home.<sup>37</sup> Generally, while in the home, respondents chose a fixed line call when it was available rather than use a mobile. In addition,

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<sup>35</sup> ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a.

<sup>36</sup> ComReg(2006) ComReg Trends Report Q2 2006, July 2006, prepared by Amárach, Document 06/57a.

<sup>37</sup> ComReg (2006) ComReg Trends Report Q4 2005, December 2005, prepared by Amárach, Document 06/08a.

79% of respondents to the latest trends survey<sup>38</sup> claimed that making a fixed line call instead of a mobile call saved money.

*Views of Respondents*

3.54 None of the respondents commented in relation to this issue.

*Conclusion*

3.55 On balance, ComReg's view is that at the retail level a M2M call would not at present be effectively substitutable for a F2M call. Irrespective of the latter any substitution would not affect a mobile operator's revenue from providing termination services as the mobile operator controls the termination for a call originated on a fixed or mobile network and at present this is the same for both types of network.

Is making an on-net M2M call a substitute for making an off-net mobile call or a F2M call?

*Consultation Proposal*

3.56 ComReg examined another possibility that callers could only make calls to subscribers on the same network as them (on-net calls) or would do so to a sufficient extent. This would mean that on-net calls could be a substitute for both F2M calls and M2M off-net calls. Traditionally, mobile on-net calls were generally cheaper than mobile off-net calls and comparable to, if not cheaper than, F2M retail charges. However, in the case of H3GI, its post-paid retail tariff plans did not appear to distinguish between on-net calls or off-net calls at the time ComReg Document 07/01 was published. Excluding the bundle of free minutes per subscription package, all calls to mobile (both on-net and off-net) were charged at a retail rate of 30 cent per minute. This retail pricing trend was becoming more evident as Irish MNOs were offering subscription packages inclusive of bundled minutes that continued to have one set retail rate outside of this, irrespective of the called network.<sup>39</sup>

3.57 However, there were mobile users such as pre-paid mobile users and other post-paid mobile subscribers on legacy subscription packages, that would have a price differential between making an on-net and off-net call. ComReg's preliminary view was that the widespread use of on-net calls would be restricted by the fact that mobile users were distributed across several mobile networks, which suggested that the extent of substitution of mobile on-net calls for either F2M calls or M2M off-net calls would be limited. In addition, on-net pricing could have the effect of separating out price sensitive consumers from those less sensitive by influencing a consumer's choice of network and arguably preserved the level of termination charges. In other words at the wholesale level the originating operator needs to direct the call to a particular number irrespective of the network on which it is located and, due to the CPP, the terminating operator's retail customer is unlikely to have sufficient incentives to change network based on MTRs alone. Also, due to the fact that

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<sup>38</sup> ComReg (2006) ComReg Trends Report Q4 2006, December 2006, Document 06/64.

<sup>39</sup> See MNOs websites for tariff plan details: [www.3ireland.ie](http://www.3ireland.ie), [www.vodafone.ie](http://www.vodafone.ie), [www.o2.ie](http://www.o2.ie), [www.meteor.ie](http://www.meteor.ie).



mobile subscribers are distributed across several networks it is unlikely that the calling parties would switch to a particular network, e.g. H3GI's, on a sufficient enough scale so as to avail of on-net tariffs just for those particular mobile subscribers in response to small but significant changes in MTRs.

- 3.58 It is of note that new post-paid tariffs were introduced by H3GI on the 9 March 2007. For the Talk 100/200 Anytime plans the cost of an on-net call is 20c per minute whereas the cost of a call to another Irish network is 30c per minute. In addition, post-paid consumers may purchase an add-on for €3.99 which provides unlimited on-net calls. For the Talk 400/750/1000 Anytime plans on-net calls are free whereas calls to another Irish network are 30c per minute.<sup>40</sup>

#### *Views of Respondents*

- 3.59 One respondent (arising from its view that termination was part of a cluster market incorporating all mobile services (see paragraphs 3.29 to 3.33) was of the view that ComReg should analyse the possible demand-side substitutes for mobile services as a whole. Notwithstanding this, they were in broad agreement with ComReg's analysis of demand-side substitution. However, they considered that ComReg overstated the case regarding a decline in the distinction between on-net and off-net calls. They noted that while analysis of H3GI's post-paid tariff packages may be correct, the distinction between on-net and off-net calls in relation to their pre-paid offering remained (the latter category representing the majority of mobile subscribers in the market<sup>41</sup>). They also drew attention to a differentiation between on-net/off-net charging in respect to other MNOs, for example via a free add-on providing unlimited calls to other on-net subscribers.

#### *ComReg's Position*

- 3.60 ComReg recognises that for H3GI's pre-paid tariff the price for an on-net call and a call to a landline is 18 cent per minute and 35 cent per minute for an off-net call<sup>42</sup> (as noted in paragraph 3.45 of ComReg Document 07/01). Further, new post-paid tariffs have been introduced which offer more favourable terms for on-net calls as outlined above. However, ComReg would note the market share data referred to paragraph 3.8. In the context of subscribers spread over a number of MNOs and mobile number portability, ComReg considers that the extent of substitution towards on-net calls would be restricted.

#### *Conclusion*

- 3.61 ComReg's view is that this type of substitution towards on-net calls would not act as a sufficient constraint on MTRs.

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<sup>40</sup> See [www.3ireland.ie](http://www.3ireland.ie)

<sup>41</sup> At Q3 2007, pre-paid subscribers accounted for 74% of all active mobile subscriptions. ComReg (2007) Irish Communications Market: Key Data Report, December 2007, Document 07/106, page 35.

<sup>42</sup> See [www.3ireland.ie](http://www.3ireland.ie)

### Using multiple mobile subscriptions/SIM Cards

#### *Consultation Proposal*

3.62 Another possibility examined was if the calling party used more than one SIM card (mobile subscription) to make outbound calls rather than the one to which they subscribe for receiving inbound calls, this could arguably put some pressure on mobile voice termination charges. Likewise the called party could have more than one mobile subscription for which they distinguished between making outbound and receiving inbound calls. A mobile user could therefore manually substitute one SIM card for another to avail of the retail pricing of a network with cheaper termination charges or on-net pricing. ComReg's preliminary view was that this type of substitution was unlikely to be a viable alternative for mobile users at present. Evidence from consumer research reported that just 7% of mobile users with a mobile phone use more than one subscription or account.<sup>43</sup> Earlier consumer research indicated that the majority of people with more than one account were the result of having a work and a personal subscription. Furthermore mobile respondents did not cite cheaper calls on other networks as a reason for using more than one mobile subscription.<sup>44</sup>

#### *Views of Respondents*

3.63 None of the respondents commented on the analysis presented in relation to this issue.

#### *Conclusion*

3.64 Based on the evidence to date on historical customer behaviour patterns, it is not evident to ComReg that an incentive currently exists for mobile users to use more than one SIM card in an effort to avail of cheaper termination of calls given the CPP arrangement. Another relevant factor that ComReg considered is the possible cost for consumers in terms of time and "hassle" in regularly changing SIM cards.

### Are SMS services a substitute for making a voice call?

#### *Consultation Proposal*

3.65 In certain circumstances, it is possible that sending a text message via SMS is a substitute for a voice call, particularly for short voice calls. However, ComReg was of the preliminary view that only a limited number of characters could be conveyed by text, and it was not a real time service but could be stored and forwarded, thereby opening up the potential for delay. ComReg therefore did not have evidence to suggest that consumers considered SMS a close substitute for voice calls in many circumstances due to the lack of an immediate response or the need to speak directly to someone. This preliminary view was supported by consumer research that reported that just 16% of respondents would choose to send a text message to a

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<sup>43</sup> ComReg (2006), ComReg Trends Report Q2 2006, Document 06/57a, page 27.

<sup>44</sup> However, the small sample size in this survey should be noted. See ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a, page 22.

friend/family member to communicate for two minutes during the day on a weekday when at home or at work, assuming that the friend/family member were contactable by mobile, fixed phone and e-mail. This proportion fell to 12% of respondents when the call duration increased to five minutes.<sup>45</sup>

- 3.66 In any case, ComReg was of the preliminary view that as all MNOs offered both SMS and voice termination services they had the ability to set charges for SMS termination in such a way as to limit any competitive pressure on charges for voice termination.

#### *Views of Respondents*

- 3.67 No comments were made by respondents with regard to this issue.

#### *Conclusion*

- 3.68 ComReg's view is that SMS is not substitutable for a voice call to a sufficient degree.

#### Shortening calls or requesting call-back

#### *Consultation Proposal*

- 3.69 ComReg also examined the possibility for substitution through making calls of shorter duration, thus cutting down on spending and by extension the amount of termination revenue generated. This was also relevant in the context of making a short call to request a call-back. As noted by the European Commission in order for such potential substitution to broaden the market it would need to constrain the behaviour of the operator setting termination charges by lowering its overall profitability.<sup>46</sup>
- 3.70 Consumer survey data showed a low level of usage of a call-back service which suggested that it would not act as a constraint on MTRs. For example, just 1% of respondents claimed to use call back as a means of communicating with a friend/family member (assuming they were contactable by mobile phone, landline and e-mail) for either a two minute or five minute call during the day on a weekday when at home or work.<sup>47</sup> In addition, its use would also have to occur in sufficient volume and it would have to be the case that outgoing revenue generated was lower than revenue received to have an impact on MNOs. ComReg also did not consider that consumers viewed shortening calls as a genuine alternative to voice calls.

#### *Views of Respondents*

- 3.71 One respondent was of the view that ComReg understated the significance of call shortening as a constraint on the setting of MTRs in isolation. They argued that it

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<sup>45</sup> ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a.

<sup>46</sup> Public Consultation on a Draft Commission Recommendation on Relevant Product and Service Markets. Brussels, 28 June 2006 SEC (2006) 837, p.38.

<sup>47</sup> Amarách survey, Q1 2006.

was clear that the higher the level of MTR and the higher the resulting retail price of a call, then the lower would be the quantity demanded of calls in terms of the quantity of calls and/or the duration of those calls. They asserted that this clearly would act as a constraint on the setting of MTRs in isolation.

#### *ComReg's Position*

3.72 As outlined above from the consumer evidence available to ComReg it does not appear that call shortening represents a substitute for making a voice call. It is of note that the respondent based its argument on a hypothetical example relating to a positive correlation between the MTR and the retail price of a call which maps directly onto a negative correlation with the quantity of calls demanded in terms of the quantity of calls and/or duration of calls. ComReg notes that the respondent provided no concrete evidence to support the view that call shortening is currently perceived by consumers as a viable alternative to making a call or is likely to become so within the lifetime of the review. The critical issue is that a sufficient number of customers would have to switch to call shortening or to a call-back service in order to constrain a mobile operator from undertaking a small but significant increase in MTRs and the CPP principle suggests the called party is unlikely to have adequate incentives to do so to a sufficient degree.

#### *Conclusion*

3.73 ComReg's view is that shortening calls or requesting a call-back is not an adequate substitute for making a voice call.

#### Is making a call over VoIP a substitute for a mobile voice call?

#### *Consultation Proposal*

3.74 ComReg examined in ComReg Document 07/01 the potential for emerging services to become alternatives to mobile voice calls. Such technologies included voice over internet protocol ("VoIP").<sup>48</sup> A subset of VoIP type services known as voice over licensed wireless ("VoLW") the latter would include services offered over a wireless licensed network such as a 3G network or where available a WiFi network. However, ComReg was of the preliminary view that the potential take-up of these services in Ireland was uncertain and there was a lack of market evidence to assess their impact on H3GI's mobile call termination charges. Again, survey research reported that of the 47% of residential respondents who reported using the internet, 49% claimed to have heard of VoIP and just 17% of the latter group (i.e. respondents who both used the internet and had heard of VoIP) or approximately 4% of all

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<sup>48</sup> VoIP is an IP telephony term for a set of facilities used to manage the delivery of voice information over the internet. VoIP involves sending voice information in digital form in discrete packets rather than by using the traditional circuit-committed protocols of the PSTN network. A sub-set of this is voice over internet ("VoI"), which refers to voice calls on the public Internet, accessible through installing software on a computer and are available on a limited customer basis. Another subset is voice over licensed wireless ("VoLW"), which would include services offered over a wireless network such as a 3G network.

respondents claimed to have used VoIP to make a call over the internet.<sup>49</sup> Awareness of VoIP was higher among the business community although just 5% of SMEs<sup>50</sup> claimed to have used it, with the level of usage being almost six times higher (i.e. 29%) among corporate users.<sup>51</sup>

3.75 A report by Credit Suisse<sup>52</sup> examined the threat of VoLW to MNOs in Europe and found that it could start to have an impact on mobile market share in 2008-2010 as WiFi enabled handsets become available to a mass market. In respect of VoLW over handsets on mobile networks, particularly as MNOs begin to offer data packages bundled with providers such as Skype<sup>53</sup>, the report found that mobile data pricing was set too high to make VoLW an attractive proposition for all but a small number of networks. In addition, the report highlighted that there were quality of service issues and extra interconnect for calling non-Skype users that would undermine the commercial appeal of such services and voice over WiFi services.

3.76 In addition, if a called party has the option to receive a call using either VoIP or the more common technology it is likely that it would opt for the latter as at present there is no charge for receiving a call, i.e. it is unlikely that it would switch technology purely for the purpose of receiving calls.

#### *Views of Respondents*

3.77 One respondent agreed that VoLW was not currently an effective supply-side substitute for making a voice call over a mobile network. However, they noted that the likely development of this service over the lifetime of the review was uncertain and as such should be kept under continuous review given its implications for market definition and the imposition of remedies.

#### *Conclusion*

3.78 ComReg's view is that making a VoIP type call is not an effective substitute for making a voice call over a mobile network during the timeframe of this review. ComReg's view is that on a prospective basis other technological developments (e.g. VoLW) will not provide substitutability to a sufficient degree for making a voice call over the timeframe of this review such as to constrain small but significant price increases in MTRs due to the low take-up of this service in Ireland to date. However, ComReg will continue to monitor the situation and may need to revisit the market definition should major technological change take place to the extent that VoIP/VoLW may be seen to provide sufficient supply or demand-side substitutability within the time period of the review.

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<sup>49</sup> ComReg (2007) ComReg Trends Survey Series Q4 2006, Presentation of Results, prepared by Amárach Consulting, Document 07/13, March, pages 46, 70-71.

<sup>50</sup> Small and Medium-sized Enterprises.

<sup>51</sup> ComReg (2007) Business Telecommunications Survey, Wave 2, 2006: Survey Results, pages 53, 55, Document 07/23a.

<sup>52</sup> Credit Suisse, Fatphone, the threat of VoIP to mobile, 3 March 2006.

<sup>53</sup> In the UK, Hutchison announced a new pricing model, the X-series that offers, among other things, unlimited Skype calls with any Skype PC user and other Skype 3 mobile customer as well as unlimited mobile Internet access and IM for a flat fee. The offer is only available on HSPDA enabled handsets.

### Called Party Behaviour

3.79 ComReg Document 07/01 first examined the behaviour of the calling party as described above but the behaviour of the called party may also change in response to an increase in termination rates, for example by switching networks. For this type of substitution to be viable a mobile user would have to be price sensitive to inbound mobile voice calls. If consumers were not concerned about the cost others pay to contact them then there would be little incentive for MNOs to reduce termination charges. If users derived a benefit from being called then this could place a constraint on termination rates, if rate increases prompted users to switch networks. ComReg examined this issue as summarised in the paragraphs below.

### Choice of Network

#### *Consultation Proposal*

3.80 Evidence from consumer surveys showed that when selecting a mobile package, the price which other people paid to call them was not one of the most important factors for subscribers. Consumer research ranked that factor sixth out of seven in terms of importance when choosing a mobile service.<sup>54</sup> To the extent that consumers did rank being on the same network as family and friends as an important factor ComReg was of the preliminary view that it may have been more likely, given the CPP principle, to be important to them in the context of making cheaper outbound calls. When asked in consumer research carried out in 2004, whether they had ever changed mobile network to be on the same mobile network with someone to whom they often speak, only 6% of respondents reported to have chosen a mobile network or changed to a new network for this reason.<sup>55</sup>

#### *Views of Respondents*

3.81 None of the respondents made any comments in respect to ComReg's assessment of this factor.

#### *Conclusion*

3.82 ComReg's view is that given CPP, called parties are not likely to switch networks to a significant extent in response to a rise in the cost of calling them.

### Communities of Interest/Closed User Groups

#### *Consultation Proposal*

3.83 ComReg was of the preliminary view that there was little evidence to suggest that mobile users selected their networks based on communities of interest or closed user groups. However, to the extent that a minority of mobile subscribers were sensitive to the cost of incoming calls, MNOs could potentially neutralise this pressure by

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<sup>54</sup> ComReg (2006) ComReg Trends Report Q1 2006, Document 06/22a.

<sup>55</sup> ComReg (2004) Residential Telecommunications Survey, Quarterly Report January 2004, prepared by TNS mrbi, Document 04/80.

offering such users more favourable terms in the form of differential retail tariffs, for example, for business users. In addition, as noted by the European Commission, MNOs are able to price discriminate among the various categories of users and via the use of on-net tariffs offer closed economic user groups discounts for calls.<sup>56</sup>

#### *Views of Respondents*

3.84 Arising from argumentation concerning the continued importance of the distinction between on-net and off-net calls, one respondent expressed the view that ComReg understated the significance of closed user groups as a constraint on the setting of MTRs.

#### *ComReg's Position*

3.85 This line of reasoning is unclear since the stated continued importance of on-net tariffs serves to support ComReg's view that closed user groups do not act as a sufficient constraint on MNOs' pricing behaviour in setting their MTRs. Evidence of further examples of differentiation between on-net/off-net rates provides further support for ComReg's contention that closed user groups do not pose an effective constraint on the setting of MTRs since more price sensitive consumers may opt for on-net rates which gives further scope to the operator in setting termination charges for off-net customers. As noted by the European Commission, if a given network operator raised termination charges and thereby increased the price of incoming calls, group members could switch networks to be on a given network and take advantage of lower on-net prices. However, MNOs are potentially able to price discriminate among the various categories of users and, via the use of on-net tariffs, offer closed user groups discounts for calls,<sup>57</sup> thus preserving the level of MTRs for off-net calls.

#### *Conclusion*

3.86 ComReg's view is that communities of interest or closed user groups do not act as an effective constraint on MNOs pricing behaviour.

### **Conclusions on Market Definition: Retail Level**

3.87 From an analysis of these possible substitutes and the options available to consumers to alter their behaviour, ComReg is of the view that current alternative means of communicating between a caller and a mobile number are insufficient over the timeframe of this review to be able to constrain H3GI's MTRs at the wholesale level. ComReg's view is based on the following:

The role of CPP is important in the market definition procedure;  
Consumers may have an overall knowledge of the cost of their bills but not necessarily of the exact cost of making specific types of calls;

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<sup>56</sup> Public Consultation on a Draft Commission Recommendation on Relevant Product and Service Markets. Brussels, 28 June 2006 SEC (2006) 837, page 39.

<sup>57</sup> Public Consultation on a Draft Commission Recommendation on Relevant Product and Service Markets. Brussels, 28 June 2006 SEC (2006) 837, page 39.

## Wholesale voice call termination on Hutchison 3G Ireland's mobile network

- A caller would not substitute making a M2F call for a M2M call to a sufficient degree;
- A caller would not substitute making a M2M call for a F2M call to a sufficient degree;
- Substituting an on-net mobile call for an off-net call or a call from a fixed phone would not act as an effective constraint on H3GI's MTRs;
- Sufficient incentives for using multiple SIM cards do not exist given the CPP principle and historic customer behaviour patterns;
- SMS is not substitutable to a sufficient degree for making a voice call;
- Shortening calls or requesting a call-back is not substitutable to a sufficient degree for making a mobile voice call;
- Making a VoIP call is not at present an adequate substitute for making a voice call on a mobile network;
- Called parties are not unduly concerned about the cost others have to pay to contact them and would not switch networks to a sufficient degree in response to small changes in MTRs; and
- Communities of interest/closed user groups would not act as an effective constraint on H3GI's voice termination charges.

3.88 ComReg's view is that there are currently no effective retail demand or supply-side substitutes on the part of either the calling party or the called party nor is this situation likely to change on a prospective basis.

### **The Relevant Product Market**

#### *Views of Respondents*

3.89 It should be noted here that one respondent reserved its position on the issue of the product market definition and as such had no further comment to make with respect to ComReg's definition exercise at this time. Nonetheless, the respondent expressed the view that a forward-looking assessment of the relevant market as defined in ComReg Document 07/01 could not be sustained in respect of the product market definition. No further detail or evidence was provided to support this contention.

#### *ComReg's Position*

3.90 ComReg has carried out a detailed, prospective analysis of the product market definition in relation to each of the issues as set out above and considers that it is appropriate to delineate a market for wholesale voice call termination on H3GI's individual mobile network. Notwithstanding this, ComReg will monitor the market



and may revisit its market definition should any viable supply or demand-side substitutes emerge within the lifetime of the review.

### *Conclusion*

3.91 Taking into consideration the wholesale and retail level, ComReg is of the view that the relevant product market is for wholesale voice call termination on H3GI's individual mobile network. As outlined above, ComReg considers that this market definition is sustainable over the period of the review. However, it may reconsider the market definition exercise should it be deemed necessary arising from significant developments/technological changes.

## **The Relevant Geographic Market**

### *Consultation Proposal*

3.92 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>58</sup> ComReg's preliminary view was that the relevant geographic market for the provision of mobile termination services was Ireland. This view was based primarily on the fact that as mobile networks were considered a separate product market for the provision of voice call termination services, the geographic scope reflected the extent of the physical coverage that characterised each mobile network. Furthermore, mobile licenses were on a national basis, MNOs had roll-out requirements in their licences and offered geographically uniform MTRs. ComReg's preliminary view was that the relevant geographic market for the provision of mobile voice call termination services was the Republic of Ireland.

### *Views of Respondents*

3.93 One respondent reserved its position on the issue of the geographic market definition and as such had no further comment to make with respect to ComReg's definition exercise at this time.

3.94 All of the respondents who commented on the geographic market definition agreed that the relevant geographic market was national. One respondent noted that it was currently the case that termination rates were set on a common basis across the Republic of Ireland which suggested that any geographic market should be national. A second pointed to the largely homogeneous competitive conditions throughout the country. A third agreed that the relevant market for the analysis of competitive effects was certainly not less than the national market.

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<sup>58</sup> See the Commission Notice on Market Definition, SMP Guidelines, ComReg Document 02/117 - Information Notice on Market Analysis and Data Collection and United Brands v. Commission, [1978] ECR 207, for additional guidance.

*Conclusion*

3.95 ComReg's view is 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.

## 4 Relevant Market Analysis

### Introduction

- 4.1 Having first identified a relevant market 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 significant market power ("SMP") in that market. ComReg is obliged under the Framework Regulations to assess SMP in accordance with European Community law and, in doing so, to take utmost account of the SMP Guidelines.<sup>59</sup>
- 4.2 In ComReg Document 07/01, having provisionally identified the relevant market as voice call termination on an individual mobile telephone network in the Republic of Ireland, ComReg's analysis focussed on the issue of whether H3GI had sufficient market power to profitably raise the price of termination above the efficient level. If such market power existed, then there may be a case for regulatory intervention to prevent any negative effects of such market power on consumers and ultimately end users.
- 4.3 On the basis of the market analysis conducted in ComReg Document 07/01, ComReg provisionally determined that the market for wholesale call termination on H3GI's individual networks was not effectively competitive. Accordingly, ComReg was of the preliminary view that H3GI has SMP in the relevant market.
- 4.4 ComReg solicited respondents' views on the relevant SMP criteria underlying the competition assessment and on the proposals and views contained therein. ComReg has considered all responses received to ComReg Document 07/01 in arriving at its conclusions in relation to market analysis and SMP as set out below.
- 4.5 In the following sections, ComReg considers the issue of SMP in the relevant market. In each case, a summary of ComReg's preliminary views is presented, followed by respondents' views received on foot of ComReg Document 07/01, ComReg's responses to these views and ComReg's final position having examined and taken into consideration all the views expressed by respondents. A brief background regarding the ECAP Decision is also provided below.

### Background: ECAP Decision on H3GI

- 4.6 In 2004, ComReg conducted a market analysis of all MNOs in Ireland including H3GI and had designated all MNOs including H3GI with SMP.<sup>60</sup> However, H3GI successfully appealed that decision and the appeal raised a number of issues that are also relevant to this review. ECAP Decision Number 02/05<sup>61</sup> annulled that part of ComReg's Decision D9/04<sup>62</sup> that designated H3GI with SMP. The SMP analysis in this document therefore relates only to the market for wholesale call termination on H3GI's mobile network. Following the appeal, ComReg undertook a new market

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<sup>59</sup> Regulation 25(2).

<sup>60</sup> Decision Notice D9/04 Market Analysis-Wholesale Voice Call Termination on Individual Mobile Networks

<sup>61</sup> ECAP 2004/01: Hutchison 3G Ireland Limited -v- Commission for Communications Regulation.

<sup>62</sup> ComReg (2004) Decision Notice D9/04 Market Analysis-Wholesale Voice Call Termination on Individual Mobile Networks, Document 04/82.

analysis of the relevant market for wholesale voice call termination on H3GI's network (ComReg Document 07/01) of which this document is the response to consultation.

- 4.7 The ECAP Decision found that there was no real controversy in respect to the use of market share as a significant indicator of dominance. However, the ECAP did find that ComReg may have over-relied on market share to the exclusion of other key factors in the initial market review. ComReg took as its starting point to the current review that having 100% market share was not determinative of the issue of SMP, but rather was one factor which was necessary for ComReg to consider along with other relevant factors. The assessment of SMP in this current review therefore required a holistic assessment of a number of factors. It also does not assume that having a 100% market share equates with SMP.
- 4.8 The SMP criteria considered to be the most relevant to the analysis of the market in question and which were examined in ComReg Document 07/01 were the following<sup>63</sup>:
- Market share;
  - Existing competition;
  - Barriers to entry and potential competition; and
  - Countervailing buyer power.

## **Market Share**

### *Consultation Proposal*

- 4.9 H3GI had 100% market share on the relevant market - a high and non-transitory market share. The SMP Guidelines state that the existence of a dominant position cannot be established solely on the 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 SMP.<sup>64</sup> However, the SMP Guidelines also state that according to established case-law, very large market shares (that is in excess of 50%) were in themselves, save in exceptional circumstances, evidence of the existence of a dominant position.
- 4.10 ComReg took as its starting point in the current review the assumption that having 100% market share was not determinative of the issue of SMP, but rather was one factor which it was necessary for ComReg to examine along with other relevant factors. However, it was apparent that the 100% market share was a sustainable and non-transient position from the following analysis in light of the high barriers to entry and the fact that potential competition was unlikely to occur over the lifetime of the review.

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<sup>63</sup> Annex F contains a summary of the other SMP criteria contained in the SMP Guidelines and an explanation for why ComReg considered them less relevant in the context of this market review.

<sup>64</sup> SMP Guidelines, Paragraph 78.

## Existing Competition

### *Consultation Proposal*

4.11 ComReg was of the preliminary view that existing competition would not provide an effective competitive constraint on the relevant wholesale market for voice call termination on H3GI's mobile network in the Republic of Ireland. This was mainly for the reasons outlined in section 3 on market definition where the analysis showed that there were no feasible substitutes for termination to end users on H3GI's network within the timeframe of the review. For example, any attempt to terminate the call on another MNO's network would have resulted in the call to a H3GI subscriber being unsuccessful. There were no wholesale supply, or demand side substitutes or retail constraints over the period of this review. The same considerations apply in respect of the market analysis in that there are no feasible alternatives to terminating a call on H3GI's network at present, nor are there likely to be any over the period of the review.

### *Views of Respondents*

4.12 No comments were received from respondents in relation to the assessment of market share and existing competition.

### *Conclusion*

4.13 Given the lack of alternative infrastructure for terminating calls on H3GI's network, which results in a 100% market share, ComReg is of the view there is an absence of existing competition in the relevant market for wholesale mobile voice call termination on H3GI's network, which is likely to persist over the period of this review.

## Barriers to Competition and Potential Competition

### *Consultation Proposal*

4.14 The threat of market entry, either on a long-term or "hit and run" basis, is one of the main potential 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 is of the view that there are absolute barriers to entry based on the definition of the relevant market. As stated in the market definition section above, there are no potential supply or demand side substitutes to termination on an individual mobile network foreseeable within the timeframe of the review. For example, on the supply side, irrespective of whether a new entrant entered the overall mobile market (as may arise from the award of a fourth 3G licence, new technologies or the entry of a MVNO) it would still not be technically possible for these operators to replace termination of voice calls to H3GI's subscribers. ComReg reached the conclusion in section 3 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 H3GI's termination rates over the period of this review. In this respect, the infrastructure required to enable other providers to

terminate calls on H3GI's network is not available or not easily replicated over the period of this review. The same considerations apply in respect of the market analysis in that there are no potential alternatives to terminating a call on H3GI's network over the period of the review.

#### *Views of Respondents*

4.15 One respondent stated that potential substitution arising from the development of competing Wi-Fi/Wi-Max services would act to constrain MTRs prospectively, although they acknowledged that the magnitude of their impact within the current review period was uncertain.

#### *Conclusion*

4.16 ComReg is of the view 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. This is because there is a lack of alternative infrastructure for terminating calls on H3GI's network and the absolute and non-transitory nature of this barrier to entry results in a 100% market share, which is likely to persist over the period of this review.<sup>65</sup> Nonetheless, ComReg will continue to monitor the market and may need to revisit the issue should it become necessary in light of technological developments within the timeframe of the review.

## **Countervailing Buyer Power**

#### *Consultation Proposal*

4.17 The ECAP decision mentioned a number of issues that ComReg should have considered more thoroughly in its analysis of Countervailing buyer power ("CBP") to have a thorough and overall analysis of the economic characteristics relevant to the market:

- The role of economic theory, namely "bargaining theory" and "access pricing theory";
- Factors such as whether the being a new entrant made a difference to bargaining power, the effect of possible delay of entry to the market and the effect of market saturation on the bargaining dynamic; and
- How the interconnect obligation on Eircom affected the bargaining dynamic and how the obligation might have had a different effect when an MNO was a new market entrant.

4.18 In addition, the European Commission has noted the following:

*"A market definition for call termination on each mobile network would imply that currently each mobile network operator is a single supplier on each market. However, whether every operator then has market power still*

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<sup>65</sup> The issue of Wi-Fi has been considered in paragraphs 3.21 to 3.23.

*depends on whether there is any countervailing buyer power, which would render any non-transitory price increase unprofitable.*<sup>66</sup>

- 4.19 Therefore, it was necessary as part of the current review to consider whether there were other factors, such as the existence or otherwise of CBP, that taken into account with the 100% market share and barriers to entry could be determinative of the question of the existence of SMP or not. ComReg proposed that CBP existed where large customers had the ability within a reasonable timeframe to resort to credible alternatives if the supplier decided to increase prices or to deteriorate the conditions of delivery. An operator was not dominant where sufficient CBP existed to constrain its charging prices above competitive levels. In principle, such buyer power existed where the purchaser had an alternative source of supply, could provide the service itself, or could simply refuse to purchase the service if the cost of the good was too high.<sup>67</sup>
- 4.20 Therefore, in the context of this market review, the issue under consideration was whether an originating operator (such as Eircom or another fixed or mobile operator) had sufficient CBP to constrain H3GI's pricing behaviour. The consultation aimed to evaluate the likelihood of and/or existence of CBP in the market for wholesale voice call termination on H3GI's network and to identify the circumstances under which this could have potentially been exercised.
- 4.21 In ComReg Document 07/01, in order to encapsulate a complete review of the factors inherent in the exercise of CBP, ComReg firstly provided an overview of the economic framework including the traditional approach and the more recent bargaining approach. Secondly, it assessed the evidence from the actual negotiations between H3GI and its interconnect partners, Eircom and BT Ireland. Thirdly, ComReg's assessment of any evidence of the exercise of CBP then included an examination of the relative bargaining positions of the buyer and seller of termination in light of the economic framework, the evidence from the negotiations and any relevant regulatory factors that needed to be taken into consideration in the analysis under a modified Greenfield approach.<sup>68</sup> Each of these are discussed in more detail below.

#### Overview of Economic Framework

- 4.22 The ECAP Decision stated that, in respect of economic arguments on the correct approach to modelling the market in question, it was not its role to choose between

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<sup>66</sup> Public Consultation on a Draft Commission Recommendation on Relevant Product and Service Markets. Brussels, 28 June 2006 SEC (2006) 837, page 39.

<sup>67</sup> This is in line with the European Regulators' Group ("ERG") approach which suggests that: "The extent of countervailing buyer power largely depends on whether customers can credibly threaten to switch to other suppliers, to self-provide the service, to significantly reduce consumption or to cease to use the service at all in [the] case of a price increase". ERG (2005) Revised ERG Working paper on the SMP concept for the new regulatory framework, September, page 5.

<sup>68</sup> "A modified Greenfield approach takes account of non-SMP regulation and of SMP-related regulation originating in markets which are not a component of the value chain under review." Cave, Stumpf & Valletti (2006) A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to ex ante Regulation. Available at:

[http://ec.europa.eu/information\\_society/policy/ecomm/info\\_centre/documentation/studies\\_ext\\_consult/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecomm/info_centre/documentation/studies_ext_consult/index_en.htm)

competing models. Rather, its focus would lie on whether ComReg, in concluding that H3GI had SMP, had made a significant error, factual or legal, in coming to its conclusion. To do this, the ECAP stated that it must look at the key economic issues that have a bearing on the decision and assess whether they had been sufficiently and properly analysed. ComReg had noted in ComReg Document 07/01 that this was particularly the case as the ECAP expert, Professor Muthoo, had pointed out that there was no established model or theory which could directly apply to this situation.<sup>69</sup> ComReg outlined in ComReg Document 07/01 the various literature on the issue of call termination on networks to provide an economic context for the analysis of the evidence from the negotiations between H3GI and its interconnect partners.

- 4.23 In ComReg Document 07/01 ComReg highlighted that there has been considerable economic analysis of the issue of call termination on networks.<sup>70</sup> The majority of this literature focussed on whether unregulated markets would lead to a socially optimal outcome (for the purposes of this market review this was termed “the traditional approach”). ComReg Document 07/01 focused on the issue of whether the terminating network (in this case H3GI) had sufficient market power to have the ability to raise the price above the competitive level<sup>71</sup>, which would indicate that the operator is not under a significant competitive constraint either from other operators or consumers in the market. If such market power existed, then there would be a case for *ex ante* regulatory intervention to correct any negative effects of such market power.
- 4.24 In the traditional (“access pricing theory”) approach MTRs were studied as part of a more general class of access problems. The network operator terminating calls was analysed as making a take-it-or-leave-it-offer (“TIOLO”) to operators who wished to terminate calls on its network. In the context of fixed to mobile termination rates, this usually led to the conclusion that, in the absence of regulation, a MNO would in effect behave like a monopolist bottleneck supplier and set the monopoly price or higher for terminating calls. This would particularly be the case where callers paid for calls and termination tariffs were determined based on usage. In some situations this monopoly charge would be extremely high.
- 4.25 A further exposition of the access problem is found in Wright.<sup>72</sup> Under the scenario outlined in that model, there were a number of competing MNOs that first set their fixed to mobile (“F2M”) termination rates and then chose their retail prices. At the same time a fixed network operator (“FNO”) selected a F2M retail rate (second stage). This characterisation was intended to capture the strategic aspects associated with setting termination payments and the strategic reaction of the FNO. Under a number of assumptions, Wright considered two cases: one where the FNO discriminated its retail F2M prices across the different MNOs, and the second where

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<sup>69</sup> ECAP Decision No. 02/05, paragraph 6.47 at p. 56.

<sup>70</sup> See Armstrong (2002), “Theory of Access Pricing & Interconnection,” Chapter 8 in Handbook of Telecommunications Economics, eds. Cave M., S. Majumdar & I. Vogelsang, for a summary of this literature.

<sup>71</sup> In this case, the competitive level is roughly equated to the level that would occur if there were a large number of sellers of termination services.

<sup>72</sup> Wright J. (2002) “Access Pricing Under Competition: An Application to Cellular Networks.” Journal of Industrial Economics. 50, 289–315.



the FNO offered a uniform F2M retail price for calls to all MNOs. Under the former scenario, the predicted outcome was that the MNOs chose the F2M termination rate that would be chosen by a monopoly MNO, or the rate that maximised the subscriber profit of termination. In the latter case, it was predicted the MNOs chose a termination rate above the monopoly outcome of the first case. In equilibrium, therefore, the F2M termination rate would actually be above the monopoly rate.

- 4.26 Another variant of this framework based on the “access pricing approach” has suggested that high termination rates are more likely the smaller the mobile network (as measured by its subscriber base). One approach found that smaller operators will charge higher termination rates than larger operators as a small operator's impact on the weighted average price is relatively small so it can increase its prices significantly without a significant effect on the quantity of off-net calls demanded.<sup>73</sup> This is assuming that consumers are un-informed and base their calling decisions on average prices, that is, consumers are not always aware what mobile operator they are calling. This approach is summarised in Dewenter and Haucap<sup>74</sup>, which presents empirical evidence based on data on MTRs and the subscriber base of 48 different MNOs from 17 European countries. Their analysis found that an operator's market share tended to have a statistically significant impact on its termination rate; that is, smaller operators (as measured by subscriber base) tended to have significantly higher MTRs. The analysis also found that downward regulation of the larger operators' rates tended to have the effect of increasing the rates of unregulated (or smaller) operators.
- 4.27 As can be seen, the standard analysis, based on the terminating party having 100% market share, usually predicts at least the monopoly outcome. Indeed, the outcome may be above the monopoly level and the incentive to have high termination rates may be greater for smaller operators, depending on the level of consumer awareness of networks called and the associated prices.<sup>75</sup> All of this literature, although focussed mainly on the issue of whether and how regulation can improve matters, seems to lead to the conclusion that the terminating operator has market power.
- 4.28 On the other hand, there is the paper by Binmore and Harbord<sup>76</sup> (“B&H”) that focuses on the application of bargaining theory. In summary, the bargaining framework as outlined by B&H put forward the solution, under the ‘saturated market’ scenario (which was considered more relevant by B&H<sup>77</sup>), that termination rates negotiated between H3GI and Eircom would likely be lower than the average of other MNOs' rates (where the threat of regulatory intervention was not taken into

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<sup>73</sup> Economic Literature suggests a MNO with a smaller subscriber share will have a higher percentage of off-net calls per average subscriber than a MNO with a larger subscriber share. Laffont et al (1998), Network Competition II: Price Discrimination, Rand Journal of Economics.

