Mobile and Fixed Voice Call Termination Rates in Ireland

Response to Consultation, Decisions and Decision Instruments

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Chapter 1

1 Introduction

1.1 This Response to Consultation and Final Decision Document ('**the Document**') sets out ComReg's final position regarding a Price Control for Fixed Termination Rates ('**FTRs**') and Mobile Termination Rates ('**MTRs**') (referred to collectively for the purposes of this Document as '**Termination Rates**') in Ireland. ComReg published its Consultation, draft Decision Instruments and draft Regulatory Impact Assessment (**'RIA'**) in ComReg Document No. 12/67 'Voice Termination Rates in Ireland – Proposed Price Control for Fixed and Mobile Termination Rates'[1] ('**the Consultation Document**'), in which it considered the possible regulatory approaches available when imposing a price control obligation on fixed service providers ('**FSPs'**) and mobile service providers ('**MSPs**') (referred to collectively for the purposes of this Document as '**Service Providers**').

1.2 Termination Rates are the tariffs charged between Service Providers for terminating phone calls (from a fixed or mobile phone) on their network. Although Termination Rates are regulated in all EU Member States, the European Commission on 7 May 2009 issued a Termination Rate Recommendation[2] to National Regulatory Authorities ('**NRAs'**) across Europe in light of the divergence between price control measures that prevailed across the Member States.

1.3 While recognising that Termination Rates were on a downward trend due to NRA intervention, the European Commission was also of the view that they are too high, particularly for calls to mobile phones. While attributing the divergence between Termination Rate levels to the inconsistent approaches adopted by NRAs, it expressed concern that the inconsistent regulation would distort competition, impede investment and lead to higher tariffs for end-users. It was envisaged therefore that consistent regulation across the EU would provide legal certainty and a level playing field for all Service Providers.

[1] ComReg Document No. 12/67: Voice Termination Rates in Ireland – Proposed Price Control for Fixed and Mobile Termination Rates; published on 28 June 2012 ('**the Consultation Document**').

[2] European Commission Recommendation: "*The Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC)*"; dated 7 May 2009 (**'2009 Termination Rate Recommendation'**).

1.4 In summary, the 2009 Termination Rate Recommendation states that by the end of 2012, NRAs should mandate symmetric Termination Rates for FSPs and symmetric Termination Rates for MSPs respectively. It recommends that such Termination Rates should be set in accordance with a cost orientation obligation based on the costs of an efficient operator using a bottom-up long run incremental cost ('**LRIC**') approach. The approach favoured by the European Commission is referred to as a "**pure-LRIC**"[3] approach i.e. the increment is the wholesale termination service and it excludes a mark up for any common costs which would not be avoided if the wholesale termination service was no longer supplied. ComReg is obliged by virtue of Article 19(2) of the Framework Directive[4], as transposed by Regulation 30(1) of the Framework Regulations[5], to take "utmost account" of the 2009 Termination Rate Recommendation.[6]

1.5 As set out in Chapter 1 of the Consultation Document, Termination Rates in Ireland charged by Eircom Limited ('**Eircom**') and the main MSPs i.e. Vodafone Ireland Limited (**'Vodafone'**), Telefónica Ireland Limited (**'O2'**), Meteor Mobile Communications Limited (**'Meteor'**) and Hutchison 3G Ireland Limited (**'H3GI'**) have to date been based on a price control imposed by ComReg in the form of a cost orientation obligation[7].

[3] In defining the relevant increment as the wholesale voice call termination service provided to third parties, pure LRIC allows for the recovery of all fixed and variable costs which are incremental to the supply of the wholesale voice termination service, i.e., those costs that are incremental to terminating voice traffic incoming from other Service Providers. This wholesale voice call termination increment can be calculated by identifying the total long-run cost of a Service Provider providing a full range of services and then identifying the long-run costs of this same Service Provider in the absence of the wholesale call termination service. The latter is then subtracted from the former to calculate the cost of the defined 'pure LRIC' voice call termination increment.

[4] Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC (the '**Framework Directive**').

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

[6] Paragraph 3.29 of the Consultation Document referred to the European Commission's Staff Working Document and paragraph 3.30 referred to the European Commission's Explanatory Note, both of which accompanied the 2009 Termination Rate Recommendation - the Staff Working Document details the impacts of the Recommendation on industry, competition and consumers while the Explanatory Note refers to the inconsistencies observed by the European Regulator's Group ('ERG') (now 'BEREC') in the regulation of MTRs and FTRs by different NRAs and further explains the proposed pure LRIC methodology which it recommends NRAs should apply consistently. See Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU – Implications for Industry, Competition and Consumers, SEC(2009)600 ('**the Staff Working Document'**) and Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU – Explanatory Note SEC(2009)599 ('**Explanatory Note**').

[7] See Chapter 3 of the Consultation Document which sets out the current cost orientation obligations imposed respectively on SMP FSPs and SMP MSPs.

1.6 As noted in the Consultation Document, ComReg Document No. 12/46[8] proposed to designate two further MSPs (i.e. Tesco Mobile Ireland Limited ('**TMI**') and Lycamobile Ireland Limited ('**Lycamobile**')) with Significant Market Power ('**SMP**') in Market 7[9] (also referred to in this Document as the wholesale mobile voice call termination ('**MVCT**') market) and to impose a price control obligation on them in the form of a cost orientation obligation. The Consultation Document also proposed that the FSPs other than Eircom who have already been designated with SMP in Market 3[10] (also referred to in this Document as the wholesale fixed voice call termination ('**FVCT**') market) should be made subject to a price control obligation i.e. BT Communications Ireland Limited ('**BT**'), Verizon Ireland Limited ('**Verizon**'), NTL Communications (Ireland) Limited/Chorus Communications Limited (now UPC Communications Ireland Limited) ('**UPC**'), Colt Telecom Ireland Limited ('**Colt**'), Smart Telecom Holdings Limited ('**Smart**') and Magnet Networks Limited ('**Magnet**'), all of whom were designated with SMP in the 2007 FVCT Decision[11].

1.7 Following the consultation process and having reviewed the responses to ComReg Document No. 12/46, ComReg Document No. 12/124 (the '**2012 MVCT Decision**')[12] reaffirms the SMP designation of the four main MSPs (i.e. Vodafone, O2, Meteor and H3GI), and also designates two further MSPs with SMP (i.e. TMI and Lycamobile). The 2012 MVCT Decision imposes a price control obligation of cost orientation on all six MSPs who are now designated with SMP.

1.8 Chapter 1 of the Consultation Document highlighted:

- the imbalance that exists in Ireland between MTRs and FTRs (the former being considerably higher)[13] with a significant net flow of revenues from FSPs to MSPs for terminating fixed-to-mobile calls;

[8] ComReg Document No. 12/46: Market Review – Voice Call Termination Rates on Individual Mobile Networks; published on 23 May 2012 ('**ComReg Document No. 12/46**').

[9] This corresponds to Market 7 listed in the Annex to the European Commission Recommendation dated 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 ('**the 2007 Relevant Markets Recommendation**').

[10] This corresponds to Market 3 listed in the Annex to the 2007 Relevant Markets Recommendation.

[11] Pursuant to ComReg Decision No. D06/07, Market Analysis – Interconnection Market Review Fixed Wholesale Call Termination Services, ComReg Document 07/109, 21 December 2007 ('**the 2007 FVCT Decision**').

[12] ComReg Decision No. D11/12, Document No. 12124: Response to Consultation, Decision and Decision Instruments Market Review – Voice Call Termination Rates on Individual Mobile Networks; published on 21 November 2012.

[13] ComReg recognizes that the cost drivers for the access elements of fixed and mobile networks differ and that a cost oriented approach may still imply (cost reflective) differences between MTRs and FTRs with the former being somewhat higher than the latter.