<sup>74</sup> Dewenter, R., and J. Haucap (2003) Mobile Termination with Asymmetric Networks, Discussion Paper No. 23, University of Federal Armed Forces Hamburg, Department of Economics, October.

<sup>75</sup> Gans J. & S. King (2000) Mobile Network Competition, customer ignorance and fixed to mobile call prices, Information Economics and Policy, 12.

<sup>76</sup> Binmore K. & Harbord D. (2005), Bargaining over Fixed to Mobile Termination Rates: Countervailing Buyer Power as a Constraint on Monopoly Power, Journal of Competition Law and Economics, Volume 1 (3). This paper was introduced by H3GI's expert witnesses during its appeal.

<sup>77</sup> Ibid, page 465. A saturated market is one where there is no possibility for further expansion of the number of consumers, and any new entrant such as H3GI would take customers from current market participants and is discussed further in paragraph 4.25.

account). When accounting for the threat of regulatory intervention, the B&H model resulted in a solution for termination rates negotiated between H3GI and Eircom that was still below, albeit very close to, the average of other MNO's termination rates.<sup>78</sup> ComReg has included a summary of the economic bargaining framework proposed by B&H below. A more formal assessment of the B&H paper is contained in Annex D.

- 4.29 The basic B&H model used a bargaining model where there were two firms: H3GI and Eircom, who bargained over the price that H3GI would charge Eircom to terminate calls on its network. The B&H model was based on a market structure of bi-lateral monopoly, where there is a single buyer and a single seller. This was because (i) it assumed there was a requirement for H3GI to interconnect with Eircom and (ii) whatever interconnection agreement H3GI reached with Eircom it would be available to all other operators because the other operators would have the option of routing traffic to H3GI's subscribers via Eircom's network. B&H also assumed that each firm had the same approximate 'power' in the bargaining game, which can be interpreted as saying no side had a particular advantage in bargaining. B&H justified this by suggesting that Eircom had an interconnectivity requirement which ensured it could not refuse to bargain, while H3GI had a requirement to get its network functional.
- 4.30 B&H specified the potential benefits Eircom and H3GI would gain from any bargain, and what were known as their 'status quo' payoffs (what they would obtain if the bargain did not take place). B&H initially posited that H3GI's status quo was zero, while its gains from a successful bargain would simply be the total revenue obtained (the termination rate multiplied by the number of calls) minus the total costs of termination. The values for Eircom would depend upon whether there was what B&H called a 'saturated' market or not. A saturated market is one where there is no possibility for further expansion of the number of consumers, and any new entrant such as H3GI would have to take customers from current market participants.
- 4.31 The prediction of the B&H model was that the actual termination rate would not exceed the average of the termination rates paid to other mobile operators. An important driver of this result was the saturated market assumption; it implied that in order for Eircom to have been persuaded to allow its customers to terminate on H3GI's network, it must have been offered a better rate than it currently obtained from other operators. This is because, given the number of total users was fixed, H3GI was forced to bid lower than the amount paid to existing operators.
- 4.32 B&H then explored the case of a non-saturated market, where none of H3GI's customers previously subscribed to other mobile networks. They suggested that this situation seemed less realistic than the saturated case. In this equilibrium of the model (absent regulatory intervention), the termination price was found to be

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<sup>78</sup> As concluded by B&H, "Our simple model predicts that incumbent FNOs will never agree to pay a new mobile entrant such as H3G a termination rate that exceeds that paid to existing 2G operators [FN 40 At least in the saturated market case, which would appear to be the most relevant], and in the absence of any threat of regulatory intervention they would frequently offer (and pay) much less than this". Ibid, page 470.

roughly half-way between the monopoly outcome and the efficient charge level. It should be noted that the price could be substantially above H3GI's costs.<sup>79</sup>

- 4.33 B&H went on to examine what effect H3GI being a new entrant would have on the outcome. The authors assumed that it would make it more risk averse and impatient and hence decrease its bargaining power and share of the surplus being bargained over. B&H also considered how this framework would be affected by the presence of the regulator. The paper explicitly acknowledged the idea of dispute resolution and analysed how this would affect the actual negotiations. The paper found that the key issue in determining what rates would be set is the rate the regulator would set. The paper considered two scenarios as the possible rate set by the regulator - the cost of termination for H3GI, or the average of the other operators' MTRs. In either of the latter cases the paper predicted the most likely outcome was where the agreed rate would be around the average of the other operators' rates.<sup>80</sup>
- 4.34 For completeness, in the sections following ComReg's summary of economic theory in ComReg Document 07/01, ComReg went on to examine the evidence for the exercise of CBP taking account of the actual market conditions and the bargaining dynamic present in this market along with the economic framework as described and formally assessed in Annex D. That exercise and respondents' views are dealt with further in sub-sections 2) and 3) below.

#### Evidence from the Actual Negotiations

##### (1) Introduction

- 4.35 In ComReg Document 07/01, ComReg summarised its understanding, based on information provided by the relevant operators, of the negotiation process for the signing of the interconnect agreements between H3GI and the two largest fixed operators, the incumbent, Eircom and another fixed line operator, BT Ireland, and the outcome of its negotiations with those operators in respect of termination rates. This was to assist in determining the actual bargaining dynamic between those operators and what the outcome of any future negotiation between the parties might be more likely to approximate to. A full chronology of the negotiations between the parties is contained in Annex E (confidential).

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<sup>79</sup> Ibid, page 464-5. It is of note that the non-saturated market scenario was only solved in the B&H analysis absent regulatory intervention. A submission by Harbord to the consultation paper, on behalf of one of the respondents, indicated that solving the non saturated market case taking regulatory intervention into account would lead to essentially the same conclusions as in the saturated markets case i.e. that the parties would quickly agree to the outcome considered more likely when the regulator intervenes.

<sup>80</sup> "Two natural candidates for aR [termination rate determined by regulator] are  $aR = \bar{a}T$  [average 2G termination rate] or  $aR = cT$  [entrant's termination costs]. If it is viewed as highly likely, for instance, that the regulatory would quickly intervene to impose a solution  $aR = \bar{a}T$ , then the parties will agree on a termination rate close to, but less than,  $\bar{a}T$  immediately. If, on the other hand,  $cT > \bar{a}T$ , as appears likely, and the regulator would impose  $aR = cT$  with high probability, then the parties will agree a rate between  $\bar{a}T$  and  $cT$  immediately, as may have occurred in bargaining between H3G and BT in the United Kingdom, and between H3G and Eircom in Ireland". (Ibid, page 469).

(2) Summary of Actual Negotiations between H3GI and Fixed Operators

4.36 In ComReg Document 07/01, ComReg presented and examined a summary of the negotiations between H3GI and its interconnect partners, Eircom and BT. ComReg was of the preliminary view that it was evident that BT had insufficient CBP in respect of H3GI. **[Confidential]**. This may have been because BT had incentives to achieve wholesale revenues as well as end-to-end connectivity for its subscribers. In the case of Eircom, ComReg discussed the evidence further in ComReg Document 07/01 and this is summarised in the following section.

(3) Evidence from Negotiations

4.37 ComReg examined the evidence for the proposal that there was sufficient CBP to constrain H3GI from acting to an appreciable extent independently from its customers. ComReg carried out this assessment in the context of the bargaining framework and bearing in mind the predictions of the model proposed by B&H, (as summarised above), while also examining the actual bargaining dynamic between parties in relation to negotiations to date and on a prospective basis.

4.38 As evidenced by the negotiations, the rates that H3GI and Eircom ultimately agreed on were above the rates in the overall mobile sector. A key prediction of the B&H paper was that, in a saturated market, the rates achieved by H3GI would likely be lower than the average of other operators' rates. This is incorrect when applied to the situation in Ireland. H3GI's termination rates were in excess of those of Vodafone and O<sub>2</sub><sup>81</sup>, and as such were above the average of the other MNOs' rates.

4.39 In terms of prevailing MTRs in the Irish market, Table 4.1 below shows that H3GI's termination rates for peak, off-peak and weekend calls are currently higher than all other SMP mobile operators active in the Irish market.<sup>82</sup> Again, H3GI's blended termination rate is higher than the existing SMP mobile operators.<sup>83</sup> This differential will grow as the other mobile operators are further reducing their termination rates over the next five years.<sup>84</sup>

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<sup>81</sup> H3GI's rates were equivalent to Meteor's at the time.

<sup>82</sup> In November 2007 Tesco Mobile entered the market with termination rates that were above H3GI's. It should be noted that Tesco Mobile is not currently subject to price control regulation.

<sup>83</sup> A blended termination rate is the weighted average of peak, off peak and week end rates based on the volumes of calls at these times. In general, blended rates have been calculated on the basis of the current traffic profiles of each individual operator, i.e. the volume of terminating minutes for each type of call (i.e. peak, off-peak and weekend). This data is collected from the operators as part of ComReg's data collection process for the Quarterly Report. Where this data is not available, appropriate assumptions have been made regarding traffic profiles. ComReg estimates, based on information available to it at this time, that H3GI's current blended termination rate is approximately 13.5 cents which is above the blended termination rates of Vodafone and O<sub>2</sub> (both approximately 9.6 cents), and Meteor (approximately 12.4 cents). Therefore, on average, H3GI's blended rate is approximately 3 cents higher than the average of the other three mobile operators.

<sup>84</sup> There have been two reductions in MTRs by SMP MNOs in the period 2006-2007. See ComReg (2006) Information Notice, Reductions in mobile termination charges by Vodafone, O<sub>2</sub> and Meteor will benefit consumers, 16 January 2006, ComReg Document 06/02; and ComReg (2007) Information Notice - Further reductions in mobile termination charges by Vodafone, O<sub>2</sub>, and Meteor will benefit consumers, Document No. 07/58.

**Table 4.1: Mobile operator termination rates in Ireland at November 2007**

Termination Rate (cents)	Vodafone	O <sub>2</sub>	Meteor	H3GI	% Difference above Vodafone	% Difference above O <sub>2</sub>	% Difference above Meteor
<b>Peak</b>	12.26	11.25	15.90	17.78	45 %	58 %	12 %
<b>Off peak</b>	8.15	7.99	10.71	11.43	40 %	43 %	7 %
<b>Weekend</b>	5.00	7.99	8.32	8.89	78 %	11 %	7 %

Source: Eircom switched transit and routing price list version ("STRPL") 64 9-11-07, Table 101  
<http://www.Eircomwholesale.ie/dynamic/pdf/STRPL%20Issue%2064marked.pdf>

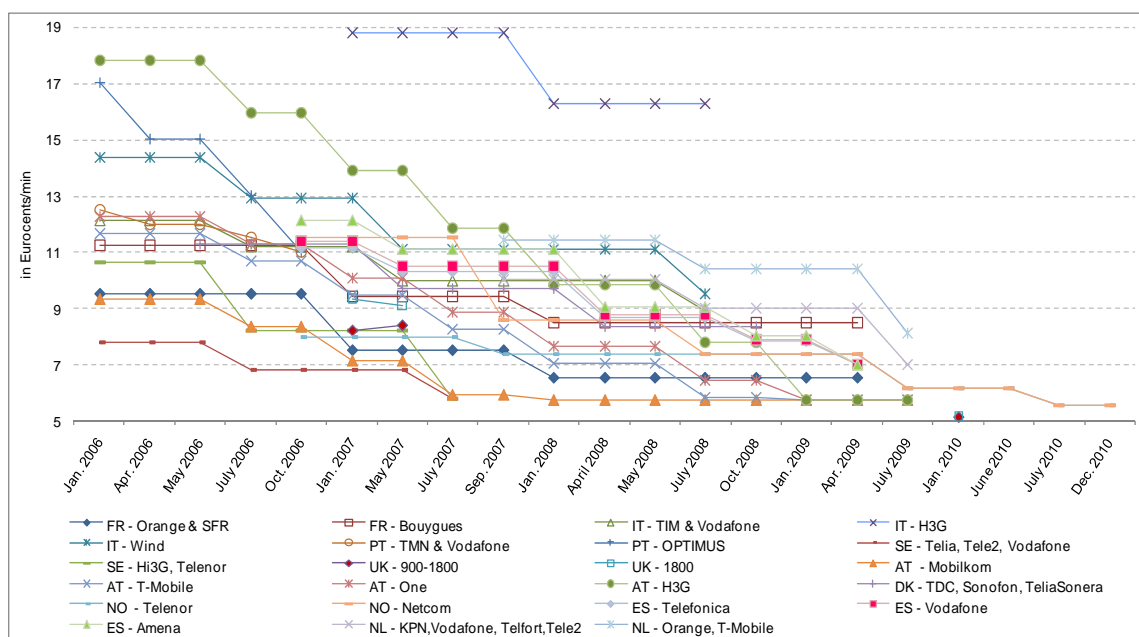
4.40 The data presented in Table 4.1 shows that in this key area, the B&H model did not seem to offer an accurate prediction (nor did it suggest Eircom had sufficient CBP such that it prevented H3GI in its ability to act to an appreciable extent independently of its customers, competitors and consumers). Indeed, as H3GI's rates had effectively been in the market since 2003 (for interconnection via BT), the disparity in rates has widened since that time and is likely to widen further as the trend in MTRs for SMP MNOs in Ireland, and elsewhere in the EU (see Figure 4.1), is downward. While H3GI had asserted in the appeal of the initial review that it had been forced to bring its rates down to levels below its original proposal, ComReg was of the preliminary view that the operator was not constrained to offer the average of the 2G price level. Instead it had achieved rates that were above the level in the overall mobile sector and likely to have remained so which indicated that Eircom had insufficient CBP to constrain H3GI to an appreciable extent at that time, and, by extension, during the period of the review.

4.41 As the rates of SMP MNOs' in Ireland declined because of regulation, ComReg was of the preliminary view that there was little incentive or impetus for H3GI to decrease its rates in tandem towards the benchmark levels in the overall mobile market.<sup>85</sup> Furthermore, ComReg noted that the majority of the other NRAs that examined this market set "glide paths" (i.e. a phased reduction towards a target rate) with target rates in the range of 6-9 cent per minute to be reached between 2007 and 2009, as illustrated in Figure 4.1 below.<sup>86</sup> Again, this indicated that H3GI had managed to achieve rates that were above what could have been described as benchmark efficient levels elsewhere in Europe.

<sup>85</sup> For example, absent regulation in the past the 2G MNOs rates remained above efficient levels, consistent with the economic literature (see Gans and King (2000)).

<sup>86</sup> Cullen International, Cross Country Analysis, Mobile Call Termination (Market 16).

**Figure 4.1: Glide Path for Reduction in MTRs**



Source: Cullen International, Cross Country Analysis, November 2007

4.42 Furthermore, in ComReg Document 07/01, ComReg assessed whether H3GI had SMP in a situation where it was already an existing market player. As such, H3GI's perceived disadvantage as a new entrant and the assessment of the B&H model were no longer as appropriate as they might have been. ComReg considered it was likely to be the case that the requirement for H3GI to provide its potential subscribers with the ability to receive calls from Eircom was more important for it to launch a commercially viable service than would be the converse situation for Eircom. However, as was discussed further in ComReg Document 07/01, ComReg was of the preliminary view that all operators, including Eircom, wished to provide subscribers with the ability to make and receive calls to all other operators in the Irish market and this provided incentives for interconnection. This was supported by the fact that being a new entrant did not prevent H3GI from setting rates unilaterally vis-à-vis BT, the operator that terminated the bulk of H3GI's traffic via transit.

4.43 ComReg was of the preliminary view that it was clear that, in the position of a new entrant and in the absence of any certainty as to what the precise outcome of a regulatory intervention would be, H3GI managed to negotiate favourable terms from Eircom. This indicated to ComReg that H3GI was likely to be able to at least sustain its then rates for the immediate future. Given the contractual situation, for an amendment of rates to occur, H3GI would need to reach agreement with Eircom over any change in rates. The contractual arrangements agreed between Eircom and H3GI specified that the contract could be terminated with a notice period of 24 months, but that either party could seek to renegotiate the rates during a specified time over that period. **[Confidential]**.

4.44 One respondent to ComReg Document 07/01 highlighted that an exchange of correspondence had taken place between Eircom and H3GI in October 2006.

ComReg has considered this correspondence further and is of the view that Eircom's letter served to notify H3GI that it had the opportunity to revise their rates downwards at that time should they wish to do so, rather than representing a concrete attempt to re-negotiate these rates. It is of note that Eircom clearly signalled that they anticipated a price reduction rather than a price increase in H3GI's rates which may suggest that they consider H3GI's are at a high level and possibly not reflective of H3GI's own costs. H3GI responded outlining that it did not consider it appropriate to reduce its MTRs at present. It does not appear that Eircom attempted to further negotiate this price downwards.

- 4.45 Based on an analysis of the history of negotiations, ComReg considered in ComReg Document 07/01 that, whenever any future negotiations over rates took place, it seemed probable that, with an existing subscriber base and the ability to make end-to-end calls being of importance to consumers, H3GI would be in an even stronger bargaining position than it was when about to enter the market. ComReg was of the preliminary view that there would be insufficient incentives for H3GI to lower its rates on a prospective basis, even in an environment where other MNOs' rates were falling.
- 4.46 In the initial round of negotiations it was possible that Eircom could still have wished to achieve lower termination rates and sought to have the termination rates reviewed by referring a dispute to ComReg. ComReg did not have strong evidence to support that as a likely course of action given that Eircom had already agreed to the termination rates, despite its knowledge that ComReg had decided not to intervene when H3GI referred the dispute to ComReg. In fact, it was H3GI that appeared to leverage the possibility (in its mind) that ComReg would favour it in any determination in one of the final proposals it made to Eircom as detailed in paragraph 4.35 of ComReg Document 07/01.
- 4.47 Therefore, on a forward-looking basis ComReg's preliminary view was that the evidence suggested H3GI would be able to negotiate rates that were at least as high as the current level and that there would be insufficient CBP to exert downward pressure on the rates over the period of the review.

(4) Relative Bargaining Strengths of Buyer and Seller as Evidenced by Negotiations

- 4.48 The EU Commission's Independent Report<sup>87</sup> proposed a number of bargaining tools that were potentially available to buyers when engaging in negotiations with sellers. These included (i) the potential for buyers to refuse to interconnect or (ii) to purchase and/or to impose a reciprocal increase in the termination rate. In ComReg Document 07/01, ComReg examined to what extent Eircom did, or could in fact, credibly have threatened to refuse to purchase or delay negotiations with H3GI and to what extent other factors such as regulatory intervention influenced the relative bargaining strengths of the operators in question.

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<sup>87</sup> Cave, Stumpf & Valletti (2006) A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to ex ante Regulation.

(i) Threat of Refusal to Purchase or Delay

4.49 In respect of a buyer's option not to purchase, this would have been more credible where there would have been no disturbances to outgoing (and incoming) connections for the buying operator and its customers. ComReg was of the preliminary view that this would not be credible in the case of Eircom. Apart from the requirement to ensure end-to-end connectivity, there were other reasons why Eircom would not have refused to purchase termination from H3GI. A large proportion of calls terminate outside the network in which they originate. For example, 39% of total fixed retail voice traffic was to calls other than domestic fixed minutes at the time of the negotiations i.e. Q2 2005.<sup>88</sup> (It is of note that the most recent data indicates an increase in this figure to 45%.<sup>89</sup>) Bearing in mind that there was no viable substitute or alternative means of supply of termination on H3GI's network, this meant that network operators were often not able to provide a full service unless they purchased call termination services from other networks. Multiple networks coexisted and these networks needed to connect to facilitate off net calling. This was a point emphasised by the ECAP expert, Professor Muthoo, when he stated that in a post-launch scenario, Eircom's buyer power would be weakened if there was also pressure coming from Eircom's own customers to ensure they had the ability to make calls to subscribers on H3GI's network.<sup>90</sup> It was also possible that FNOs would be concerned that not providing their subscribers with the ability to make calls to subscribers of mobile phones would have increased the possibility of fixed mobile substitution and have damaged their reputation. Further, it may also have been commercially important for Eircom to interconnect with all operators, including H3GI to maintain its central position in the interconnection market.

4.50 The ability to threaten not to interconnect or to delay could have been potentially influenced by the size of the undertaking in question as measured by its subscriber base. In that case, H3GI's inability to interconnect with Eircom could have imposed a greater cost on H3GI than vice versa, given Eircom's large subscriber base. However, in terms of traffic terminated, it appeared from information provided by H3GI that **[Confidential]**. Thus, it was conceivable that H3GI could have initially entered the market based on interconnection with BT and the other MNOs, thereby conferring some further bargaining power on H3GI in the negotiations. This appeared to have been further supported by the fact **[Confidential]**.

4.51 This issue of relative size may have been more relevant to the situation where H3GI was seeking entry to the mobile market, as Eircom could threaten to delay that launch. However, as examined in part (c) above on the evidence from the negotiations, ComReg was of the preliminary view that this perceived disadvantage did not prevent H3GI from extracting higher prices than other MNOs for termination

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<sup>88</sup> ComReg (2005) Irish Communications Market, Quarterly Key Data Report, September 2005, Document 05/73, page 10.

<sup>89</sup> ComReg (2007) Irish Communications Market: Key Data Report, December 2007, Document 07/106, page 16.

<sup>90</sup> ECAP (2005) Hutchison 3G Ireland and Commission for Communications Regulation, Transcript 21 July 2005, pages 8-9.



in the agreement with Eircom. Indeed, Eircom seemed keen to reach agreement with H3GI in advance of its launch.

4.52 In general, ComReg did not have evidence that FNOs envisaged offering calling services to consumers that did not enable those consumers to call specific MNOs. Furthermore, the threat of delay was no longer as relevant a consideration, given the existing contracts in place between the operators and the defined steps to proceed to re-negotiation of rates or severing of relations within those contracts. Therefore given the evidence from the previous negotiations, the commercial realities and the existing contract between H3GI and Eircom it did not appear to be the case that Eircom used this to advantage its position in the past, nor was it commercially feasible that either party would refuse to interconnect going forward.

(ii) Buyer as an Important Outlet for the Seller

4.53 The credibility of any refusal to interconnect or to purchase could also have been enhanced depending on the importance of the buyer to the seller. It would have been important for any new entrant to have an agreement with any originating operator of significant size, in this case Eircom, so that their customers could have made and received calls from Eircom subscribers. However, as summarised above, all operators needed to interconnect to facilitate off-net calling and provide a full service, not just the new entrant.

4.54 A factor that may have had a bearing on this was the issue H3GI raised of bi-lateral monopoly.<sup>91</sup> This would have meant that H3GI would not have had the ability to play off the various originating operators against each other in any bargaining situation as (a) there was an interconnectivity obligation on H3GI and (b) arbitrage would have ensured that if one operator struck a good deal, that offer would have been available to other operators. Thus, for instance, if, say, BT had received a deal of 12 cents per minute to terminate, then there would have been no way to deny Eircom or Vodafone from getting such a deal as well, as they could have simply interconnected with BT and thus have obtained very close to the same deal. B&H also went on to argue that this showed that there was a bilateral monopoly between negotiating operators, and that the traditional pricing framework of one seller and a number of buyers did not apply. Hence, H3GI proposed that Eircom was essentially the only buyer of its termination services.

4.55 ComReg was of the preliminary view that there was considerable force to this argument. However, a world of costless arbitrage was probably not an accurate reflection of reality either. In theory, almost any pricing situation could have been resolved by any buyer and seller bargaining over prices but most often, the seller did make take it or leave it offers. There were fewer players in the situation being examined in ComReg Document 07/01, but assuming costless arbitrage and an automatic bilateral monopoly did not seem fully accurate for the reasons that ComReg explained, as outlined below.

4.56 If Eircom had refused to interconnect or delay, H3GI had the option to interconnect (directly and indirectly) with multiple other FNOs and MNOs. For example, at the

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<sup>91</sup> A situation where there is a sole buyer of H3GI's termination services, in this case Eircom.

time of commercial launch H3GI had concluded a direct interconnection agreement with BT Ireland<sup>92</sup> and continued to use such an agreement with BT to deliver terminating traffic, including Eircom's traffic<sup>93</sup>, to the H3GI network. Again, ComReg noted that the traffic terminating on H3GI's network and delivered by BT originated predominantly from other MNOs and Eircom.<sup>94</sup> The majority of the traffic originated **[Confidential]**. Alternative interconnection partners provided H3GI with the opportunity to receive calls from other operators, such as the MNOs, irrespective of any termination deal it had with the incumbent fixed operator, which clearly had implications for H3GI's relative bargaining position. Indeed, H3GI had been able to expand its portfolio of terminating revenues with BT Ireland operating as a transit interconnect for video calling services between H3GI and Vodafone.

4.57 Therefore, from the pool of potential interconnection partners, it was possible for H3GI to launch a business offering data services, M2M services, and M2F services without directly connecting with Eircom for the purposes of terminating the latter's F2M traffic. It was clear that the possibility of making outgoing calls was not affected by any F2M termination agreement. It was also important to note that H3GI could have negotiated with other MNOs with respect to termination of a number of services other than voice.<sup>95</sup> By contrast, Eircom or alternative FNOs could only have terminated fixed voice originating traffic, which again reduced their potential leverage on termination markets. Also, there was likely to be a reduced need for transit due to self build by MNOs' enlargement of their own networks. At the time ComReg Document 07/01 was published, H3GI's 3G video service had a coverage of 80% of the total population. Though clearly the ability to receive calls from subscribers to Eircom's network was likely to be an important consideration for consumers when choosing to subscribe to H3GI's network, ComReg was of the preliminary view that the evidence suggested that H3GI's operations were not wholly dependent on establishing interconnection exclusively with Eircom. This would have been likely to strengthen H3GI's negotiating position.

4.58 On balance, ComReg was of the preliminary view that it could have been argued that H3GI must have had an interconnection agreement with Eircom to have a viable commercial business and certainly if this was the case, the bilateral monopoly argument had considerable force. However, in practice, the arbitrage argument used by B&H was not likely to operate with the same speed or to have incurred zero transaction costs. In terms of the B&H model, this suggested that there may have been some ability for H3GI to have played one firm off against the other and introduced competition among buyers, which would have assigned it more bargaining power. ComReg's preliminary view was that while a TIOLO (take-it-or-leave-it) approach was not fully realistic, the bargaining approach advanced by B&H also had some flaws and that, in respect to the bilateral monopoly issue, the seller

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<sup>92</sup> H3GI had an interconnect agreement in place with BT from December 2004.

<sup>93</sup> ComReg understands that the arrangement whereby BT was transiting Eircom's traffic was temporary and that Eircom began sending voice calls for termination on H3GI's network as of 24 July 2006.

<sup>94</sup> According to information supplied by H3GI in response to a data request.

<sup>95</sup> MNOs are more reliant on interconnection agreements between MNOs in respect of terminating revenues for services other than voice, e.g. SMS, MMS.

(H3GI) may have had more bargaining power than the B&H model had assigned to them.

4.59 In summary, Eircom was likely to be a very important purchaser of H3GI's termination services, but equally, all operators needed to interconnect to enable their customers to make and receive calls to all other operators, fixed and mobile. In addition, ComReg was of the preliminary view that there may have been some options open to H3GI to engender competition among buyers and, irrespective of this, it did not appear to ComReg that the importance of Eircom as a buyer prevented H3GI from extracting high termination rates from the negotiation with Eircom. Again, ComReg highlighted that H3GI was in any event no longer a new entrant; it had a subscriber base and would as a result have enhanced bargaining power as Eircom would have more to lose in any future negotiations. On a forward-looking basis H3GI's bargaining position would be further enhanced by its growing subscriber base which will lead to an increase in the proportion of on-net calls and would also serve to increase the costs to Eircom of not purchasing call termination from H3GI. The trend towards direct interconnection with MNOs may also reduce the importance of Eircom as a transit operator.<sup>96</sup>

(iii) H3GI as a New Entrant

4.60 The ECAP suggested that ComReg had not sufficiently considered factors specific to H3GI, such as that it was a new entrant, and whether that would have had an impact at the time of the negotiations. B&H, for example, predicted that H3GI's pay-off if it failed to reach an agreement would be zero. This was primarily under the assumption that H3GI must have provided its potential subscribers with the ability to receive calls from Eircom to launch a commercially viable service, so the cost of any delay in reaching an agreement would have been more significant to H3GI than to Eircom.

4.61 ComReg thoroughly examined this issue in ComReg Document 07/01. ComReg was of the preliminary view that there were options open to H3GI in the event it had not managed to reach an agreement with Eircom (as outlined in paragraphs 4.53 to 4.59 above). While this effect may not have been very strong, it was possible to directly factor it into the bargaining dynamic between the two operators by allowing H3GI's payoffs in the event that it failed to reach an agreement with Eircom to be greater than zero. This indeed would have given it more bargaining power if negotiations had broken down or were delayed significantly, thus having allowed it to have obtained a higher termination rate, which seems to have been the case. A formal assessment of this issue is contained in Annex D.

(iv) Relevance of a Saturated or Non-Saturated Market

4.62 A further issue that ComReg examined was whether there would be any effect on bargaining between the two parties depending on whether the market was saturated or not. A fuller analysis of this point is included in Annex D and is summarised below. The B&H paper had asserted that the saturated market was the most likely case, which would have had the effect of somewhat weakening H3GI's bargaining

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<sup>96</sup> [Confidential].

position. It was not evident to ComReg why it should have been assumed that the market was saturated (that is whether the total number of subscribers would rise as a result of H3GI's entry). While there may have been a high penetration rate in terms of subscriber numbers<sup>97</sup> consumers may have wished to subscribe to H3GI for reasons of product differentiation<sup>98</sup> and there was always scope for an increase in revenues generated in the market.

- 4.63 On balance, to have assumed exclusively either a saturated or a non-saturated market was not likely to fully reflect reality; a new entrant to the market would have both created new subscribers and taken some customers from existing operators. ComReg was of the preliminary view based on the history of negotiations before it, that when reaching a deal Eircom appeared to be coming from a position where, if no deal was made, it would obtain a pay-off of zero and H3GI close to zero. While Eircom was reluctant to enter into a commercial agreement at the rates originally proposed by H3GI, there did not seem to be significant evidence that Eircom considered it would be losing revenue from its existing fixed customers by negotiating an interconnect arrangement with H3GI.<sup>99</sup>
- 4.64 ComReg was of the view that of the various versions of the B&H model, the outcome predicted in the non-saturated market seemed to have most congruence with the empirical data. This was not to say that the assumption that the market was non-saturated was completely accurate, although it should be noted that mobile subscription rates have continued to increase since the original B&H paper, thus suggesting that the saturated model is not a good representation of reality. In any case, the prediction of the non-saturated market – that H3GI would have achieved a rate half-way between the monopoly rate and the overall mobile sector level – seemed to have most congruence with empirical data, and with the actual pattern of bargaining that occurred.
- 4.65 This seemed to ComReg to be evidence of SMP – it was true the outcome was not the monopoly outcome, but the B&H model had shown H3GI's ability to set price considerably higher than the competitive price. This is essentially what SMP (or dominance) is: the ability to act, to an appreciable extent, independently of other market participants and customers. The empirical evidence did not support the contention that Eircom had sufficient CBP to restrict H3GI from acting, to an appreciable extent, independently, and ensuring it enjoyed a price above the overall mobile sector level.

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<sup>97</sup> It is of note in this respect that the mobile penetration rate was 94% at the time negotiations were concluded i.e. Q2 2005, six places below the EU average of 102%. The latest penetration rate for the Irish market is 114%, which is above the EU average of 113%. See ComReg (2005) Irish Communications Market: Key Data Report, September 2005, pages 21-22, Document 05/73; and ComReg (2007) Irish Communications Market: Key Data Report, December 2007, Document 07/106, page 33.

<sup>98</sup> This seems particularly likely given that H3GI offers 3G services, such as video services and higher bandwidth for internet access.

<sup>99</sup> ComReg notes again that Eircom requested that H3GI have a direct interconnect agreement in place with it before its commercial launch.

(v) Importance of the Regulatory Background

4.66 ComReg had also identified two relevant areas of regulation that it deemed may have been appropriate to review in the context of a modified Greenfield approach and in an assessment of the relative bargaining strengths of operators.

4.67 The first regulatory factor was that Eircom was already regulated in the markets for interconnection. The standard form documentation of the Reference Interconnect Offer ("RIO") is the standard agreement between Eircom and other operators, and requires that Eircom offers equivalent terms and conditions to operators in equivalent circumstances. In respect of negotiating termination rates, Eircom was not in a position to offer more advantageous terms or conditions or termination rates to one operator over another, which removed one potentially very significant source of bargaining strength. That is Eircom could not retaliate to unreasonable termination rates proposed by other operators by a reciprocal increase in its own rates. In addition, all operators were required to negotiate interconnection in order to ensure end-to-end connectivity.

4.68 For F2M calls, the mobile rates of other SMP MNOs were regulated<sup>100</sup>, albeit at the time of ComReg Document 07/01, the cost orientation of rates had been effected on a voluntary basis. H3GI was not at that time subject to any regulatory obligations in respect of its MTRs and there had been no evidence of self-regulation of its rates either.

4.69 The second regulatory factor that could have been of relevance was dispute resolution. As discussed fully in Annex E, the issues in relation to dispute resolution were very hypothetical and case specific. For the reasons detailed in Annex E, ComReg had reached the preliminary conclusion that dispute resolution was not a factor to which it could attach very considerable weight in assessing whether or not Eircom had sufficient CBP and as to whether H3GI had SMP, or that it was of itself a singularly significant factor bearing on the issues. It was noted that the Competition Appeal Tribunal ("CAT") in the UK had stated that a potentially regulated entity could not say that it did not have SMP because there was a chance its market power would be curbed by actual regulation. There would appear to be no obvious reason for saying that the comments of the CAT do not equally apply to other varieties of regulation e.g. a determination on foot of a dispute resolution. ComReg also noted that the CAT stated that it did not consider that the mechanism for dispute resolution under an interconnection agreement "*has any material effect on the question of whether H3G had or has SMP.*"<sup>101</sup>

4.70 Fundamentally, the question at issue is whether there existed sufficient CBP and to some extent, whether an economic model could reasonably capture this. If it was valid to ask whether dispute resolution affected CBP, it appeared that one would have in fact been requiring ComReg to know in advance what H3GI thought would be the likely outcome of dispute resolution. Such an exercise seemed artificial and contrived and it was difficult to see how it could have been invested with any

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<sup>100</sup> ComReg (2005) Market Analysis-Decision on SMP obligations-Wholesale Voice Call Termination on Individual Mobile Networks, Document 05/78.

<sup>101</sup> <http://www.catribunal.org.uk/documents/Jdg1047H3G281105.pdf> page 74 of Judgement by the CAT

accuracy or reliability. Notwithstanding those views, ComReg attempted in Annex D to carry out a somewhat speculative assessment on the issue and this is summarised below.

- 4.71 In the case of H3GI, if its expectation was that ComReg would favour it in any price determination it made, that would have made it more confident in its negotiations and vice versa for Eircom. That might have been the case, for example, if H3GI expected that ComReg would have allowed it to set the prices it chose. On the other hand, H3GI could also have expected that the regulatory intervention would be less favourable to it, making it less confident in its negotiations with Eircom. By the time that ComReg Document 07/01 was published, ComReg had not issued a price determination under the relevant dispute resolution powers and therefore H3GI would have had no prior experience to refer to in this regard. ComReg noted that in assessing whether H3GI had or did not have SMP, it would have been entirely inappropriate for ComReg to have suggested or factored in that ComReg itself would have been predisposed to favour either of the possible outcomes. To do so would have been tantamount to predetermining the matter with respect to possible future disputes, but moreover (and worse) would have left ComReg open to a charge of bias.
- 4.72 In reality, operators might have anticipated that the outcome to dispute resolution lay somewhere between the two extremes of favouring one party entirely over the other. It was not practical or possible for ComReg to have anticipated either the exact outcome, or its exact policy with respect to intervention in a specific case.<sup>102</sup>
- 4.73 However, while there were many uncertainties regarding dispute resolution, it seemed likely that ComReg would have had to adopt lighter touch regulation with respect to setting a MTR in respect a non-SMP operator, relative to the MTR applicable to SMP operators. If ComReg were called upon to adjudicate a dispute, it could not have set a cost oriented MTR under Articles 9-13 of the Access Directive. This was because ComReg would have been addressing the dispute in the absence of H3GI having SMP. The obligation to offer cost oriented MTRs could only have been imposed on operators having SMP, as outlined in Article 8 (3) of the Access Directive which provided that:
- “...national regulatory authorities shall not impose the obligations set out in Articles 9 to 13 on operators that have not been designated in accordance with paragraph 2.”*
- 4.74 H3GI would not have been a SMP operator *“designated in accordance with paragraph 2”* and it could not therefore have been subject to any of the obligations set out under Articles 9 – 13. One of the obligations that may have been imposed under Articles 9 – 13 was that of *“price controls, including obligations for cost orientation of prices...”* as provided for under Article 13.
- 4.75 ComReg notes the provisions of Article 5 (1) of the Access Directive, which enable obligations to be imposed on undertakings that control access to end-users, to the extent that it is necessary to ensure end-to-end connectivity. The obligations include, in justified cases, the obligation to interconnect their networks where this is not

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<sup>102</sup> ComReg is for example likely to take into account the need to be proportionate and the effect that any decision would have on competition and consumers in the market place.

already the case. Given that these provisions are exceptional, ComReg believes they should be narrowly construed. While ComReg was not able to (and could not have been expected to) predict the actual price that would have been imposed in the context of a dispute, it was clear (because of the limits of ComReg's legal powers) that the price would not have been the same or better than a cost oriented rate.