- the financial imbalances that can arise due to different traffic flows or (in some cases) asymmetric Termination Rates of Service Providers. A Service Provider could either be a net beneficiary or net payer on cross network mobile-to-mobile and cross network fixed-to-fixed traffic depending on their wholesale traffic flows and/or level of Termination Rates.

1.9 Competition concerns were furthermore raised with Termination Rates above efficient cost creating an artificially high price floor for (off-net) calls services and affecting the intensity of retail (off-net) call competition, as well as potentially reinforcing differentiated tariffs. The latter concern relates to differential tariffs for on-net minutes (calls to other end users using the same Service Provider) versus off-net minutes (calls to end users that use a different Service Provider to the user making the call) with comparatively lower on-net tariffs making larger Service Providers more attractive and creating barriers to entry and growth for later entrant/smaller Service Providers.

1.10 The structure of this Document is as follows:

- Chapter 2 of this Document contains the Executive Summary.
- Chapter 3 of this Document contains Background in the specific context of Ireland.
- Chapter 4 of this Document contains the possible regulatory approaches to setting Termination Rates.
- Chapter 5 of this Document contains the Assessment Criteria for assessing the regulatory approaches set out in Chapter 4.
- Chapter 6 of this Document contains the assessment of the regulatory approaches set out in Chapter 4.
- Chapter 7 of this Document sets out how ComReg believes the preferred price control should be implemented.
- Chapter 8 of this Document contains the regulatory impact assessment (‘**RIA**’).
- Annex 1 of this Document contains the Decision Instrument in relation to FTRs
- Annex 2 of this Document contains the Decision Instrument in relation to MTRs.

- Annex 3 of this Document explains the legal basis for ComReg's decisions.
- Annex 4 of this Document sets out the European context for the decisions.

Chapter 2

2 Executive Summary

2.1 In accordance with the Communications Regulation Acts 2002 to 2011[14] and the EU regulatory framework for electronic communications, ComReg has a number of regulatory objectives, including (insofar as the provision of electronic communications networks, services and associated facilities are concerned) the objectives of promoting competition, contributing to the development of the internal market and promoting the interests of users within the Community.

2.2 **Regulation of FTRs and MTRs in Ireland to date**

2.3 To date, the main FSP (i.e. Eircom), and the MSPs designated with SMP (i.e. Vodafone, O2, Meteor and H3GI), have been subject to ex-ante price regulation in the FVCT and MVCT markets in the form of a cost orientation obligation. These Service Providers therefore have had regulatory restrictions on the Termination Rates that they could charge other FSPs and MSPs for terminating calls on their networks.

2.4 As regards MTRs, in 2005 and 2008 a price control obligation of cost orientation was imposed on MSPs designated as having SMP in the relevant MVCT markets. ComReg did not however specify how this was to be implemented, rather that the burden of proof of compliance rested with the relevant SMP MSPs. ComReg has since updated the market analysis for the MVCT market and has published the 2012 MVCT Decision. The 2012 MVCT Decision reaffirms the SMP designation of the four main MSPs (i.e. Vodafone, O2, Meteor and H3GI), and also designates two further MSPs with SMP (i.e. TMI and Lycamobile). The 2012 MVCT Decision imposes a price control obligation of cost orientation on all six MSPs who are now designated with SMP.

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

2.5 As regards FTRs, in 2007 seven FSPs were designated with SMP in the relevant FVCT markets (the '**2007 FVCT Decision'**).[15] However, a cost orientation obligation was imposed only on Eircom (requiring the use of a pricing model based on forward looking - long run incremental costs ('**FL-LRIC**')). The other FSPs designated with SMP in 2007 received a derogation from the obligation of cost orientation until *inter alia* such time as their share of total direct access paths reached 5%. Where the alternative FSP did not reach a 5% share of the market within a five-year timeframe, it was provided that ComReg may, following a consultation, impose price control regulation. ComReg has since updated the market analysis of the FVCT market and has set out its preliminary views in ComReg Consultation Document No. 12/96[16]. ComReg's preliminary conclusion in that document is that all existing SMP FSPs should continue to be designated with SMP and that a further 12 FSPs[17] should be designated with SMP for the first time. It is also proposed in Consultation Document 12/96 that all SMP FSPs should be subject to a cost orientation obligation.

2.6 It should be noted that the present Document (including the Decision Instrument contained in Annex 1 below) relates only to those seven FSPs designated with SMP in the 2007 FVCT Decision (i.e. Eircom, BT, Verizon, NTL/Chorus (now UPC), Colt Telecom, Smart Telecom (now part of the Digiweb Group) and Magnet). This present Document does not apply to the additional FSPs that ComReg proposes (in ComReg Document No. 12/96) to designate for the first time with SMP in the Relevant FVCT Markets; those additional FSPs are predominantly smaller/later entrant FSPs that have traditionally terminated lower traffic volumes. However, ComReg Document No. 12/96 proposes that, if these 12 additional FSPs are designated with SMP at the end of the current FVCT market analysis process, they would also become subject to the same price control obligations as set out in the current Document.

[15] ComReg Decision No. D06/07, Market Analysis – Interconnection Market Review Fixed Wholesale Call Termination Services, ComReg Document 07/109, 21 December 2007 ('**the 2007 FVCT Decision**').

[16] ComReg Document No. 12/96: Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location; published on 3 September 2012 ('**ComReg Document No. 12/96**').

[17] These are: Imagine Communications Group Limited; Blue Face Limited; Cable and Wireless (Ireland) Limited; Digiweb Limited; In2com Limited; Voxbone SA; Airspeed Communications Limited; Equant Network Systems Limited; Finarea SA; Modeva Networks; 3Play Plus Limited and Magrathea Telecommunications Limited. While it is not entirely a new SMP designation for Digiweb Limited (as it has acquired control of Smart Telecom which was previously designated with SMP in the 2007 market review), Digiweb Limited is included within the list of proposed new SMP designations above for the sake of completeness, taking account of all of the wholesale call termination services it offers.

2.7 The overall average MTRs charged by Vodafone, O2, Meteor and H3GI over the past two years have been in line with the simple average MTR across the twenty-seven Member States monitored by the Body of European Regulators for Electronic Communications ('**BEREC**') (previously known as the European Regulators Group or ERG). The current MTR price control regime in Ireland is based on a voluntary glide-path arrangement whereby the MTRs of SMP MSPs are set in line with the expected European average using the BEREC six-monthly snapshots and other publicly available information. ComReg has not intervened to date on whether MTRs charged by SMP MSPs comply with the cost orientation obligation; however it has made it clear to MSPs that the approach to date was only acceptable as an interim measure until a consultation on the further specification of the cost orientation took place. That consultation was undertaken in the Consultation Document.

2.8 Noting the divergence in the approaches in setting Termination Rates both within and across EU Member States, the European Commission on 7 May 2009 issued a Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU ('**the 2009 Termination Rate Recommendation**').