- 4.76 Given that ComReg could not, or would be highly unlikely to have imposed a cost oriented rate under Articles 9-13 in respect of H3GI's MTR, this would have likely improved H3GI's bargaining position. This, ComReg believed, was the only significant conclusion which could have been drawn from an assessment of dispute resolution. If it was a valid conclusion, it was one that in fact favoured the view that there was insufficient CBP in the market and that H3GI had SMP.
- 4.77 Overall, however, because it would have been inappropriate for ComReg to have suggested or factored in that ComReg itself would have been predisposed to favour any possible outcome in advance of a particular dispute, ComReg was not convinced that an explicit analysis of potential regulatory intervention was necessarily helpful in assessing the sufficiency of CBP. The Independent Report on the Relevant Markets Recommendation<sup>103</sup> also discussed this issue. It stated, amongst other things, that if the possibility of dispute resolution was part of the picture and affected the very same price under consideration in the analysis, this could have introduced a circular reasoning.
- 4.78 However, what was more clear from the evidence was that H3GI appeared to have used the prospect of dispute resolution to its advantage in the actual negotiations that took place, where it referred to the possibility that Eircom would have been adversely affected financially in the event that ComReg ruled in H3GI's favour, when it made its third pricing proposal. This suggested to ComReg that H3GI anticipated an outcome favourable to its position. This appeared to have been further supported by the fact that it was H3GI that referred the dispute to ComReg and not Eircom. Based on the foregoing evidence it was therefore by no means clear how the prospect of dispute resolution would have favoured Eircom's position and it was certainly not clear that Eircom anticipated this to be the case. At the time ComReg Document 07/01 was published, ComReg did not have evidence to suggest that Eircom used the prospect of dispute resolution as a means of improving its bargaining position. Rather the evidence suggested that, if there was any effect, H3GI used it as a means to strengthen its own bargaining position.
- 4.79 Furthermore, the extra bargaining power attributed from the threat of regulatory intervention would have allowed H3GI to achieve rates very close to the average rate of other MNOs. This was a possibility acknowledged by B&H. ComReg noted that the predicted outcome of the B&H model remained incorrect, even in the case of regulatory intervention, as H3GI had actually obtained rates well above those of the average of other MNOs.<sup>104</sup>

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<sup>103</sup> Cave, Stumpf & Valletti (2006) A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to ex ante Regulation.

<sup>104</sup> See paragraphs 4.38 to 0.

(vi) Costs

4.80 B&H also suggested that H3GI was likely to have a higher cost of capital than Eircom, which would have disadvantaged it in any bargain. ComReg was of the view that this had no real evidence to support it. The market value of the parent company of H3GI was greater than the market value of Eircom<sup>105</sup>, thus ComReg questioned the suggestion that H3GI was financially constrained, or was likely to be particularly risk-averse. Moreover, H3GI had successfully entered markets in other jurisdictions, including the UK. Under these circumstances, it seemed legitimate to not attribute much significance to any such suggestions, unless there was strong empirical evidence to the contrary, in particular as H3GI was now an established market operator with an on-going relationship with Eircom.

4.81 ComReg was aware that B&H also argued that it was probable that H3GI had a much higher cost than the other operators, which could have led to the implication that H3GI's higher rates, discussed above, were due to high costs, and that they may have in fact been achieving a rate below cost. ComReg was sceptical of this argument for a number of reasons.

4.82 Firstly, costs are not necessarily a vital factor in an assessment of SMP. As the recent judgment of the CAT in the UK on H3G made clear, a firm may be pricing close to cost and still have SMP:

*“we consider that it was not necessary for OFCOM to conduct the exercise or exercises that H3G says should have been carried out. The existence of a power to behave independently of competitors, customers and consumers may, in some cases, result in excessive prices, but that is not necessarily the case. It is perfectly possible to have SMP and not charge excessive prices either at the time the position is being tested or in the future. Excessive prices are not an inevitable manifestation of SMP. .... SMP in the present case turns on the power or ability to behave independently of customers or others. That does not require that present or future pricing be investigated.”<sup>106</sup>*

4.83 The important factor is the ability to act to an appreciable extent independently of competitors or customers, or the ability to raise price above the competitive level which would indicate that the operator is not under a significant competitive constraint either from other operators or consumers in the market.

4.84 Secondly, the core argument of B&H (that H3GI would have been forced to agree a rate below the average of other operators) had nothing to do with costs. If H3GI's costs were above the level of other operators' rates, by the logic of the B&H model, Eircom would not have done a deal with H3GI (or H3GI would have struck a deal with Eircom that was below its costs) as the fact that H3GI had high costs had no relevance for Eircom. This did not happen; H3GI achieved a rate well above the average of other operators within the mobile sector in Ireland.

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<sup>105</sup> Hutchison Whampoa Group had a market capitalisation of 315,702 million Hong Kong \$ (approximately €30 million, Lehman Brothers, August 25 2006. Eircom group plc had a market capitalisation of €2,275 million, Irish Stock Exchange, April 7 2006.

<sup>106</sup> Hutchison 3 G (UK) Limited v the Office of Communications [2005] CAT 39 at paragraph 66.



4.85 Thirdly, ComReg was of the view that there was no requirement for a regulator to have determined costs before imposing any *ex ante* regulation; given that such regulation frequently involved assessing costs, it would have seemed unreasonable to first have expected costs to be calculated in order to have the ability to regulate.<sup>107</sup>

*Views of Respondents*

4.86 One respondent welcomed the detailed analysis of CBP in ComReg Document 07/01 and agreed with ComReg's reservations concerning the failure of the predictions of the bargaining model as presented by B&H to align with the empirical evidence. They agreed that the requirement for end-to-end connectivity and the commercial incentives to provide a comprehensive service to customers, in combination with other regulatory obligations on Eircom such as non-discrimination, were and are sufficient to ensure that Eircom is effectively constrained from the exercise of CBP vis-à-vis H3GI.

4.87 They asserted that the failure of the main version of the bargaining model (i.e. under the saturated market assumption) to predict an outcome consistent with the empirical evidence (given that H3GI's rates were set at a rate substantially above those of other MNOs) and the failure of the other version (i.e. under the unsaturated market assumption) to make a prediction that was readily testable against the empirical evidence (since it would require the calculation of both the efficient charge level and the monopoly price) indicated that any future predictions made by this model about market outcomes and associated inferences concerning the level of CBP must be regarded with extreme caution.

4.88 The respondent outlined its view that ComReg should develop and analyse a bargaining model developed to reflect H3GI's current circumstances. They made the assertion that ComReg had confined itself to examining how modifying elements of the original B&H model to reflect current market conditions might affect H3GI's relative bargaining power and considered that this approach was unsatisfactory and lacked rigour. However, the respondent agreed with ComReg's analysis in relation to the future trajectory of H3GI's termination rates, noting that given H3GI was the sole supplier of call termination services to the relevant market, there would be no incentive for it to voluntarily lower its termination rates from the current levels in the context where the other MNOs were reducing their rates. Indeed, they argued that there were strong incentives in place for H3GI to maintain its termination rates at current levels, as the excess revenues resulting from the considerable asymmetry in MTRs between it and the other MNOs would only increase with the implementation of termination rate reductions by its competitors. This would increase H3GI's ability to subsidise call prices, handsets and other elements of its service offerings and thereby bolster H3GI's competitive position.

4.89 Another respondent expressed the view that the key issue was consistency in the application of the regulatory framework. They agreed that the perceived bargaining

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<sup>107</sup> However, mindful of the ECAP exhortation that a thorough and overall analysis of all relevant characteristics should be carried out, ComReg did conduct a benchmark exercise, for corroborative purposes only, that indicated that H3GI's costs were likely to be below the prices H3GI has achieved. ComReg did not carry out any further examination of the issue of H3GI's costs than this as it was not relied upon for the finding of SMP, i.e. it is not dispositive of the issue of SMP or indeed a determining factor necessary for a finding of SMP.

disadvantage H3GI alleged it had as a new entrant and the assessment of the B&H model were no longer as relevant as they may have been.

*ComReg's Position*

- 4.90 ComReg agrees with the respondent that, as shown by ComReg's detailed analysis, the B&H model did not serve to predict accurately the outcome of the negotiations between Eircom and H3GI in relation to H3GI's termination rates. However, it would refute the contention that its analysis merely sought to modify the B&H model to reflect current market circumstances. A full empirical analysis of the course of negotiations between Eircom and H3GI in advance of H3GI's commercial launch was carried out which demonstrated that Eircom was not in a position to exert sufficient CBP to constrain H3GI from charging termination rates above the competitive level (i.e. that Eircom did not act as a sufficient competitive constraint on H3GI).
- 4.91 Following this, the results predicted by the B&H model were compared to the empirical evidence of the actual negotiations and limitations in the B&H framework were underlined. Importantly, however, ComReg did not limit itself to discussing the limitations of the B&H framework but also considered a number of additional factors that may have played an important role in the bargaining dynamic between the parties, such as bargaining tools that are potentially available to buyers when engaging in negotiations with sellers (i.e. threat of possible refusal to purchase or delay, buyer as an important outlet for the seller); and H3GI as a new entrant and the role of the regulatory context (i.e. regulation applying to Eircom in the interconnection markets and dispute resolution). As such, ComReg engaged in a comprehensive examination of the relative bargaining positions of the parties and the key factors that may have influenced those respective positions.
- 4.92 ComReg considers that, while remaining cognisant that market analysis is carried out on a prospective basis, it is useful to assess the level of CBP exercised by Eircom during the course of its negotiations with H3GI prior to the latter's entry into the market as a starting point. Whenever any future negotiations over rates take place, it is probable that, as H3GI grows in size and has an established subscriber base in place, the degree of any CBP held by Eircom is likely to decrease. Hence, H3GI would be in an even stronger bargaining position than it was in 2004/2005. As such, on a forward-looking basis ComReg considers that the evidence suggests that H3GI would continue to be in a position to exert SMP, with insufficient CBP from Eircom, to exercise an appreciable constraint on this over the period of the review.

**Countervailing Buyer Power: Key Arguments Raised by Respondent**

- 4.93 Another respondent disagreed with ComReg's assessment of CBP. In particular, they asserted that ComReg had failed to meet the necessary standard of analysis and review required of it in respect of the following issues:
- (1) No clear economic basis for ComReg's conclusions;
  - (2) Use of access pricing literature;
  - (3) Apparent misunderstanding of key elements of B&H analysis;

- (4) BT Ireland's CBP in the negotiations with H3GI;
- (5) Chronology of negotiations between H3GI and Eircom;
- (6) Prospective analysis in relation to H3GI and Eircom;
- (7) Incorrect conclusions regarding Eircom's importance as a buyer;
- (8) Deficient analysis of the role of dispute resolution;
- (9) Failure to assess the effect of H3GI's new entrant status and delay; and
- (10) Inappropriateness of drawing any conclusions regarding H3GI's costs in the absence of a cost model.

4.94 Further detail in relation to each issue and ComReg's response is presented below.

- (1) No clear economic basis for ComReg's conclusions

*Views of Respondent*

4.95 The respondent noted that the ECAP's decision was not that ComReg had failed to consider bargaining theory in the form of the B&H analysis, but rather that ComReg had failed to sufficiently analyse all market factors relevant to the subject of CBP in coming to its view that H3GI had SMP. ComReg's consideration of the B&H analysis did not of itself meet the requirement to undertake a thorough analysis and as a result, ComReg offered no clear economic basis for the conclusions reached by it.

*ComReg's Position*

4.96 ComReg would refute the contention that it solely considered the B&H model in its analysis. Even a cursory examination of ComReg Document 07/01 reveals that ComReg carried out a thorough and robust analysis of all relevant elements pertaining to CBP. For example, additional issues that the ECAP argued that ComReg should have considered more thoroughly in its analysis of CBP were examined (cited paragraph 4.17 above) namely: i) the role of economic theory i.e. bargaining theory and access pricing model (cited paragraphs 4.22 to 4.34 above and Annex D); ii) factors such as whether being a new entrant made a difference to bargaining power, the effect of possible delay of entry to the market and the effect of market saturation on the bargaining dynamic (cited in paragraphs 4.60 to 4.61, 4.49 to 4.52 and 4.62 to 4.65 above respectively); and iii) how the interconnect obligation affected the bargaining dynamic and how the obligation might have had a different effect when a MNO was a new market entrant (cited paragraphs 4.60 to 4.61 above). In addition, ComReg considered bargaining tools that are potentially available to buyers when engaging in negotiations with sellers (i.e. threat of possible refusal to purchase or delay, buyer as an important outlet for the seller) (cited paragraphs 4.49 to 4.52 and 4.53 to 4.59 above) and the role of the regulatory context, i.e. regulation applying to Eircom in the interconnection markets and dispute resolution (cited paragraphs 4.69 to 4.79 above and 1D.25 to 1D.53 in Appendix D). Overall,

ComReg is of the view that it has fully considered the economic issues surrounding its views, and as such has a clear economic basis upon which to take its ultimate decision. Furthermore, ComReg's analysis has been exceptionally careful and ComReg is very confident that it does not disclose any errors that could render its analysis in any way invalid.

(2) Use of access pricing literature

*Views of Respondent*

4.97 The respondent maintained that ComReg wrongly asserted that H3GI was successful in achieving rates "*above the overall mobile market level*" and therefore erred in its assertion that this was "*to a degree*" consistent with more traditional economic literature. Given that the access literature was not instructive in relation to the forces that determined the level at which termination rates were set, it was difficult to understand how it provided an economic context for the analysis. They argued that ComReg's assertion that H3GI was achieving rates "*above the overall mobile market level*" lacked meaning, since according to ComReg's own analysis there were four separate mobile termination markets and that there was no "*market level*" since there were four operators each of which had different costs. In particular, they maintained that H3GI was likely to have different costs as it used a different technology i.e. 3G. The respondent further argued that at the time they were agreed, H3GI's rates were the same as Meteor's and had been proposed by Eircom. As such, the agreed MTRs were not the highest in the market at the time they were negotiated as implied by ComReg throughout the consultation. They asserted that this was an important distinction as it betrayed a fundamental error of fact and the associated conclusions made by ComReg.

4.98 Furthermore, according to the respondent the degree of consistency claimed by ComReg between the access pricing literature and the actual outcome on rates was not explained. The respondent cited an Oftel model<sup>108</sup> which they used to claim that the access pricing literature would predict termination prices roughly three to five times higher than those achieved by H3GI in Ireland.<sup>109</sup>

*ComReg's Position*

4.99 ComReg is aware that the rates agreed between H3GI/Eircom were the same as those prevailing for Meteor at the time. However, the statement that they were well above those prevailing among MNOs generally, remains valid (particularly in light of Meteor's more modest market share of the overall mobile sector<sup>110</sup>). It is not clear from the paper trail of the negotiations (as presented in detail in paragraphs 4.31-4.47 of ComReg Document 07/01 and Annex E) that Eircom insisted H3GI set its rates equivalent to those of Meteor's. Eircom in fact proposed (20 April 2005) that the parties should use the published rates already in existence for H3GI mobile

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<sup>108</sup> Oftel, Termination Charges in the Absence of Regulation, 17 April 2002.

<sup>109</sup> In the range of €0.33 per minute to €0.64 per minute in 2000/01 prices (or approximately €0.38per/min to €0.74 per/min in current prices).

<sup>110</sup> In Q2 2005 the market shares on a subscriber basis of Vodafone, O<sub>2</sub> and Meteor were 49.4%, 39.9% and 10.7% respectively. See ComReg Document 07/17, page 30.

termination traffic i.e. rates for traffic routed to H3GI's network via BT and those currently paid by Eircom to BT.<sup>111</sup>

- 4.100 Further, even taking into account the rates at the time, it is unclear why it would be in Eircom's interests to impose such rates or why it would indicate effective CBP on Eircom's behalf as Meteor's rates were the highest MTRs at the time by a significant amount.<sup>112</sup> In fact, Eircom had earlier (7 January 2005) proposed rates closer to those prevailing for Vodafone/O<sub>2</sub>; however this offer was successfully rejected by H3GI. In addition, Meteor had just been identified as an operator with SMP in relation to wholesale voice call termination on its network and as such, its MTRs would then have been expected to have been set above the efficient level absent regulation, as would those of the other 2G MNOs.<sup>113</sup> It is noteworthy that the MTRs for the three other MNOs, including Meteor, have declined since 1 January 2006, leaving H3GI with the highest rates by a significant differential (see Table 4.5 above).
- 4.101 In relation to the respondent's second point, the access pricing approach is one of the main theoretical frameworks adopted to study the issue of MTRs and as such it was included in ComReg's overview of the economic literature for completeness.<sup>114</sup> ComReg also included detailed analysis of other economic models such as the B&H analysis, which employs the economic theory of bargaining in order to assess the relative bargaining power of the negotiating parties in setting MTRs. As noted in the assessment of the access pricing literature, the standard analysis generally predicts a monopoly outcome, or in other words, it leads to the conclusion that the terminating operator has market power. As such, H3GI's ability to achieve high MTRs was seen to be in line with this predicted outcome. In relation to the figures quoted from the Oftel pricing model, there are numerous assumptions underlying this model (e.g. including price, quantity, incremental and fixed cost data supplied by Oftel)<sup>115</sup> as such, it is not clear that the findings of this model would be directly transferable to the Irish context.
- 4.102 With regard to the third point raised by the respondent, the use of the term "*above the overall mobile market level*" arises from ComReg's analysis of the termination rates achieved by the other MNOs as a reference point or benchmark against which to assess H3GI's ability to act independently of its wholesale customers.
- 4.103 As detailed earlier in section 3, ComReg considers that the relevant product market relates to the wholesale provision of mobile voice call termination services on

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<sup>111</sup> [Confidential].

<sup>112</sup> Prevailing MTRs were as follows (€ cent): Vodafone – 12.90 peak, 11.42 off-peak, 5.97 weekend; O<sub>2</sub> – 12.90 peak, 10.00 off-peak, 7.87 weekend; Meteor – 17.78 peak, 11.43 off-peak, 8.89 weekend. See ComReg (2006) Information Notice, Reductions in mobile termination charges by Vodafone, O<sub>2</sub> and Meteor will benefit consumers, January, Document 06/02; and Eircom switched transit and routing price list version 57 11-05-07, Table 101, page 15.

<sup>113</sup> ComReg had determined that these operators had both the ability and incentive to set MTRs above efficient levels to the detriment of end users. See ComReg (2005) Wholesale Voice Call Termination on Individual Mobile Networks, D11/05, Document 05/78, 13 October 2005, page 5.

<sup>114</sup> A point about the access pricing literature is that it generally models behaviour using economic "primitives" – for instance, the B&H model does not explicitly model consumer preferences, and also inherently assumes the total quantity of calls made is fixed. These factors may detract somewhat from the overall applicability of the model.

<sup>115</sup> See [http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm\\_2002/main\\_report.pdf](http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/main_report.pdf)

H3GI's individual mobile network. The SMP assessment therefore involves assessing whether or not that particular relevant market is effectively competitive. However, in assessing the extent to which H3GI enjoys a position of SMP in the market in question and, in particular, in determining whether Eircom exercises sufficient CBP vis-à-vis H3GI, it is useful to consider the MTRs achieved by the other MNOs given they would also have a similar set of wholesale customers as H3GI (most notably Eircom). It is therefore considered useful to compare H3GI's success relative to those other MNOs in their respective call termination markets in extracting MTRs from their wholesale customers and, in particular, from the incumbent FNO, Eircom. Indeed, it should be noted that the B&H paper also appears to consider it a useful exercise to invoke the termination rates paid by existing 2G operators as a reference point when assessing H3GI's likely bargaining power vis-à-vis the incumbent FNO in its bargaining model.

- 4.104 In that regard, and in the absence of useful benchmarks or comparators in the market in question, it is useful in this instance to posit a broader hypothetical or theoretical market cluster or group incorporating a number of individual markets exhibiting broadly similar features or characteristics on the supply side and, more importantly in this context, on the demand side. ComReg is by no means presuming that this market cluster comprises a perfectly homogeneous set of markets that are perfectly comparable. Rather, given the fact that the relevant MNOs in each of the markets comprising the broader market cluster or grouping face similar wholesale customers on the demand side, it is considered a useful exercise to evaluate H3GI's success relative to those MNOs in their negotiations over MTRs and, in particular, in their negotiations with the incumbent FNO, Eircom.
- 4.105 As noted above, the B&H model also appears to have considered there to be merit in considering the termination rates paid to existing 2G operators when carrying out its own analysis of H3GI's likely bargaining power. This would appear to lend support to ComReg's approach.

(3) Apparent misunderstanding of key elements of B&H analysis

*Views of Respondent*

- 4.106 The respondent claimed that ComReg appeared to be operating on an apparent misunderstanding of key elements of the B&H analysis. The respondent suggested that a careful reading of the B&H analysis revealed that H3GI achieving the highest 2G rate available in Ireland was perfectly consistent with the predictions of that analysis and provided no *a priori* evidence for the existence of SMP. It was therefore asserted by the respondent that ComReg's rejection of some of the central themes of the paper led to erroneous conclusions, which formed a significant part of the justification for ComReg's preliminary view that H3GI had SMP.
- 4.107 The respondent maintained that B&H's central predictions for the outcome of bargaining between H3GI and Eircom was in the context of a saturated market scenario where there was the potential for direct regulatory intervention (and parties expected the regulator to potentially impose a cost-based rate in the event of a dispute), in which case, H3GI would receive a higher than average termination rate

but one which might be below its own cost of termination.<sup>116</sup> Hence the empirical evidence is claimed to be consistent with the predictions of the B&H analysis. A submission by Dr Harbord on behalf of the respondent also noted that ComReg's contention that H3GI was able to exert SMP in its negotiations with Eircom, appeared to rest heavily on the claim that the B&H analysis predicted that H3GI would achieve rates lower than the average of the other operators in the Irish market.

#### *ComReg's Position*

- 4.108 In relation to the saturated market scenario, it is of note that this predicted outcome (i.e. where H3GI would receive a higher than average termination rate, but one which might be below its own cost of termination) only applies in the context of dispute resolution where it is assumed that the regulator would impose a solution equal to the entrant's termination costs with "*high probability*". As noted in paragraphs 4.69 to 4.79 above on the issue of dispute resolution, it is not considered possible to predict with any degree of certainty what the probability of any particular outcome was, or what the parties would have perceived it to be. Furthermore, engaging in such an assessment would be highly speculative and extremely uncertain.
- 4.109 It is further important to note that in its market analysis, ComReg did not base its finding of SMP on a mere comparison of the consistency of the B&H predictions with the empirical evidence. On the contrary, ComReg engaged in a detailed analysis of the sufficiency of CBP, including a detailed assessment of the actual negotiations and bargaining dynamic that took place and a rigorous examination of a range of factors potentially influencing the relative bargaining positions of the respective parties.

#### *Views of Respondent*

- 4.110 Dr Harbord noted further that, even in the absence of any prospect of regulatory intervention, the saturated and non-saturated market scenarios did not differ significantly, as observed by Cave and Doyle<sup>117</sup> in their commentary on the B&H analysis. It is claimed that ComReg's repeated assertions to the contrary rest at least in part on a misunderstanding of the reference to a "*monopoly*" termination rate in B&H. It is argued that the term "*monopoly*" termination as used by B&H<sup>118</sup> does not correspond to the "*unconstrained monopoly price*" referred to in the access pricing literature. In the saturated market example, it is stated that B&H referred to the

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<sup>116</sup> It should be noted here that the respondent and the supporting Harbord submission placed greater emphasis on this scenario as the central predicted outcome than was the case in the original paper (i.e. "*as may have occurred*"). (Binmore, K. and Harbord, D. (2005) page 469). Further, Harbord maintained that H3GI achieved MTRs lower than its own termination costs; however, no evidence is provided for this contention.

<sup>117</sup> ComReg commissioned Cave & Doyle to produce a commentary on the B&H analysis in respect of the ECAP decision.

<sup>118</sup> Binmore, K. and Harbord, D. (2005) pages 463, 465.

average price paid to other operators,  $\bar{a}T$ , as the “*monopoly*” or maximum termination rate for the reasons given in footnote 28 of the paper.<sup>119</sup>

*ComReg's Position*

- 4.111 In response, while B&H do use the term “monopoly” rate in relation to the average price paid to other operators, ComReg was not referring to this rate as the monopoly rate in its own analysis. ComReg is of the view that it is somewhat strange and misleading to refer to the average of other operator's termination rates as the monopoly rate, particularly when those operators are in fact subject to price regulation. The term monopoly rate, as used by ComReg, should more properly be interpreted as meaning the “unconstrained monopoly price” – the termination rate that would be achieved by a monopoly supplier of termination services in the access pricing literature. Indeed, B&H also (somewhat confusingly) use the term monopoly rate to refer to  $P - C_o$ , and it is to this, more appropriate terminology, that ComReg refers to when it mentions the monopoly rate.
- 4.112 B&H refer to  $P - C_o$  in their discussion of the non-saturated market example. According to B&H,  $P - C_o$  denotes the difference between the incumbent's regulated F2M retail price and its origination cost, and in the monopoly outcome, the supplier of termination services will appropriate all the surplus, thus leading to a termination rate equal to  $P - C_o$ . The non-saturated case predicts an outcome halfway between this level and the H3GI's costs. Dr Harbord presents no evidence to demonstrate that this rate as defined by B&H is inconsistent with a finding of SMP. That  $P - C_o$  may pose an upper bound to the price H3GI can achieve in the non-saturated market scenario does not imply that the suggestion that the predicted termination rate will be half-way between  $P - C_o$  and H3GI's costs is inconsistent with a finding of SMP. Indeed, it seems to ComReg that this would be *consistent* with H3GI acting to an appreciable extent independently of its customers.
- 4.113 Harbord's response claimed further that in the presence of dispute resolution and where  $P$  is chosen by the regulator, (following Cave and Doyle<sup>120</sup>) it makes sense to set  $P - C_o = \bar{a}T$  “*so the saturated market case and the nonsaturated market case yield exactly the same prediction*”. However, as noted above, it is entirely speculative and indeed, not at all certain what outcome any dispute resolution procedure might have yielded. Furthermore, in the absence of any precedent on the matter and the fact that ComReg declined to intervene on this occasion, it is not considered possible to predict with any degree of certainty *ex post* what outcome the parties might have anticipated or perceived that process to yield.

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<sup>119</sup> “Note that this means that even if the entrant could act as a classical monopolist and make a take-it-or-leave-it offer to the incumbent FNO, it could obtain at most  $\bar{a}T$  in this bargaining situation” (Ibid, page 463). In this scenario, absent dispute resolution, it is claimed that “the entrant's termination rate will never exceed the average 2G termination rate, because agreeing to such a rate will always result in a net loss for the incumbent FNO” (Ibid, pages 463, 464). When dispute resolution is factored in, the likely agreements (depending on the likely outcome of dispute resolution) are considered to be either a rate that is close to or less than  $\bar{a}T$  or a rate between  $\bar{a}T$  and  $cT$ . Hence in the latter case, Harbord argues that H3GI achieving a higher than average termination rate or the highest rates available in the Irish market is perfectly consistent with the predictions of the analysis.

<sup>120</sup> Ibid



- 4.114 ComReg has considered in detail the B&H model and remains of the view that its summation of this approach is valid. In the absence of dispute resolution, ComReg remains of the view that the predicted outcome in the saturated market scenario does not correspond to the empirical evidence. In the context of the unsaturated market scenario, Harbord does not demonstrate how the predicted outcome would be inconsistent with a finding of SMP. In the presence of dispute resolution, each of the scenarios presented would appear to be subject to extremely strong in-built assumptions regarding the likely outcome and the parties' perception of that outcome. In fact, it may be surmised that no SMP outcome is possible given the relatively restricted regulatory options that Harbord considers in the context of dispute resolution, suggesting that such an economic framework assumes from the outset that no SMP can be exercised by the MNO. This would clearly represent an inherently biased approach.
- 4.115 The B&H model brought bargaining theory to the fore in relation to assessing market power in the market for wholesale voice call termination on individual operator's mobile networks. ComReg took this insight into account in evaluating the negotiations between Eircom and H3GI in 2004/2005 and on a prospective basis. However, ComReg pointed to an inherent weakness underlying the model in terms of the strong in-built assumptions in relation to the outcome of the dispute resolution process.<sup>121</sup> Dispute resolution was discussed in detail in ComReg Document 07/01 (see paragraphs 4.69 to 4.79 above and 1D.25 to 1D.53 in Appendix D) in relation to the fact that it is both hypothetical and case specific and as such, the regulator's decision cannot be known in advance. It is of note that no reference is made to these arguments in the respondent's submission. This was a key weakness identified in relation to the B&H analysis and as such the respondent's failure to address it must be seen as significant.
- 4.116 Furthermore, ComReg would refute the contention that the finding that H3GI was able to exert SMP in its negotiations with Eircom rested heavily on the claim that the predicted outcomes of the B&H analysis did not fit the empirical evidence, as claimed by the respondent. A full empirical analysis of the course of negotiations and the actual bargaining dynamic between Eircom and H3GI in advance of H3GI's commercial launch was undertaken, which indicated that Eircom was not in a position to exert sufficient CBP to constrain H3GI to an appreciable extent. ComReg also considered a number of additional factors relevant to assessing the relative bargaining strength of the parties in question as outlined above. On a forward-looking basis, it was considered that H3GI's market power would be further reinforced, given the strong commercial incentives for Eircom to continue to ensure end-to end connectivity for its customers. As such, it would appear Eircom will be even more constrained in any next round of negotiations where H3GI has a pre-existing and growing subscriber base in place.

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<sup>121</sup> For example a central section cited by the respondent notes: "Two natural candidates for  $aR$  are  $aR = \bar{a}T$  or  $aR = cT$ . If it is viewed as highly likely, for instance, that the regulatory would quickly intervene to impose a solution  $aR = \bar{a}T$ , then the parties will agree on a termination rate close to, but less than,  $\bar{a}T$  immediately. If, on the other hand,  $cT > \bar{a}T$ , as appears likely, and the regulator would impose  $aR = cT$  with high probability, then the parties will agree a rate between  $\bar{a}T$  and  $cT$  immediately, as may have occurred in bargaining between H3G and BT in the United Kingdom, and between H3G and Eircom in Ireland" (Ibid, page 469).

(4) BT Ireland's CBP in the negotiations with H3GI

*Views of Respondent*

4.117 The respondent stated that ComReg had placed considerable reliance on the negotiations between BT and H3GI for the carriage of test traffic prior to commercial launch. They expressed the view that as neither party would have had any concern about the level of MTRs in relation to limited test traffic passing between their networks ComReg's analysis was essentially meaningless. Both parties knew that volumes would be trivial until H3GI's full commercial launch which would only take place once Eircom had imposed its own terms and price on H3GI, at which point H3GI would have no other option but to offer the same terms and price to BT. BT's CBP in the negotiations on test traffic for H3GI had no relevance to the question of H3GI's bargaining power and whether or not it had SMP.

4.118 Furthermore, the respondent noted that BT had entered into a major agreement with H3GI to roll out the latter's 3G network. They maintained that any bargaining power which H3GI would have had in respect of BT would have arisen not because of its position in relation to mobile termination on its network but as a result of the larger agreement it had with BT in relation to network rollout; as such, they concluded that it was unlikely that BT would seek to jeopardise the performance of that contract. They asserted in particular that given the rationale for BT and H3GI's behaviour it was not possible for the arrangements between H3GI/BT to "*assist in determining the actual bargaining dynamic between these operators and what the outcome of any future negotiation between the parties might be more likely to approximate to*" (paragraph 4.29, ComReg Document 07/01).

4.119 In addition, the respondent argued that BT was aware of Eircom's bargaining strength and was likely to be confident in Eircom's ability to use that power in setting a rate which would in turn become the standard rate offered to BT and the rest of industry.

*ComReg's Position*

4.120 ComReg provided a full outline of the course of negotiations between BT and H3GI (paragraphs 4.30-4.47 of ComReg Document 07/01 and Annex E). **[Confidential]**. The issues surrounding bi-lateral monopoly arguments were also considered by ComReg in its analysis (see paragraphs 4.54 to 4.58 above). ComReg remains of the view that that there may have been some options open to H3GI to engender competition among buyers and irrespective of this, it does not appear to ComReg that the importance of Eircom as a buyer prevented H3GI from extracting high termination rates from its negotiation with Eircom.

4.121 The respondent's arguments failed to provide a complete analysis of H3GI's bargaining strength in relation to negotiations with BT. It is not self-evident that one can attribute H3GI's bargaining power in relation to negotiations on MTRs solely to the network rollout agreement or the additional factors outlined by the respondent. [In fact BT confirmed to ComReg that in general it accepted any rate set by MNOs and did not have a history of disputing such rates. As such, its negotiating stance did not appear to be specific to H3GI.] By definition, a number of factors will be

involved in determining the relative bargaining strength between parties. The respondent, however, appears to argue that there were a number of unique intervening variables which served to weaken BT's CBP in this instance. The fact remains that BT was not in a position to exercise CBP to constrain H3GI's CBP in the mobile termination market at this time and the respondent fails to provide evidence that there would be a different outcome prospectively i.e. within the timeframe of the review.

- 4.122 Nonetheless, the respondent's statement that '*In reality it is unlikely that BT would seek to jeopardise the performance of that contract [i.e. network rollout]*' has a significant implication. If one accepts the respondent's logic in linking the network rollout contract with BT to negotiations over termination rates, this statement undermines any argument that BT had any or sufficient CBP and seems tantamount to an admission by the respondent that BT had insufficient CBP. This is because if BT did not wish to jeopardise the performance of the contract (as claimed by the respondent) that fact clearly removed any incentive BT would have had to exercise any CBP that it might have had in negotiations with H3GI. Clearly, that is the same as saying that BT had insufficient CBP (or whatever CBP it had, it was not prepared to exercise it against H3GI).
- 4.123 The respondent's comment that BT would have been confident in Eircom's bargaining strength is noteworthy since the MTR agreed between H3GI and Eircom was the published rates already in existence for traffic routed to H3GI's network via BT. Arising from the argumentation presented above, in relation to the absence of sufficient CBP exercised by BT, this would in turn suggest that Eircom similarly did not have sufficient CBP to constrain H3GI from enjoying a position of SMP in this market.

- (5) Chronology of negotiations between H3GI and Eircom;

*Views of Respondent*

- 4.124 The respondent asserted that ComReg's analysis of the chronology of negotiations between H3GI and Eircom was also flawed and failed to have regard to a number of key issues including:
- (a) The importance of H3GI reaching an agreement with Eircom;
  - (b) The pressure placed on H3GI by Eircom with regard to interconnection and protracted negotiations;
  - (c) The extent of Eircom's regulatory obligation to interconnect;
  - (d) Eircom's refusal to accept any of the rates proposed by H3GI and its insistence on a rate equivalent to a 2G operator;
  - (e) ComReg's refusal to accept H3GI's dispute resolution request; and
  - (f) Eircom's plans to re-enter the mobile market.

4.125 The respondent maintained that there appeared to be an absence of cogent economic analysis to demonstrate the extent of Eircom's CBP and then to determine its insufficiency. ComReg, it suggested, appeared to take the view that Eircom's CBP must be weak because H3GI received MTRs "*above the overall level in the market*" which (in addition to being incorrect in respect of the time at which the rates were agreed) ignored H3GI's specific circumstances as a 3G-only new entrant. It was submitted that the conclusion that Eircom had insufficient CBP as regards H3GI should be based on stronger economically justified grounds than those presented in the consultation document.

*ComReg's Position*

4.126 ComReg notes that a full outline of the course of negotiations between Eircom and H3GI was provided (see paragraphs 4.31-4.47 of ComReg Document 07/01 and Annex E). In relation to point a) in paragraph 4.124 above the respondent asserted that no MNO (or FNO) would be able to credibly launch in the absence of an agreement with Eircom. Without a direct agreement, H3GI would have been faced with an inability to receive calls from Eircom and any other network operator in Ireland that did not have a direct link with H3GI/BT which would have severely undermined H3GI's credibility as a MNO.

4.127 ComReg acknowledged that interconnection with Eircom was important, as such it recognised the importance of H3GI receiving traffic from Eircom. However, it was outlined that alternatives were available to direct interconnection with the fixed incumbent for H3GI to credibly launch, such as the option to interconnect (directly/indirectly) with multiple other FNOs and MNOs (see paragraphs 4.56 to 4.57 above). This possibility may have added strength to its relative bargaining position in the negotiations. For example, at the time of commercial launch H3GI had concluded a direct interconnection agreement with BT and continued to use such an agreement with BT to deliver terminating traffic including Eircom's traffic to the H3GI network. Eircom's incentives to interconnect with H3GI both from a regulatory and commercial perspective were outlined; in particular, on a forward looking basis, given that H3GI has an established and growing subscriber base, ComReg does not consider that Eircom would position itself to offer calling services to consumers while not enabling them to call specific MNOs.