2.9 **Regulatory options for forthcoming price control period**

2.10 The 2009 Termination Rate Recommendation states that Termination Rates should be set in accordance with a cost orientation obligation and should be based on the costs of an efficient operator using a pure long run incremental cost ('**pure-LRIC**') cost recovery approach. The European Commission set out the objectives of the Recommendation at that time[18];

> *".....will help eliminate price distortions between big and small mobile phone operators across the EU and also distortions between fixed and mobile operators."*
>
> *".....is about customer welfare – it will benefit both business and household phone users by requiring termination rates to be based on costs"*
>
> *".....are levelling the playing field in particular for small mobile operators, but also between fixed and mobile operators, and ensuring that more competition is possible"*
>
> *"…..will lead to more competition and innovation in the sector, and improved customer welfare."*

[18] Speech by Viviane Reding - http://europa.eu/rapid/press-release_SPEECH-09-222_en.htm?locale=en and Neelie Kroes - http://europa.eu/rapid/press-release_SPEECH-09-218_en.htm?locale=en

2.11 For the purposes of the present price control review, ComReg has considered a number of possible regulatory options for regulating FTRs and MTRs in Ireland (see Chapter 4 of the Consultation Document and Chapter 4 of this Document). These include:

- possible lighter-touch regulatory approaches such as fair and reasonable agreements between Service Providers,
- alternative industry-wide settlement mechanisms such as Bill and Keep (whereby zero Termination Rates apply) or Receiving Party Pays (whereby part or all of the termination cost is recovered from the terminating provider's own retail customers), or
- cost-oriented approaches such as pure LRIC (whereby only the avoidable costs of the wholesale call termination service are recovered from the wholesale Termination Rate) or more expansive cost orientation approaches such as LRAIC, LRIC+ or LRAIC+ (collectively referred to as LR(A)IC+ approaches) which take a broader interpretation of incremental costs than just the wholesale call termination service and/or include additional non-incremental costs through an explicit mark-up.[19]

2.12 As stated above, ComReg, in accordance with the Communications Regulation Acts 2002 to 2011 and the EU regulatory framework for electronic communications, has a number of objectives in relation to the provision of electronic communications networks, services and associated facilities, specifically with regard to the *promotion of competition*, *contribution to the development of the internal market* and *promotion of the interests of users within the Community*. These objectives are discussed at length in this Document and are inherently mapped to the set of Assessment Criteria[20] (see Chapter 5 of the Consultation Document and Chapter 5 of this Document) against which ComReg has undertaken a comparative assessment of each of the potential regulatory options considered. The key conclusions arising from this comparative assessment are set out in the summary below:

[19] These approaches have the common feature that the wholesale Termination Rate includes some part of costs that are common with other service(s) and so are above pure LRIC. This might be through an explicit mark-up on LRIC (i.e. LRIC+). Alternatively, where a broader increment including services other than just wholesale voice call termination is used (i.e. LRAIC) and there are avoidable costs that are joint to wholesale voice call termination and these other services, then some share of these joint costs would typically be allocated to wholesale termination. Most reasonable approaches to LRAIC would thus typically result in a cost for wholesale termination greater than pure LRIC if scope economies are significant.

[20] These Assessment Criteria include:

- *Competition* and *Efficiency* which reflect ComReg's statutory objective to promote competition and investment;
- *Equity* which reflects ComReg's statutory objective to promote the interests of end users;

2.13 **Facilitating a more competitively neutral framework**

2.14 The analysis of the MVCT and FVCT markets demonstrates that SMP Service Providers may extract above-cost wholesale revenues from the sale of wholesale call termination services on their respective networks. Service Providers have bottleneck control over the delivery of calls to their subscribers, as callers wishing to reach those specific subscribers have no choice but to call the recipient's network. In that respect, wholesale call termination differs from other markets, such as wholesale call origination, where the customer choosing to use the service is also paying the bill. As these Service Providers are also in competition with each other for subscribers, the level of Termination Rates can have important strategic and competitive implications at the retail level, as it could – in the absence of appropriate regulation – be used as a soft source of revenue to fund competition for retail customers to the disbenefit of those calling into the recipients' networks.

2.15 Taking this into account, mark-ups over the efficient costs of wholesale call termination can generate competitive distortions between fixed and mobile networks, and between Service Providers of the same networks that have asymmetric market shares. The direction and intensity of retail competition can be distorted in a number of ways by the level of Termination Rates which may not necessarily be related to the superior technical or cost efficiency of a given Service Provider. For example:

- Termination Rates set above efficient cost have the potential to **raise barriers to entry and growth** by generating significant financial transfers from smaller Service Providers (or net termination payers) to their larger rivals (or net termination recipients) which have stronger incentives (and are more able) to offer on-net discounts. The further termination charges depart from efficient cost, the further they may contribute to raising the growth barriers for a new entrant Service Provider, where the majority of originated calls are to another Service Provider, or "Off-Net".

- *Consistency with the 2009 Termination Rate Recommendation* which reflects ComReg's statutory objective to contribute to the development of the Internal Market; and
- *Ease of Deciding on Implementing Approach*, *Transparency and Regulatory Certainty* which reflect proportionality considerations.

- Above-cost Termination Rates **effectively create a floor to retail (off-net) pricing** behaviour and can thus influence the ability and incentives of smaller Service Providers to pursue customers with significant off-net calling volumes. Termination Rates can therefore have a material bearing on the retail commercial strategies pursued by smaller Service Providers. They may prevent tariff innovation, such as Service Providers (large or small) from being able to include off-net calls in tariff bundles.

- In addition, the further Termination Rates are set above the efficient cost of wholesale call termination, the further they can **accentuate the ability of Service Providers to employ retail on-net/off-net price discrimination strategies** which, through reinforcing network effects, can enhance the attractiveness of the larger networks, further 'tipping' the retail market in their favour. Such strategies may raise switching costs for customers within calling circles (such as families or groups of friends) as all must switch network together to maintain access to on-net discounts, and such strategies thereby mute retail competition.

2.16 Having assessed the range of possible regulatory options for setting Termination Rates in Ireland, setting MTRs and FTRs on the basis of *cost-orientation* was determined to be the most appropriate remedy for ComReg to adopt. Ultimately, ComReg has arrived at this decision taking account of the ability and incentives for MSPs and FSPs to raise the price for wholesale call termination above efficient cost. To minimise distortions the appropriate cost-oriented methodology should be one that best mimics the price that would prevail in a hypothetical competitive market[21]. If the market mechanism were functioning properly, all Service Providers would price close to the level of efficient cost, as otherwise they would lose market share and revenues to more efficient rivals.

2.17 In this regard, in the 2012 MVCT Decision, ComReg has imposed a cost orientation obligation on six MSPs (including TMI and Lycamobile). The current Decision also maintains the cost orientation obligation imposed on Eircom under the 2007 FVCT Decision and imposes, for the first time, a cost orientation obligation on the other six FSPs designated with SMP in the 2007 FVCT Decision (i.e. BT, Verizon, NTL/Chorus (now UPC), Colt Telecom, Smart Telecom (now part of the Digiweb Group) and Magnet).

[21] The Explanatory Note to the 2009 Termination Rate Recommendation recognises, however, that the efficient price for wholesale call termination is complicated by the fact that both callers and receivers cause a call to be completed. It notes that it is rather a question of how these financial transfers are distributed across operators in a way that best promotes economic efficiency to the benefit of consumers.

2.18 ComReg further believes that the *pure LRIC* approach to cost orientation is the best approach to reflect the efficient cost of wholesale termination services and to minimise the scope for competitive distortions in the marketplace. The further Termination Rates move away from the incremental or efficient cost of the wholesale call termination service, the greater the transfers between Service Providers and the greater the potential for competitive distortions between FSPs and MSPs, and between Service Providers with asymmetric market shares. It may also raise impediments for at least some customers to switch networks to the extent that they enjoy on-net discounts within calling circles.

2.19 ComReg believes that the pure LRIC approach to Termination Rates has better potential than other cost orientation approaches that result in the inclusion of some common costs (or costs jointly shared with other services) to reduce inefficient cross-subsidies between Service Providers by reducing the termination payments of net senders of call traffic. Reducing these wholesale transfers provides a more competitively neutral framework at the retail level thereby supporting all forms of inter-operator (including fixed-to-mobile) competition. Furthermore, by lowering the price floor for all off-net calls and facilitating the reduction of on-net/off-net price differences (in particular in the case of mobile calls), the pure LRIC approach supports intra-fixed and intra-mobile competition, encourages bundled/convergent services, and reduces barriers to entry and expansion for smaller Service Providers.

2.20 Compared to other cost-oriented approaches considered in this Document, ComReg believes that a pure LRIC approach provides less insulation to larger, more established Service Providers from competitive pressures from net termination payers or smaller Service Providers. As a consequence, under pure LRIC the direction and intensity of retail competition is less influenced by the existing size of Service Providers and the historical direction of traffic flows between them and should rather be based primarily on the Service Provider's retail offers. While some net recipients of termination revenues will inevitably face a reduction in their wholesale receipts (albeit recognising some opportunities to counterbalance this with additional retail revenues discussed further in paragraphs 2.25 and 2.33 below), ComReg's obligation is to promote the overall competitive environment rather than promote or preserve the existing competitive positions of individual Service Providers supported by inefficiently high Termination Rates.