4.128 If Eircom were to refuse to purchase termination from H3GI, or prospectively cease doing so, this may have the effect of stimulating substitution via carrier selection (i.e. CA/CS, CPS).<sup>122</sup> A refusal by Eircom to offer its customers certain retail calls services (in this instance calls to H3GI customers) which Eircom no longer wants to purchase termination services from, could lead Eircom's retail customers to switch to these CPS operators for making such calls. Eircom's retail customers could use such operators to call H3GI customers provided that these operators were directly or indirectly interconnected with H3GI. Further, Eircom's failure to facilitate such calls by its customers would likely result in customer

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<sup>122</sup> CA refers to Carrier Access, CS to Carrier Select and CPS to Carrier Pre Select.

dissatisfaction and reputation damage. Such substitution could in turn serve to diminish Eircom's market share in the fixed calls market.<sup>123</sup>

- 4.129 Furthermore, it is of note that Eircom does not view the discontinuation of offering call services to H3GI as a viable prospect. Eircom has indicated that, if for any reason they decided not to purchase termination directly from H3GI, it would be faced with transiting calls as it is obliged to make available to its customers the facility to call other operators. They note that transit would likely increase its cost of sale for such services and is not a realistically attractive option for Eircom. Furthermore, Eircom's obligations to provide national transit to other OAOs would not allow Eircom to refuse to purchase termination services from H3GI. This strongly suggests the commercial incentives exist for Eircom to reach an agreement with H3GI and to maintain it prospectively.
- 4.130 In relation to point b) in paragraph 4.124 above, the respondent asserted that Eircom's insistence on concluding an interconnection agreement with H3GI three months prior to their commercial launch "*forced H3GI to accept lower MTRs than it required*". In fact, Eircom's keenness to directly interconnect with H3GI may be seen to support ComReg's view that Eircom did not have sufficient CBP to counterbalance H3GI's market power and that providing its customers with an end-to-end service was important to it. Eircom's timeframe appears reasonable from a commercial point of view in that the agreement would need to have been finalised an adequate period of time in advance of H3GI's launch. As such, it appears that Eircom's behaviour was in line with the exercise of normal commercial and legal prudence, which would be expected of a reasonably prudent operator. Significantly, **[Confidential]**. This would seem to suggest a keenness to reach agreement and that it was unlikely to use the threat of refusal to deal as a means to bolster its bargaining position or delaying H3GI's launch, i.e. all operators need to interconnect to facilitate off-net calling and provide a full service, not just the new entrant. Moreover, the phrase "lower MTRs than it required" is a rather vague formulation, and does not appear to usefully demonstrate how H3GI does not have SMP. It may not have obtained the initial rate it wanted, but that does not mean that it cannot act, to an appreciable extent, independently, as was demonstrated by its ability to obtain rates in excess of other operators.
- 4.131 Furthermore, the respondent noted that although Eircom was prepared to support testing of H3GI's network "*it explicitly reserved the right to require a full interconnect agreement (with terms controlling price imposed on H3GI) before it would allow H3GI to launch*". The latter representation of events is inaccurate as demonstrated by the evidence of negotiations outlined between H3GI and Eircom. The fact that they reached agreement on the rates as per the existing transit rates in place between BT and Eircom, suggests that Eircom did not exercise sufficient CBP to act as a competitive constraint on H3GI. The potential alternatives available to direct interconnection with the incumbent also suggests that H3GI was not entirely dependent on Eircom to launch its service. In addition, negotiations between H3GI and Eircom lasted for six months (i.e. 25 October 2004 – 27 April 2005) which does

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<sup>123</sup> Similar reasoning has been applied by the European Commission as a relevant factor in assessing the CBP of DTAG. See Commission Decision pursuant to Article 7(4) of Directive 2002/21/EC, Case DE/2005/0144: Call termination on individual public telephone networks provided at a fixed location, Brussels, 17.05.2002 C92005)1442 final, paragraphs 27-28.

not appear overly protracted in relation to commercial negotiations. **[Confidential]**.

- 4.132 In relation to point c) in paragraph 4.124 above, the respondent submitted that Eircom's obligations to interconnect under Regulation 5 of the Access Regulations would not have been sufficient to force Eircom to transit through BT. This was supported by the fact that BT was not paid transit by Eircom for H3GI terminating traffic. They concluded that it was for this reason that Eircom insisted on any transit with BT being on an interim basis only and requested direct interconnection with H3GI.
- 4.133 With regard to this contention, ComReg considers that the better view with regard to its legal powers is that they could not be legally compelled to interconnect with another operator under Regulation 5 of the Access Regulations. Regulation 5 sets out a statutory right to negotiate access and interconnection and a corresponding duty to do so. It would also appear that Regulation 5 of the Access Regulations would not be sufficient to force Eircom to transit through another operator e.g. BT.<sup>124</sup> Further, in this context, there is also a need to consider Eircom's current SMP interconnection obligations which derive from the completion of the market analysis process under the Access Regulations.<sup>125</sup>
- 4.134 Notwithstanding what Eircom may be obliged to do from a legal perspective, it is of note that the respondent ignores the clear incentives for Eircom, from a commercial perspective, not to refuse to purchase termination from H3GI, which were considered in detail in ComReg's analysis. Arising from this, it is evident that it would not be in Eircom's interests to refuse to purchase transit from third parties for the purpose of terminating traffic. Further, the rationale as to why the respondent considers that this led to Eircom requesting direct interconnection with H3GI is unclear.
- 4.135 Regarding point d) in paragraph 4.124 above, it was noted in the outline of the course of negotiations that Eircom rejected H3GI's proposals on a number of occasions (i.e. 16 November 2004, 20 December 2004 and 20 April 2005). It was further stated that H3GI also rejected Eircom's proposals (i.e. 7 January 2005). The fact that Eircom did not accept H3GI's initial proposals does not lead to the automatic conclusion that H3GI did not have SMP. Indeed, Eircom finally agreed to a rate considerably in excess of its original proposal and at a level that was already in existence for the transfer of terminating traffic to H3GI via BT. (The respondent's claim that Eircom's insisted on a rate equivalent to a 2G operator is considered above.)
- 4.136 In relation to point e) in paragraph 4.124 above, the respondent argued that ComReg downplayed the fact that H3GI sought regulatory intervention through dispute resolution. They maintained that ComReg avoided any consideration of the role it played in the negotiations between H3GI and Eircom and the effect that its

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<sup>124</sup> ComReg also considers that Regulation 3(1) and 3(2) of the Universal Service Regulations might be interpreted as placing an obligation on Eircom to interconnect, even if through a transit operator.

<sup>125</sup> In relation to interconnection, in October 2007, ComReg published a Decision Notice regarding the fixed wholesale call origination and transit markets (ComReg Document 07/80); and in December 2007, ComReg published a Decision Notice regarding the fixed wholesale call termination market (ComReg Document 07/109). In each of the three markets, Eircom was designated with SMP.

unreasonable refusal to intervene had on the outcome. Furthermore, they considered it remarkable that ComReg would take the view that an operator with SMP would seek dispute resolution in such circumstances, given that ordinarily a request for dispute resolution would tend to demonstrate the absence of SMP.

- 4.137 It is noteworthy that it was stated in ComReg Document 07/01 that in March 2005 ComReg notified H3GI and Eircom that it would not investigate the dispute at that time as it provided a potential conflict with the SMP appeal that was pending before the ECAP at that time (paragraph 4.34 of ComReg Document 07/01 and 1E.12 below). It was considered that H3GI appeared to leverage the possibility that ComReg would favour it in any determination in the proposal it made to Eircom (paragraphs 4.35 and 4.46 of ComReg Document 07/01). It was noted that the interconnect negotiations were concluded in the absence of any certainty as to what the precise outcome of a regulatory intervention would be. The role of dispute resolution generally was also discussed in detail. It is a significant omission on this respondent's part that it does not respond to these detailed arguments, critically, the uncertainty surrounding the outcome *ex ante* and the speculative nature of predictions concerning same which undermine the predictive value of the B&H framework. Furthermore, it appears an overly simplistic approach to view dispute resolution as a mechanism pursued solely by non-SMP operators. Such a view overlooks the strategic role appealing to the regulator may play. If it was the case that an appeal for dispute resolution was likely to indicate a lack of SMP, then there would be a clear incentive for any operator to use the dispute resolution process strategically to "prove" that it did not have SMP, regardless of whether in fact it did have SMP. Indeed, it is stated in the B&H paper that:

*"It would be easy to draw misleading conclusions about the underlying distribution of market power in an industry subject to regulation by observing the actions taken by economic agents who are aware that their actions are likely to influence the beliefs or behaviour of the regulatory authority. [fn 9] In some cases, the actions of the economic agents will be motivated almost entirely by a perceived need to influence the regulator, with the consequence that their behaviour conveys little or no information about the market fundamentals of the industry".<sup>126</sup>*

- 4.138 In relation to point f) in paragraph 4.124 above, it is of note that Eircom's successful bid for Meteor was in July 2005 (its acquisition was only cleared by the Competition Authority in November 2005) and as such, was after the negotiations between H3GI/Eircom had been concluded in May 2005. Eircom has further outlined to ComReg that it does not consider that its acquisition of Meteor had any impact on its negotiations or its attempts to negotiate with H3GI in respect of the rates to be applied to H3GI's MTRs. It is not clear how this bid would have had any significant bearing on Eircom's negotiations with H3GI. In addition, it is not clear how securing rates equal to the highest of the 2G operators is evidence of sufficient CBP for the reasons highlighted above. In addition, if rates were reciprocal then one would expect H3GI's rates to have declined in line with Meteor's. This has not happened to date, despite a continued fall in Meteor's rates, nor does there appear to be any sign of it happening going forward. In terms of a prospective analysis, ComReg considers that Eircom's acquisition of Meteor would appear unlikely to

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<sup>126</sup> Binmore, K. and Harbord, D. (2005) page 453.

have a significant impact on Eircom having insufficient CBP to constrain H3GI's SMP arising from the detailed analysis presented above.

(6) Prospective analysis in relation to H3GI and Eircom;

*Views of Respondent*

- 4.139 The respondent noted that ComReg had also drawn certain inferences and conclusions arising from the fact that neither H3GI nor Eircom sought to open negotiations on price after the interconnection agreement was signed. It was asserted that the evidence examined was not capable of substantiating the conclusions drawn. Furthermore, the analysis, given that it was prospective, was not sufficiently rigorous and thorough so that there was a failure to draw a clear link between existing circumstances and likely future behaviour.
- 4.140 The respondent posed an alternative reason to that suggested by ComReg as to why Eircom had not sought to re-negotiate H3GI's MTRs, namely that it did not consider that the rates were unreasonable having regard to H3GI's costs as a new entrant 3G network operator. The opportunity for re-negotiation was limited since Clause 22.4 of the Interconnection Agreement provided for an annual review commencing on 1 October in any year. However, they indicated that the issue of H3GI's MTRs was raised by Eircom in October 2006 when it signalled that if there were to be a MTR rate change that it would lead to a reduction in H3GI's rates, rather than an increase. In response to this, H3GI made it clear that it would be "inappropriate" for it to reduce its MTRs at that time.
- 4.141 The respondent indicated that H3GI requesting a price review would only make sense if they wished to increase their current MTRs. They maintained that the October 2006 exchange did not seem to support ComReg's view that in relation to any future re-negotiation of rates, H3GI would likely be in an even stronger bargaining position based on the correspondence referred to, the fact that H3GI would need to negotiate on the basis of rates that were lower than any of the rates proposed during its negotiations with Eircom and which were not representative of H3GI's costs.
- 4.142 A number of comments made by the respondent are of interest in relation to ComReg's prospective analysis. They maintained that ComReg had not given due regard to the importance of the level at which an operator set its initial MTRs since this level was crucial as it is the rate from which all future negotiation had to take place. As such, they argued that the bargaining power H3GI had during its negotiations with Eircom in 2005 was likely to have and continued to have a significant bearing on its ability to re-negotiate going forward.
- 4.143 It is significant that Harbord's submission, on behalf of the respondent, pointed to two scenarios for re-negotiation between H3GI and Eircom when considering Eircom's CBP on a forward-looking basis:
- Negotiations that would occur if either party terminated the existing interconnect agreement and bargained *ab initio*; and
  - Renegotiation within the existing contractual agreement.



- 4.144 He asserted that in either case the predictions of the bargaining analysis would not differ materially since in either case, the parties' expectations would focus on the rates which they predicted that the regulator would impose when called upon to arbitrate a dispute.
- 4.145 ComReg is mindful of the need to analyse the market on a forward-looking, prospective basis. In this regard, historic data is used as a guide to future developments in the market. This methodology is in keeping with the SMP Guidelines which note that, "*NRAs should take past data into account in their analysis when such data are relevant to the developments in that market in the foreseeable future.*"<sup>127</sup> In addition, forward-looking analysis was carried out taking account of the likely bargaining dynamic on a prospective basis.
- 4.146 ComReg considers that it has taken due regard of the level at which the initial MTRs were set, as it carried out a detailed analysis of the course of the initial negotiations in carrying out its market analysis. Indeed, the respondent's comments in relation to the significance of the level of bargaining power at the time of the initial negotiations for future renegotiations appears helpful in relation to ComReg's prospective analysis. Furthermore, the Harbord paper, submitted on behalf of the respondent, was in fact supportive of ComReg's view regarding the diminished relevance of H3GI's status as a new entrant and the issue of delay on a forward-looking basis. The reduced importance of such factors serves to support the view that H3GI would be in an even stronger bargaining position vis-à-vis Eircom on a prospective basis.
- 4.147 ComReg notes that the respondent provided no evidence for its contention that Eircom considered H3GI's rates reasonable and in fact, this argument appears to be directly contradicted by their statement that Eircom had indicated that if there was to be an MTR rate change it fully expected that it would lead to a rate reduction. Furthermore, it is significant that no cost data was provided by the respondent to support its argument that H3GI's MTRs were representative of its costs even though it has always been open to it to do so. It is also not clear why Eircom would consider H3GI's costs as a relevant factor if it genuinely felt it could put pressure on H3GI to decrease its rates. Surely, Eircom would not be interested in subsidising H3GI's business or its retail customers particularly as it competes with it at the retail level via Meteor? ComReg considers that the documentation relating to the October 2006 exchange of correspondence between H3GI and Eircom does not serve to support the respondent's view that Eircom has sufficient CBP to constrain H3GI from exercising SMP in this market. **[Confidential]**.
- 4.148 On a forward-looking basis, Harbord continues to depend on strong assumptions regarding the outcome of the dispute resolution process as a central tenet of predictions regarding the outcome of the MTR negotiation process. The basis for these assumptions is not explained, nor why they may be considered credible. As such, the respondent has not attempted to contradict the critical weaknesses identified by ComReg with regard to the B&H approach despite ample opportunity to do so. Harbord assumes the future outcome of negotiations will depend on how parties anticipate the regulator would act. However, this is highly uncertain and thus it is difficult to see how one could draw useful conclusions for the future from

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<sup>127</sup> SMP Guidelines. See paragraph 20.

engaging in the speculative assessment that the respondent urges ComReg to undertake.

- (7) Incorrect conclusions regarding Eircom's importance as a buyer;

*Views of Respondent*

4.149 The respondent underlined their view that it was and remains necessary for H3GI to have an interconnection agreement with Eircom and that the market was one in which considerations associated with bilateral monopoly were relevant. ComReg's claim that "*there may have been some options open to H3GI to engender competition among buyers*" was claimed to be unsubstantiated and as a result, ComReg had drawn incorrect conclusions regarding Eircom's importance as a buyer, wrongly discounting the issues associated with bilateral monopoly.

*ComReg's Position*

4.150 In relation to this point, ComReg recognised the importance of H3GI receiving traffic from Eircom, however it was outlined that alternatives were available to direct interconnection with the fixed dominant incumbent for H3GI to credibly launch, such as the option to interconnect (directly/indirectly) with multiple other FNOs and MNOs. ComReg maintains its view that viable alternatives to direct interconnection with Eircom were available to H3GI. For example, at the time of commercial launch, H3GI had concluded a direct interconnection agreement with BT and continued to use such an agreement with BT to deliver terminating traffic including Eircom's traffic to the H3GI network. As such, ComReg is of the view that there is sufficient evidence to support the view that there were options open to H3GI to engender competition among buyers to at least launch its service initially, which would subsequently have put increasing pressure on Eircom to interconnect. This threat cannot be discounted, particularly as Eircom also needed to be in a position to offer an end-to-end service to compete with its rivals. Furthermore, the respondent in its submission fails to take account of the commercial incentives on Eircom's part to interconnect which would appear to be supported by the empirical evidence which indicated a keenness on Eircom's part to negotiate interconnection in advance of H3GI's launch.<sup>128</sup> Accordingly, while ComReg recognises the importance of Eircom, it considers that the basic B&H framework of strict bilateral monopoly somewhat overstates the case, as H3GI is likely to have some limited increase in bargaining power as a result of using other operators to interconnect.

- (8) Deficient analysis of the role of dispute resolution;

4.151 The respondent argued that ComReg's powers in respect of dispute resolution could in certain circumstances include the power to set cost orientated rates. As such, ComReg's analysis of the role of dispute resolution was deficient to the extent that it was prefaced on erroneous conclusions regarding its legal powers. Furthermore, the respondent argued that ComReg failed to sufficiently analyse the role dispute resolution had in the bargaining process and in particular, the effect it

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<sup>128</sup> The B&H framework does not explicitly model consumer preferences, thus it cannot analyse how consumers would react to H3GI if it did not have a termination agreement with Eircom.

would have had during the course of H3GI's negotiations with Eircom during 2004/05.

- 4.152 ComReg would point out at the outset that the potential role of dispute resolution and ComReg's powers to impose SMP obligations on non-SMP operators was discussed at length in ComReg Document 07/01 (see also paragraphs 4.69 to 4.79 above and 1D.25 to 1D.53 in Appendix D). Critically however, H3GI does not respond to most of the arguments presented. In ComReg's view, the analysis of its legal powers, set out in ComReg Document 07/01 was sound and remains so. The respondent has however raised a number of further issues and criticisms. These issues are analysed below.
- 4.153 The respondent noted that it *assumed* that ComReg would have intervened during the course of its negotiations in 2004/5 and that it might have imposed a cost orientation obligation on it, in the event of its powers being invoked and exercised. The respondent's assumption that (a) ComReg would have intervened and/or that (b) it might have imposed a cost orientation obligation does not appear to be a realistic interpretation of ComReg's powers, particularly given the discretionary nature of those powers.<sup>129</sup> It should be pointed out that in ComReg Document 07/01, ComReg did not rule out the possibility that SMP obligations could be imposed on a non-SMP operator as the respondent attempts to suggest. In fact, it did note the possibility in ComReg Document 07/01<sup>130</sup> and explained why this was however unlikely (paragraphs 4.72-4.76). In footnote 94, ComReg Document 07/01, ComReg also clearly noted as follows:

*“ComReg notes the provisions of Article 5 (1) of the Access Directive, which enable obligations to be imposed on undertakings that control access to end-users, to the extent that it is necessary to ensure end-to-end connectivity. The obligations include, in justified cases the obligation to interconnect their networks, where this is not already the case. Given that these provisions are exceptional, they should be narrowly construed. The criteria for their application would also need to be first present. Even if it were (a) permissible and (b) appropriate to impose price related obligations pursuant to this provision and (c) given the discretionary nature of the provision, Article 5 (1) would and could not oblige ComReg to require an operator to offer cost oriented MTRs.”*

- 4.154 The respondent failed to comment on ComReg's explicit reference to its powers to impose SMP obligations on non-SMP operators at footnote 94 in ComReg Document 07/01. ComReg acknowledges that in theory, ComReg could impose a cost orientation obligation on a non-SMP operator, but it seems an unlikely possibility. ComReg's analysis of its legal powers bears out the view that there is no *obligation* upon it to impose an obligation of cost orientation on a non-SMP operator in the course of ruling upon a dispute and that the statutory provisions could not in any case create any definite expectation or right in the mind of an operator that this might occur.

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<sup>129</sup> It may be noted that where an operator actually has SMP, the regulator has less discretion and must impose at least one SMP obligation.

<sup>130</sup> ComReg Document 07/01.

4.155 ComReg notes that the provisions of Article 5 (1) of the Access Directive referred to above are transposed in to Irish law by the provisions contained in Regulation 6 (2) of the Access Regulations. Regulation 6 (2) provides:

*“Without prejudice to any measures that may be taken in accordance with Regulation 9 regarding undertakings with significant market power, the Regulator may:*

*(a) to the extent that it is necessary to ensure end-to-end connectivity, impose obligations referred to in Regulations 10 to 14 inclusive on undertakings that control access to end-users, including in justified cases, the obligation to interconnect their networks where this is not already the case...” (Emphasis added).*

4.156 What is absent from the respondent's analysis of the implications of Regulation 6 (2) (a) of the Access Regulations is any explanation of how imposing a cost orientation obligation is or was “*necessary to ensure end-to-end connectivity*”. Significantly, if ComReg were using those powers it would, be a condition of their being exercised, that they would be exercised only to the extent that it was necessary to ensure end-to-end connectivity. Furthermore, ComReg would have to be reasonable and proportionate in the exercise of this discretionary power, where a number of choices regarding intervention were open to it. While Regulation 6 of the Access Regulations could in specific circumstances allow ComReg to impose an obligation of cost orientation on a non-SMP operator, the conditions for doing so would also need to be first present. One of those criteria would be that the imposition of a cost orientation obligation is or was “*...necessary to ensure end-to-end connectivity...*” ComReg does not see that in these circumstances the imposition of such an obligation would automatically or at all be “necessary” and as a consequence, it seems unlikely that this condition could be met. In addition, it is highly questionable whether or not the imposition of cost orientation in these circumstances would necessarily meet the relevant tests for proportionality of measures either under the electronic communications regulatory framework<sup>131</sup> or under general EU law principles, given for example, the alternatives that exist to ensure “*end-to end connectivity*”. Therefore, one might say that the most obvious and “necessary” obligation for ComReg to impose in such circumstances would not be a cost oriented pricing obligation, but quite simply, an obligation of access, as provided for by Regulation 13 of the Access Regulations. The imposition of such an obligation would (under these theoretical circumstances) appear to be the most direct, logical and proportionate type of intervention, “*...necessary to ensure end-to-end connectivity...*” It should of course be made clear that an obligation of access would also cover interconnection. In that regard, Regulation 2 of the Access Regulations clearly provides that “*interconnection is a specific type of access implemented between the public network operators*”.

4.157 Even in circumstances where it was permissible, appropriate and proportionate to impose price related obligations pursuant to Article 5 (1) of the Access Directive / Regulation 6 of the Access Regulations, these powers could not *oblige* ComReg to

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<sup>131</sup> See Regulation 6 (4) of the Access Regulations which provides that: “Any obligations imposed by the Regulator pursuant to paragraphs [6] (1), (2) and (3) shall be **objective, transparent, proportionate and non-discriminatory** and shall be applied in accordance with Regulations 19 and 20 of the Framework Regulations.” (Emphasis added).

require an operator to offer cost oriented MTRs, given the discretionary nature of these powers.

- 4.158 The respondent's fails to explain why imposing the SMP obligation of cost orientation would be so important, as opposed to imposing an SMP obligation to interconnect (an access obligation) but the respondent also seems to automatically assume that any price control that could (in theory) be imposed on a non-SMP operator would, or must be, cost orientation. In this regard, it is of note that Regulation 14 (1) of the Access Regulations provides that: "*The Regulator may in accordance with Regulation 9 impose on an operator obligations relating to cost recovery and price controls, including obligations for cost orientation of prices....[emphasis added]*".
- 4.159 Cost orientation therefore, is not the only type of price control that could in theory, be permitted by Regulation 14 of the Access Regulations. The provision is clearly non-exhaustive with respect to the variants on price control that are permissible. Regulation 14 of the Access Regulations would in fact permit various types of price controls, any one of which could be imposed on a non-SMP operator.<sup>132</sup> Taking this into account, one would further be expected to have doubts over the respondent's exact expectations regarding the outcome of regulatory intervention. ComReg notes that this also pertains to the B&H analysis itself and the Harbord paper provided by the respondent in support of its submission. The strong underlying assumptions regarding the predicted outcome of regulatory intervention was identified in ComReg Document 07/01 as a critical weakness underlying the B&H analysis. It is important to reiterate at this point that the respondent has altogether failed to address these points.
- 4.160 However, the question of how ComReg might, or might not exercise its powers under Regulation 6 (2) of the Access Regulations (exercised of its own initiative or on foot of a dispute) is extremely speculative. Even more speculative is trying to determine *how the parties would have expected* ComReg to exercise those powers. Attempting to answer the question, given the great number of variables surrounding the exercise of these powers, does not provide any real assistance in knowing how their exercise might actually impact on the bargaining power of H3GI and Eircom. The difficulties in predicting what the regulator might, or might not do are obvious and it would seem to stretch credibility to expect that a regulator could make meaningful or accurate calculations and predictions in advance on these issues, and even more so that operators would be able to know with certainty what the outcome of these deliberations would be in advance, or that ComReg would be able to interpret how the parties themselves anticipated that dispute resolution function to operate.
- 4.161 The highly speculative analysis that the respondent urges ComReg to undertake, would not yield clear answers to the question of whether or not H3GI's bargaining power is lessened, or whether Eircom's is increased. It is therefore also difficult to see how engaging in such an analysis could yield any clear answers on the question of whether or not H3GI has SMP. This might not be the case if a regulator had a

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<sup>132</sup> It is of note that even if the regulator determined to impose a cost oriented rate, the outcome would be by no means certain in advance since estimating the costs of providing call termination is dependent on the details of the accounting procedure utilised, e.g. the treatment of common and joint costs, depreciation method, the cost of capital, the relevant time period etc.

definite policy, determined in advance as to how it would intervene in any given case which the parties were clearly aware of and then acted accordingly. Even if a regulator could anticipate such matters in advance, or indeed, if the statutory framework was very specific and prescriptive in this regard, the use of its powers in this manner would have questionable legality, bearing in mind its obligation not to fetter its legal discretion by effectively applying such a "blanket" policy in advance.

- 4.162 ComReg does not believe that it can be predicted in advance by any party, with any degree of certainty, how ComReg's legal powers might have been exercised. Once one properly understands what is permitted by ComReg's legal powers (while at the same time appreciating the significant degree of uncertainty surrounding their potential use) it is apparent that this is as far as the analysis of ComReg's legal powers can or should realistically proceed, unless one is to engage in a highly speculative exercise. ComReg has carefully considered the applicability of Article 5 of the Access Directive/ Regulation 6 of the Access Regulations to H3GI as a non-SMP operator and believes it was unlikely in the past that the necessary conditions existed to warrant the imposition of a cost orientation obligation on H3GI. Certainly, there could be no definite expectations on anyone's part, that cost orientation had to be, or would in fact be mandated.
- 4.163 It also appears to ComReg that its task in conducting the market review is not so much to speculate on how parties may have regarded dispute resolution possibilities in the past, but rather to have a clear understanding of how the general framework for dispute resolution fits with the overall SMP analysis.
- 4.164 In light of the above, ComReg believes that it has given the correct weight to the role and relevance of dispute resolution and its powers under Regulation 6 (2) of the Access Regulations that a thoroughgoing market analysis requires. Furthermore, ComReg believes it has undertaken a complete analysis of the role of these issues in reaching its final decision on the question of whether or not H3GI has SMP.

(9) Failure to assess the effect of H3GI's new entrant status and delay

- 4.165 The respondent asserted that despite presenting an analysis based on past negotiations, ComReg failed to assess in any meaningful way the effect that H3GI's new entrant status and delay had on its inability to set its own MTRs. In particular, they maintained that ComReg dismissed the need to assess the effect that H3GI being a new entrant had on its original negotiations at paragraphs 4.44 in ComReg Document 07/01.
- 4.166 Consideration of H3GI as a new entrant was discussed in detail in ComReg Document 07/01 and above. Accordingly, the respondent's contention that ComReg dismissed the need to assess the effect of H3GI being a new entrant appears ill-founded. Nonetheless, as acknowledged by the respondent, on a prospective basis, issues associated with being a new entrant and delay are of less direct relevance. ComReg would point out that, at time of this paper being published, H3GI will have been an active participant in the mobile sector for approximately 30 months. It should be noted that the ECAP expert, Professor Muthoo, pointed out that the case for H3GI having SMP was likely to be stronger when it could no longer be considered a new entrant.

(10) Inappropriateness of drawing any conclusions regarding H3GI's costs in the absence of a cost model.

- 4.167 The respondent expressed the view that in the absence of a cost model it was inappropriate for ComReg to draw any conclusions regarding H3GI's costs as a result of benchmarking H3GI's MTRs against those of other MNOs or otherwise. They maintained that to do so failed to have regard to the costs of H3GI as a new entrant 3G network operator. Furthermore they noted that 3G MTRs are higher than 2G MTRs in mobile markets, presenting data regarding 2G and 3G MTRs in the UK for Orange, O<sub>2</sub>, T-Mobile and Vodafone UK to support this contention.
- 4.168 In relation to this point, ComReg conducted a benchmark exercise as a reference point which indicated that H3GI achieved higher MTRs than other MNOs facing a similar set of wholesale customers. Furthermore, it was noted that ComReg did not carry out any detailed examination of the issue of H3GI's costs as it was not relied upon for the preliminary finding of SMP and it was considered not to be a determining factor necessary for a finding of SMP and was not relied upon to substantiate the finding of SMP. Indeed, it would appear to be perverse and unduly burdensome on both the regulator, and indeed the operator being assessed, that a regulator should have to fully establish costs in advance of any finding of SMP, given that one of the possible remedies to SMP is to analyse what the cost base of the operator is. The key point outlined above in relation to costs is that it is not clear why H3GI's wholesale customers would be concerned about H3GI's costs when negotiating MTRs, particularly if those wholesale customers had sufficient bargaining power to potentially negotiate lower rates. It is not clear why those wholesale customers would be interested in subsidising H3GI's retail customers. The critical issue in determining whether H3GI holds a position of SMP on the market for wholesale voice call termination on its mobile network is whether it has the ability "*to behave to an appreciable extent independently of its competitors, customers and ultimately consumers*".<sup>133</sup> Arising from its detailed and thoroughgoing analysis of the issue ComReg maintains that H3GI enjoys this position in this market and is likely to continue to do so within the timeframe of the review.
- 4.169 It is of note in relation to the UK figures cited that in December 2005 Ofcom decided to extend the current mobile wholesale price controls on 2G voice call termination for Vodafone, T-Mobile, Orange and O<sub>2</sub> for one year (until March 31 2007). The charge control did not cover 3G voice call termination, and therefore, the practice among the MNOs was to set a 3G termination charge above the regulated 2G rate with operators then charging a single 'blended rate' of regulated 2G and unregulated 3G voice termination charges.<sup>134</sup> It is further of note that these MNOs have been designated as having SMP in the market for termination of voice calls on their respective mobile networks.<sup>135</sup> As such, absent regulation their MTRs would be

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<sup>133</sup> Framework Directive, Article 14(2).

<sup>134</sup> Cullen International, 'Big Five Update', No. 81, 28 March 2007 – 21 April 2007); 'Big Five Update', no. 65, December 2005.

<sup>135</sup> Ofcom, Wholesale Mobile Voice Call Termination, June 2004.

expected to be above efficient levels.<sup>136</sup> In any case the key point is that when assessing CBP, it is the nature and structure of demand that is most relevant, not supply. In that regard H3GI faces a similar set of wholesale customers as the other MNOs, in particular Eircom. The respondent does not provide any evidence or reasoning for why Eircom would be particularly concerned regarding H3GI's costs vis-à-vis the other MNOs. Indeed, if Eircom in reality had sufficient bargaining power to secure lower rates from H3GI (e.g. more in line with the other 2G operators) it is by no means clear why it would not have done so. To suggest otherwise, i.e. that Eircom was concerned with H3GI's costs, when in reality it could have secured lower rates, would not appear to be reflective of commercial reality. It is unlikely that as part of the bargaining process Eircom took into account the need to subsidise H3GI's costs and by implication its retail customers.

### **Overall Conclusions on Countervailing Buyer Power**

4.170 ComReg has noted the submissions made and has examined and analysed in detail each element. ComReg has carried out a detailed and fully-considered analysis of the economic framework proposed by B&H, the relevant regulatory backdrop and the actual negotiations that took place between the parties in question. ComReg assessed the consistency of the empirical evidence with results posited by the bargaining model as presented by B&H and used this empirical evidence to further substantiate its finding that Eircom was not in a position to exert sufficient CBP such as to constrain H3GI from charging termination rates above the competitive level. In addition, ComReg carried out an extensive assessment of the relative bargaining strengths of H3GI and Eircom respectively, drawing on both evidence from the actual negotiations and also considering the market dynamic on a forward looking basis.

### Overview of Economic Framework

4.171 ComReg's principal reservation on the B&H model is that its predicted outcomes do not fit the empirical evidence. The B&H model predicted in the saturated market case (which they considered the most relevant) that H3GI would not achieve termination rates in excess of that paid to existing 2G operators. This has not happened, however, as H3GI's rates are well above the levels in the overall mobile market. In the non-saturated case, the B&H model predicted termination rates that

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<sup>136</sup> Furthermore, it is of note that Ofcom has recently concluded that charge controls should be imposed on the supply of mobile voice call termination by each of the five MNOs in the UK and these controls should apply without distinction to voice call termination whether on 2G or 3G networks. It was determined that for the 3G-only operator, (i.e. H3G) its average wholesale mobile voice call termination charge should be reduced to 5.9 pence per minute ("ppm"), whereas those of each of the four 2G/3G MNOs (i.e. Vodafone, O<sub>2</sub>, Orange and T-Mobile) should be reduced to 5.1 ppm in 2006/7 prices by the final year of the charge control (1 April 2010 to 31 March 2011). As such, only an additional 0.8ppm, or a 16% differential, is afforded to H3G, reflecting exogenous cost differences between a 3-G only operator and the 2G/3G MNOs. See Ofcom, Mobile Call Termination Statement, 27 March 2007, pages 2, 152-153.

While recognising that the assumptions underlying Ofcom's model may not be directly transferable to the Irish context, nonetheless it is of interest to compare this to the differential average MTRs prevailing between H3GI and the other MNOs (as illustrated in Table 4.5 above), where the difference between H3GI's average rate and that of the other MNOs is greater than 30%.



were half-way between the monopoly and the efficient charge level. The latter case would seem to be evidence of SMP; it is true the outcome is not the strict monopoly outcome but this version of the B&H model has shown H3GI's ability to set prices considerably higher than the competitive price. This is essentially consistent with SMP, which is the ability to act, to an appreciable extent, independently of other market participants and customers.

4.172 The B&H model also predicted that in a situation of regulatory intervention, stemming from the interconnectivity obligation and dispute resolution, H3GI's bargaining power would be increased but that termination rates would remain around the average of the 2G operator rates. Again, this has not happened. H3GI's rates are above the level in the overall mobile market, which would not support the contention that Eircom had sufficient CBP to constrain H3GI from acting to an appreciable extent independently of its customers, competitors and consumers. Furthermore, as the rates of the other SMP MNOs decrease due to regulatory intervention, the disparity between H3GI's rates and the level in the overall mobile market is likely to become greater.

4.173 ComReg considers the B&H model raises interesting questions and makes a valuable contribution to the theory of setting MTRs, in particular as regards its emphasis on the actual bargaining dynamic which is something ComReg has examined in detail. The B&H model is different from the more traditional literature to date in its predicted outcomes, although reasonable versions of the model do predict that H3GI will have the ability to set prices well above the competitive level. However, it is also possible to use the more traditional approach to examine the issue, as that approach could also fit the observed facts. Therefore, ComReg is of the view that there are a number of economic models capable of being used to produce plausible predictions of termination rate levels under a given set of assumptions. In the case of the B&H model, ComReg's principal reservations are that its predicted outcomes do not fit the empirical evidence, as well as the model's strong in-built assumptions regarding the outcome of the dispute resolution process in the context of regulatory intervention. As outlined above, it is not at all clear what the outcome of the dispute resolution process would have been, or moreover, what the parties would have expected it to be.

#### Evidence from the Actual Negotiations and Relative Bargaining Strengths

4.174 While interconnection with Eircom is clearly of importance for H3GI, it is likely that Eircom's customers similarly expect end-to-end connectivity with all available networks. The evidence shows that Eircom appears to have been keen to begin the negotiation process with H3GI asking it for a commitment to enter into a direct interconnect agreement at least three months prior to commercial launch. In addition, H3GI might have had some more weight added to its bargaining position given the opportunity to initially enter the market (whether that was in a more limited form) based on interconnection agreements with other operators, including BT Ireland. In any case, the fact that it now has an existing subscriber base, and the ability to make end-to-end calls being of importance to consumers, suggests that it is in an even stronger bargaining position now than when it was about to enter the market initially. Moreover, the evidence further shows that, irrespective of any

difference in the size of subscriber bases, H3GI was still successful in obtaining termination rates above the overall level in the market from both Eircom and BT and there has been no obvious downward trend in these rates since that time. With an existing subscriber base now in place, ComReg's view on a forward-looking basis is that H3GI would be able to negotiate rates that are at least as high as the current level and that there would be insufficient downward pressure on these rates in the future.<sup>137</sup> This is supported by the October 2006 exchange between Eircom and H3GI wherein Eircom was not successful in prompting a reduction in rates, with H3GI sustaining its prevailing rates.

- 4.175 Furthermore, the threat of refusal to deal and/delay is no longer as relevant a consideration given the existing contracts in place between the operators and the defined steps to proceed to re-negotiation of rates or severing of relations within the contract. Therefore, in light of the evidence from the previous negotiations, the commercial realities and the existing contract between H3GI and Eircom, it does not seem likely that Eircom used this to advantage its position in the past nor is it commercially feasible that either party would refuse to interconnect going forward. Indeed, Eircom has not re-negotiated lower rates in the meantime, despite the trend for lower rates from the SMP MNOs.
- 4.176 ComReg is also of the view that the fact Eircom could not respond to H3GI's requests for high termination rates by threatening to raise its own termination rates (as it must terminate all traffic, including mobile traffic originating on H3GI's network, on a non-discriminatory cost-oriented basis), removed a potentially very significant source of bargaining power on Eircom's part. While H3GI has argued previously that this is not as significant in the case where it is a new entrant, it is certainly likely to be of more significance in the future where the threat of refusal to deal/delay is even less.
- 4.177 Furthermore, while the potential for either party to refer any impasse in negotiations to ComReg exists, in the absence of any precedent on the matter it is by no means clear what the outcome of any such dispute resolution procedure would be or what the parties would expect that outcome to be. However, the empirical evidence would seem to suggest that H3GI used the prospect of dispute resolution to its advantage in the negotiations, where it referred to the possibility that Eircom would be adversely affected financially in the event that ComReg ruled in H3GI's favour when making its third pricing proposal. This suggests that H3GI anticipated an outcome favourable to its position. This would appear to be further supported by the fact that it was H3GI that referred the dispute to ComReg and not Eircom. ComReg does not have evidence at this time to suggest that Eircom used the prospect of dispute resolution as a means of improving its bargaining position. Rather the evidence shows H3GI used it as a means to strengthen its own bargaining position. However, it should be recognised that it is very difficult to anticipate how either of the parties predicted the dispute resolution process to impact on their respective bargaining positions. Thus, little useful conclusions can be drawn regarding its impact on the negotiations. In any case, ComReg does not place significant reliance on this factor as it is highly uncertain. ComReg is of the view

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<sup>137</sup> Absent regulation in the past, ComReg notes that the termination rates of the 2G operators remained above efficient levels, consistent with Gans and King (2000).

that SMP analysis and dispute resolution are fundamentally different processes, and that it would be somewhat perverse to use the possibility of dispute resolution, and/or the fact that one party has asked for it, to undermine the basic premises of SMP analysis.