2.21 In terms of net gains and losses, and focusing solely on the effect on wholesale revenues across the fixed and mobile sector combined, it is important to recall that termination receipts and expenditures effectively net out to zero. The zero sum game nature of Termination Rates means that – to a first approximation - any reduction in revenues and profits for a specific Service Provider do not disappear but rather represent a transfer between Service Providers (of different size and/or different networks). Thus, while the level of Termination Rates is neutral on the overall net wholesale profits generated by the fixed and mobile sector combined, it can have a significant influence on the relative competitive positions of individual FSPs and MSPs depending on their respective Termination Rates and historic traffic flows and thus materially influence overall competitive intensity. Termination Rates based on the costs of the efficient provision of the termination service (i.e. pure LRIC) help to ensure that this transfer is more equitable than under other cost orientation approaches which result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). Pure LRIC has a better potential to minimise the risk of retail distortions by narrowing the gap between the underlying cost of off-net and on-net calls. It is thus the pure LRIC cost orientation approach which best meets ComReg's statutory objective of promoting efficient competition and helps create a level playing field for all Service Providers (fixed and mobile).

2.22 **Competition drives investment incentives**

2.23 In a *static* sense, whether Termination Rates are set under a pure LRIC or LR(A)IC+ cost orientation approach is unlikely to immediately have a material impact on productive efficiency since many of the assets used to provide call termination are also used to provide other services. Retail competition and the need to provide quality retail calls services to subscribers provide ongoing incentives to undertake necessary network investments in the short term.

2.24 In a *dynamic* context, however, enhanced scope for retail competition resulting from a reduction in distortions associated with Termination Rates should provide more balanced and sustainable investment incentives for all Service Providers over time. Competition provides a strong impetus for dynamic efficiency. Pure LRIC reduces the impact of inter-operator termination transfers and provides Service Providers with greater scope for offering innovative packages with larger numbers of inclusive (off-net) call minutes, or converged services (e.g., fixed and mobile bundles). Increased competition from FSPs and late-entrant or smaller MSPs (which is better facilitated under a pure LRIC approach than under other cost orientation approach which result in the inclusion of some additional joint/common costs) should promote innovation and additional investment incentives for all Service Providers in the long-run.

2.25 Pure LRIC-based MTRs and FTRs (compared to broader cost orientation approaches such as LR(A)IC+) may lead to a transitory reduction in wholesale revenues for some large Service Providers (which are often net receivers of voice traffic) or smaller Service Providers benefiting from high asymmetric Termination Rates due to reduced revenues from incoming off-net calls. However, Service Providers have the ability to rebalance their service offerings to recover part of that lost wholesale revenue through, for example, achieving greater overall efficiency, or managing the recovery of additional retail revenues across the range of service features offered including retail access charges, handset subsidies/rate of handset upgrades, variety of call types, credit expiry periods, range of promotional offers and/or customer acquisition costs, etc. to maintain overall customer lifetime values (‘**CLVs**’) [22].

2.26 **Contribution to the development of the Internal Market**

2.27 Setting Termination Rates based on a pure LRIC methodology is also consistent with ComReg’s statutory objective to contribute to the development of the internal market. Differing rates and methodologies across the EU have important implications for cross-border competition and investment. A common approach to call termination markets based on efficient costing principles should encourage a stable and effective regulatory environment for future investments and establish a level playing field and enhanced competition between different Service Providers and networks (fixed and mobile). It should also minimise the regulatory burden of Service Providers that are active on a cross border basis (as many of the Irish MSPs are) and reduce cross-country distortions to investment decisions and overall competition, thereby consolidating the internal market for telecoms services.

2.28 By considering a higher proportion of (non-avoidable) network costs as potentially relevant under LR(A)IC+ approaches, a differing regulatory treatment of a single cost component to cost orientation can generate significantly diverging results across EU Member States. By contrast, by considering only the avoided costs of the wholesale call termination service as relevant for the purposes of the pure LRIC cost calculation, a pure LRIC approach is less likely to be sensitive to cross-country variations in practice and implementation and performs better than other cost-oriented approaches considered in this Document in meeting ComReg’s objective to contribute to the development of the internal market.

[22] CLV is defined further in footnote 72 above.

2.29 ComReg is also adopting an approach of symmetric Termination Rates across Service Providers providing the same service (i.e., either FVCT or MVCT respectively). While asymmetric Termination Rates can allow higher post-entry profits for new entrants and can therefore provide an additional support for entry and investment, this policy can generate other important distortions which can conversely reinforce obstacles to entry and growth at retail level. For example, such a policy of rewarding smaller Service Providers may give inappropriate investment signals and lead to inefficient entry which is not sustainable over the longer term. Asymmetric Termination Rates can further raise the price floor for off-net retail prices accentuating on-net/off-net retail price differentials and thereby reinforcing the network effects of the larger Service Providers which have a larger proportion of their retail traffic on-net. Furthermore, asymmetric Termination Rates can reinforce cross-country variations in Termination Rates, thereby generating regulatory uncertainty for cross-border investment decisions.

2.30 Taking, *inter alia*, all of the above factors into account, ComReg considers that setting symmetric cost-oriented Termination Rates on the basis of a pure LRIC methodology is the approach which best meets ComReg's statutory objective to contribute to the development of the internal market at this time.

2.31 **Implications for Consumers**

2.32 ComReg is of the view that consumers should have greater potential to benefit from the proposed pure LRIC approach to setting Termination Rates compared to other cost-oriented approaches considered in this Document. Given the nature of call termination in that interconnecting Service Providers are also in competition with each other for subscribers, the further Termination Rates move away from incremental cost the greater the potential for retail competitive distortions to arise. In contrast, pure LRIC has a greater potential to reduce inter-operator transfers and support competition between fixed and mobile, between larger and smaller Service Providers, as well as through enhancing the ability of Service Providers to offer bundled offers of off-net (fixed and mobile) calls more effectively. ComReg expects that the market will be better positioned under pure LRIC to see more diverse consumer choice overall due to the establishment of a more level playing field between both FSPs and MSPs, and between Service Providers with different sized networks.

2.33 To the extent that existing high MTRs feed through into other retail benefits such as hand-set subsidies, consumers can expect to see these reduced/reapportioned to some extent as MSPs rebalance their services and tariffs. Given *inter alia* the saturated mobile market, strong commercial incentives to maintain communities of users, the relatively low costs of maintaining existing subscribers on mobile networks, the widespread existence of SIM-only offers, and myriad opportunities available to Service Providers for retail tariff/revenue rebalancing across the range of user groups, ComReg does not expect this rebalancing to lead to large numbers of consumers dropping their mobile phone services in Ireland. Thus, while fixed consumers will derive clear benefits from fewer resources being diverted away from fixed voice networks and services under a pure LRIC approach (than under LR(A)IC+ approaches), ComReg is also of the view that mobile users would not be impaired through the manifold tariff rebalancing options that would remain available under a pure LRIC approach.

2.34 **Implementation issues**

2.35 ComReg is obliged by virtue of Article 19(2) of the Framework Directive[23], as transposed by Regulation 30(1) of the Framework Regulations[24], to take "utmost account" of the 2009 Termination Rate Recommendation. While deviation from the Recommendation is allowed under Article 19 of the Framework Directive, any such deviation requires notice to the European Commission "*giving reasons for its position"*. In addition and in accordance with Regulation 30 of the Framework Regulations, in cases where it chooses not to follow a recommendation, ComReg must "*inform the Minister and the European Commission giving the reasons for its position"*.