4.178 ComReg has therefore reached the conclusion that the empirical evidence, while it indicates that H3GI was not able to extract a 'super-monopoly' price, does show that H3GI has the ability to obtain termination rates above the level in the overall mobile market i.e. the level that MNOs with a similar set of wholesale customers have been able to achieve, which suggests that it is not under a significant competitive constraint. The evidence shows further that Eircom was limited in the previous set of negotiations in its ability to negotiate this price towards the average of the 2G rates.<sup>138</sup> Given the importance of facilitating end-to end connectivity for its customers, Eircom would appear even more constrained in any next round of negotiations where H3GI would have a subscriber base in place. While there are arguments contained in economic models for and against H3GI's ability to achieve high prices, the fact remains that H3GI was successful in achieving rates above the overall mobile market level which to a degree is consistent with the findings of the more traditional literature described above in that this literature predicts that the terminating operator has market power. Furthermore, there is no obvious reason why H3GI could not sustain these high termination rates over the timeframe of this review. ComReg is of the view that the evidence presented in the analysis above would indicate that there is insufficient CBP to constrain H3GI's price setting behaviour in the market on a forward-looking basis.

### **Excessive Pricing**

4.179 It is clear from the ECAP decision<sup>139</sup> that ComReg may have used an assessment of whether established MNOs tended to charge excessive prices as a corroborative factor, rather than a determining factor in a finding SMP. As such, ComReg did not engage in a detailed analysis of H3GI's own costs or the relationship between those costs and its prices in determining whether it enjoyed a position of SMP in the market for mobile voice call termination on its individual network. Further reasoning for this approach is provided below.

4.180 ComReg considers that a finding of SMP does not require a detailed examination of H3GI's costs or whether its prices are excessive. Rather, the finding of SMP is based on H3GI's *power* or *ability* to act to an appreciable extent independently of its competitors and customers. In this instance, H3GI's *power* or *ability* to act independently stems primarily from the lack of existing competition, the high and non-transitory entry barriers and the insufficient CBP present in the relevant market.

4.181 According to the Competition Appeal Tribunal ("CAT")<sup>140</sup> in the UK, the existence of a power to behave independently of competitors and customers may, in some cases, result in excessive prices, but that is not necessarily the case.

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<sup>138</sup> Contrary to one respondent's suggestions, this is not related to H3GI being a 3G operator with a different cost base as Eircom is unlikely to be willing to subsidise H3GI's subscribers if in reality it could negotiate a lower rate.

<sup>139</sup> ECAP Decision No. 02/05: Hutchison 3G Ireland Limited v Commission for Communications Regulation, 26th September 2005.

<sup>140</sup> Hutchison 3 G (UK) Limited v the Office of Communications [2005] CAT 39 at paragraph 61.

*“It is perfectly possible to have SMP and not charge excessive prices either at the time the position is being tested or in the future. Excessive prices are not an inevitable manifestation of SMP... SMP in the present case turns on the power or ability to behave independently of customers or others”.*

4.182 Indeed, the SMP Guidelines state that:

*“The starting point for carrying out a market analysis for the purpose of Article 15 of the Framework Directive is not...an alleged abuse of dominance within the scope of Article 82 EC Treaty, but is based on an overall forward-looking assessment of the structure and the functioning of the market under examination.”*

4.183 While Footnote 73 at paragraph 73 of the SMP Guidelines states unequivocally that:

*“It should be noted that NRAs do not have to find an abuse of a dominant position in order to designate an undertaking as having SMP.”*

4.184 ComReg is obliged to take the utmost account of the SMP Guidelines and there seems no doubt that ComReg was and is not as a matter of law, required to prove that H3GI had abused its SMP in order to sustain a finding of SMP. A finding of abuse under Article 82 is never a prerequisite to establishing dominance, although there have been a limited number of cases where evidence of actual abuse has been accepted as being an indicator of dominance. Indeed, the whole point of a finding of SMP is to permit, where appropriate, *ex ante* regulation. By its very nature, *ex ante* regulation is not remedying pre-existing abusive behaviour (such as excessive pricing) but is pre-emptive in nature with a view to preventing such behaviour occurring in the future. Hence *ex ante* regulation is concerned with identifying those instances where firms now and prospectively have the *power* or *ability* to set prices and/or other commercial terms independently of competitors and customers. In contrast, *ex post* competition law is concerned with identifying instances where that *power* or *ability* has in fact been abused.

4.185 For comparative purposes, ComReg has noted that H3GI achieved termination rates that are higher than those achieved by other Irish MNOs, despite the fact that other MNOs face similar wholesale customers as H3GI. ComReg does not argue that these MTRs are necessarily determinative evidence of excessive pricing. Rather, they are used as supporting evidence in ComReg's analysis of the insufficiency of Eircom's bargaining power, i.e. to demonstrate Eircom's failure to constrain H3GI's rates to levels comparable with MNOs facing similar wholesale demand conditions. Indeed, it should be noted that the B&H paper submitted by H3GI also appears to consider it a useful exercise to invoke the termination rates paid by existing 2G operators as a reference point when assessing H3GI's likely bargaining power vis-à-vis the incumbent fixed operator in its bargaining model.

4.186 ComReg's analysis relies on a range of indicators to demonstrate that H3GI has the *ability* to act independently of its competitors and customers. The central factor in its analysis is the insufficiency of CBP. In that regard, one indicator of insufficient CBP on Eircom's part is H3GI's clear ability to set and sustain higher rates than the other Irish MNOs, despite facing a similar wholesale demand. This is also notwithstanding the trend for lower MTRs in Ireland and elsewhere, as suggested by figure 4.1 above. Furthermore, on a prospective basis, any bargaining tools that Eircom may seemingly have had at its disposal prior to H3GI's entry to the market,

are significantly weakened with H3GI now having a customer base in place and Eircom having a clear commercial incentive to provide a full service offering. This strong commercial incentive, coupled with the fact that contractual and physical arrangements for interconnection are already in place, suggests that the credibility of any threat of refusal to deal/purchase on Eircom's part going forward is considerably diminished. This evidence would appear consistent with H3GI having the *power* to behave to an appreciable extent independently of its wholesale customers over the timeframe of this review.

#### *Views of Respondents*

4.187 One respondent noted that while recognising that the ECAP indicated that ComReg could use "*excessive pricing as a corroborative factor in finding SMP*", the manner in which it was utilised was not consistent with mere corroboration. In particular, ComReg's conclusion was based upon a "*competitive level*". However, this phrase was not explained in the analysis. As such, they maintained that a crucial aspect of the underlying analysis required to support such a contention was absent, rendering it impossible to ascertain the grounds on which ComReg had concluded that H3GI's prices "*are unlikely to tend to competitive levels over the period of the review*". This was claimed to be a significant failing in terms of ComReg's prospective analysis.

#### *ComReg's Position*

4.188 At the outset it should be noted (as outlined above) that ComReg did not use and never purported to use excessive pricing as a key indicator of SMP. The key criteria that ComReg considered to be the most relevant to the analysis of SMP were a lack of existing competition, the existence of high and non-transitory entry barriers and the insufficiency of CBP in the relevant market.<sup>141</sup>

4.189 When assessing the sufficiency of CBP, ComReg noted, for comparative purposes, that H3GI had achieved termination rates higher than those achieved by other Irish MNOs. ComReg does not argue that these MTRs are necessarily determinative evidence of excessive pricing. Rather, they are used as supporting evidence in ComReg's analysis of the insufficiency of Eircom's bargaining power. As CBP is essentially concerned with the nature and structure of demand, it is perfectly valid for ComReg to use this comparative analysis to demonstrate Eircom's failure to constrain H3GI's rates to levels consistent with MNOs facing similar wholesale customers/demand conditions. As noted above, the B&H paper also appears to consider there to be merit in invoking the termination rates paid to existing 2G operators as a reference point when assessing H3GI's bargaining power.

4.190 In relation to H3GI's contention that further explanation of the "*competitive level*" is necessary, ComReg considers that it is not obliged to specify what the precise "*competitive level*" of prices is for the purposes of the SMP analysis. As outlined above, ComReg is not investigating whether H3GI is charging excessive prices and thus is not obliged to engage in a detailed assessment of the relation between H3GI's prices and the relevant competitive level for H3GI's wholesale service or similar

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<sup>141</sup> Further Annex F outlined a summary of the other SMP criteria contained in the SMP Guidelines and set out why ComReg considered them less relevant in the context of this market review.

services.<sup>142</sup> However, it should be noted that the other 3 MNOs, all of which are designated as having SMP, are on an agreed “glide path” downwards with respect to their MTRs. Their level of current and projected future MTRs could be seen as a rough proxy for a competitive level (with a strict value for the latter likely to be closer to the level at the end of the glide path), in that one of the main purposes of price regulation of SMP operators is to try and achieve the effect of competitive markets. As stated before, given that H3GI's MTRs are considerably higher than other operators, it seems reasonable to suggest that they are considerably larger than the competitive level.

4.191 The legal definition of dominance within the meaning of Article 82 of the Treaty is well-known from *United Brands v Commission* which defines it as:

*“...a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.”*

4.192 The Framework Directive has clearly aligned the definition of SMP with the Court's definition of dominance above. ComReg has therefore concentrated its SMP analysis on a detailed assessment of H3GI's *power* or *ability* to act independently of its competitors and customers within the meaning of the legal definition of dominance given above. Thus any reference to a “*competitive level*” in ComReg Document 07/01 is intended as a reference to H3GI's *power* or *ability* to act to an appreciable extent independently of competitive constraint, i.e. its *ability* to raise prices above competitive levels, without necessarily specifying what that competitive level is or should be. This approach would appear to find support in the Competition Appeals Tribunal (“CAT”) ruling on *Hutchison 3G (UK) Limited v OFCOM* [2005] CAT 39 where it alluded to this issue at paragraph 66 of its ruling:

*“SMP in the present case turns on the power or ability to behave independently of customers or others. That does not require that present or future pricing be investigated.”*

4.193 In addition, at paragraph 51 of the ruling, the CAT stated further:

*“It is also right that the potential to increase prices, or charge excessive prices, led to the remedy imposed by OFCOM (a reporting remedy) but that deals with the effect of having found SMP, not the means of determining whether SMP exists.” (Emphasis added).*

4.194 For the sake of clarity, ComReg would reiterate that it is not basing its SMP analysis on a claim of excessive pricing. Thus, it is not incumbent on it to engage in a detailed assessment of what the “competitive level” of prices is or should be for the purposes of this market analysis. And, in any case, the fact that its prices are significantly higher than other, regulated, MNOs suggests that its prices are excessive.

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<sup>142</sup> Indeed part of the test for excessive pricing proposed by the European Court of Justice within the meaning of Article 82 of the Treaty is “*whether a price has been imposed which is either unfair in itself or when compared to competing products*”. See Case 27/76 *United Brands v Commission* [1978] ECR 207, [1978]1 CMLR 429, para. 252.

*Conclusion*

4.195 ComReg considers that a finding of SMP does not require an examination of H3GI's costs or whether its prices are excessive. In accordance with the Framework Directive, the SMP Guidelines and established competition case law, the key issue which ComReg needs to demonstrate is whether H3GI has the *ability* to act to an appreciable extent independently of its competitors and customers. To that end, ComReg's analysis relies on a range of indicators to demonstrate that H3GI has the *power* or *ability* to act to an appreciable extent independently of its customers. Such indicators include an assessment of its ability to set higher rates than other Irish MNOs despite those operators facing a similar wholesale demand. Furthermore, an examination of Eircom's commercial incentives and the bargaining tools available to it going forward would indicate that, on a prospective basis, the credibility of any threat of refusal to deal/purchase on Eircom's part is considerably diminished in any future set of negotiations. Such evidence would appear consistent with H3GI having the *power* to behave to an appreciable extent independently of its wholesale customers over the timeframe of this review. In any case, the fact that its prices are significantly higher than other, regulated, MNOs could well be suggestive that its prices are excessive.

**Overall Conclusions on Market Analysis**

*Consultation Proposal*

4.196 Based on the analysis as outlined above, ComReg was of the preliminary view that the evidence suggested that H3GI's position afforded it the independence that was necessary to find dominance on the market for wholesale termination services, notwithstanding its total mobile market share. The principle reasons for this finding were the following:

- H3GI has 100% share in the relevant market. There is no existing competition in the market and due to the high and non-transitory barriers to entry, there is consequently no prospect of potential competition over the period of this review. This gives a strong indication of SMP.
- ComReg had carried out a detailed analysis of the most recent economic framework surrounding CBP as presented by B&H. ComReg was of the view that the B&H model made a valuable contribution, particularly due to its emphasis on the bargaining dynamic, which ComReg had examined in detail. However, ComReg's principal reservation on the model was that its predicted outcomes and the arguments for Eircom possessing sufficient CBP did not fit the empirical evidence. H3GI was not forced to accept rates that were the average of the 2G rates. ComReg carried out a detailed analysis of the actual negotiations and actual bargaining dynamic between the parties which indicated that when compared with other MNOs facing similar wholesale demand conditions, H3GI was successful in achieving and maintaining the highest MTRs.
- Furthermore, it appeared that these rates were sustainable, there having been no concrete move to re-negotiate these rates despite a mechanism in the interconnect agreement with Eircom to review them and reductions

in termination rates by the regulated MNOs in Ireland. Indeed, the increase in relative size by H3GI, as well as the fact that Eircom's customers would be likely to be unhappy about losing the ability to call H3GI's customers, indicates that the bargaining position of H3GI is probably stronger than it was in 2005.

- ComReg also analysed in detail the respective bargaining positions of the operators taking account of various bargaining tools at their disposal and was of the preliminary view that while interconnection with Eircom was clearly important to H3GI the commercial incentives and regulatory obligations to engage in interconnect negotiations also potentially constrain Eircom in the exercise of CBP. Given the importance of facilitating end-to-end connectivity for customers, Eircom would be even more constrained in any future set of negotiations when H3GI had an established subscriber base in place. While the impact of the dispute resolution procedure was uncertain, the evidence did not indicate that Eircom used it to its advantage. Rather Eircom appeared to have been keen to reach an agreement with H3GI prior to its launch on the Irish market. This is likely to continue to be the case on a forward looking basis. In any case with an agreement already in place and H3GI having an established subscriber base Eircom is unlikely to be in a position to constrain H3GI's behaviour in future negotiations.

4.197 On balance, then and based on an examination of the SMP criteria of relevance, ComReg's preliminary view was that the evidence did not indicate that there was sufficient CBP in this market. Accordingly, it was of the preliminary view that H3GI had significant market power in the market for wholesale voice call termination on its mobile network.

#### *Views of Respondents*

4.198 One respondent while disagreeing with the narrow product market definition (as addressed earlier in section 3) considered that ComReg's market analysis had adequately demonstrated that the defined relevant market for wholesale voice call termination on H3GI's network did not differ in any material respect – in terms of market share, entry barriers, demand-side and supply-side substitution, or the extent of CBP - from the defined markets for wholesale voice call termination on other operators' networks. As such, ComReg's conclusions in relation to SMP in this market must logically be the same as those reached on the markets for wholesale voice call termination on other MNOs' networks.

4.199 Another respondent indicated that they supported ComReg's preliminary finding that H3GI enjoyed a position of single dominance in the market for wholesale voice call termination services on its mobile network. They also supported the preliminary finding as substantiated by evidence-based analysis of actual market behaviour – not theoretical competition problems – that there was not sufficient CBP in this market to prevent H3GI from being designated as having SMP.

4.200 Another respondent asserted that ComReg's finding of SMP was disproportionate and in breach of ComReg's statutory obligation to act in a proportionate manner. It referred to the legal tests of proportionality as enunciated in case law and the



statutory provisions that embed the principle of proportionality in the electronic communications regulatory framework.

*ComReg's Position*

- 4.201 In relation to the latter respondent's view, under EU law<sup>143</sup>, proportionality requires that a measure or an administrative decision should be seen to be proportionate or balanced in the sense that any injury or restriction on the individual caused by the act should be justified by the gain to the Community as a whole. A lawful measure under Community law must therefore be shown not only to be aimed at a legitimate objective permitted by Community law, but must also be the least burdensome measure appropriate to that task.
- 4.202 In the *Fedesa* case (C-331/88) the Court held that the lawfulness of the prohibition of an economic activity<sup>144</sup> was subject to the condition that the measures were appropriate and necessary in order to achieve the objectives legitimately pursued by the legislation: "*where there is a choice between several appropriate measures recourse must be had to the least onerous, and the disadvantages caused must not be disproportionate to the aims pursued.*" In circumstances where a regulator has different choices regarding the exercise of its powers, the legal principle of proportionality will therefore assume a greater relevance.
- 4.203 In relation to the particular legal tasks assigned to ComReg (to define and analyse markets) that range of choices is however limited. There are two possibilities, either H3GI has SMP, or it does not. However, whether H3GI has SMP or not is not a matter of choice on the regulator's part, rather it is a matter of fact, to be determined objectively in light of the relevant available evidence. Accordingly, ComReg under the Framework Regulations is tasked with defining and analysing the wholesale mobile call termination markets on individual operator's respective networks.
- 4.204 Where the relevant economic evidence on the whole indicates that a party has SMP, it is not open to ComReg to consider whether or not a SMP designation would be proportionate or not. ComReg is not afforded such discretion – it cannot ignore the evidence that an operator has SMP and decline to designate it accordingly (for example on the grounds that it is a new or recent entrant in a market). Thus, the question of whether or not an operator should be designated with SMP is not an exercise in proportionality; rather it is an exercise in arriving at one or the other determination, on the basis of all of the relevant economic evidence.
- 4.205 However, ComReg is mindful of the requirement to consider the proportionality of *regulatory obligations* that it might impose on an operator with SMP on foot of that designation, particularly if it would have the result of impeding its commercial freedom. In that context, (unlike the case of designating with SMP or not) a range of choices are open to the regulator with respect to the type of regulatory obligations that it might impose.

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<sup>143</sup> Article 5 of the EU Treaty provides that "any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty."

<sup>144</sup> It should however be recalled that a SMP designation does not entail the prohibition of any economic activity.

4.206 ComReg notes that the respondent suggested that because a SMP designation *might lead to SMP remedies* (which it considered to be disproportionate) that this means that the SMP designation is of itself disproportionate. However, in light of arguments presented above, regarding the absence of discretion where the economic evidence indicates SMP, this does not appear to be an inherently attractive or convincing line of argumentation.

*Conclusion*

4.207 ComReg considers that it has carried out a complete and evidence-based analysis of all the relevant SMP criteria. In view of all the circumstances and issues that have been carefully examined, ComReg has reached the conclusion that H3GI holds a position of SMP on the market for wholesale voice call termination on its mobile network. This is owing to the 100% market share, the high and non-transitory barriers to entry, and the evidence which does not indicate that there is sufficient CBP in this market, which prevents H3GI acting to an appreciable extent independently of its customers, competitors and consumers.

## **5 Designation of Undertakings with Significant Market Power**

5.1 Having regard to the sections above, ComReg is of the view that, in accordance with the Framework Regulations:

- H3GI should be designated as having SMP on the wholesale market for the termination of voice calls on its network in Ireland.

## 6 Market Remedies

### Introduction

- 6.1 Where ComReg determines, as a result of a market analysis carried out by it in accordance with Regulation 27 of the Framework Regulations, that a given market identified in accordance with Regulation 26 of the Framework Regulations is not effectively competitive, ComReg is obliged, under Regulation 9(1) of the Access Regulations,<sup>145</sup> where an operator is designated as having SMP to impose on such an operator some of the obligations set out in Regulations 10 to 14 of the Access Regulations that are appropriate, justified and proportionate.
- 6.2 In this section, ComReg first outlines the potential competition problems which it considers could possibly arise in this relevant market, in the absence of regulation. In light of this assessment and having considered respondents' views, ComReg then sets out the detailed remedies that it will impose on the SMP operator, H3GI, to address the potential competition problems and market failures identified. ComReg has selected remedies that it considers appropriate, justified and proportionate at this time and in view of the prevailing market conditions.

### Potential Competition Problems and the Issue of Forbearance

- 6.3 In ComReg document 07/01, ComReg outlined potential competition problems that could arise in the call termination market. Following the recommendations of the SMP Guidelines, the approach taken to the assessment of the wholesale call termination markets and the scope for potential competition problems to arise was forward-looking. In line with the Modified Greenfield Approach,<sup>146</sup> ComReg must carry out the assessment of competition problems in the absence of regulation.
- 6.4 ComReg considers that the justification for considering *ex ante* remedies must be broader than if solely based on demonstrable acts of past behaviour.<sup>147</sup> ComReg instead has to identify the potential for a particular competition problem to arise in the relevant markets because of the ability and incentives of an SMP undertaking to engage in such behaviour, which in turn will be based on the findings of the market analysis (see section 4). ComReg suggests that this is a key difference in approach between *ex ante* and *ex post* analysis and ComReg notes that its approach is similar to that of other NRAs, as is evident from their notifications to the European Commission.
- 6.5 According to settled case law

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<sup>145</sup> European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003. S.I. No 305 of 2003.

<sup>146</sup> As outlined in the Expert Report.

<sup>147</sup> While evidence of past market behaviour can contribute to this analysis, it is important to note that in any discussion of possible competition problems and of the scope for an operator to exert SMP, it is not necessary for ComReg to point to examples of actual abuse that may have occurred. While such examples if clearly identified could be corroborative of a finding of SMP, the nature of *ex ante* regulation is that it is concerned with guarding against such potential abuses in advance.

*“dominance is a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of the consumers.”<sup>148</sup>*

- 6.6 An undertaking which has SMP has the ability to potentially influence a range of competition parameters including prices, innovation, output and the variety or quality of goods and services. Absent regulation, a dominant firm would rationally have the incentive to raise prices, as there would be insufficient competitive pressure to prevent this. Generally, the types of competition problems likely to arise in the call termination markets are associated with possible exploitative behaviour, such as excessive pricing, and possible exclusionary behaviour, in particular vertical leveraging. In each case, ComReg set out above a detailed discussion of the issues.

#### Excessive Pricing

- 6.7 Concerns about pricing arise where, absent SMP regulation, price levels are likely to be persistently high with no effective pressure (e.g., from new entry/expansion or from strong buyers) to bring them down to competitive levels over the period of the review.
- 6.8 As discussed in section 4, the wholesale call termination market is characterised by 100% market share, an absence of existing competition, high and non-transitory barriers to entry associated with control over infrastructure not easily replicated, limited scope for potential competition and insufficient CBP. Thus, there is insufficient pressure to constrain H3GI to an appreciable extent in its pricing behaviour over the period of the review. In the absence of regulation, H3GI has the ability to charge excessive prices for termination services in its own respective termination market. This derives from the fact that such high prices would not be undermined by significant new entry or expansion or by pressure from strong buyers over the period of this review.
- 6.9 The incentives for H3GI to charge excessive prices derive largely from its ability to make excessive profits by virtue of the high and non-transient barriers to entry and the absence of significant competitive pressure and insufficient CBP over the timeframe of the review. ComReg noted that H3GI's termination rates were above all existing SMP operators in the overall mobile market. Thus, possible exploitative behaviour by way of excessive pricing is a key potential concern for the termination market identified above.
- 6.10 Further incentives to charge excessive prices would also derive from the fact that the terminating operators' wholesale customers are also frequently their downstream competitors. Thus, charging high prices for wholesale call termination could also have the effect of restricting competition/raising rivals' costs in downstream calls markets, thereby enabling the terminating operators' retail arms to gain market share and profits at the expense of their rivals. This possibility is considered in the following section dealing with constructive or outright refusal to deal.

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<sup>148</sup> DG Competition (2005) Discussion paper on the Application of Article 82 of the Treaty to Exclusionary Abuses, Brussels, December, page 9.

### Vertical Leveraging

- 6.11 The main type of vertical leveraging that may arise in the call termination markets includes a refusal to deal /denial of access or supply on unreasonable terms.<sup>149</sup> Such a refusal to deal may be effected by either pricing or non-pricing means and may be an outright denial of access or a constructive refusal of access, for example, by way of offering access on unreasonable terms or unduly delaying the permission of such access. This problem may arise in the call termination markets as terminating operators have control of important wholesale inputs for downstream competitors to offer retail calls services.
- 6.12 A vertically-integrated operator with SMP at the wholesale level is likely to have incentives to impede competition in downstream retail markets where it is also active as such behaviour could increase its retail market share and profits. While ComReg is of the view that operators would generally have incentives to interconnect with each other, it is possible that the ability and incentives remain, for example, to offer access to termination services on unreasonable terms (for example, via the potential discriminatory use of, or withholding of information, delay tactics, and the application of undue requirements in interconnect contracts), and as such, obligations are appropriate.
- 6.13 In addition, given that a key concern for all of the termination markets is the potential for exploitative behaviour by way of excessive pricing, H3GI could potentially reinforce its ability to extract excessive prices from their wholesale customers via their terms and conditions of access. For example, H3GI may supplement their bargaining power by employing some of the tactics, such as, the application of undue requirements in interconnect contracts so as to extract higher rates from their customers. Thus, obligations relating to non-discrimination may be necessary to supplement any obligations addressing the potential pricing problems identified above.
- 6.14 ComReg was of the preliminary view that forbearance or simply monitoring the trend in termination charges was not sufficient to address the potential underlying competition problems in this market. Such an approach could potentially lead to prices being maintained above efficient levels for a longer period to the disadvantage of the market and ultimately end users. In addition, when a designation of SMP was made in a relevant market, ComReg was obliged under the Framework Regulations to have imposed an appropriate obligation or remedies.
- 6.15 Respondents were asked whether they agreed that forbearance is not a suitable option to address the competition problems in this market.

### *Views of Respondents*

- 6.16 All but one of the respondents agreed that forbearance was not a suitable option to address the competition problems in this market. One of these respondents highlighted that forbearance was not appropriate given the absence of (voluntary)

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<sup>149</sup> Vertical leveraging, in general, can be described as any behaviour by which a vertically-integrated undertaking with SMP on one market transfers its market power to another, potentially competitive market. As leveraging is an attempt to drive rivals out of the potentially competitive market, to limit their sales or profits, or to prevent them from entering the market, it can be regarded as a form of foreclosure.

reductions in H3GI's MTRs to date and hence showing no sign of tending towards an efficient level. Another respondent noted that ComReg was legally obliged to impose at least one regulatory remedy on an operator designated with SMP. They drew attention to the fact that, absent regulation of H3GI's termination rates, where other SMP MNOs were progressively reducing their respective MTRs, H3GI's artificial advantage arising from the relatively higher level of its MTRs would be strengthened. According to this respondent, by raising the costs of the other MNOs the increasing asymmetry between H3GI's MTRs and those of the other operators would have a negative impact on retail customers, particularly those of H3GI's competitors. A third respondent also recognised that forbearance was not a valid option in the context of the requirements of the European regulatory framework following a designation of SMP. Further, they noted that voice termination on 3G networks could not be considered to be an emerging market.

- 6.17 One respondent believes that forbearance is appropriate for this call termination market as H3GI did not have SMP and that ComReg's analysis had failed to prove otherwise. This respondent also suggested that ComReg was obliged to adopt a light-handed regulatory approach when designating an operator with SMP and hence it was only obliged to impose one of the obligations set out in Regulations 10 to 14 of the Access Regulations. This respondent submits that the proposed remedies would not meet the proportionality test as set out in *Heaney v Ireland*.<sup>150</sup> Given H3GI's status as a new entrant, forbearance from imposing a suite of SMP obligations would be a more appropriate and proportionate action for ComReg to take at this point in time. They argue that in formulating its proposals with regard to appropriate remedies in this case ComReg did not have regard to the difference between H3GI and the other Irish MNOs. The respondent considered that asymmetric regulatory obligations may have been appropriate and referred to the ARCEP<sup>151</sup> decision<sup>152</sup> in France where it was recognised by the European Commission that an asymmetry might be justified by objective costs differences, which were outside the control of the operators.<sup>153</sup> By virtue of the fact that H3GI had a 3G network and therefore had different costs to the other MNOs, the respondent maintained that asymmetric regulatory obligations would be appropriate in this instance.

#### *ComReg's Position and Conclusion*

- 6.18 As discussed above, ComReg has identified potential competition problems in the market for wholesale voice call termination on H3GI's network associated with single market dominance and, as such, remedies are required to address these

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<sup>150</sup> [1994] IR 3 IR 593

<sup>151</sup> L'Autorité de Régulation des Communications Électroniques et des Postes.

<sup>152</sup> Case FR/2006/0461: Price control obligation relating to voice call termination on individual mobile networks in metropolitan France, Comments pursuant to Article 7(3) of Directive 2002/21/EC, Brussels, 04.9.2006.

<sup>153</sup> "It is recognized that, in certain exceptional cases, an asymmetry might be justified by objective cost differences which are outside the control of the operators concerned, for instance owing to cost differences between the operation of a GSM900 network and a DCS1800 network or to substantial differences in the date of market entry."

problems. The European Commission's SMP Guidelines<sup>154</sup> make it clear that the designation of SMP, without imposing any regulatory obligations, is inconsistent with the provisions of the new regulatory framework, notably Article 27 (4) of the Framework Regulations. For the reasons detailed in section 4 above, ComReg has designated H3GI as having SMP in the market for call termination and therefore proposes to impose appropriate SMP obligations. According to the SMP Guidelines, the purpose of imposing *ex ante* obligations on undertakings designated as having SMP is to ensure that undertakings cannot use their market power to restrict or distort competition in the relevant market, or to lever market power into an adjacent market.

- 6.19 ComReg considers that the SMP held by H3GI will not be diluted in any meaningful way in the absence of appropriate and proportionate *ex ante* regulation. In the absence of regulatory pressure, H3GI has not to date lowered their termination rates even in the presence of progressive reductions in termination charges of other MNOs in Ireland and elsewhere in Europe. ComReg believes that if prices are left unregulated there is a risk that termination charges will be excessive due to a negative pricing externality, which results from consumer ignorance regarding termination prices.<sup>155</sup> In addition, H3GI's MTRs are likely to be persistently high with no effective pressure (e.g., from new entry/ expansion or from strong buyers) to bring them down to a more appropriate level over the period of the review. H3GI's prevailing termination rates are the highest of all the mobile operators in the overall mobile market.
- 6.20 In view of the market analysis and the respondents' views, ComReg concludes that, in the presence of SMP, it is appropriate and proportionate to impose some form of regulation in this market. ComReg does not anticipate any circumstance where H3GI's rates would increase further and at a minimum believes the prevailing H3GI termination rates should be ceiling rates. In addition, given that a key concern in relation to call termination is the potential for exploitative behaviour by way of excessive pricing, H3GI could potentially reinforce its ability to extract excessive prices from their wholesale customers via their terms and conditions of access. Thus, obligations relating to non-discrimination may be necessary to supplement any obligations addressing the potential pricing problems identified above. The majority of respondents agreed that forbearance is not a suitable option to address the competition problems in this market.
- 6.21 However, ComReg notes the view of one respondent that it did not have regard to the (cost) difference between H3GI and other MNOs and that asymmetric regulation is appropriate in light of the ARCEP decision in France. ComReg also notes this respondents' view that the proposed remedies would not meet the proportionality test as set out in *Heaney v Ireland*. In relation to the ARCEP case, it is noteworthy that this case concerns the application of asymmetric remedies in call termination markets rather than forbearance from applying any regulatory measures. With

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<sup>154</sup> European Commission (2002) 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.

<sup>155</sup> As discussed in section 3 on market definition, consumer ignorance is a particular problem of mobile telephony as customers are not often able to identify which specific network they are calling. See Gans and King, 2000; Wright, 2002.



regard to the alleged breach of the principle of proportionality, in *Heaney v Ireland*, Costello J applied the following three stage analysis to the requirements of proportionality:

- Is the decision rationally connected to the objective to be achieved? Could it be described as arbitrary, unfair or based on irrational considerations?
- Does the decision impair the operator's rights as little as possible?
- Are the effects of the decision on the operators' rights proportional to the objective?

6.22 ComReg notes that the respondent does not outline in what way its proposed measures are inconsistent with *Heaney v Ireland*. ComReg considers that its proposals meet each element of this test. ComReg accepts that Meteor operated in the mobile market in Ireland without any regulatory obligations for a period of five years, but notes that this was due to the fact that all MNOs, including Meteor, were in fact not subjected to SMP regulation at all at the time. ComReg rejects any suggestion that the reasons for Meteor not having been regulated are because it was receiving favourable or discriminatory treatment, in comparison to H3GI. In fact, Meteor began operating in 2001 and it was not until 25 July 2003 that ComReg was even under a legal obligation to determine whether or not Meteor had SMP in the market for wholesale voice call termination on its mobile network. On 13 October 2005, ComReg issued a Decision Notice, following its SMP designation which imposed regulatory obligations on Meteor, including price control.

6.23 ComReg has considered the requirements of proportionality in setting remedies for H3GI and has taken account of H3GI's stage of development in the market. ComReg recognises that small players are potentially at a disadvantage because they are late entrants, have less efficient economies of scale and potentially less valuable resources (frequency, sites, etc). Discussed further below, ComReg acknowledges that investment and innovation should be encouraged and considers this when setting out appropriate remedies on H3GI on the basis of its SMP status. However, in choosing remedies, ComReg has also considered their potential effects on related markets. A direct consequence of higher termination charges is that they raise the costs of competing operators which may in turn cause the costs of competing retail services to rise. The issue becomes more pertinent as H3GI builds up a significant market share and competing operators terminate more calls on its network. With a growing market share, a substantial differential between H3GI's MTRs and the MTRs of the existing SMP MNOs would have an increasingly adverse impact.<sup>156</sup> This concern is further highlighted below in the discussion on an appropriate form of price control.

6.24 For these reasons, ComReg remains of the view that forbearance, or simply monitoring the trend in termination charges is not sufficient to address the potential underlying competition problems in this market. Such an approach could potentially

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<sup>156</sup> According to Dewenter and Haucap (2005), in addition to smaller operators charging higher termination rates than larger operators, asymmetric regulation may ultimately carry perverse incentives for smaller operators to increase their termination rates.

lead to prices being maintained above efficient levels for a longer period to the detriment of the market and ultimately end users. As noted above, such an approach would also not accord with the regulatory framework where a designation of SMP is made in relation to a relevant market. The remedies set out in detail below are intended to ensure termination rates are set at efficient levels and a transparent market place. ComReg believes that this will ultimately benefit end users through lower retail prices.

### **Remedies to Address Potential Competition Problems**

6.25 In ComReg Document 07/01, ComReg had considered the suitability of the following types of SMP obligations available under the Access Regulations:

- (a) Price Control;
- (b) Transparency;
- (c) Non-discrimination;
- (d) Access to and use of specific network facilities; and
- (e) Cost Accounting and Accounting Separation.

6.26 ComReg was of the preliminary view that a price control obligation should be imposed and in addition, to impose the further supporting obligations of price transparency and non-discrimination.

6.27 Having completed the market assessment and having considered the respondents' views, ComReg remains of the view as that expressed in document 07/01 that it is appropriate to impose on H3GI the obligations of: price control, transparency and non-discrimination. ComReg would note, however, that in line with the SMP Guidelines it must ensure that each obligation is proportionate to the problem to be remedied. Thus, it has approached the selection of remedies by ensuring the means used addresses a potential problem and is no more than what is appropriate and necessary to achieve that particular objective. These obligations are proportionate and justified on the basis of competition and are being imposed to address the potential competition problems arising in the relevant market and as discussed above. In choosing remedies, ComReg has taken account of their potential effects on related markets. The remedies chosen by ComReg are also incentive compatible.

6.28 The following sections set out again the reasons as to why ComReg continues to believe that these obligations are necessary for this termination market.

### **Price Control Obligation**

6.29 In ComReg Document 07/01, ComReg examined whether a price control obligation in relation to termination charges should be applied to H3GI where SMP is found on its individual mobile network. ComReg put forward four options regarding an

appropriate form of price control obligation for H3GI and asked respondents for their views:

- H3GI's MTRs should tend towards an efficient level and a price control based on H3GI's current costs and volumes would be of little benefit in establishing an efficient MTR;
- Is a glide path a suitable approach for H3GI to bring MTRs to an efficient level?
- Is it premature at this time to impose a price control based on forward looking costs and volumes?
- Is it appropriate, in the short term, to set the current mobile voice call termination charges as a ceiling, i.e. price control should cap prices at the current nominal rates, and in the medium/long term would other forms of price controls need to be implemented.

6.30 In each case ComReg sets out in detail below the responses received and ComReg's final conclusion.

*Consultation Proposal (1): Toward Efficient MTRs*

6.31 ComReg was of the preliminary view that over time, H3GI's MTRs should have tended towards an efficient level. Nevertheless, ComReg was cognisant of H3GI's stage of development in the market and that it may not have been in a position to avail of economies of scale like the established operators until such time as it had built up a more significant market share. As such, ComReg examined the option of a price control based on current costs and volumes. ComReg was of the preliminary view that this option would have been of little benefit in establishing an efficient MTR. Such an approach would have probably been inconsistent with H3GI's own business planning and development over the medium term as it would not have taken into account any forward looking projections in H3GI's revenues, costs and market share etc. It may also have led to greater volatility in the market as H3GI's MTRs would initially have been set at high rates, and progressively have fallen as they built up market share.

6.32 Respondents were asked whether or not they agreed that H3GI's MTRs should tend towards an efficient level and that a price control based on H3GI's current costs and volumes would be of little benefit in establishing an efficient MTR.

*Views of Respondents*

6.33 All but one respondent agreed that H3GI's MTRs should tend towards an efficient level yet current costs and volumes of H3GI would be of little benefit in establishing the efficient MTR. One of the respondents believed it was appropriate that H3GI's MTRs tended towards an efficient level given the reductions implemented by other MNOs. They also supported the view that a price control based on H3GI's current costs and volumes would be of little benefit in establishing an efficient MTR given the lack of scale at this point in time. However, they noted that this was not to say that an efficient charge could not be established through a combination of other

means such as Bottom-up LRIC modelling and reference to other Irish MNO's MTRs.

- 6.34 A second respondent underlined that it was imperative that ComReg imposed the same form of price control obligation on H3GI as was currently imposed on the other MNOs designated with SMP and that the manner in which this obligation was implemented be broadly consistent across the operators including H3GI. From the respondent's standpoint the most important drawback of price control based on current costs and volumes was that it would appear to make concessions for H3GI's currently low market share and probable resultant failure to achieve economies of scale. They considered that such an approach would be tantamount to subsidising H3GI at the expense of its competitors which would have serious consequences in terms of distorting the retail mobile market. A third respondent noted that the efficient level in respect of individual MNOs may differ due to factors such as time in the market and technology deployed.
- 6.35 One respondent disagreed with the proposal that H3GI's MTRs should tend towards an efficient level suggesting that the consultation question as posed was inherently biased as it was predicated on ComReg's flawed assumption that H3GI's rates were not currently at an efficient level vis-à-vis H3GI's operations. Without prejudice to the foregoing, the respondent agreed with the principle that H3GI's MTRs should tend towards an efficient level, but that such a level should properly take into account long-run investment incentives and the ability to recover efficiently incurred costs.

*ComReg's Position and Conclusion*

- 6.36 Having completed the review of competition and developments in relation to H3GI's termination market and, taking into account the views of respondents, ComReg continues to believe that, in the presence of SMP, a price control on H3GI is appropriate, proportionate and justified. As noted above, forbearance is inappropriate for this market where there is insufficient pressure to constrain H3GI to an appreciable extent in its pricing behaviour over the period of the review. While imposing transparency and non-discrimination obligations only would represent a lighter form of regulation on H3GI, it would not fully target the main competition problem that of potential excessive pricing. Price control is an appropriate and proportionate regulatory response that addresses H3GIs' position of SMP in the market for termination. Consistent with the price control on existing SMP MNOs, H3GIs' MTRs should over time tend towards an efficient cost orientated level. Failure to regulate all termination rates, where the rates of the more established operators are regulated will increasingly tend to distort competition to the detriment of consumers.
- 6.37 ComReg has considered whether it should allow H3GI to set call termination charges that allow it to recover the efficiently incurred costs of an operator of their size and topology. The main argument used for charging higher termination rates is the lack of economies of scale for smaller operators compared with more established networks. There are substantial economies of scale in the provision of these services and that the larger operators have lower unit costs than the smaller networks. The differences in unit cost arise not because small/ new entrant operators are necessarily

inefficient. In general, these operators tend to be smaller (as measured through its subscriber base) as they have only recently entered the market.

- 6.38 However, should the termination charge be regulated on an asymmetric basis with reference to differential costs, there is risk that this will reduce incentives to efficiency and distort the competitive process. Setting termination rates to reflect the efficient cost of provision provide incentives for operators, such as, H3GI to become more efficient. In addition, all operators should achieve efficient scale of output and cost of operation, within a reasonable time period. In that regard, ComReg notes the presence of a national roaming agreement between H3GI and a 2G network operator since their entry into the mobile market in 2003. H3GI's market share is increasing and as its market share increases the cost of call termination should decrease as the unit cost falls due to economies of scale. Even where different levels are used as the regulated target price, ComReg would expect termination rates to be decreasing over time.
- 6.39 As set out below, when imposing a price control remedy, ComReg has taken account of the remedies imposed on other MNOs designated with SMP to ensure it is broadly consistent and at the same time have regard to proportionality of the effect of any remedy on H3GI. ComReg aims to achieve a balance between the interests of parties in respect of interconnection conditions of which termination services are part. A balance should be achieved in this case to allow the forward looking remuneration of both the roll out of new entrants' networks and the incumbent networks.

*Consultation Proposal (2): A Glide Path Toward Efficient MTRs*

- 6.40 ComReg recognised that an immediate adjustment downward of H3GI's mobile voice call termination charges to an efficient charge level could have caused disproportionate problems for it and may also have destabilised competition in the overall mobile market. ComReg outlined the possibility of using a glide path approach and/or a possible once off adjustment followed by a glide path to achieve a more appropriate level of termination rates. Respondents were asked whether or not a glide path is a suitable approach for H3GI to bring its MTRs to an efficient level.

*Views of Respondents*

- 6.41 One respondent maintained that without a cost model, the imposition of a price control could result in H3GI's MTRs being below cost which could significantly damage competition. They considered that until such time as ComReg understood 3G costs, basing price control on 2G costs was arbitrary and wrong. The respondent maintained that the only proportionate price control method would be a cost-oriented model. If ComReg was not prepared to carry out a proper 3G costs assessment, it would be better for ComReg to forebear from taking action, as it would be better for it to take no action at all than to take inappropriate action.
- 6.42 All other respondents agreed that a glide path was a suitable approach for H3GI to bring its MTRs to an efficient level. One of these respondents underlined that it was vital that any agreed glide path be fully transparent and known to the other operators. A second stated that the form of this glide path could of course incorporate elements specific to H3GI in light of its 3G only network and unique starting point in terms of its current nominal MTRs. However, in the interests of providing regulatory certainty, there should be clarity around the timeframe within which a target

termination rate would be achieved. They noted that the commencement by H3GI of the process of progressively reducing its MTRs to the target efficient level should occur at the earliest practicable opportunity. They did not accept that considerations regarding H3GI's market share or ability to avail of economies of scale could in any way justify delaying the commencement of the inevitable process of aligning H3GI's MTRs with those of the other MNOs. A third respondent concurred that in general glide paths were an appropriate mechanism to bring MTRs to an appropriate level balancing consumer protection with the need to ensure a proportionate effect, the encouragement of investment and the continued promotion of competition in the retail market.

*ComReg's Position and Conclusion*

- 6.43 Following detailed analysis by ComReg of the various price control options set out above and having taken into account the disparity of respondents' views, ComReg is of the view that, for correct incentives, a glide path is an appropriate and proportionate approach for H3GI to bring its MTRs to an efficient level. For transparency and legal certainty, when H3GI achieves a market share of 5% of mobile subscribers (to be determined on the basis of Quarterly Report data) or, in the event that H3GI with SMP does not reach such a threshold, a maximum of two years from the effective date of any final decision, whichever of these thresholds is soonest, this will trigger the commencement of a glide path for H3GI to reduce its MTRs to 7.99 cent by 2013 (over a period of 5 years from the effective date of any final decision).
- 6.44 ComReg will adopt a broadly consistent approach in relation to call termination such that operators' charges all ultimately approximate efficient cost orientated rates. ComReg expects the existing SMP MNOs to deliver their undertakings and reduce their MTRs to 7.99 cent by 1 January 2012. ComReg considers that voluntary reductions by H3GI to achieve a target rate of 7.99 cent by 2013 forms part of a glide path toward efficient MTRs consistent with the principles of the price control obligation. Such an approach is not unduly burdensome and provides an opportunity for H3GI to self regulate consistent with achieving more efficient MTRs by the least intrusive means.
- 6.45 Nevertheless, ComReg reserves the right to intervene further if necessary, if rate reductions are not delivered when H3GI achieves a 5% or greater market share of mobile subscribers (or 2 years from the effective date of a final decision, whichever is soonest). ComReg will benchmark Irish rates against other EU rates and will ensure that the trend in Irish rates is consistent with other EU countries. If deemed necessary and appropriate, ComReg may further consult with industry at a future date on an appropriate target rate for H3GI, the nature of any glide path, and possible specification of rate reductions over a period. While a detailed cost model would be a desirable method of setting MTRs, the determination of efficient prices is a complex task. Detailed cost models would potentially increase administrative costs for both ComReg and for at least some of the mobile operators concerned and would potentially be a time consuming exercise. Ongoing reductions in MTRs would reduce the need for detailed cost models. ComReg notes that efficient MTRs may be established through a combination of other means such as bottom up LRIC modelling and reference to other prevailing Irish and European MTRs.

- 6.46 ComReg believes that the principle of the threshold (a 5% market share of mobile subscribers, or a maximum of 2 years from the effective date of any final decision, whichever is soonest) is an appropriate basis for triggering the commencement of a glide path towards an efficient rate principally on the basis that it balances consumer protection with the need to ensure a proportionate effect, the encouragement of investment and the continued promotion of competition in the retail market. The European Commission has used market share thresholds in other areas of competition law, for example in relation to vertical agreements, therefore precedence for a trigger mechanism of this sort exists.<sup>157</sup>
- 6.47 ComReg has considered the requirements of proportionality in selecting an appropriate form of price control for H3GI and has taken into account the different stage of evolution of that network. In view of potential cost differences and the need to build economies of scale,<sup>158</sup> a glide path which commences upon reaching a 5% share of mobile subscribers, or 2 years from the effective date of any final decision, represents a suitable approach for H3GI to bring its MTRs to a more appropriate level. In practice, a common approach to setting termination rates is to allow entrant networks to set higher charges on market entry in order to recover the level of initial investment and potential inability to achieve economies of scope and scale.<sup>159</sup> Accordingly, a stringent remedy in the initial period of market growth may be inappropriate and unnecessary. For example, setting (strict) cost-orientated rates immediately potentially ignores real economies of scale issues that certain network operators cannot address however efficient they may be.<sup>160</sup> Market share is, in general, the first and main indicator of the level of economies of scale that an operator enjoys (yet calculation of economies of scale is not an exact science). In the presence of a 2G national roaming agreement, ComReg would expect that H3GI would achieve efficient scale of output and cost of operation within a reasonable time period. Application of a trigger mechanism should provide incentives for H3GI to become more efficient and grow its market share.
- 6.48 This trigger mechanism also recognises the dynamic benefits that the existence of H3GI, the fourth mobile operator in the market, brings in terms of competition or the lower connection or handsets that it may be able to offer. H3GI charging higher termination rates may obtain higher expected profits in the short term, strengthening its relative competitive position through faster penetration of the market than immediate cost based regulation, thereby leading to increased competition in the long term to the benefit of consumers.<sup>161</sup> Some asymmetry in MTRs at this stage

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<sup>157</sup> Commission (2000) Guidelines on Vertical Restraints. In these Guidelines, the Commission states that vertical agreements entered into by undertakings whose market share on the relevant market does not exceed 10% are generally considered to fall outside the scope of Article 81(1). This recognises that vertical agreements between firms with small market shares are unlikely to have a significant impact on the market.

<sup>158</sup> There may be significant economies of scale which are likely to remain un-exhausted in the early stages of market entry. At least initially, operators may face a smaller addressable customer base until a certain level of coverage or roll out is achieved (i.e. an effective market presence).

<sup>159</sup> The pattern of asymmetric regulation has been discussed in most European countries and is currently applied in a number of jurisdictions. Even in the mobile context, while most member states favour symmetrical rates in the longer term, the majority currently allow asymmetric termination.

<sup>160</sup> See Dewenter and Haucap, 2005. It is not only necessary, but even efficient that some prices exceed marginal costs in an industry characterised by significant sunk and common costs.

<sup>161</sup> See Peitz (2005) and Wright (2002).

may be pro-competitive where they create the incentive for H3GI to invest in the network. For these reasons, in the current asymmetric setting, it may be socially optimal to have non reciprocal termination rates for a period. With a very small market share (not currently exceeding 5% of mobile subscribers), the welfare burden of H3GI's high MTRs are likely to be relatively low, while the dynamic benefits of having an additional player in the market are likely to be high.

- 6.49 However, as set out in section 4 of the report, H3GI can price, to an appreciable extent, independently in the setting of their termination rates. In principal, if asymmetric rate differences are allowed over too long a period of time, this can lead to inefficiencies and be detrimental to competition and welfare. In choosing an appropriate form of price control for H3GI, ComReg has therefore also considered their potential effects on related markets. As H3GI's market share grows the welfare burden of its higher MTRs becomes increasingly burdensome on operators and customers of other networks who have to pay those charges. The asymmetric regulation of other SMP MNOs, requiring them alone to reduce termination charges increasingly tends to distort competition. ComReg notes the concerns of one respondent who points out that other operators are reducing their MTRs while H3GI's MTRs remain unchanged creating an advantage for H3GI. H3GI's current MTRs for peak, off-peak and weekend calls are higher than the rates charged by each of the other SMP MNOs (See Table 4.1 above). Substantial differences in termination rates over a prolonged period of time could provide certain operators with an unjustified advantage when competing against other operators, for example at the retail level. H3GI with current MTR differentials of approximately 10 to 50 percent above other mobile networks would have an adverse impact were it to have a far from negligible market share. This potential adverse impact on existing SMP MNOs is also likely to be more pertinent with other players entering the market, such as mobile virtual network operators ("MVNOs").
- 6.50 ComReg also recognises that a new entrant cannot remain un-regulated indefinitely. The nature of competition is that some firms may not succeed in competing effectively in the market. As such, while it seems appropriate to give a new entrant a degree of time before regulating their prices, they should not be given an indefinite period, as otherwise their incentives to grow their customer base and become more efficient may diminish. ComReg feels that a period of a maximum of two years after the date of a decision that the operators has SMP is sufficient time – if the operator has still not reached 5% of mobile subscribers at that point, it should still commence price regulation through the initiation of a glide path.
- 6.51 In the presence of the 2G national roaming, ComReg considers a requirement to move towards 7.99 cent by 2013 when H3GI achieves 5% of mobile subscribers, or two years from the publication of any final decision, whichever is soonest, would balance the need to encourage investment and innovation while limiting any potential distortion to competition as its market share grows. Thus, were H3GI to have a far from negligible market share of mobile subscribers, any potential adverse impact would be addressed as it becomes subject to a glide path to a more appropriate level of MTRs.



*Consultation Proposal (3): A Price Control Based on Forward Looking Costs*

- 6.52 In its consideration of the price control remedy, ComReg considered different forms of price control (i.e. one based on forward looking costs, one based on benchmarking against operators with the lowest unit costs or a hypothetical situation where all operators had an equal market share). In assessing the efficient level of unit costs on a forward looking basis, ComReg would have had to take a view on the future market share, and hence volume of traffic, of H3GI in the medium to long term. ComReg recognised the difficulties and uncertainties in setting such forecasts and the implication on the market of setting forecasts which needed significant revision at a later date.
- 6.53 ComReg was of the preliminary view that in the longer term this approach would have been an appropriate one as it would most likely lead, in the longer term, to the setting of a price control which prevented H3GI from raising prices above an efficient cost. However, ComReg was also of the preliminary view that it would have been premature to impose such a price control in the market at this time given the level of uncertainty in forecasting and the implications for possible disruptions in the market. ComReg then considered benchmarking against operators with the lowest unit costs (i.e. those operators with the greatest economies of scale), or a hypothetical situation where all operators had equal market shares. However, ComReg considered this approach would also have been disproportionate given the difference in scale between H3GI and the other operators.
- 6.54 Respondents were asked whether or not it would be premature at this time to impose a price control based on forward looking costs.

*Views of Respondents*

- 6.55 One respondent agreed that it would be premature at this time to impose a price control based solely on forward-looking costs. However they considered that referencing to the MTRs of O<sub>2</sub> and Vodafone would be a practical move towards setting MTRs for H3GI. A second respondent also agreed that ComReg should seek a pragmatic approach to establishing the efficient levels for H3GI rather than detailed modelling requiring forward-looking assumptions in a dynamic and uncertain market.
- 6.56 A third respondent outlined its view that a price control based on a forward-looking forecast of H3GI's own particular costs and volumes would not be appropriate either in the short term or at some later date. They considered that the appropriate price control should ensure that H3GI reduced its MTRs over time so as to reach the efficient charge level that would be set by an efficient 3G only network operator. The relevant hypothesised efficient 3G operator would be one that had reached a market share sufficient to avail of significant scale economies. They argued that setting a target termination rate for operators with low market shares and/or less efficient operations in line with benchmarks of the lowest unit cost operators was in no way disproportionate. On the contrary, they maintained this approach would create strong and proper incentives for smaller operators to grow their market share rapidly, streamline their operations and reap the resulting considerable economies of scale of the currently more efficient operators. They asserted that setting ultimate MTR targets for operators, such as H3GI, that were significantly above those of

other operators, on the basis of its currently low market share, would perpetuate the current competition distorting asymmetry in MTRs between H3GI and its competitors and would be equivalent to subsidising H3GI at the expense of other market players.

*ComReg's Position and Conclusion*

6.57 While ComReg recognises some of the merits of these options, it agrees with the majority view of respondents that to impose a price control based on H3GI's forward looking costs is not appropriate. ComReg's expectation is that H3GI's market share will grow over a reasonable period of time in the presence of a 2G national roaming agreement. Thus, referencing to EU benchmarks and the MTRs of the existing SMP MNOs is an appropriate, proportionate and practical approach towards setting termination rates for H3GI to a more appropriate level. Similar to the discussion above on the setting of the price control based on H3GI's current cost and volumes, were H3GI's network to grow to the same size as the incumbent mobile networks, it should have unit costs approximate to those networks. ComReg is still of the view that over time H3GI's MTRs should tend towards an efficient level.

*Consultation Proposal (4): Price Ceiling At Prevailing MTRs*

6.58 ComReg was of the preliminary view that at a minimum the prevailing rates should be a ceiling for H3GI's mobile voice call termination charges. ComReg noted that H3GI's mobile voice call termination rates were the highest of all the mobile operators and that the current trend in Europe was toward reductions in MTRs. While ComReg accepted that H3GI was the latest player in the market, it does not anticipate any circumstance where it would have been appropriate for H3GI's rates to increase further.

6.59 Weighing up the alternatives, ComReg was of the preliminary view that the setting of a price ceiling in the short term would be the least onerous form of price control obligation it could impose on H3GI. This would have the effect of reducing rates in real terms and be in effect a price control of CPI-CPI. It also had the advantage of ameliorating the uncertainty and disruptive effects of the other forms of price controls addressed above.

6.60 However, ComReg was also of the preliminary view that this form of price control may not be appropriate in the medium/longer term, as H3GI built up market share and the differential in operators' rates had a potentially increased adverse effect on competition. Other existing SMP MNOs were subject to regulation that maintained a downward trend in their termination rates, thus the differential between other termination rates in the market and H3GI's termination rates (set at a ceiling level) was likely to increase over time. ComReg indicated that it would closely monitor developments in the markets, including evolution of H3GI's market share. Depending on the competitive effect in the market, other forms of price controls (as discussed above) would be considered in the medium/longer term. ComReg also indicated that if H3GI in the medium/longer term were to voluntarily reduce their MTRs as part of a glide path to an efficient rate, similar to the existing SMP MNOs, this would have reduced the need for early regulatory intervention.

6.61 ComReg invited comments from respondents on whether, in the short term, it would be appropriate, as a form of price control on H3GI's MTRs, to set the current mobile

voice call termination charges as a ceiling, i.e. cap prices at the current nominal rates, and whether in the medium/long term other forms of price controls would need to be implemented.

*Views of Respondents*

6.62 One respondent disagreed with ComReg's proposal submitting that a price control remedy of any kind was wholly inappropriate for a number of reasons:

- A price cap on H3GI's MTRs at the current nominal rates was disproportionate and would not be the least onerous form of price control.
- H3GI needs a sufficient period to properly establish itself on the market and grow its business in order to determine what its proper cost structure would be. In the interim, H3GI should be in a position to adjust its rate accordingly.
- A ceiling cap on H3GI's MTRs would preclude H3GI from raising its MTRs in line with inflation which is an excessively onerous cost control burden.

6.63 In addition, this respondent considers that ComReg's proposed price control remedy breached the principle of legal certainty by i) failing to specify the duration of the proposed price cap remedy and ii) failing to specify what pricing remedy ComReg would impose as a replacement for the price cap remedy upon its removal. In support, they referred to the *Fishing Quotas* case where it was held that any decisions liable to result in financial consequences must be taken in strict accordance with the principle of legal certainty, so that those concerned may know precisely the extent of the obligations which they have imposed on them. The respondent also referred to Case FR 2006/0413 in which the EU Commission emphasised that remedies should provide adequate transparency and legal certainty for market players. The respondent maintained that they were unable to foresee, with a sufficient degree of certainty, how it would be applied

6.64 A second respondent who also disagreed with ComReg's proposal did so for different reasons. They considered that the price control remedy proposed failed to contribute to achieving its intended objective and discriminated between H3GI and the other MNOs. The respondent asserted that the current asymmetry in MTRs between H3GI and the other operators was already having a significant adverse effect on competition and consumer welfare. The respondent considered the proposed asymmetrical approach to the imposition of the price control remedy by ComReg across markets, where essentially identical potential competition problems had been identified, was entirely contrary to the requirements of a non-discriminatory approach. They noted that ComReg should have regard to the EU Commission's comments letter in BE/2006/0433 in which the Commission indicated that the fact that a MNO had entered the market later and had therefore a smaller market share could only justify higher MTRs for a limited transitory period. The respondent did not consider that ComReg's proposals to set H3GI's current MTRs as a ceiling for an undefined period was consistent with the EU Commission's guidance in other jurisdictions.

- 6.65 Two respondents agreed with ComReg's proposed approach in the short-term. However, one of these suggested that ComReg should be more explicit on the type of price control to be imposed in the longer term and proposed that this price control could be linked with the market share of H3GI.

*ComReg's Position and Conclusion*

- 6.66 As noted above, forbearance is inappropriate for this market. At a minimum, a ceiling cap on H3GI's MTRs at the prevailing rates is appropriate and justified as consumers benefit from some real reductions in H3GI's termination rates. As noted in section 4 above, the economic literature suggests that downward regulation of the larger operators' tends to have the effect of increasing the rates of unregulated (or smaller) operators.
- 6.67 ComReg is of the view that the prevailing MTRs of H3GI are unlikely to reflect the efficient cost of provision.<sup>162</sup> This seems likely based on precedents in other European countries viz a viz termination rates (see Figure 4.1 above) and comments from the EU Commission about MTRs in general.<sup>163</sup> Progressive reductions are being implemented by all existing SMP MNOs in the Irish mobile market who are expected to achieve MTRs of 7.99 cents by 1 January 2012.<sup>164</sup> H3GI's MTRs are likely to be persistently high with no effective pressure (e.g., from new entry/expansion or from strong buyers) to bring them down to a more appropriate level over the period of the review. ComReg notes that in the absence of regulation H3GI has not (voluntarily) lowered its MTRs, and is hence charging competing operators termination rates above the market average rates. ComReg would also highlight that while Hutchinson's termination rates in other EU jurisdictions differ and are less than the prevailing H3GI rate in Ireland, they are declining similar to 2G networks.<sup>165</sup>
- 6.68 ComReg does not anticipate any circumstance where it would be appropriate for H3GI's rates to increase further. Charging high prices for wholesale call termination will have the effect of restricting competition/raising rivals' costs in downstream calls markets thereby enabling the terminating operators' retail arms to gain market share and profits at the expense of their rivals. Effective from the date of any final decision in relation to SMP and SMP obligations on H3GI, a ceiling at H3GI's prevailing termination rates would apply.

Overall Conclusions on Price Control

- 6.69 ComReg has reviewed the EU Commission's comments pertaining to the imposition of remedies in this market in other Member States.<sup>166</sup> ComReg considers that its proposed approach is consistent with these principles. H3GI is the fourth market

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<sup>162</sup> ComReg notes that H3GI did not provide it with any detailed information to rebut this point.

<sup>163</sup> It is important to note that according to the EU benchmark on MTRs there is a movement towards a reduction of asymmetries of MTRs.

<sup>164</sup> ComReg Document 07/58.

<sup>165</sup> See Figure 4.1.

<sup>166</sup> Amongst others, case BE/2006/0433: voice call termination on individual mobile networks in Belgium, Comments pursuant to Article 7(3) of Directive 2002/21/EC, Brussels, 04.8.2006.

player, launching commercially in July 2003 and only offering a full suite of 3G services in July 2005. ComReg considers there is no question of discrimination arising in the application of this remedy in this case because the operators are in different positions, and indeed to apply the same remedies would in fact be discriminatory. In circumstances where much smaller operators exist side by side with more established operators, the regulator has a duty to assess the proportionality of the burden to be imposed. ComReg has considered this issue in relation to the discussions on a glide path approach to achieving efficient termination rates.

6.70 The key conclusions on the price control remedy to be imposed on H3GI are:

- A price control on H3GI effective from the date of a final decision and, broadly consistent with the existing SMP MNOs, its MTRs must over time tend towards an efficient cost orientated level.
- A ceiling at H3GI's prevailing termination rate will apply effective from the date of a final decision.
- H3GI must comply with a glide path towards an efficient MTR when it achieves a market share of 5% of mobile subscribers (to be determined on the basis of Quarterly Report data), or within a maximum of two years of the publication of any final decision, whichever is soonest, and reduce its termination rates towards a target rate of 7.99 cents which must be achieved by 2013 (over a period of 5 years from the effective date of any final decision).

6.71 Discussed above, voluntary reductions by H3GI to achieve a target rate of 7.99 cents by 2013 would form part of a glide path toward efficient MTRs consistent with the principles of the price control obligation. Failing voluntary reductions by H3GI, ComReg reserves the right to undertake cost modelling, if deemed necessary, and may further consult with industry at a future date on, amongst other things, cost modelling, an appropriate target rate for H3GI, the nature of any glide path and possible specification of rate reductions over a period. ComReg considers this approach is proportionate on H3GI as it takes account of their stage of development in the marketplace and gives the operator sufficient time to establish itself more firmly in the market place. The clarification provided on the timescale of the cap on H3GI's existing MTR and the initiation of the glide path approach are also intended to provide greater legal certainty to H3GI and transparency to the industry as a whole.

### **Transparency Obligation**

6.72 Regulation 10 of the Access Regulations allows for the imposition of an obligation of transparency on SMP operators, under which ComReg may require an operator to make public specified information such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices.

6.73 ComReg had proposed to impose a price transparency obligation on H3GI. In furtherance of this obligation, ComReg had proposed that H3GI publish its mobile

voice call termination charges (or any other relevant information ComReg may have requested it to publish from time to time) in a publicly accessible manner.

- 6.74 ComReg was of the preliminary view that such an obligation would provide greater certainty in the market and would inform interested parties of charges to other electronic communications providers who were purchasing wholesale mobile call termination services. ComReg's preliminary view was that it was also important that a price control was associated with a high degree of transparency for interconnecting operators, consumers and other interested parties. In addition, a transparency obligation could assist ComReg and the industry in ascertaining and monitoring whether H3GI was complying with its non-discrimination obligation (as discussed below) under Regulation 11 of the Access Regulations, which was intended to deter potential anti-competitive behaviour by SMP operators.

#### *Views of Respondents*

- 6.75 Three respondents agreed that an obligation of transparency was necessary. One of these respondents noted that the obligation had already been imposed on the other MNOs. A second respondent noted that such an obligation would not be unduly burdensome on H3GI in terms of compliance costs. However, the respondent was deeply concerned by the considerable differences between the transparency remedy proposed for H3GI compared with that currently imposed on the other MNOs. They asserted that despite the major differences in the form of H3GI's proposed obligation the necessary detailed justification for such an asymmetrical approach was absent. The respondent considered that there was in fact no basis for a less prescriptive approach given that the identified competition problems were the same in all cases.
- 6.76 In contrast, a fourth respondent contended that such a high degree of transparency as proposed was not an appropriate remedy for a new entrant operator in the concentrated mobile sector. Furthermore, H3GI as a new entrant had finite resources and limited scope to expand its activities on the basis of its existing structure to include the provision of transparency. They considered that this remedy was disproportionate since Eircom published all MTRs in the pricing schedule of its RIO and these rates were charged to all operators.

#### *ComReg's Position and Conclusion*

- 6.77 ComReg accepts that the specific requirements of the transparency obligation are less prescriptive than that imposed on the other SMP MNOs. However, ComReg is of the view that it is disproportionate to apply the same obligations on H3GI given its smaller total market share, the length of time in the market and the economies of scale achieved by operators with a larger market share. ComReg would also point out that current practice is that existing SMP MNOs only publish their MTRs in compliance with this remedy.
- 6.78 ComReg disagrees with the views of one respondent that such a high degree of transparency as proposed was not an appropriate remedy for a new entrant operator in the mobile sector, as it is only requiring H3GI to publish its MTRs in a publicly accessible manner (i.e. on its website) as part of this obligation, which would not be a costly exercise. Also in response to another respondent, ComReg would point out that it has not changed its view on the need for a transparency remedy as it considers this remedy is still necessary for the reasons set out in ComReg Document 07/01, but

on the grounds of proportionality considers a less prescriptive remedy is appropriate for H3GI at its current stage of development.

- 6.79 ComReg remains of the view that a transparency obligation would provide greater certainty in the market and would inform interested parties of charges to other electronic communications providers who are purchasing wholesale mobile call termination services. ComReg's view is that it is also important that a price control is associated with a high degree of transparency for interconnecting operators, consumers and other interested parties.

### **Non-Discrimination Obligation**

- 6.80 ComReg was of the preliminary view that a non-discrimination obligation was necessary to ensure that H3GI offered equivalent conditions in equivalent circumstances to other undertakings providing equivalent services. This would mean that H3GI must offer the same price and level of service to similar operators. However, ComReg was aware that the scope of this obligation could have covered a wide variety of behaviours. It was in ComReg's view difficult for it to specify a list of prohibited behaviours as such a list might have risked unduly restricting ComReg in the exercise of its enforcement powers in the event of potential future breaches of the obligation. However, ComReg Document 07/01 attempted to provide guidance as to ComReg's thinking at the time.
- 6.81 ComReg did not intend that an obligation of non-discrimination would have prohibited the negotiation of commercial deals, as long as they did not have adverse effects or operate to the detriment of consumers. ComReg noted that non-discrimination did not mean that all parties were treated in exactly the same way, but that parties in similar circumstances were treated identically and that any differences in treatment were justified by reference to objective considerations.
- 6.82 ComReg stated that it would be guided by the principle of non-discrimination as elucidated through the jurisprudence under Article 82 of the EC Treaty (and by any guidelines that may be issued in the future by the EU Commission/DG Competition) in the application of this obligation. ComReg was of the preliminary view that a non-discrimination obligation implemented in that manner was an effective and proportionate obligation and would have prevented or restricted an imbalance in the competitive position between FNOs and MNOs, or between MNOs which had an adverse effect. The requirement would have reduced the likelihood of potentially adverse effects on competition and have protected consumers whilst not placing too onerous an obligation on the designated undertakings in question. However, ComReg was of the preliminary view that this obligation was not sufficient on its own to address the potential competition problem in this market that was to sufficiently restrict H3GI in acting to an appreciable extent independently of its customers, competitors and consumers.

#### *Views of Respondents*

- 6.83 Three respondents agreed with ComReg that an obligation of non-discrimination was necessary. One respondent noted that the obligation had already been imposed on

the other MNOs. A second respondent stated that such an obligation would not be unduly burdensome on H3GI in terms of compliance costs. A third respondent noted that to the extent that H3GI might seek to place higher MTRs on FNOs or other MNOs, a non-discrimination obligation combined with a transparency obligation to demonstrate compliance was a proportionate remedy.

6.84 However, a fourth respondent expressed the view that a non-discrimination obligation was onerous and in proposing this obligation ComReg was acting in a disproportionate manner. The respondent argued that it was a burdensome obligation which affected H3GI's ability to compete effectively in the mobile sector in Ireland. They maintained that in imposing an obligation of non-discrimination on H3GI ComReg was in breach of its statutory duty. The proposed non-discriminatory obligation would also not meet the proportionality test as set out in *Heaney v Ireland*. The respondent noted that H3GI had previously set out to ComReg that it had no plans to discriminate between operators in Ireland in regard to the MTRs it offered. Should H3GI attempt to do so, it would always be open to operators to determine the cheapest way to route traffic. Therefore, H3GI must assume that the lowest rate which it set would be the route by which most, if not all, would choose to pay when sending traffic to H3GI.

#### *ComReg's Position and Conclusion*

6.85 Having completed the review of competition and developments in relation to H3GI's termination market and, taking into account the views of respondents, ComReg continues to believe that, in the presence of SMP, a non-discrimination obligation on H3GI is appropriate, proportionate and justified.

6.86 As noted above, forbearance is inappropriate for this market where there is insufficient pressure to constrain H3GI to an appreciable extent in its pricing behaviour over the period of the review. Given that a key concern for termination markets is the potential for exploitative behaviour by way of excessive pricing, H3GI could potentially reinforce its ability to extract excessive prices from their wholesale customers via their terms and conditions of access. While ComReg is of the view that operators would generally have incentives to interconnect with each other, and they are also obliged to do so, H3GI may supplement their bargaining power by employing some of the tactics, such as, the potential discriminatory use of, or withholding of information, delay tactics, and the application of undue requirements in interconnect contracts so as to extract higher rates from their customers. Thus, obligations relating to non-discrimination are necessary to supplement obligations addressing the potential pricing problems identified above.

6.87 A non-discrimination obligation is an appropriate and proportionate regulatory response that addresses H3GIs' position of SMP in the market for termination. As such, ComReg considers that it meets the proportionality test set out in *Heaney v Ireland* (as outlined above). ComReg notes that the majority of respondents agreed on the need for a non-discrimination obligation which in their view is not unduly burdensome or costly in terms of compliance. ComReg notes the comments by one respondent who indicated that it has no plans to discriminate between operators in Ireland in regard to its MTRs and if it attempted to do so, it would always be open to operators to determine the cheapest way to route traffic. Given these comments, ComReg is unclear as to their objection to the imposition of this remedy.



6.88 In view of the identified market failure in call termination, an obligation of non-discrimination is required on H3GI in addition to the price control obligation, to prevent and monitor potential competitive distortions brought about by termination charges. It is necessary as opportunities exist for H3GI with SMP to discriminate in a manner that would disadvantage another provider by applying different charges where differences are not justified by reference to objective considerations. Thus, regardless of the size of the H3GI network operator in the overall mobile sector, it has the ability to discriminate against particular operators, with an accompanying negative effect on competition. Consistent with the non-discrimination obligation on existing SMP MNOs, H3GI should in respect of termination on the H3GI network offer equivalent conditions in equivalent circumstances to other undertakings providing equivalent services.

### **Access Obligation**

6.89 Under the regulatory framework for electronic communications, there is provision under Regulation 6 of the Access Regulations to ensure that there is adequate access and interconnection. ComReg noted that it was in H3GI's commercial interests to have offered access and interconnection. In addition, the provisions of Regulation 6 of the Access Regulations went some way towards lessening ComReg's concern that H3GI could have unreasonably denied access. Therefore, ComReg's preliminary view was that it would not be proportionate to impose the access obligations set out in Regulation 13 of the Access Regulations on H3GI.

#### *Views of Respondents*

6.90 One respondent agreed that an access obligation was unnecessary in respect of MTR regulation given the established provisions of the European regulatory framework in respect of interconnection. They noted that ComReg's analysis in this respect applied to other MNOs and they assumed ComReg would initiate action in the near future to ensure a consistent approach.

6.91 Two other respondents disagreed given that an access obligation was currently imposed on the other MNOs. One of these respondents asserted that ComReg's proposed asymmetrical approach to the imposition of the access remedy across markets where essentially identical competition problems had been identified was entirely contrary to the need to avoid unjustified discriminatory regulatory treatment in respect of undertakings in equivalent circumstances. The respondent noted that the reasons given for proposing not to impose an access obligation on H3GI were equally relevant to the other MNOs. The respondent considered that ComReg had not provided adequate justification for its preliminary decision not to impose a specific access obligation on H3GI in the context where such an access obligation was currently in force on the other MNOs.

6.92 A fourth respondent expressed the view that the imposition of remedies of any kind was wholly inappropriate.

*ComReg's Position and Conclusion*

- 6.93 Having further considered this issue, ComReg remains of the view as that expressed in ComReg Document 07/01. An access obligation on H3GI designated with SMP is unnecessary at this stage in view of the current asymmetric setting owing to H3GI's very small market share (not currently exceeding 5% of mobile subscribers), the length of time in the market and the economies of scale achieved by operators with a larger total market share. A stringent access obligation on H3GI at this stage is likely to be disproportionate in view that it is in H3GI's commercial interests to offer access and interconnection. In order to provide a complete portfolio of services to its own subscribers H3GI is highly unlikely to have an incentive not to interconnect. On the grounds of proportionality, ComReg is of the view that it is not necessary to impose an access obligation at this time, but will keep this issue under review during the period of this market review.
- 6.94 If however ComReg was to become aware of a refusal or delayed interconnection by H3GI, ComReg would seek to invoke one or more regulatory measure. Further to the obligation of non-discrimination, a failure to provide access, where it is already being provided (as is the case with H3GI) could constitute a breach of their non-discrimination obligation and ComReg could intervene in a timely fashion to remedy non-compliance. Alternatively, if there was evidence of a failure to provide end-to-end connectivity, Regulation 6 of the Access Regulations could be used to impose an access obligation – without the necessity of undertaking a market analysis, normally undertaken in respect of SMP operators. Also, a failure by H3GI to provide interconnection could be the subject of a dispute notification to ComReg. Such provisions should address any concerns in relation to interconnection for termination in H3GI's network. This is consistent with the requirement to adopt the least burdensome means of regulatory intervention at this time.
- 6.95 In view of the above factors, it is ComReg's view that the imposition of an access obligation may be disproportionate at this time. Nevertheless, in the event that any general interconnection obligation stemming from Irish legislation would not resolve swiftly any access problems, such as delaying tactics on the part of H3GI, ComReg reserves the right to reconsider the issue of a more specific access obligation imposed as a result of a market analysis. ComReg will closely monitor developments in the markets for call termination and should a situation arise relating to denial of interconnection by H3GI, ComReg subject to further consultation may re-consider this issue and, whether it would be necessary to impose access obligations on H3GI designated with SMP.