2.36 In order to assess which approach is most appropriate, and thus whether any such deviation is merited, the Consultation Document assessed a range of possible methods for setting FTRs and MTRs in the relevant FVCT and MVCT markets and their likely benefits or otherwise on relevant stakeholders. That assessment also considered in detail ComReg's relevant statutory objectives, including the promotion of competition, contributing to the development of the internal market and promoting the interests of users within the Community.

[23] Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC (the '**Framework Directive**').
[24] European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011) (the '**Framework Regulations**').

2.37 In this current Decision, having regard to ComReg's relevant statutory functions and objectives as well as to the final report prepared by its external consultants, Analysys Mason ('**the Final Analysys Mason Report**'[25]), ComReg has considered in detail the responses received from interested parties in relation to the possible regulatory approaches set out in the Consultation Document.

2.38 Further to the above, and having eliminated the alternative non-cost orientated options in the initial phase of the assessment to focus more specifically on assessing the suitability of available cost-oriented approaches (see Chapter 6 of the Consultation Document and Chapter 6 of this Document), and based on the submissions made by respondents, ComReg is of the opinion that Termination Rates set on the basis of a pure LRIC approach are most appropriate at the current stage of market development. Compared to broader cost orientation approaches (such as LR(A)IC+ approaches), a pure LRIC approach to setting Termination Rates:

- provides optimal scope for effective and sustainable competition and dynamic efficiency/investment incentives over time;
- is more aligned with ComReg's statutory objective to contribute to the development of the internal market; and
- better facilitates more balanced and diverse choices for (fixed and mobile) consumers as a whole.

This conclusion is consistent with that of the European Commission in its 2009 Termination Rate Recommendation. It is also consistent with recent regulatory precedent in other EU Member States, as well as with recent comments letters issued by the European Commission to other NRAs pursuant to Article 7 of the Framework Directive and recent BEREC opinions.

[25] ComReg Document No, 12/125a: Analysys Mason Final Report: Fixed and Mobile Termination Rates in Ireland; published on 21 November 2012 ('**the Final Analysys Mason Report**'). Please see footnote 37 for details of the First Analysys Mason Report which was annexed to the Consultation Document and formed part of the overall consultation process. Whilst substantively similar, for ease of referencing this Document refers to the First Analysys Mason Report when setting out ComReg's preliminary or initial draft position as referred to in the Consultation Document. This Document further refers to the Final Analysys Mason Report when setting out ComReg's final position on the issues raised by Respondents on the Consultation Document and thus when setting out ComReg's final Decision.

2.39 The aim of this Document is to address the responses made by respondents, adjust (where appropriate) the draft decisions (as originally set out in Chapters 8 and 9 of the Consultation Document) on foot of those responses, and set out the nature and process of implementation of an appropriate price control remedy for Service Providers that have been designated with SMP in the FVCT and/or MVCT markets. This Document is the result of the public consultation contained in the Consultation Document and follows full and detailed consideration by ComReg of all submissions received from interested parties.

2.40 ComReg notified its draft measures in relation to Termination Rates to the European Commission on 12 October 2012 under Article 7 of the Framework Directive. The European Commission responded with a comments letter to ComReg dated 12 November 2012[26]. The European Commission did not raise any issues regarding the relevant cost standard proposed by ComReg (i.e. pure LRIC), but did comment on the implementation dates proposed by ComReg for the imposition of pure LRIC FTRs and MTRs and on the MTR benchmark.. In particular, the European Commission called upon ComReg to implement pure LRIC FTRs and MTRs by the 31 December 2012 deadline set out in the 2009 Termination Rate Recommendation. Ultimately, however, the European Commission considered that, in the circumstances, ComReg's short delay until 1 July 2013 in implementing cost-oriented FTRs and MTRs was acceptable (see Chapter 7 below for further detail regarding the European Commission's comments letter).

2.41 In this Document, ComReg sets out its final view that, taking into account a detailed comparative assessment of various regulatory options against clearly defined Assessment Criteria (mapped to ComReg's statutory objectives), there is no reason for Ireland to diverge from the methodology recommended by the European Commission in the 2009 Termination Rate Recommendation, i.e. (i) the appropriate price control is a cost orientation obligation, and (ii) the cost orientation obligation should be implemented for all Service Providers designated with SMP in the FVCT and MVCT markets by means of the pure LRIC cost recovery methodology.

2.42 In summary the **main** decisions of this Document are as follows:

- A pure LRIC costing methodology is the most appropriate approach to setting FTRs and MTRs in Ireland for the present price control period.

[26] This letter is published on the European Commission website at the following link: http://circa.europa.eu/

- For FTRs, the pure LRIC approach will be implemented based on an updated bottom-up ('BU') model based on a pure LRIC cost methodology for an efficient fixed network in Ireland. This should be based on a full TDM network from July 2013 to June 2014, with the PSTN evolving to a hybrid NGN network of IP switching and PSTN interconnectivity for the following two years. The FTR for the third year is based on the assumption that the fixed network is primarily an IP-based network.

- For MTRs, the pure LRIC approach will be implemented using a benchmark approach until such time as a 'fit for purpose' pure BU-LRIC cost model is available for MTRs in Ireland. The benchmark used is based on benchmarking against those EU countries where: (i) a pure BU-LRIC model has been notified to the European Commission, (ii) the modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation and (iii) the relevant NRA has adopted a final decision setting a BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State for the purposes of the benchmark is the pure BU-LRIC rate adopted in the NRA's final decision.

- The move to a pure LRIC basis for setting FTRs and MTRs will not take effect until 1 July 2013, thereby extending by six months the implementation date set out in the 2009 Termination Rate Recommendation. For the interim period from 1 January 2013 to 30 June 2013, the weighted average MTR charged by SMP MSPs must be no more than 2.60 cent. SMP FSPs must charge no more than their current FTRs for the interim period from 1 January 2013 to 30 June 2013.

- For FTRs, the maximum rates to be applied by SMP FSPs will be 0.070 cent per minute and 0.075 cent per call (or a blended[27] 0.98 cent per minute) from 1 July 2013, falling to 0.060 cent per minute and 0.068 cent per call (or a blended 0.85 cent per minute) from 1 July 2014 and 0.060 cent per minute and 0.068 cent per call from (or a blended 0.072 cent per minute)1 July 2015

- For MTRs, pending the adoption of a 'fit for purpose' pure BU-LRIC cost model for MTRs in Ireland, the maximum MTR to be applied by SMP MSPs will be 1.04 cents from 1 July 2013.

[27] Where the blended rate per minute = cost per minute + (cost per call / average duration of a call) where the average duration of a call = 2.66 minutes

- With effect from 1 July 2013, the maximum FTRs and MTRs provided for in this Document must be applied as flat rates i.e. there will be no permitted differentiation between FTRs or between MTRs depending on the time-of-day or day of the week on which a particular call is terminated on the relevant Service Provider's network.

Chapter 3

3 Background and Process

3.1 Overview

3.1 Chapter 3 of the Consultation Document set out the legal and regulatory framework for imposing a price control obligation on Service Providers designated with SMP in the FVCT[28] and MVCT[29] markets.

3.2 As set out in the Consultation Document, ComReg was at that time in the process of reviewing both the wholesale market for FVCT (i.e. Market 3) and the wholesale market for MVCT (i.e. Market 7). With regard to Market 7, ComReg has completed its consultation (see ComReg Document No. 12/46) and is issuing its decision in parallel to this Document in the 2012 MVCT Decision. The 2012 MVCT Decision replaces the previous SMP designations and obligations with a new decision designating certain MSPs with SMP (i.e. Vodafone, O2, Meteor, H3GI, TMI and Lycamobile) and imposing a range of SMP obligations (including cost orientation).

3.3 In relation to Market 3, ComReg Document No. 12/96[30] was published on 3 September 2012 and the consultation period ran from 3 September to 15 October 2012. ComReg is currently reviewing the responses received and proposes to adopt a Decision in due course.

3.4 The Consultation Document considered the prevailing price control obligations for MVCT and FVCT markets, the 2009 Termination Rate Recommendation and the situation in other EU countries.

[28] ComReg Decision Notice D06/07 (ComReg Document No. 07/109): Decision Notice and Decision Instrument – Designation of SMP and SMP Obligations. Market analysis: Interconnection market review fixed wholesale call termination services; published on 21 December 2007 ('**ComReg Decision No. D06/07**')

[29] ComReg Decision Notice D11/05 (ComReg Document No. 05/78.): Imposition of SMP obligations. Market analysis: Wholesale voice call termination on individual mobile networks; published 13 October 2005 ('**ComReg Decision No. D11/05**') and ComReg Decision Notice D05/08 (ComReg Document No.08/92), Market Analysis Voice Call Termination on Hutchison 3G Ireland's Mobile Network, published on 1 December, 2008 ('**ComReg Decision No. D05/08**')

[30] ComReg Document No. 12/96: Market Review – Wholesale Voice Call Termination Services Provided at a Fixed Location; published on 3 September 2012 ('**ComReg Document No. 12/96**')

3.2 Mobile Voice Call Termination Price Control Obligation

3.5 Paragraphs 3.8 – 3.17 of the Consultation Document dealt with the current and proposed Mobile Voice Call Termination Price Control Obligation. ComReg Decision No. D9/04[31] and ComReg Decision No D11/05[32], designated Meteor, O2 and Vodafone as having SMP and imposed a price control obligation based on cost orientation requiring that:

"The burden of proof that charges are derived from costs, including a reasonable rate of return on investment shall lie with SMP MNO's"[33]

3.6 A price control obligation based on cost orientation was imposed on H3GI by ComReg Decision D05/08 requiring that H3GI:

"...shall have an obligation of cost orientation with respect to its prices for MVCT,..."

3.7 Paragraph 3.14 of the Consultation Document explains that the current price control regime is based on a glide-path arrangement whereby Irish MTRs of SMP MSPs have been set in line with the expected European average using BEREC[34] six monthly snapshot reports together with other publicly available information from other countries regarding future reductions to MTRs.

3.3 Fixed Voice Call Termination Price Control Obligation

3.8 Paragraph 3.18 – 3.26 of the Consultation Document dealt with the current Fixed Voice Call Termination Price Control Obligation as set out in the 2007 FVCT Decision. ComReg Decision No. D06/07 (i.e. the 2007 FVCT Decision) imposed a price control obligation on Eircom and separately on six Other Authorised Operators ('**OAOs**').

3.9 Regarding Eircom's price control obligation, Section 10.1 of that Decision requires that prices charged by Eircom shall be:

[31] ComReg Document No. 04/82: Decision D9/04: Market Analysis – Wholesale Voice Call Termination on Individual Mobile Networks; published on 24 July 2004 ('**ComReg Decision No. D9/04**').

[32] ComReg Decision D11/05, Document No. 05/78, Decision Notice – Imposition of SMP Obligations - Market Analysis: Wholesale Voice Call Termination on Individual Mobile Networks, 13 October 2005 ('**ComReg Decision No. D11/05**').

[33] See Section 6.2 of the Decision contained in Appendix A of ComReg Decision No. D11/05 (applicable to Vodafone, O2 and Meteor).

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

"...cost orientated and such costs shall be calculated using a pricing model based on forward looking long run incremental costs (FL- LRIC) or an alternative model should ComReg decide..."

3.10 In relation to OAOs (i.e. SMP FSPs other than Eircom), Section 10.3 of that Decision Instrument states *inter alia* that the OAO shall have price control obligations *"once a OAO reaches 5% share of the Market".* Where the OAO (i.e. SMP FSP other than Eircom) did not reach a 5% share of the market within a five-year timeframe, it was provided that ComReg may, following a consultation, impose price control regulation. To date, ComReg has not determined that any OAO has officially reached the 5% threshold and therefore the FTRs charged by SMP FSPs other than Eircom have not been subject to any price control obligations.

3.4 Consultation Process

3.11 The Consultation Document was published on 28 June 2012 and an initial deadline for responses of 10 August 2012 was given. Following representations from various operators, the deadline for responses was extended on three separate occasions to allow just over nine weeks for the receipt of submissions, with a final deadline of 4 September 2012.

3.12 ComReg received eight responses to the Consultation Document from ALTO, BT, Eircom, H3GI, Magnet, O2, TMI and Vodafone, non confidential versions of which are published in ComReg Document No. 12/110[35]. In addition, the European Commission provided ComReg comments on its proposals as set out in paragraphs 7.72– 7.87 of this Document.

3.13 ComReg notes that a number of respondents raised concerns in relation to the length of the consultation period. In particular, several respondents considered that, in light of the issues raised and the potential market impact of the proposals, a longer period should have been allowed for responses. Furthermore, a number of respondents considered that the consultation in relation to price control methodology was premature in light of the parallel consultation process for the MVCT market review.

[35] ComReg Document No. 12/110 'Voice Termination Rates in Ireland – Non-confidential submissions received from respondents'; published on 11 October 2012.

3.14 ComReg notes these concerns but is satisfied that interested parties were given a reasonable and adequate opportunity to submit their views. ComReg has consulted in line with its statutory obligations and duties and its published consultation procedures. It has also coordinated the output of its MVCT market review procedure and the current consultation[36].

3.15 ComReg has fully considered all responses to consultation received and has taken these into account in reaching its final decisions in this Document in respect of FTRs and MTRs. The main points raised by respondents are identified and addressed in Chapters 4 to 8 below.

[36] Issues regarding the sequencing of the MVCT market review and price control remedies processes are thoroughly addressed in paragraphs 4.66 to 4.68 of this Document. Conducting the market analysis and remedies consultations and final decisions in parallel is fully in line with best EU practice and the need to ensure timely, effective and appropriate regulation.

4 Possible regulatory approaches: principles and methodologies

4.1 Overview

4.1 In Chapter 4 of the Consultation Document, ComReg set out the possible regulatory approaches that could be implemented as part of the price control remedy to mitigate the potential competition problems which may arise for both the FVCT and MVCT markets (i.e. Markets 3 and 7). In particular, the following were discussed:

- Potential competition problems identified in the FVCT and MVCT markets
- Possible Regulatory Approaches to set Termination Rates in Ireland
- Principle of Symmetry

4.2 Potential competition problems and the principle of symmetry were discussed under Section 4.2 and Section 4.4 respectively of the Consultation Document. The possible regulatory approaches to setting Termination Rates in Ireland, the views of respondents and ComReg's assessment of responses and final position are discussed below in the following section.

4.2 Possible Regulatory Approaches to set Termination Rates in Ireland

4.2.1 ComReg's Preliminary View from the Consultation Document

4.3 Section 4.3 of the Consultation Document set out five potential regulatory approaches for setting price controls in the FVCT and MVCT markets in Ireland (as identified in the First Analysys Mason Report[37]). These five potential regulatory options are:

- No price control (as a baseline scenario)
- 'Fair and reasonable'
- Bill & Keep
- Receiving Party Pays
- Cost Orientation

[37] ComReg Document No. 12/67a: Analysys Mason: Final Report for Consultation – Fixed and Mobile Termination Rates in Ireland; published on 28 June 2012 ('**the First Analysys Mason Report**')

4.4 Under a ***'No price control'*** approach (discussed under Section 4.3.1 and Section 6.2 of the Consultation Document), MSPs and FSPs would effectively decide what MTRs and FTRs to charge one another. Concern was raised in the Consultation Document that Service Providers using this approach may not negotiate Termination Rates at an appropriate level in the interest of promoting competition or in the interests of consumers. The Consultation Document also noted that this approach is inconsistent with the 2009 Termination Rate Recommendation, with general EU regulatory practice, and with ComReg's statutory objective to contribute to the development of the internal market. Furthermore, while this option would not require any resources to implement, it does not provide transparency or regulatory certainty and would not be justified in light of the competition problems identified.