**Accounting Separation and Cost Accounting Obligations**

- 6.96 ComReg examined this issue in earlier consultation documents (see ComReg Documents 04/62b and 05/51) and was of the view that it would be disproportionate to impose the obligations of accounting separation or cost accounting systems on operators with a small overall share of the mobile market, such as H3GI. ComReg had to take into account the promotion of competition in the mobile sector and was of the preliminary view that it would not have been proportionate to impose cost accounting and accounting separation on H3GI.

*Views of Respondents*

6.97 All respondents agreed that it was inappropriate to impose accounting separation and cost accounting SMP obligations on H3GI. One respondent expressed the view that obligations of accounting separation were unnecessary and imposed unwarranted heavy costs on operators without providing any significant offsetting benefits. Another respondent questioned the merits of imposing such obligations on any MNO in the context of MTR regulation. They noted that ComReg's concerns regarding compliance with non-discrimination obligations were adequately dealt with through transparency obligations.

*ComReg's Position and Conclusion*

- 6.98 ComReg must impose proportionate remedies and imposing an obligation of accounting separation and cost accounting on H3GI would seem to be excessively burdensome and costly for them to comply with given its smaller total market share and stage of development in the market. ComReg considers that appropriately designed price control, non-discrimination and transparency obligations ought to suffice to regulate H3GI effectively. As discussed above, ComReg is obliged under section 13 of the Communications Act 2002 to have regard and to comply with policy directions given to ComReg by the Minister and considers that it has done so in carrying out its market analysis and proposals on remedies. ComReg also considers that there is no question of discrimination arising in the application of remedies in this case because the operators are in different positions, and indeed, to apply the same remedies would in fact be discriminatory.
- 6.99 On the grounds of proportionality therefore, ComReg does not propose to impose an Accounting Separation/Cost Accounting obligation on H3GI at this time.

## 7 Regulatory Impact Assessment

### Introduction

- 7.1 According to ComReg's consultation on its Approach to Regulatory Impact Assessment, ComReg Document 06/69, the purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. ComReg's proposed approach to RIA is that in the future it will continue to conduct RIAs in respect of any proposed statutory instruments which would impose regulatory obligations, or in respect of any market analyses which propose to impose, amend or withdraw obligations, through the finding of SMP or effective competition. Appropriate use of RIA should ensure the most effective approach to regulation is adopted.
- 7.2 In conducting RIA ComReg will take into account the RIA Guidelines<sup>167</sup>, adopted under the Government's Better Regulation programme. The RIA Guidelines are not formally or legally binding upon ComReg, however, in conducting RIA ComReg will have regard to them, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation may be different to regulation exclusively by way of enacting primary or secondary legislation. In conducting a RIA ComReg will take into account the six principles of Better Regulation that is, necessity, effectiveness, proportionality, transparency, accountability and consistency. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards RIA. As decisions are likely to vary in terms of their impact, if after initial investigation a decision appears to have relatively low costs, then ComReg would expect to carry out a lighter RIA in respect of those decisions.
- 7.3 The Government's RIA Guidelines sets out the stages it believes are necessary for minor impact regulations and a more detailed set of steps for more comprehensive or full RIA, ComReg has taken these steps into consideration and has come up with a 5 step approach as follows which will be used:
- (a) Description of policy issue to be addressed and identification of objectives;
  - (b) Identify and describe the regulatory options;
  - (c) Determine the impact on stakeholders;
  - (d) Determine the impact on competition; and
  - (e) Assess the impacts and select the best option.
- 7.4 In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost benefit analysis would only arise where it would

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<sup>167</sup> See "RIA Guidelines: How to conduct a Regulatory Impact Analysis", October 2005, [www.betterregulation.ie](http://www.betterregulation.ie)

be proportionate or in exceptional cases where robust, detailed and independently verifiable data is available. Such comprehensive review will be taken when necessary.

- 7.5 The following sections in conjunction with the rest of this consultation document represent a RIA. It sets out an assessment of the potential impact of SMP obligations for the voice call termination market on H3GI's mobile phone network.

## The RIA

### Description of policy issue and objectives

- 7.6 The European Commission, in its adoption of a new common regulatory framework for electronic communications networks and services on 7th March 2002, acknowledges the need for *ex ante* regulatory obligations in certain circumstances in order to ensure the development of a competitive communications market. The Recommendation identifies electronic communications markets, the characteristics of which may be such as to justify the imposition of such regulatory obligations. Regulation 26 of the Framework Regulations<sup>168</sup> requires that, as soon as possible after the adoption by the European Commission of this Recommendation, ComReg shall define relevant markets in accordance with the principles of competition law including the geographical area within the State of such markets. In addition, Regulation 27 requires that, as soon as possible after ComReg defines a relevant market, ComReg should carry out a market analysis of these markets. Where ComReg determines that a recommended market is not effectively competitive, it shall designate undertakings with significant market power on that market, and it shall impose on such undertakings such specific obligations as it considers appropriate.
- 7.7 Regulation 9(1) of the Access Regulations<sup>169</sup> 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<sup>170</sup> state that, “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 as having SMP.
- 7.8 ComReg can impose any or a combination of obligations from those obligations listed in Regulation 10 to 14 of the Access Regulations. Under Regulation 9(6) of the Access Regulations, obligations shall be “based on the nature of the problem identified; be proportionate and justified in the light of the objectives laid down in

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<sup>168</sup> European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003, S. I. No. 307 of 2003.

<sup>169</sup> European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

<sup>170</sup> Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03).

section 12 of the Act of 2002 and only be imposed following consultation in accordance with Regulations 19 and 20 of the Framework Regulations”.

- 7.9 As part of the process of selecting appropriate obligations which satisfy the requirements of Regulation 9(6), ComReg is conducting, inter alia, a Regulatory Impact Assessment in accordance with the Ministerial Policy Direction on Regulatory Impact Assessment.<sup>171</sup> ComReg is also paying close attention to best practice, and specifically, to the RIA Guidelines issued by the Department of the Taoiseach.<sup>172</sup>
- 7.10 ComReg has undertaken a market analysis of the market for wholesale call termination on individual mobile networks (one of the markets identified in the Recommendation as having characteristics which may be such as to justify the imposition of regulatory obligations) in this specific consultation for wholesale voice call termination on H3GI's mobile network. ComReg has made the finding that this market is not effectively competitive and has designated H3GI with SMP in its individual market, as required under Regulation 27 of the Framework Regulations.
- 7.11 As such, ComReg is obliged to impose at least one regulatory obligation on H3GI in light of this finding. It is considered that the following regulatory obligations should be imposed on H3GI:
- Transparency (Regulation 10);
  - Non-discrimination (Regulation 11); and
  - Price control (Regulation 14).
- 7.12 ComReg's objectives as the national regulator are to promote competition, contribute to the development of the internal market and to promote the interests of end users within the European Union.

#### Description of regulatory options for H3GI

- 7.13 The regulatory options open to ComReg (Regulations 10-14 of the Access Regulations):
- **Access to and use of specific network facilities:** ComReg is of the view that it would be disproportionate to impose an obligation of Access on H3GI. This is primarily because the provisions of Regulation 6 of the Access Regulations go some way towards lessening ComReg's concern that H3GI could unreasonably deny access. As outlined in section 4 it is also the case that commercial incentives exist to interconnect for the provision of termination services. ComReg is of the view that this will not harm end-users in the market nor will it adversely affect fixed and/or mobile operators in the telecommunications market in Ireland. Further,

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<sup>171</sup> Section 6 of the 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, published in February 2003.

<sup>172</sup> See "RIA Guidelines: How to conduct a Regulatory Impact Analysis", October 2005, [www.betterregulation.ie](http://www.betterregulation.ie)

H3GI has an existing obligation under its 3G licence, unlike the other MNOs in the Irish market, to offer access to mobile virtual network operators (MVNO).

- **Transparency & Non-discrimination:** ComReg is of the view that the obligations of transparency and non-discrimination are proportionate, appropriate and justified. ComReg is of the view that a transparency obligation will provide greater certainty in the market and will inform interested parties of changes to other communications providers who are purchasing wholesale mobile call termination services from H3GI. It would also be important that a price control obligation (see below) would be associated with a high degree of transparency for interconnecting operators, consumers and other interested parties and commentators. In addition it can assist ComReg and the industry in ascertaining and monitoring whether H3GI is complying with a non-discrimination obligation, as discussed below. The general non-discrimination obligation on H3GI would require that H3GI must offer equivalent conditions in equivalent circumstances to other undertakings providing equivalent services. This obligation would not mean that commercial negotiation of deals would be prohibited as long as these deals did not have adverse effects or operate to the detriment of consumers. Finally, out of the five SMP obligations available to ComReg, these two obligations are the least burdensome, apart from the imposition of an obligation of transparency alone as, together, they constitute a minimum intrusion on an SMP operator's business. It is unlikely for example that the imposition of an obligation of transparency would impose a high cost burden on H3GI in terms of administrative costs.
- **Accounting Separation:** ComReg is of the view that an accounting separation obligation would be disproportionate to impose on H3GI. ComReg must impose proportionate remedies and imposing this obligation on H3GI, with its smaller total market share and its stage of development in the market would be excessively burdensome and costly for them to comply with.
- **Price Control and Costs Accounting Obligations:** Where a lack of effective competition means that the operator concerned might apply or implement excessive prices (i.e. to the detriment of end-users) then this obligation may apply. Absent regulation, the current termination market structure would appear to allow for such an outcome. In addition a benefit of setting termination rates *ex ante* would be to provide for certainty in the market and for operators when setting their retail prices, as the retail price is a function of the termination charge. Based on the analysis carried out in the consultation document, ComReg is of the view that the current termination markets do not provide sufficient constraints to ensure that prices reflect costs and are not excessive. ComReg is of the view that this has the potential to result in higher prices for consumers.

In addition, MTRs make up the largest proportion of costs in a fixed to mobile retail price for a voice call. H3GI has stated in previous responses that it does not want to be perceived as a high cost network to call. However this did not seem to prevent it from attempting to extract termination rates from FNOs that were substantially higher than all other mobile operators' rates at the time and successfully achieving rates that are higher than the level in the overall mobile market. ComReg is of the view that any ad hoc or forbearance approach would be more likely to result in a climate of commercial and regulatory uncertainty. As such, it is appropriate to assess whether this obligation should be imposed to complement the preceding obligations in addressing the potential competition problems in this market and ComReg is of the view that the benefits of such an obligation would outweigh the costs.

#### Impact of Options on Stakeholders and Competition

7.14 There are three options available to ComReg:

Option 1: Do nothing (impose no SMP obligations).

Option 2: Impose Transparency & Non-discrimination obligations only.

Option 3: Impose Transparency, Non-discrimination and Price Control

7.15 In relation to the options available to ComReg in achieving the objectives of the regulatory obligations (i.e. to ensure the development of a competitive communications market) ComReg notes that the "do nothing" option (Option 1), which is the situation at present, is primarily included for benchmarking purposes only. Therefore, it will not be examined in detail as part of this RIA because it is not envisaged that this option will be pursued in practice. To impose no regulatory obligations on an undertaking designated as having SMP, or vice versa, would mean a failure to comply with EU obligations and could result in prosecution by the EU Commission.

7.16 Option 2 would impose a lighter form of regulation on H3GI than Option 3 but ComReg is of the view that it would not fully target the main competition problem which is the potential for excessive pricing.

7.17 In relation to the market for wholesale call termination on H3GI's mobile network, it is considered that the obligations set out under Option 3 would be proportionate and justified on the basis of competition. ComReg again sets out the reasons as to why it is of the view that these obligations would be necessary for this market. In choosing obligations, ComReg has taken into account the potential impact of each option on consumers, competitors and on H3GI (see Table 6.1 below).



**Table 6.1: Identification of costs, benefits and other impacts of each option being considered**

<b>Option 1* - Do Nothing (impose no SMP Obligations)</b>			
<b>H3GI</b>	<b>Competition</b>	<b>Consumers</b>	<b>Overall Impact</b>
<p><b>Positive impact on H3GI</b></p> <p>H3GI would benefit from maintaining the status quo of no regulatory burden. However, flexibility for H3GI to potentially use its market power at the wholesale level.</p>	<p><b>Negative impact on competition</b></p> <p>Risk that H3GI would have the potential to charge excessive termination rates to competitors. Asymmetrical treatment of SMP operators in mobile markets.</p>	<p><b>Negative impact on consumer welfare</b></p> <p>Potential for high retail prices.</p>	<p><b>Positive impact on H3GI</b></p> <p>Highly negative impact on competition and consumers</p>
<b>Option 2 - Obligations of Transparency &amp; Non-discrimination</b>			
<b>H3GI</b>	<b>Competition</b>	<b>Consumers</b>	<b>Overall Impact</b>
<p><b>Neutral impact on H3GI</b></p> <p>H3GI would have lightest form of regulation imposed on it. Low cost of compliance as rates published already and to date no discrimination on rates charged to different operators in equivalent circumstances.</p>	<p><b>Negative impact on competition</b></p> <p>High risk that, even though transparency &amp; non-discrimination afforded, insufficient regulation for ComReg to ensure that dominant firm is not adversely affecting competition or exercising its market power through charging higher than efficient termination rates to competitors</p>	<p><b>Negative impact on consumer welfare</b></p> <p>As above</p>	<p><b>Neutral impact on H3GI</b></p> <p>Highly negative impact on competition and consumers</p>
<b>Option 3 - Obligations of Transparency, Non-discrimination &amp; Price Control</b>			
<b>H3GI</b>	<b>Competition</b>	<b>Consumers</b>	<b>Overall Impact</b>
<p><b>Negative impact on H3GI</b></p> <p>Increased regulatory burden. However, ComReg would note this is minimised by the proposal to have a less</p>	<p><b>Positive impact on competition</b></p> <p>H3GI wholesale pricing is certain for customers and competitors to have certainty in the market</p>	<p><b>Positive impact on consumer welfare</b></p> <p>Consumers benefit from ensuring that the risk of excessive pricing that would feed into retail prices is mitigated.</p>	<p><b>Negative impact on H3GI</b></p> <p>Highly positive impact on competition and consumers</p>

intrusive form of price control.	and competition benefit at the retail level.	Reducing H3GI’s MTRs to the target blended rate of 7.99 cents by 2013 will deliver potential savings to consumers. The benefit of rate reductions to consumers is likely to increase over the period giving a per annum saving of approximately €7 million by 2013. <sup>173</sup>	
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*\* This option would leave ComReg open to legal challenge from the European Commission for not imposing an obligation on an SMP operator.*

*Views of Respondents*

- 7.18 One respondent agreed that Option 3 was the best of the options presented as it afforded competitors certainty in the market through the adoption of a consistent framework of regulatory obligations to the benefit of retail competition and consumers.
- 7.19 A second respondent did not agree that the RIA was correct in all respects. The main issues of concern to the respondent were, firstly, they considered that ComReg failed to provide any justification for its assessment that an accounting separation obligation would be disproportionate to impose on H3GI. Secondly, the description of the impact of Option 3 in Table 6.1, framed in terms of ensuring certainty for customers and competitors in terms of wholesale pricing, implied that ComReg had confined itself to assessing the impact of Option 3 in terms of the proposed price cap on H3GI’s MTRs at the current nominal levels. The respondent was of the view that ComReg should consider the impact of implementing a graduated approach to reducing H3GI’s MTRs such as a glide path. This was necessary given that the asymmetry in MTRs between H3GI and the other SMP MNOs was not likely to decline in its absence, and given ComReg’s recognition that alternative forms of price control may be required in the medium to long term.
- 7.20 A third respondent expressed the view that the overall tone of the RIA suggested that ComReg was somewhat biased towards Option 3 in that the other options were not thoroughly analysed. They therefore considered that ComReg’s RIA fell short of the rigorous RIA which was required as part of the market analysis process. In addition, they considered that ComReg should have conducted a separate RIA for the proposed finding of SMP or at the very least a two-step RIA dealing with both the proposed finding of SMP as well as the proposed remedies.

<sup>173</sup> ComReg considers that this is likely to be a conservative estimate. These potential savings are calculated based on the differential between H3GI’s current estimated blended termination rate compared to the target blended rate of 7.99 cent to be achieved by 2013.

*ComReg's Position*

- 7.21 With regard to the second respondent's views ComReg considers that it would be disproportionate to place an accounting separation obligation on H3GI as outlined above since imposing this obligation on H3GI, with its smaller total market share and its stage of development in the market, would be excessively burdensome and costly for them to comply with. Further, it is considered appropriate to focus the RIA in relation to this market analysis on the short-term forms of price control envisaged in this market. A further impact assessment may be carried out at the time when the medium term price control measure is under consideration.
- 7.22 In relation to the third respondent's comments, ComReg considers that it has carried out a complete and thoroughgoing RIA of each of the regulatory options as presented above. Notwithstanding, it was noted that Option 1 would leave ComReg open to legal challenge from the European Commission for not imposing an obligation on an SMP operator.
- 7.23 ComReg notes that its approach to RIA is set out in ComReg Document 07/56. ComReg's approach to RIA is that it will conduct a RIA in respect of any market analysis which proposes to impose, amend or withdraw obligations, through the finding of SMP or effective competition. ComReg considers that it would not be appropriate to conduct a RIA on the finding of SMP in itself since the finding of SMP arises from detailed economic analysis of the relevant market in line with the SMP Guidelines under the regulatory framework. Once this evidence indicates that an undertaking enjoys a position of SMP in the relevant market, ComReg does not have discretion under the Framework in relation to whether to designate that undertaking with SMP or not. This issue is also considered in section 4 above.

*Conclusion*

- 7.24 The imposition of regulation in the wholesale market for voice call termination on H3GI's mobile network (i.e. Option 3) is justifiable, in that it is required to ensure that H3GI does not exploit its market power at the wholesale level to the ultimate detriment of its customers, competitors and consumers and hence meets ComReg's objectives. The regulatory obligations chosen do not unduly discriminate against H3GI in that, while they only apply to H3GI, the obligations are imposed in order to specifically address the potential competition problems which exist in the market for wholesale voice call termination on H3GI's mobile network. They are proportionate in that they are the least burdensome means of achieving this objective. For example, the implementation of the price control remedy is in a manner that is less burdensome than other alternative forms and ComReg has also decided not to impose cost accounting on H3GI.
- 7.25 ComReg considers that it has met the condition of transparency by setting out the potential requirements on H3GI, the justification for the proposed obligations, and issuing a public consultation on same.

## Appendix A – Draft Decision Instrument

**NOTE: This Draft Decision Instrument is for information purposes only and is not the final Decision Instrument. Respondents to consultation are asked to provide their detailed views from a commercial, practical and legal perspective in relation to the Draft Decision Instrument.**

### 1 STATUTORY POWERS

1.1 This Decision Instrument is made by the Commission for Communications Regulation (“ComReg”):

1. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations<sup>174</sup> and Regulations 9, 10, 11 and 14 of the Access Regulations<sup>175</sup>;
2. Having regard to and complying with ss 10 and 12 of the Act of 2002<sup>176</sup> and the factors set out in Regulation 13 (4) of the Access Regulations;
3. Taking the utmost account of the European Commission's Recommendation<sup>177</sup> and the SMP Guidelines<sup>178</sup>;
4. In compliance with s 13 of the Act of 2002 and the relevant Policy Directions made by the Minister<sup>179</sup>; and
5. Is based on the market definition and analysis and reasoning conducted by ComReg in relation to the market for wholesale voice call termination services on H3GI's individual mobile network related to the Consultation Document entitled *Market Analysis: Mobile voice call termination on Hutchison 3G Ireland's mobile network* (Document No. 0701) dated 11 January 2007) and this decision.

1.2 In this Decision Instrument:

“**H3GI**” means Hutchison 3G (Ireland) Limited;

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<sup>174</sup> The European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003.

<sup>175</sup> The European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003.

<sup>176</sup> The Communications Regulation Act, 2002.

<sup>177</sup> European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

<sup>178</sup> Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

<sup>179</sup> Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

“**MVCT**” means mobile voice call termination services;

“**Operator**” means an undertaking (within the meaning of the Framework Regulations) seeking MVCT from H3GI; and

“**SMP**” means significant market power, as referred to in Regulation 25 of the Framework Regulations.

- 1.3 The individual decisions in the preceding sections of this decision notice shall where necessary be construed with this Decision Instrument.

## **2 MARKET DEFINITION**

- 2.1 This Decision Instrument relates to the market for wholesale voice call termination services on individual mobile networks, as identified in the European Commission's Recommendation.

- 2.2 Pursuant to Regulation 26 of the Framework Regulations, the relevant product market in this Decision Instrument is defined as the market for wholesale voice call termination on H3GI's individual mobile network in accordance with the European Commission's Recommendation.

- 2.3 Pursuant to Regulation 26 of the Framework Regulations, the relevant geographic market for the market for wholesale voice call termination on H3GI's individual mobile network is defined as Ireland.

## **3 DESIGNATION OF UNDERTAKING WITH SMP**

- 3.1 Pursuant to Regulation 27 of the Framework Regulations, H3GI is designated as having SMP in the market for wholesale voice call termination on its individual mobile network in Ireland.

- 3.2 For the purposes of this Decision Instrument, any reference to H3GI includes its successors and assigns and any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, H3GI 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 product and geographic markets defined in this Decision Instrument.

## **4 SMP OBLIGATIONS**

- 4.1 ComReg is imposing certain SMP obligations on H3GI, as provided for by Regulations 9, 10, 11 and 14 of the Access Regulations and as set out hereunder.

## **5 OBLIGATION OF TRANSPARENCY**

- 5.1 Pursuant to Regulation 10 of the Access Regulations, H3GI shall have the obligation to ensure transparency in relation to the terms and conditions (including price) for offering and providing MVCT.

- 5.2 Without prejudice to the generality of section 5.1, H3GI shall comply with the SMP obligations set out in sections 5.3 and 5.4.
- 5.3 H3GI shall publish on its official website and in an easily accessible manner, all MVCT prices, immediately before the effective date of this Decision Instrument, within 30 days of the effective date of this Decision Instrument. H3GI shall publish on its official website and in an easily accessible manner, all amendments to MVCT prices made subsequent to the effective date of this Decision Instrument, 30 days prior to their becoming effective.
- 5.4 H3GI shall make publicly available accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices in respect of MVCT and other information as may be specified by ComReg from time to time.

**6 OBLIGATION OF NON-DISCRIMINATION**

- 6.1 Pursuant to Regulation 11 of the Access Regulations, H3GI shall have an obligation of non-discrimination.
- 6.2 Without prejudice to the generality of section 6.1, H3GI shall:
  - 1. Ensure that it applies equivalent conditions in equivalent circumstances to Operators providing equivalent MVCT; and
  - 2. Ensure that it provides MVCT and information in relation thereto, to Operators under the same conditions and of the same quality as H3GI provides for its own MVCT, or those of its subsidiaries or partners.

**7 OBLIGATION RELATING TO PRICE CONTROL**

- 7.1 Pursuant to Regulation 14 of the Access Regulations, H3GI shall have the obligation of cost orientation with respect to prices for MVCT, to take effect in accordance with this section.
- 7.2 H3GI's prices for MVCT shall not exceed those set out in the Table below.

**Table: Maximum Prices for MVCT**

**Permitted to be offered by H3GI (Cent per minute)**

<b>Peak</b>	<b>Off-Peak</b>	<b>Weekend</b>
17.78	11.43	8.89

- 7.3 When H3GI achieves 5% market share in relation to all mobile subscribers, or upon the expiry of 24 calendar months from the effective date of this Decision Instrument, whichever happens sooner, a glide path towards the reduction in H3GI's prices for MVCT shall become operative: H3GI's prices for MVCT shall be reduced to a target blended price of 7.99 Cent per minute, no later than 60 calendar months from the effective date of this Decision Instrument. The target blended price of 7.99 Cent per minute is a weighted average price of peak, off-peak and weekend prices for MVCT.
- 7.4 No later than 1 calendar month from the time the glide path referred to in section 7.3 becomes operative, H3GI shall submit a draft proposal in writing to ComReg, describing in detail how it proposes to achieve the target blended price of 7.99 Cent per minute, in compliance with its obligation under section 7.3. The draft written proposal shall at a minimum, specify:
1. The number of reductions in prices for MVCT that H3GI proposes to make;
  2. The amount of each proposed reduction; and
  3. The times when the proposed reductions are to become effective.
- 7.5 Without prejudice to section 7.3, ComReg may, after prior consultation, issue a decision in relation to the glide path towards the target blended price of 7.99 Cent per minute. A decision on a glide path may, amongst other things, specify:
1. The number of reductions in H3GI's prices for MVCT that are required;
  2. The amount of each reduction; and
  3. The times when such reductions must become effective.
- 7.6 The market share referred to in section 7.3 shall be calculated by ComReg. H3GI shall comply with any written request made by ComReg requesting statistics or information for these purposes. ComReg shall inform H3GI in writing if it has determined that H3GI has attained a market share of 5% of all mobile subscribers.

## **8 STATUTORY POWERS NOT AFFECTED**

- 8.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties under any primary or secondary legislation (in force prior to or after the effective date of this Decision Instrument) from time to time as the occasion requires.

## **9 EFFECTIVE DATE**

- 9.1 This Decision Instrument shall be effective from the date of its publication and shall remain in force until further notice by ComReg.

**JOHN DOHERTY  
CHAIRPERSON  
THE COMMISSION FOR COMMUNICATIONS REGULATION  
THE • DAY OF• YEAR**



## Appendix B – 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 Hutchison 3G Ireland’s (“H3GI”) mobile network.

Under Article 6 of the Directive 2002/21/EC, ComReg has conducted a national consultation, contained in ComReg Document 07/01. This consultation ran from 11 January 2007 to 2 March 2007. The responses to this consultation have been taken into consideration and ComReg has now reached decisions in relation to market definition, designation of SMP and regulatory obligations, which are contained in ComReg Document 08/06.

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. ComReg has consulted with the Competition Authority in relation to its findings on the market for wholesale voice call termination on H3GI’s mobile network and provided the Competition Authority with a summary of these findings. The Competition Authority having considered these findings and discussed them with ComReg concluded that they were appropriate.

### Section 1 - Market Definition

**Please state where applicable:**

<b>1.1</b>	The affected relevant product/service market (s).	The wholesale market for the termination of mobile voice calls on Hutchison 3G Ireland’s mobile network.	Pages 11-32
	Is this market mentioned in the Recommendation on relevant markets?	Yes – market 7 voice call termination on individual mobile networks.	
<b>1.2</b>	The affected relevant geographic market (s)	Ireland.	Pages 32-33
<b>1.3</b>	A brief summary of the opinion of the national competition authority where provided;	The Authority considered ComReg’s findings and following discussions with ComReg concluded that they were appropriate in relation to the market definition exercise.	Pages 9
<b>1.4</b>	A brief overview of the results of the public consultation to date on the	Five responses to the consultation were provided by: <ul style="list-style-type: none"> <li>• Eircom Ltd.,</li> </ul>	

	<p>proposed market definition (for example, how many comments were received, which respondents agreed with the proposed market definition, which respondents disagreed with it)</p>	<ul style="list-style-type: none"> <li>• Hutchison 3G Ireland Ltd.,</li> <li>• Meteor Ltd.,</li> <li>• O<sub>2</sub> Communications (Ireland) Ltd., and</li> <li>• Vodafone (Ireland) Ltd.</li> </ul> <p>There was general agreement among respondents on the analysis and conclusions reached. Although there was some disagreement relating to the market definition, it was recognised that the finding was consistent with that applied the market definition exercise carried out in relation to the other mobile network operations in the Irish retail market. Overall, the proposed conclusions remained unchanged after the consultation.</p>	
<p><b>1.5</b></p>	<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 of significant market power<sup>180</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>181</sup>.</p>	<p>Not Applicable.</p>	

<sup>180</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>181</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.

**Section 2 - Designation of undertakings with significant market power**

**Please state where applicable:**

2.1	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	Hutchison 3G Ireland Ltd should be designated as having SMP in the market for wholesale voice call termination on its mobile network.	Page 90
2.2	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>• Existing Competition,</li> <li>• Barriers to Entry and Potential Competition, and</li> <li>• Absence of Countervailing Bargaining Power.</li> </ul>	Pages 35-89
2.3	The name of the main undertakings (competitors) present/active in the relevant market.	Not applicable.	
2.4	The market shares of the undertakings mentioned above and the basis of their calculation (e.g., turnover, number of subscribers)	Not applicable.	

**Please provide a brief summary of:**

2.5	The opinion of the national competition authority, where provided	The Authority considered ComReg's findings and following discussions with ComReg concluded that they were appropriate in relation to the market analysis exercise.	Pages 9
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)	<p>Five responses to the consultation were provided by:</p> <ul style="list-style-type: none"> <li>• Eircom Ltd.,</li> <li>• Hutchison 3G Ireland Ltd.,</li> <li>• Meteor Ltd.,</li> <li>• O<sub>2</sub> Communications (Ireland) Ltd., and</li> <li>• Vodafone (Ireland) Ltd.</li> </ul>	

		<p>There was general agreement among respondents on the analysis and conclusions reached. Although there was some disagreement relating to the level of countervailing buyer power in the market by one respondent. These comments were considered in detail and responded to. Overall, the proposed conclusions remained unchanged after the consultation.</p>	
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### Section 3 - Regulatory Obligations

Please state where applicable:

<b>3.1</b>	<p>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>	<p>The following obligations are proposed under the Access Regulations which transpose Articles 9 to 13 of Directive 2002/19/EC (Access Directive):</p> <ul style="list-style-type: none"> <li>• Transparency – Regulation 10,</li> <li>• Non-discrimination – Regulation 11,</li> <li>• Price Control – Regulation 14.</li> </ul>	<p>Pages 97-112</p>
<b>3.2</b>	<p>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 2002/21/EC (Framework Directive). Alternatively, indicate the paragraphs, sections or pages of the draft measure where such information is to be found</p>	<p>Such information can be found in sections 6 and 7 of this document.</p>	<p>Pages 97-122</p>
<b>3.3</b>	<p>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</p>	<p>Not Applicable</p>	

	of the draft measure where such information is to be found		
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**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:**

<b>4.1</b>	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.	
<b>4.2</b>	The name(s) of the undertaking(s) concerned	Not Applicable.	
<b>4.3</b>	Which are the international commitments entered by the Community and its Member States that need to be respected	Not Applicable.	

## Appendix C – Glossary of Terms

**Calling Party Pays (CPP) Principle:** 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.

**Called Party:** A person who receives a call.

**Calling Party:** A person who makes a call.

**Electronic Communications Appeal Panel (ECAP):** Panel set up under legislation for operators to appeal decisions of ComReg.

**Fixed Network Operator (FNO):** An operator providing services over a fixed network, as opposed to a mobile network.

**Fixed to Mobile (F2M) Call:** A call that originates on a fixed network and terminates on a mobile network.

**Instant Messaging (IM):** The ability to see whether a chosen friend or colleague is connected to the internet and if yes, to exchange messages over the internet in a real-time online "conversation."

**IP (Internet Protocol):** Packet data protocol used for routing and carriage of messages across the internet from one computer to another.

**Mobile to Mobile Call:** A call that originates on a mobile network and terminates on a mobile network.

**Mobile Network Operator (MNO):** An operator providing telecommunications services over a mobile network operator such as H3GI.

**Mobile Number Portability:** A system that allows a customer who subscribes to one mobile operator, for example O<sub>2</sub> or Vodafone to keep their telephone number when they switch to a different mobile operator.

**Mobile Termination Rate (MTR):** A terminating operator charges a fee for the termination of a call from an originating operator on its network. For the purposes of this consultation paper, this fee is known as the mobile termination rate.

**Mobile Virtual Network Operator (MVNO):** A MVNO is a mobile operator that does not own its own spectrum and usually does not have its own network infrastructure. Instead, MVNO's have business arrangements with traditional mobile operators to buy minutes of use (MOU) for sale to their own subscribers.

**Multimedia Messaging Service (MMS):** MMS is an extension to the SMS protocol. MMS defines a way to send and receive, almost instantaneously, wireless messages that include images, audio, and video clips in addition to text.

**Originating Operator:** an operator on whose network a call originates, that is the network to which the calling party or customer subscribes and is directly connected.

**Second Generation (2G) Networks:** Second generation mobile network technology using a digital network. GSM is the standard used in Europe.

**Short Code Messaging (SMS):** A facility to send messages of alphanumeric characters between compatible devices, other wise known as texting.

**SIM:** A small smart card device that holds details of the mobile subscriber including public telephone number and the numbers required by the network to recognise and authenticate the subscriber.

**Terminating Operator:** The operator on whose network a call terminates, that is to whom the called party subscribes and is directly connected.

**Third Generation (3G) Networks:** A European 3G mobile communications system provides an enhanced range of multimedia services (e.g. high speed Internet access).

**Universal Mobile Telecommunications Service (UMTS):** UMTS is a third-generation (3G) broadband, packet-based transmission of text, digitized voice, video, and multimedia at data rates up to 2 megabits per second.

**Voice over Internet Protocol (VoIP):** The generic name for the transport of voice traffic using Internet Protocol (IP) technology. The VoIP traffic can be carried on a private managed network or the public Internet (see Internet telephony) or a combination of both. Some organisations use the term 'IP telephony' interchangeably with 'VoIP'.

**WiMax:** A family of standards under development for broadband wireless access in bands above 3GHz, also referred to as IEEE 802.16.

**WLAN:** Also known as 'hotspot' services. A WLAN access point provides Internet connection and virtual private network (VPN) access from a given location e.g. public places, such as airports, hotels, and coffee shops. Access is facilitated via the user's own portable computer.

## Appendix D – Binmore & Harbord Model - A Summary and Preliminary Analysis

- D.1 The basic Binmore & Harbord (“B&H”) model used a bargaining model where there were two firms: H3GI and Eircom, who bargained over the price that H3GI would charge Eircom to terminate calls on its network. B&H also assumed that each firm had the same approximate ‘power’ in the bargaining game, which can be interpreted as saying no side had a particular advantage in bargaining. B&H justified this by suggesting that Eircom had an interconnectivity requirement which ensured they could not refuse to bargain, while H3GI had a requirement to get its network functional.
- D.2 B&H used the Nash<sup>182</sup> bargaining solution to find the outcome of their model. The Nash solution is a frequently-used solution concept in bargaining games where the parties essentially agree, at the start of the bargaining game, to split the ‘surplus’ (or the total gain from reaching an agreement) in a way that will depend upon the various payoffs involved. In this case, the Nash bargaining solution splits the “surplus” equally between both firms. In order to do this, B&H specified the potential benefits Eircom and H3GI would gain from any bargain, and what were known as their “status quo” payoffs (what they would obtain if the bargain did not take place). They initially posited that H3GI’s status quo was zero, while its gains from a successful bargain would simply be the total revenue obtained (the termination rate multiplied by the number of calls) minus the total costs of termination. The values for Eircom would depend upon whether there was what B&H called a ‘saturated’ market or not. A saturated market is one where there is no possibility for further expansion of the number of consumers, and any new entrant such as H3GI would take customers from current market participants.
- D.3 If the market was saturated, B&H argued that Eircom’s status quo would be the profits it would receive from its existing termination deals with other mobile phone operators. Its net payoff from reaching an agreement with H3GI would then be:

$$s(a_0 - a_T) \quad (1)$$

- D.4 Note that  $s$  is H3GI’s total expected number of subscribers, while  $a_0$  is the average termination rate paid to other mobile phone operators and  $a_T$  is the rate Eircom agrees with H3GI.<sup>183</sup>
- D.5 Technically, the solution to the bargaining game was as follows:

$$a^*_T = (a_0 + c_T)/2 \quad (2)$$

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<sup>182</sup> Another model that can be used is the Rubenstein alternate offers bargaining model (see Rubenstein 1982), where the parties take turns to make offers about the value at which the goods or services can be exchanged. Indeed B&H later consider this approach in their paper and the models give similar results under plausible assumptions.

<sup>183</sup> Note that in their paper B&H suggest that the average of termination rates paid to other mobile operators is the monopoly termination rate. As discussed in the main paper, ComReg feels this is a mis-leading use of terminology.



where  $a^*T$  is the actual outcome of the game, and  $c_T$  is the termination cost faced by H3GI and ( $c_T < a_0$ ). This implied the actual termination rate will not exceed the average of the termination rates paid to other mobile phone operators. The key driver of this result was the saturated market assumption; it implied that in order for Eircom to have been persuaded to allow its customers to terminate on H3GI's network, it must have been offered a better rate than it currently obtained from other operators. This is because, given the number of total users was fixed, H3GI was forced to bid lower than the amount paid to existing operators.

- D.6 B&H then developed the framework further by adding various factors that would influence this basic outcome. First, they called  $\pi_1$  the negative externality of the incumbent as a result of a new entrant to the mobile market. They called  $\pi_3$  the flow of profits which accrued to H3GI in other markets (call origination and access, international roaming) from reaching a termination agreement. When adding this in to the framework, they obtained the following outcome:

$$a^*T = (s(a_0 + c_T) - \pi_3 - \pi_1)/2s \quad (3)$$

Note that when the values of  $\pi$  are zero, this reduces to equation (2) above.

- D.7 Essentially, introducing the outside options allowed Eircom to gain half of any benefit H3GI received by having a functioning business, while allowing Eircom to get rid of half of any negative impact H3GI's arrival would have on its general business.
- D.8 B&H then explored the case of a non-saturated market, where none of H3GI's customers previously subscribed to other mobile networks. They suggested that this situation seemed less realistic than the saturated case. The key difference with the saturated case was that the incumbent's outside option was now zero; this reduced its bargaining position somewhat. The termination charge obtained would be:

$$a^*T = (P - C_0 + c_T)/2 \quad (4)$$

where  $P^{184}$  is the incumbent's fixed-to-mobile retail price, and  $C_0$  its origination cost.

- D.9 Note that  $P - C_0$  is essentially the "monopoly" price that would be set in the traditional literature referred to in section 4. The bargaining framework had given Eircom half of the total profits to be derived from its customers terminating calls on H3GI's network.<sup>185</sup>
- D.10 In this equilibrium, therefore, the termination price was roughly half-way between the monopoly outcome and the efficient charge level. It should be noted that the price could be substantially above H3GI's costs. Indeed, it would always be greater than H3GI's costs unless  $(P - C_0)$  was less than  $c_T$ . If this was the case then even the monopoly outcome, where H3GI held 100% of the bargaining power, would not be

<sup>184</sup> The incumbent, Eircom's, price is constrained by the retail price cap of CPI-0%. Retail F2M charges changed in the past as a result of MTR changes.