4.5 The '***Fair and reasonable***' approach was discussed in Section 4.3.2 and Section 6.3 of the Consultation Document. In summary, this approach involves the relevant parties finding a resolution within specific, defined parameters that is perceived to be 'fair and reasonable' to all involved. While noting that this approach has been proposed in other jurisdictions, e.g. Ofcom in the UK where it has been adopted for smaller MSPs, the Consultation Document noted that the application of this approach would constitute a deviation from the 2009 Termination Rate Recommendation and in light of recent 'Serious Doubts' letters from the European Commission risks conflicting with ComReg's statutory responsibility to contribute to the development of the internal market. In addition, uncertainty as to what constitutes 'fair and reasonable' implies that efficiency, competition and equity objectives cannot be guaranteed. Regulatory certainty would likely be contingent on dispute resolution outcomes.

4.6 The '***Bill and Keep ('B&K')*** approach was discussed in Section 4.3.3 and Section 6.4 of the Consultation Document. This approach is one where the Service Provider originating the call bills the calling party and does not pay anything to the Service Provider terminating the call. It was identified that the 2009 Termination Rate Recommendation does not necessarily preclude this approach. While the Explanatory Note to the 2009 Termination Rate Recommendation (see Section 6.1.2) recognises the potential merits of B&K, it similarly identifies that this approach has potential drawbacks which should be *"carefully considered"* and noted the limited experience of it being mandated through regulatory intervention to date, as well as possible inefficient traffic routing and network utilisation problems which might arise. The Consultation Document also noted that while B&K was relatively transparent and certain and could mitigate to some extent against the competition problems identified, it also referred to other concerns highlighted in sections 3.1.3 and 6 of the First Analysys Mason Report. In particular, Analysys Mason notes the potential for disruption in moving from the current regulatory system, including a potential increase in unsolicited phone calls and/or bulk messages (as calling parties would no longer have to pay Termination Rates) as well as generating other possible consequences for non-geographic and premium rate payments (given its reliance on the existence of an interconnect payment system for settling charges between originating and terminating Service Providers). It further referred to possible consistency issues with Article 13 of the Access Directive[38].

4.7 The '***Receiving Party Pays***' approach was discussed in Section 4.3.4 and Section 6.5 of the Consultation Document. This approach is described as a retail pricing approach whereby the terminating Service Provider bills the receiving party while the originating Service Provider bills the calling party. The 2009 Termination Rate Recommendation (see Section 6.1.4 of the Explanatory Note) identifies that this approach would recognise the existence of a positive call externality[39] to the receiving party and the Consultation Document noted its similarly positive competitive effects to B&K. At the same time, the Explanatory Note also recognised difficulties in envisaging such a settlement system emerging in the current environment in view of the established calling party pays system and the historical evolution of Termination Rates in the EU. As noted in the Consultation Document, a radical overhaul of retail pricing structures could also raise issues in terms of implementation resources, as well as in terms of initial transparency and certainty for consumers. In addition, as noted in section 6 of the Analysys Mason Report externalities could arise due to the caller creating costs that they do not pay directly themselves.

[38] See footnote 63 of this Document below.
[39] I.e. the benefit gained when someone calls you.

4.8 The '***Cost Orientation***' approach was discussed in Section 4.3.5 and Sections 6.6 and 6.7 of the Consultation Document. It notes that this approach is the most appropriate intervention identified in the 2009 Termination Rate Recommendation given the competition problems identified in both the FVCT and MVCT markets. The Consultation Document also notes the superior performance of 'cost orientation' relative to the 'no price control' and 'fair and reasonable' options in terms of efficiency, competition, equity and overall transparency and regulatory certainty. The Consultation Document notes that there are two possible mechanisms for implementing a cost orientation approach, namely, cost modelling and benchmarking. Both approaches are discussed in greater depth (see summary below) in Sections 4.3.6 and 4.3.7 (as well as in Sections 6.6 and 6.7) respectively of the Consultation Document.

4.9 Section 4.3.6 of the Consultation Document set out the factors (as identified in the First Analysys Mason Report) that need to be considered in cost modelling, in particular:

- How should assets be valued?

  The Consultation Document makes a distinction between Historic Cost Accounting ('**HCA**') and Current Cost Accounting ('**CCA**') - HCA being based on the actual reported financial results whereas CCA costs being based on Service Providers' accounts with assets re-valued to their current cost. An analysis of the implications for depreciation was set out in paragraph 4.34 – 4.35 of the Consultation Document.

- Is the model bottom-up ('**BU**') or top down ('**TD**')?

  The Consultation Document (see paragraph 4.36) notes that while a TD model can be useful for an operator to determine its own cost base, it does not necessarily represent the best modelling approach to determine the costs of an efficient operator in a regulatory context. A BU model on the other hand calculates the cost for an efficient operator to build a network.

- Which accounting methodology allocation and increment should be used?

  Paragraph 4.37 of the Consultation Document summarises the characteristics of a BU model, discusses its advantages and drawbacks and identifies that the First Analysys Mason Report surmises that BU-LRAIC and LRIC (with or without mark ups) models provide the most commonly used approaches to determine the costs of an efficient operator.

4.10 Paragraph 4.38 of the Consultation Document compares and contrasts the TD and BU approaches while paragraph 4.39 identifies the accounting methodology/increment approach adopted by ComReg in previous pricing decisions.

4.11 Section 4.3.7 of the Consultation Document considers a benchmarking approach to implement cost orientation. Having recognised that the 2009 Termination Rate Recommendation specifically envisaged the use of benchmarking, ComReg, as also recommended by Analysys Mason, set out its preliminary view that, in the absence of a BU model, the benchmark should be based on either the rates decided by other NRAs or the rates resulting from the modelling analyses performed by other NRAs. Figures 4.2 and 4.3 of the Consultation Document set out the MTRs and the FTRs and the associated methodologies applied in other EU Member States (as of 1 January 2012).

4.12 Further to the five regulatory approaches described above, ComReg asked the following question in its Consultation Document:

Q. 1 Do you agree with the five regulatory approaches considered or are there any other approaches that respondents consider should be assessed in the context of this Consultation Document? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

4.2.2 Views of Respondents

4.13 In response to ComReg's question whether respondents agreed with the five regulatory approaches or whether there are any other approaches that respondents consider should be assessed, all respondents that submitted comments on this question broadly agree with the approaches considered by ComReg. BT has no comment in relation to this question and TMI does not respond directly to this question, although it raises concerns in relation to the status of the 2009 Termination Rate Recommendation. O2 also raises concerns in this regard.

4.14 Vodafone, however, states that, in its view, two additional approaches should have been assessed; namely

- A continuation of the current voluntary glidepath based on the BEREC benchmark; and
- LRIC + based on a cost model

4.15 According to Vodafone, there is no evidence to suggest that the current remedy has been ineffective, resulted in inefficiencies or impeded competition in the market place. Furthermore, Vodafone argues that, in the absence of the 2009 Termination Rate Recommendation, a continuation of the current voluntary glide path approach could fulfil all other regulatory objectives. In Vodafone's view, ComReg has not provided any objective evidence of what new competitive failure or consumer harm has arisen in the market since 2010 that would negate the continuation of the current regime. Vodafone argues that, in the absence of any Irish specific cost models, ComReg should facilitate a further voluntary glide path using the current approach based on the BEREC MTR benchmark.

4.16 Vodafone also believes that LRIC+ is a credible alternative cost-oriented remedy that, in its view, ComReg has not assessed in detail as a discrete alternative regulatory option. According to Vodafone, LRIC+ is likely to score differently on ComReg's Assessment Criteria relative to LRAIC+ and pure LRIC.

4.17 Vodafone argues that a pure LRIC approach would distort consumption as it would shift the burden of fixed and common cost recovery to other services such as origination. Accordingly, it would require charges for these other services to be above the efficient level. Vodafone therefore believes that this would undermine the ability of operators to earn their risk adjusted cost of capital to the detriment of efficient investment and innovation over the longer term.