<sup>185</sup> Note that, partly for simplicity, we have omitted the two values of  $n$  from this equation. If included, they would lower the rate.

sufficient to allow H3GI to cover its costs. So price would always be above costs unless demand/cost conditions were such that even the conventional monopoly outcome would also lead to a price below cost.

- D.11 B&H then considered issues such as the discount factor (the rate at which parties to the bargain trade-off the future) and whether this would influence the outcome of the bargain. In particular, they suggested that since H3GI was a new entrant, who may be financially constrained, it was more likely to be impatient and risk-averse. As is well-known in these models, the more impatient party actually loses bargaining power and would obtain a smaller share of any surplus.
- D.12 B&H moved on to consider how this framework would be affected by the presence of the regulator. The paper explicitly acknowledged the idea of dispute resolution, and analysed how this would affect the actual negotiations. If both sides were unable to reach an agreement as to rates, either had the ability to refer the dispute to the regulator. ComReg then had a specific period to analyse the dispute and, if necessary, to issue a formal direction as to the appropriate resolution of the dispute.
- D.13 B&H modelled this by altering the status quo payoffs of H3GI and Eircom. Essentially, the termination rate that would be set if the regulator intervened is factored into the choices of the firms. There was a probability,  $\rho$ , that the regulator would intervene and set a rate, and this allowed them to calculate the expected status quo payoffs. This changed their status quo payoffs, and ultimately, affected the distribution of the surplus being bargained over. Key to this was the actual rate the regulator would be likely to set; once that was known; the parties factored it in and, again, agreed an actual rate without the need for intervention.
- D.14 The use of this framework seemed to have a greater effect on the saturated market case, as it raised H3GI's status quo payoff from zero, which implied it would obtain a greater share of the surplus and thus a higher termination rate. B&H found the following solution for the saturated case:

$$a^*_T = [(1-\rho)(a_O+c_T) + 2\rho a_R]/2 \quad (5)$$

Note that  $a_R$  is the rate the regulator would set if it mediated the dispute.

- D.15 The key issue in determining the actual rate that would be agreed is the rate the regulator would set. B&H said that it was not clear what this would be, but put forward two candidates: the cost of termination for H3GI, or the average of the other operators' termination rates. In either of these latter cases, an outcome where the agreed rate was around the average of other operators rates was the most likely solution. B&H did not solve the model for the non-saturated case, but the outcome would again depend upon the rate set by the regulator. Using their framework, this would be close to the average rate, with the exact figure depending upon the extent to which the solution to the non-saturated bargaining game was greater or less than the average rate. B&H, using the saturated case, suggested that the rate with the threat of intervention would be likely to be higher than without intervention, but that it would be close to the average rate of other operators. Thus, it seemed likely that the threat of regulatory intervention would increase H3GI's bargaining power.

D.16 In summary, the B&H model put forward the solution that the termination rates negotiated between H3GI and Eircom would likely be lower than the average of other mobile operator's rates. When accounting for the threat of regulatory intervention, the B&H model resulted in a solution for termination rates negotiated between H3GI and Eircom that was still below, albeit by a smaller proportion, the average of other mobile operator's rates.

#### Analysis of the Paper

D.17 The B&H paper represents a valuable contribution to the debate over termination charges. Their key result is that an incumbent fixed-line operator may have sufficient CBP as to ensure new mobile operators will not be able to raise termination rates significantly above the competitive level. Their analysis was specifically based on a bargaining model, which constituted a new element into the analysis of this issue, as most of the previous literature on mobile call termination assumed the mobile operator made TIOLO's<sup>186</sup> to the incumbent. We now consider the strengths and weaknesses of this approach for the analysis of whether Eircom has sufficient CBP.

D.18 **Other economic models:** A first comment is that the conclusions of the B&H model could also be examined in terms of more traditional literature on the subject, where the mobile network was assumed to hold all the bargaining power. If H3GI had the ability to make a TIOLO to Eircom, and it was assumed that the mobile market is saturated, then, Eircom would only accept a termination rate which did not exceed the average termination charges of existing operators. Otherwise it would lose revenue by having to pay a higher charge to H3GI than it would pay (for exactly the same customer) to another mobile operator. Secondly, the assumption that the new entrant mobile operator is able to make a TIOLO, which in the traditional literature is assumed possible as there are many competing fixed operators, is not the case here. Therefore, whether there is a bargaining model or a more traditional-type approach, may not be the key aspect, but rather the assumption by B&H that the market is saturated and mobile operators do not have the ability to make TIOLOs.

D.19 **External values:** In their model, B&H made some assumptions about the external values, which in turn affected the agreed termination rate. ComReg is of the view that the level of evidence in support of those assumptions is not convincing. In particular, the assumption that the negative externality of the incumbent could be a large value as a result of a new entrant to the mobile market ( $\pi_1$ ) seems questionable. The idea that a new entrant to the mobile sector would have a significant negative effect on the fixed incumbent, whether through losing fixed line customers or by increasing mobile market competition seems unreasonable to ComReg, particularly since, as the authors argue, the new entrant is likely to be small in scale and market share. Moreover, mobile and fixed telephony are generally considered to constitute separate product markets. Also, according to the history of the negotiation process as outlined in Annex E, it was Eircom that requested the direct interconnect agreement with H3GI, which does not seem to lend weight to the idea that Eircom considered the new entrant, would have a significant negative impact on it.

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<sup>186</sup> "Take-it-or-leave-it offers"

- D.20 Similarly, there is little evidence for the idea that the fixed incumbent bargaining over termination rates would allow it to capture a significant proportion of any other revenue earned by H3GI ( $\pi_3$ ). Empirically, there does not appear to ComReg to be evidence provided to it to date that Eircom sought to extract any type of payment from H3GI in respect of its other mobile services **[Confidential]**.
- D.21 For the reasons given above, ComReg is of the view that the use of both external values of  $\pi$  is not merited. If these values are included in the model, it would lead to a lower termination rate, but as argued above, ComReg's view is that there is little real evidence to show such values would be factored into any bargain, or indeed that they would be high values.
- D.22 B&H also suggested that H3GI was likely to have a higher cost of capital than Eircom which would disadvantage it in any bargain. ComReg is of the view that this has no real evidence to support it. The market value of the parent company of H3GI is greater than the market value of Eircom,<sup>187</sup> thus ComReg questions the suggestion that H3GI is financially constrained, or is likely to be particularly risk-averse. Moreover, H3GI have successfully entered markets in other jurisdictions, including the UK. Under these circumstances, it seems legitimate to factor out any such suggestions, unless there was strong empirical evidence to the contrary, in particular as H3GI is now an established market operator with an on-going relationship with Eircom.
- D.23 **Saturated or non-saturated market:** It is also not clear to ComReg why it should be assumed that the market is saturated (that is whether the total number of subscribers would rise as a result of H3GI's entry). While there may be a high penetration rate in terms of subscriber numbers, the penetration rate has continued to grow since H3GI's entry to the market.<sup>188</sup> Also, consumers may wish to subscribe to H3GI for reasons of product differentiation<sup>189</sup> which can give further scope for an increase in revenues generated in the market.
- D.24 On balance, exclusively assuming either a saturated or a non-saturated market is not likely to fully reflect reality – a new entrant to the market would both create new subscribers and take some customers from existing operators. ComReg is of the view that based on the history of negotiations before it, when reaching a deal, both parties appeared to be coming from a position where if no deal was made, Eircom would obtain zero and H3GI close to zero. While Eircom were reluctant to enter into a commercial agreement at the rates originally proposed by H3GI, there does not seem to be significant evidence that Eircom considered it would be losing revenue from its existing customers by negotiating an interconnect arrangement with H3GI.
- D.25 **Regulatory intervention:** The detailed discussion concerning regulatory intervention and the role of dispute resolution in section 4 ("Relevant Market

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<sup>187</sup> Hutchison Telecoms International had a market capitalisation of 315,702mn Hong Kong \$, Lehman Brothers, August 25, 2006. Eircom group plc had a market capitalisation of €2,275 million, Irish Stock Exchange, April 7 2006.

<sup>188</sup> The latest penetration rate for the Irish market is 114%. See ComReg (2007) Irish Communications Market: Key Data Report, September 2007, Document 07/67 pages 30.

<sup>189</sup> This seems particularly likely given that H3GI offers 3G services, such as video services and higher bandwidth for internet access.

Analysis") of this document should also be referred to when reading the following sections.

- D.26 The CAT stated that: "*the possibility of dispute resolution is part of the overall picture which has to be taken into account in assessing whether BT has a real and effective bargaining position that is sufficient to counter the factors which would otherwise point in favour of H3G having SMP.*" <sup>190</sup> Dispute resolution therefore is a factor which, according to the CAT, Ofcom had to consider in assessing whether or not H3G has SMP. In Ireland, the ECAP did not rule on this issue. However, given that the CAT's ruling is likely to be persuasive in the event of an appeal before the High Court in Ireland<sup>191</sup>, it is appropriate for ComReg to also have regard to it.
- D.27 It should be clear from the earlier discussion in section 4 of this document that ComReg has, to the fullest extent possible, taken dispute resolution into account in assessing Eircom's bargaining position relative to H3GI. It will also be seen that there is a limit to how far ComReg's analysis can extend without this exercise becoming overly speculative. Accordingly, ComReg has reached the conclusion that dispute resolution is not a factor to which ComReg can attach very considerable weight in assessing whether or not Eircom has sufficient CBP and as to whether H3GI has SMP, or that it is of itself a singularly significant factor bearing upon these issues. However, the limited conclusions that ComReg can draw from its assessment of dispute resolution seem to in fact favour the view that H3GI has SMP.
- D.28 B&H analysed how regulatory intervention would change the outcome, and, as discussed above, predicted that the threat of intervention would be likely to raise the termination rates but that they would remain below the average of other mobile operators' rates. ComReg finds this analysis interesting, but also somewhat speculative. Exactly what outcome ComReg would reach while mediating a dispute would depend upon the specific circumstances of the dispute. ComReg has in certain exceptional circumstances the power to regulate prices of a non-SMP operator pursuant to the dispute resolution provisions under Regulation 31 (3) of the Framework Regulations. However, ComReg's view is there are a number of reasons, analysed in the paragraphs below, why dispute resolution, although effective when used as intended, is not a substitute for SMP regulation, nor is it at all clear what effect the regulator's determination might have in a negotiation framework.
- D.29 According to the CAT in the UK, Ofcom could make a decision on foot of a dispute over price, prior to any SMP finding being in place.<sup>192</sup> Ofcom had unsuccessfully argued before the CAT that a SMP finding must first be in place. In theory therefore, ComReg could also make such a finding without (according to the CAT at least) a finding of SMP being in place.
- D.30 However, the question of dispute resolution and any determination on foot of it being a factor that would influence CBP and act as a constraint on H3GI's SMP, is of course a different one.

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<sup>190</sup> CAT (29 November 2005) <http://www.catribunal.org.uk/documents/Jdg1047H3G281105.pdf>

<sup>191</sup> The High Court now has sole jurisdiction to hear appeals against decisions by ComReg.

<sup>192</sup> Hutchison 3 G (UK) Limited v the Office of Communications [2005] CAT 39.

- D.31 At the outset, it should be noted that there would appear to be two fundamental problems associated with ascribing special significance to the issue of dispute resolution.
- D.32 Firstly, in the UK, the CAT stated unequivocally that a potentially regulated entity cannot say that it does not have SMP on the basis that the threat of regulation means that it does not have the necessary market power.<sup>193</sup> The threat of regulation might be taken as meaning the threat of SMP regulation. However, there would appear to be no obvious reason for saying that the comments of the CAT do not apply equally to other varieties of regulation e.g. the prospect of ComReg directing in relation to end-to-end connectivity obligations or indeed, a determination on foot of dispute resolution. If that reasoning is correct, then the CAT's pronouncements should be authority for the proposition that the threat of a determination by ComReg on foot of dispute resolution is also not a valid basis for H3GI to assert that it does not have SMP. If that is so, then it would appear that this is as far as the analysis in relation to dispute resolution ought to proceed. It should be noted that the CAT also stated that it did not consider that the mechanism for dispute resolution under an interconnection agreement "*has any material effect on the question of whether H3GI had or has SMP.*"<sup>194</sup>
- D.33 Secondly, a fundamental question should be asked: if dispute resolution were in general to be considered a constraining effect on potential SMP, why are SMP designations ever necessary and why are they the cornerstone of the entire regulatory framework for electronic communications? ComReg suggests that the answer lies in the fact that the European legislators decided fundamentally, as a matter of competition policy, that *ex ante* regulation was clearly preferable to *ex post* measures (such as dispute resolution) in markets that are susceptible to *ex ante* regulation and where there are potentially SMP operators. It is also worth noting that the SMP Guidelines, which comprise a key part of the regulatory framework, make no mention whatsoever of dispute resolution as a factor that NRAs should consider in assessing SMP. Put simply, dispute resolution is no substitute for SMP obligations when one is addressing potential SMP - it would be contrary to the policy underpinning the regulatory framework for electronic communications if regulators were to proceed in this manner in relation to markets that are susceptible to *ex ante* regulation.
- D.34 It is illustrative of this principle that any determination under dispute resolution might ultimately be effective in resolving a dispute between the parties to it, but it would not necessarily prevent an operator from leveraging any market power that it had against other operators in the market who had not notified a dispute to ComReg, or against consumers. *Ex ante* measures however (if they were deemed appropriate as a consequence of any finding of SMP) would be effective at preventing in advance, the leverage of such market power.
- D.35 ComReg notes that the question of whether dispute resolution would ever come in to play and how it would operate in practice is extremely speculative.

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<sup>193</sup> Hutchison 3 G (UK) Limited v the Office of Communications [2005] CAT 39, at paragraph 98.

<sup>194</sup> Hutchison 3 G (UK) Limited v the Office of Communications [2005] CAT 39 at paragraph 139 b).

- D.36 Firstly, under Regulation 31 (3) of the Framework Regulations, ComReg has a clear discretion not to accept disputes if (a) it is satisfied that other means of resolving the dispute are available to the parties or (b) if legal proceedings in relation to the dispute have been initiated by either party. That is of course not to say that ComReg would always decline to accept a dispute. Whether its discretion to do so would be exercised or not, would depend on the circumstances of any case, which at this remove, may be too difficult to predict.
- D.37 Secondly, the procedure under Regulation 31 of the Framework Regulations does not preclude a party from bringing an action before the courts. The Framework Regulations do not therefore purport to oust the jurisdiction of the courts or indeed the ECAP. A party might choose to deal with its dispute in the High Court, rather than refer it to ComReg at all. A party may decide that its dispute can be dealt with in a manner that it prefers (perhaps before the Commercial division of the High Court). Accordingly, because of this variable, there is no guarantee that a party will even submit a dispute for resolution by ComReg in any given case.
- D.38 Thirdly, if a dispute were submitted, the terms (including price – even if it ruled upon price) that ComReg might deem reasonable in any determination it made, might not be considered reasonable or acceptable by one or both parties to the dispute. In that regard, while ComReg has the power under Regulation 31 (1) of the Framework Regulations to “make a determination, aimed at ensuring compliance...” such a determination is not necessarily truly dispositive of a dispute or a determination that must at that point then be unquestioningly accepted by the parties to the dispute. There is an obligation on an undertaking to whom a determination applies to comply with such a determination and it is a criminal offence not to do so. A party may or may not accept ComReg's determination but it is clear that at this point, they cannot have what they consider to be unreasonable terms forced upon them. This is because either party still has a right to an appeal under the Framework Regulations in respect of ComReg's determination. As a result of recent legislative changes, such an appeal now lies to the High Court, as the ECAP has been abolished. Thus, while any determination made by ComReg is intended to be complied with, it does not remove a party's right of appeal to the High Court in respect of that determination – it might ultimately materialise that a party would not in fact be bound to comply with a determination on foot of dispute resolution because of a ruling of the High Court. If a party appeals a determination (which it believes to be unreasonable) under Part 2 of the Framework Regulations, it can seek a suspension of the determination. This, it is likely to do and the High Court is in general likely to accede to its request as otherwise the appeal might be moot. Once the High Court delivers its substantive ruling, it might decide to uphold ComReg's determination or to annul it. If it does the former, that is not necessarily an end to the matter. The party aggrieved by that outcome still has a right to seek leave to appeal the High Court's decision to the Supreme Court. Aside from this the High Court, or the Supreme Court has discretion to refer a point of European Community law to the European Court of Justice. A party might also choose to appeal a decision by the High Court on this point to the Supreme Court. In any event, it is possible that both of the parties to a dispute could anticipate protracted litigation as a consequence of any legal proceedings arising from a determination by ComReg in relation to the dispute.

- D.39 On the other hand, it is also possible that neither of the parties would at all legally challenge a determination on foot of a dispute resolution procedure by ComReg and would readily accept its outcome.
- D.40 It is also possible that having initiated a dispute or legal proceedings the dispute would be withdrawn or the legal proceedings settled because the parties had decided to revert to commercial negotiations and had thereby reached agreement.
- D.41 Thus, it can be seen that the many vagaries inherent in the options for legal redress - be that the Irish courts or the European Court of Justice - may need to be factored in by the negotiating parties. Whether the parties can do so with any degree of certainty seems highly dubious to day the least. Whether ComReg can, for the purpose of estimating the effect of dispute resolution on CBP and SMP, factor in these uncertainties and how the parties themselves assess them also seems highly dubious.
- D.42 Clearly, the issues in relation to dispute resolution are very hypothetical and case specific. Fundamentally, the question at issue is whether there exists sufficient CBP and to some extent, whether an economic model can reasonably capture this. If it is valid to ask whether dispute resolution affects CBP, it appears that one would in fact be requiring ComReg in this instance to know in advance what H3GI thinks would be the likely outcome of dispute resolution. Such an exercise would seem to be artificial and contrived and it is difficult to see how it could be invested with any accuracy or reliability. Notwithstanding the above discussion and these reservations, ComReg has attempted below to carry out a somewhat speculative assessment on the issue.
- D.43 In the case of H3GI, if its expectation was that ComReg would favour it in any price determination it made, that would make it more confident in its negotiations and vice versa for Eircom. That might be the case for example, if H3GI expected that ComReg would allow it to set the prices it chose. On the other hand, H3GI could also have expected that the regulatory intervention would be less favourable to it, making it less confident in its negotiations with Eircom. ComReg has not to date issued a price determination under the relevant dispute resolution powers and therefore H3GI has no past experience to refer to in this regard. It should be noted that in assessing whether H3GI has or does not have SMP, it would be entirely inappropriate for ComReg to suggest or factor in, that ComReg itself would be predisposed to favour either of the possible outcomes. To do so would be tantamount to predetermining the matter with respect to possible future disputes but moreover (and worse) leave ComReg open to a charge of bias.
- D.44 In reality, operators might anticipate that the outcome to dispute resolution would lie somewhere between the two extremes of favouring one party entirely over the other. It is not practical or possible for ComReg to anticipate either the exact outcome or its exact policy with respect to intervention in a specific case<sup>195</sup>.
- D.45 However, while there are many uncertainties regarding dispute resolution, it seems more likely than not that ComReg would have to adopt "lighter touch" regulation with respect to setting an MTR in respect of H3GI as a non-SMP operator, relative to

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<sup>195</sup> ComReg is for example likely to take into account the need to be proportionate and the effect that any decision would have on competition and consumers in the market place.



the MTR applicable to SMP operators. In this regard, it is clear that if ComReg were called upon to adjudicate a dispute, it could not in general, set a cost oriented MTR under Articles 9-13 in the absence of an operator having SMP. The obligation to offer cost oriented MTRs can only be imposed on operators having SMP.

- D.46 In the circumstances of a dispute as envisaged, H3GI would not have SMP and would not be subject to a cost orientation obligation. In this regard, the Access Directive Article 8 (3) provides that:

*“...national regulatory authorities shall not impose the obligations set out in Articles 9 to 13 on operators that have not been designated in accordance with paragraph 2.”*

- D.47 H3GI would not be a SMP operator *“designated in accordance with paragraph 2”* and it could not therefore be subject to any of the obligations set out under Articles 9 – 13. One of the obligations that may be imposed under Articles 9 – 13 is that of *“price controls, including obligations for cost orientation of prices...”* as provided for under Article 13. However, that is certainly not to say that the possibility of imposing a cost oriented rate on a SMP operator can be altogether ruled out. ComReg notes the provisions of Article 5 (1) of the Access Directive, which enable SMP-type obligations to be imposed on undertakings that control access to end-users, to the extent that it is necessary to ensure end-to-end connectivity. The obligations include, in justified cases the obligation to interconnect their networks, where this is not already the case. ComReg previously indicated that these provisions are exceptional and that they should be narrowly construed. Article 5 (1) of the Access Directive / Regulation 6 of the Access Regulations provides national regulatory authorities with discretionary powers in certain circumstances to impose SMP-type obligations on non-SMP operators. However, national regulatory authorities are not obliged to require an operator to offer cost oriented MTRs and operators submitting a dispute do not have an automatic statutory entitlement or expectation in this regard. The criteria for their application would need to be first present. In that regard, the imposition of a cost oriented rate would have to be both necessary to ensure end-to-end connectivity and a proportionate measure in fulfilment of that aim. While one can not say that the conditions might not present themselves it is not at all clear why the imposition of a cost oriented rate could be necessary to ensure end to end connectivity, or how it would necessarily be proportionate. It should also be noted that a determination on price would not even have to prescribe a *cost orientated* price at all – the nature of the price control could be altogether different, given the flexibility of the provisions of the Access Directive / the Access Regulations which allow different types price controls to be imposed on SMP operators (in this instance however, non-SMP operators), of which cost orientation is one variety.
- D.48 While ComReg is not able to (and can not be expected to) predict the actual price that would be imposed in the context of a dispute, it would appear easier to predict (because of the limits of ComReg's legal powers) that the price would not be the same or better than a cost oriented rate.
- D.49 Given that ComReg would be unlikely to impose a cost oriented rate under Articles 9-13 in respect of H3GI's MTR, this would likely improve H3GI's bargaining

position. This, ComReg believes is the only significant conclusion which can be drawn from an assessment of dispute resolution. If it is a valid conclusion, it is one that in fact favours the view that there is insufficient CBP in the market.

- D.50 Overall, however, while theoretical models may not give unambiguous outcomes, (particularly when potential regulatory action is taken into account) ComReg is not convinced that an explicit analysis of potential regulatory intervention is necessarily helpful in assessing the sufficiency of CBP. This is particularly the case given it would be inappropriate for ComReg to suggest or factor in, that ComReg itself would be predisposed to favour any possible outcome in advance of a particular dispute.
- D.51 ComReg is also of the view that placing undue emphasis on dispute resolution would appear to be over-reliance on a single factor, perhaps no less than when the ECAP ruled that H3GI's 100% market share was a factor that ComReg placed undue reliance on when it previously found that H3GI had SMP on the relevant market.
- D.52 Upon proper examination, the issue of dispute resolution becomes a far less significant factor and one must then ask whether the preponderance of the rest of the evidence suggests that H3GI has SMP or not.
- D.53 ComReg's conclusions in relation to dispute resolution may therefore be summarised as follows:
- a) The issue of dispute resolution is not especially significant for determining whether H3GI has SMP. Attaching too much weight to it seems at odds with the policy underpinning the electronic communications regulatory framework;
  - b) Notwithstanding the above, ComReg has assessed the issue comprehensively. ComReg is of the view that it is too difficult to accurately speculate on the possible outcomes of dispute resolution; and
  - c) The limited conclusions that ComReg can draw from its assessment of dispute resolution seem to favour the view that H3GI has SMP.
- D.54 **Subscriber base:** ComReg has four other comments on the B&H paper. The first is the assumption that H3GI's subscriber base ("s") was a fixed value and did not depend upon the call termination rate. In the traditional literature, the level of calls tends to vary inversely with the termination rate, leading to an inefficiently low number of fixed to mobile calls being made because of an excessive termination rate. B&H mentioned this in a footnote to their paper, and suggested it was a relatively minor assumption, though they noted that if it was changed, the agreed termination rate would be likely to rise. As they stated, much of the literature on call termination suggested that high termination rates were used to subsidise acquiring new subscribers by, say, handset subsidies. If B&H's prediction that H3GI would achieve a rate less than other mobile operators was correct, then it would not be able to compete for its own subscribers. For example, if the market for mobile subscribers was extremely competitive, an entrant may not be able to profitably attract any subscribers unless it received the same profits from terminating calls as its competitors in the mobile market. In this situation, H3GI could not agree to any termination rate below other operators, even if that was at a monopoly level. While the exact effect of taking subscribers as fixed as compared to the number depending

upon the termination rate was not fully analysed, ComReg is of the view that it may not be a realistic assumption.

- D.55 **Complete information:** Secondly, there was the use of complete information in this model. ComReg considers that this is unlikely, as there is no reason to believe, for instance, that Eircom would know the preferences, costs, potential revenues, etc of H3GI or vice versa. However, while this affects both parties, it would be more likely that H3GI had an advantage in terms of asymmetry of information given Eircom's SMP status and regulatory obligations to be transparent and publish information.
- D.56 ComReg would note that the approach where the mobile operator makes TIOLOs also assumed complete information, so this was not an issue confined to the B&H model. However, the outcomes predicted by bargaining theory are usually particularly sensitive to different specifications of the information structure of the game. Bargaining games with asymmetric information are usually marked by multiple equilibria, where a large number of potentially very different outcomes could occur. It is thus very difficult to say what the actual outcome will be.<sup>196</sup>
- D.57 **New entrant:** Thirdly, within the bargaining game, the evidence for the assumption that H3GI's status quo payoffs were zero was not clear cut. It is likely to be the case that the requirement for H3GI to provide its potential subscribers with the ability to receive calls from Eircom is more important for it to launch a commercially viable service than would be the converse. However, as discussed in the paragraphs on the relative bargaining strengths of operators in section 4, it is also true that all operators, including Eircom wish to provide subscribers with the ability to make and receive calls to all other operators in the Irish market and this provides incentives for interconnection. In the event that H3GI had not managed to reach an agreement with Eircom for Eircom's traffic to terminate on its network it would not affect the ability of H3GI's subscribers to make outbound calls nor to reach an agreement with another fixed operator such as BT to transit other traffic, from for example the mobile operators to H3GI's network. While this effect may not be very strong, it is possible to directly factor it into the bargaining game by allowing H3GI's status quo payoffs to be greater than zero. This would alter the result of the bargain analysed by B&H; a higher status quo payoff for H3GI would give them more bargaining power if negotiations broke down, thus allowing them to have obtained a higher share of the surplus and a higher termination rate.
- D.58 Fourth, when considering the negotiation framework more generally, a possible threat point for one party might be to raise its own termination rates in response to the other party demanding a high rate. However, this is not a measure open to Eircom, as it must terminate all traffic, including mobile traffic originating on H3GI's network, on a non discriminatory cost orientated basis. The other fixed operators set their own rates, but are not obliged to offer cost orientated rates. For F2M calls, the mobile operators set the termination charges which are subject to regulatory constraints depending on the network. The MTRs of the other MNOs in

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<sup>196</sup> See, for instance, Fudenberg and Tirole (1991), P 399, "Thus, bargaining theory seems unlikely to offer unique predictions even if one knows the extensive form...The theory of bargaining under incomplete information is currently more a series of examples than a coherent set of results."

Ireland are regulated<sup>197</sup> albeit to date the cost orientation of rates has been effected on a voluntary basis. Regulation of the charges of FNOs and/or MNOs deprives them of a potential instrument in the negotiations with other operators, that is the ability to retaliate by raising termination rates.

D.59 In summary, while the model raised some very interesting issues, some of the assumptions do not have clear evidence to support them and are perhaps skewed towards the view that H3GI had no bargaining power. In addition, but perhaps tellingly, the empirical evidence does not actually support the predictions of the model.

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<sup>197</sup> ComReg (2005) Market Analysis-Decision on SMP obligations - Wholesale Voice Call Termination on Individual Mobile Networks, Document 05/78

Appendix E [Confidential] - Summary of Negotiations between  
H3GI and its interconnection partners

## Appendix F – Other SMP Criteria

SMP Criteria	Relevance to SMP Assessment	Relevance to Termination market
<b>Market shares</b>	Market shares are not on their own determinative of SMP but are a useful starting point for defining instances where SMP is more likely to arise. It is clear from EU jurisprudence that concerns about SMP are more likely to arise where a large market share is held over time.	This criterion is relevant because the wholesale termination market is characterised by very high market shares which have persisted over time.
<b>Barriers to entry</b>	Barriers to entry are factors that prevent or hinder undertakings from entering a specific market. They generally comprise any disadvantage that a new entrant faces when entering a market that incumbents do not currently face. Entry barriers may result, for instance, from a particular market structure (structural barriers) or the behaviour of incumbent firms (strategic barriers).	This criterion is relevant as the infrastructure required to enable other providers to offer termination on a specific network, apart from the provider of that network, is not available nor is it replicable in the timeframe of the review.
<b>Sunk costs</b>	Sunk costs are costs which must be incurred in order to enter a market and which are not recoverable on exiting the market.	This criterion is of less relevance as call termination to a particular end user is not replicable during the timeframe of the market review, irrespective of the costs of entry.
<b>Control of infrastructure not easily duplicated</b>	This indicator refers to a situation in which certain infrastructure is: <ul style="list-style-type: none"> <li>• Necessary to produce a particular product/service,</li> <li>• Exclusively or overwhelmingly under the control of a certain undertaking, and</li> <li>• There are high and non-transitory barriers to substituting the infrastructure in question.</li> </ul>	This criterion is relevant as it is clear that call termination to a particular end user is not replicable during the timeframe of the market review. In that respect it can be viewed as a barrier to entry.
<b>Economies of scale</b>	Economies of scale arise when increasing production causes average costs (per unit of output) to fall. By producing above the level that a new entrant might be able to produce at, the incumbent can ensure lower unit costs than the entrant. Where sunk costs are large and/or barriers to expansion exist, the new entrant's expected profit from being in the market may fail to cover its sunk costs and entry may be deterred.	This criterion is of less relevance in this market as the presence of absolute barriers to entry indicates no operator would be facing potential competition, so cost advantages are of less relevance in this market.
<b>Economies of scope</b>	Economies of scope exist where average costs for one product are lower because of it being produced jointly with other products by the same firm. If the presence of economies of scope requires that entrants enter more than one market simultaneously to achieve similar cost savings as the incumbent, this can deter entry.	This criterion is of less relevance in this market as the presence of absolute barriers to entry indicates no operator would be facing potential competition, so cost advantages are of less relevance in this market.
<b>Overall size of the undertaking</b>	This refers to the potential advantages, and the sustainability of those advantages that may arise from the large size of an undertaking relative to its competitors.	This criterion can be relevant in this market in respect of the analysis of Countervailing Buyer Power ("CBP"). It is possible that the overall size of the undertaking can have an influence on the relative negotiating positions of operators in respect of bargaining strength.
<b>Technological advantages or superiority</b>	Such advantages may represent a barrier to entry as well as an advantage over existing competitors due to lower production costs or product differentiation.	This criterion is less relevant as by virtue of the market definition there are absolute barriers to entry and no potential competition in the market. Therefore no comparison between technologies is relevant.
<b>Product/services diversification (e.g. bundled)</b>	There can be a positive relation between product/services diversification and market power. If suppliers are able to differentiate their products and competitors are not able	This criterion is of less relevance because, typically, termination services are sold on a stand alone basis and in general is not bundled

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<b>products or services)</b>	to imitate the differentiation, then scope for customer switching to alternative suppliers might be reduced. Conversely, if alternative suppliers are not able to sufficiently differentiate their own service offering from that provided by the incumbent, switching away from the incumbent may also be less likely.	by terminating operators. The actual operators who purchase termination have no effective demand-side alternatives for reaching a specific end user and so the presence of bundles incorporating termination services confers no obvious advantage on a particular terminating provider, although it may be advantageous in associated markets.
<b>Vertical integration</b>	Vertical integration, while normally efficient, can make new market entry more difficult. Where the presence of a firm at multiple levels in the production or distribution chain increases the possibilities for it to foreclose one or more markets and/or where prospective new entrants may perceive the need to enter two or more markets simultaneously to pose a viable competitive constraint to the integrated operator.	This criterion is of less relevance however in an examination of CBP it may be relevant because the size of a vertically integrated terminating operator at the retail level may be linked to CBP at the wholesale level. The greater its position in the retail market vis-à-vis its competitors, the more prospect that countervailing buyer power would be exerted at the wholesale level.
<b>Easy or privileged access to capital markets/financial resources</b>	Easy or privileged access to capital markets may represent a barrier to entry as well as an advantage over existing competitors.	This criterion is less relevant because the presence of absolute barriers to entry indicates no operator would be facing potential competition and therefore the cost of capital to be faced confers no particular advantage. This criterion might be referred to in the context of CBP if easier access to capital conferred an advantage in respect of bargaining power.
<b>A highly developed distribution and sales network</b>	A well-developed distribution system may be costly to replicate and maintain and may even be incapable of duplication. This may represent a barrier to entry as well as an advantage over existing competitors.	This criterion is of less relevance because the service in question is acquired only by purchasers at the wholesale level and it would appear that no specialized sales network is required. Furthermore, it is not clear that implementing relevant billing, account management and/or customer service systems would pose a significant barrier to potential new entrants.
<b>Absence of potential competition</b>	This refers to the prospect of new competitors (which are in the position to switch or extend their line of production or to commence an entirely new line of production) entering the market (e.g. in response to a price increase) within the timeframe considered by the review.	This criterion is of relevance. By definition, call termination to a specific end user is not replicable. So a credible threat of potential entry is not present in the timeframe of the review.
<b>Barriers to expansion</b>	While growth and expansion is easier to achieve for individual firms (and in particular for new entrants) in growing markets, it might be inhibited in mature, saturated markets, where customers are already locked in with a certain supplier and have to be induced to switch.	This criterion is of less relevance in this market as the presence of absolute barriers to entry indicates no operator would be facing potential/existing competition and competition in the market for termination is not likely to expand beyond the fixed operator in question.
<b>Absence of or low countervailing buying power</b>	The existence of customers with a strong negotiating position, which is exercised to produce a significant impact on competition, can potentially restrict the ability of providers to set their prices and/or other commercial terms to an appreciable extent independently of their customers.	This criterion is relevant. The EU Explanatory Memorandum to its Recommendation on Market Definition sets out that even a 100% market share in itself does not automatically imply that the undertaking in question has SMP. This is because an undertaking's ability to act to an appreciable extent independently depends, among other things, on the ability of its customers to influence its pricing decisions.
<b>Evidence from behaviour and performance</b>	According to the OFT's Market Power Guidelines, an undertaking's conduct in a market or its financial performance may provide evidence that it possesses market power. While high prices or profits alone are	This criterion is of relevance but it should be noted that excessive pricing is not a prerequisite for a finding of SMP. However, an analysis of pricing can indicate whether any

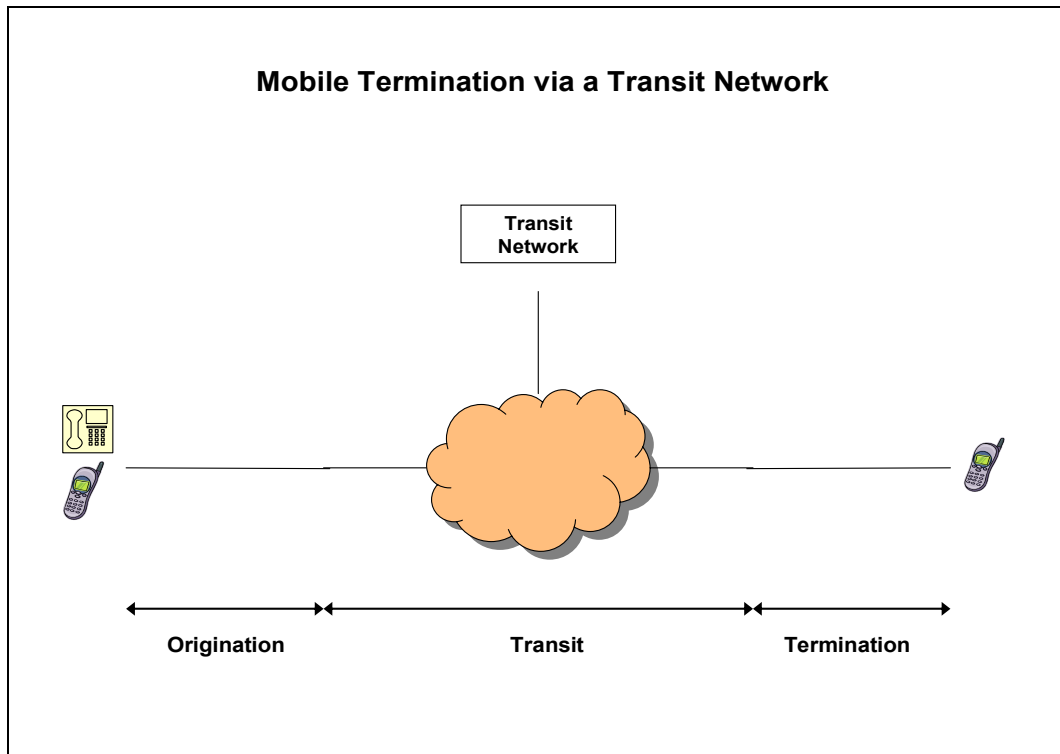
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	unlikely to be sufficient proof that an undertaking has SMP, when considered with other factors, prices that are consistently above an appropriate measure of cost, or returns that are persistently high relative to those that would prevail in a competitive market may suggest the existence of market power.	external competitive pressures induced fixed operators to reduce their charges and so whether they have the ability to act to an appreciable extent independently of their competitors and/or consumers in practice.
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## Annex G - Diagram on Mobile Termination via Transit

**Figure G.1: Mobile Termination via a transit network**



Source: ComReg