4.18 In relation to a benchmark, Vodafone is of the view that it would only work if the benchmark is against a sufficiently large number of jurisdictions where a cost oriented price control has been implemented and properly adjusted to reflect the specific cost conditions in Ireland. If such a "*robust adjusted benchmark*" cannot be implemented, it is Vodafone's view that a bottom up ('**BU**') pure LRIC cost model would be superior to a potentially "*volatile and questionable*" benchmark.

4.19 Vodafone also disagrees with the weighting given to the various criteria within the assessment exercise undertaken by ComReg, considering that efficiency and competition should have the greatest weight as they relate most directly to ComReg's statutory objectives.

4.20 Vodafone and TMI are of the view that ComReg's reasoning with respect to the 2009 Termination Rate Recommendation is flawed and that undue reliance has been placed on that Recommendation. O2 also raised concerns in this regard.

4.21 O2, while agreeing with the approaches set out, highlights that in its view a number of the approaches set out by ComReg are predicated on the outcome of the MVCT market review. A number of operators, in particular TMI, also took issue with the parallel consultation processes.

4.22 Please refer to ComReg Document No. 12/110[40] for a published version of all the non-confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

4.2.3 ComReg's Assessment of Responses and Final Position

4.23 Having considered the above views expressed by interested parties, and for the sake of clarity, ComReg has decided to address each of the issues raised under the following respective headings:

- Proposal to continue with the current voluntary glide path approach based on a BEREC benchmark
- Assessment of LRIC+ as a credible alternative cost-oriented remedy
- Impact of pure LRIC approach on fixed and common cost recovery and efficient investment and innovation incentives
- Viability of the proposed pure LRIC benchmarking approach to MTRs and regulatory certainty
- Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation
- Interrelationship between proposed price control remedies and the market review process

4.24 **Proposal to continue with the current voluntary glide path approach based on a BEREC benchmark**

4.25 ComReg considers that the voluntary glide-path that set the MTRs of MSPs designated to date with SMP was appropriate at a particular point in time and was temporary. ComReg acknowledges that it led to significant reductions in MTRs in the short to medium term; however, it was never envisaged as a long-term solution. ComReg did not include the continuation of the existing glide-path in its analysis in the Consultation Document because the intention of ComReg has always been to move towards a cost-oriented approach to setting MTRs, taking utmost account of the 2009 Termination Rate Recommendation. ComReg considers that this intention was clarified by it to

[40] ComReg Document No. 12/110: Voice Termination Rates in Ireland – Non-confidential submissions received from respondents; published on 11 October 2012 ('**ComReg Document No. 12/110**').

all the then designated SMP MSPs in 2010.

4.26 At the time of implementing the current glide-path arrangements for MTRs, ComReg considers that it made it clear to the regulated MSPs that the glide-path approach to setting MTRs was temporary in nature, with a planned end date of 30 December 2012.

4.27 It is ComReg's responsibility to ensure that there is no unnecessary delay in the accrual of substantial benefits to the competitive process and consumers as a whole from an effective approach to cost orientation which minimises the risk of Termination Rates contributing to retail distortions of competition. Vodafone's proposal to continue with the current voluntary glide path approach based on a BEREC benchmark neglects to take into account the risks that a deferral of cost-oriented MTRs would have for the overall competitive process (in particular between fixed and mobile markets and/or between Service Providers with asymmetric market shares and traffic flows) as well as for consumers overall (i.e. both fixed and mobile, and on-net and off-net user groups).

4.28 One of ComReg's statutory objectives is to contribute to the development of the internal market. In this regard, the European Commission[41] and BEREC[42] have clearly stated that voluntary glide-paths for Termination Rates create a barrier to the development of a single market for electronic communications services and do not provide prospective investors with sufficient transparency and regulatory certainty. The continuation of the voluntary glide-path by ComReg would contradict the objective of providing certain and transparent prices for MTRs. As clarified in the Final Analysys Mason Report[43], if ComReg's existing approach continued into the future, the resulting prices would be a moving blend of pure LRIC and LR(A)IC+ prices, depending on the methodologies employed by EU countries in the benchmark set. As these countries change their cost methodologies, the resultant MTRs may vary materially as not all countries included in the benchmark are using the same cost methodology. Such an approach is not appropriate going forward and ultimately ComReg intends to arrive at an appropriate cost model for Ireland to replace the benchmarking approach. Furthermore, in accordance with its internal market objective, ComReg has had to take utmost account of recent

[41] See case PL/2011/1255-1257.

[42] BEREC, BoR (11) 75, BEREC Opinion on Phase II in Case PL/2011/1255-1258.

[43] See page 20 of the Final Analysys Mason Report – as referenced in footnote 25 above.

regulatory precedent in other EU Member States[44], as well as recent BEREC opinions[45].

4.29 The fixed and mobile industry has been aware since 2009 of the Termination Rate Recommendation and the target implementation date of 31 December 2012. ComReg considers that it has been clear to all the then designated SMP MSPs, at least since 2010, that it was ComReg's intention to revisit the price control obligation taking into account the 2009 Termination Rate Recommendation prior to the end of the glide-path period with a view to a revised regime being in place with effect from 1 January 2013.

4.30 Furthermore, when imposing, maintaining or amending a price control obligation, it would not be appropriate simply to carry over an existing approach without considering whether other available regulatory options would be appropriate to achieve ComReg's objectives for the relevant price control period. Rather, it is necessary to examine the relevant options for price control, to identify which option would best meet ComReg's statutory objectives for the forthcoming regulatory period in light of the prevailing circumstances in force at that time. Pursuant to Section 12 of the Communications Regulation Acts 2002 to 2011, ComReg's relevant statutory objectives are: (i) to promote competition, (ii) to contribute to the development of the internal market, and (iii) to promote the interests of users within the Community. ComReg's statutory functions, objectives and obligations are also further set out in Regulation 16 of the Framework Regulations (which transposes Article 8 of the Access Directive) and in Regulation 6 of the Access Regulations (which transposes Article 5 of the Access Directive), Regulation 8(6) of the Access Regulations (which transposes Article 8(4) of the Access Directive) and Regulation 13 of the Access Regulations (which transposes Article 13 of the Access Directive). As regards price control obligations, Article 13(2) of the Access Directive (which is transposed by Regulation 13(3) of the Access Regulations) requires that *"….any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits"*. Recital 20 of the Access Directive explains further that *"[t]he method of cost recovery should be appropriate to the circumstances taking account of the need to promote efficiency and sustainable competition and maximise consumer benefits"*.

[44] In the following cases the NRAs have notified a pure LRIC methodology as a Final Decision for setting MTRs: BE/2010/1086, FR/2011/1200, PT/2012/1312, IT/2011/1219, ES/2012/1291, DK/2012/1342, UK/2010/1068.

[45] See, for example, BoR 12/23, BEREC Phase II Opinion on Case NL/2012/1284-1285 – Page 13 of this BEREC Opinion notes: "BEREC considers that, in the case of termination services, a pure BULRIC approach is generally the most appropriate…".

4.31 ComReg is thus required to consider which price control mechanism is most appropriate for the particular market circumstances, taking into account the objectives to promote efficiency and sustainable competition and to maximise consumer benefits. For these reasons, ComReg did not believe that the continuation of the existing voluntary glide-path for MTRs should be included in the list of options for setting MTRs to be analysed in the Consultation Document[46]. Notwithstanding this approach, and in light of the comments received, ComReg has now explained above its rationale for not continuing with the voluntary glide path approach.

4.32 A number of respondents, in particular Vodafone and TMI, argue that the approach proposed by ComReg in the Consultation Document demonstrates a failure on the part of ComReg to comply with its statutory duties. Specifically, they raise concerns that reliance on the 2009 Termination Rate Recommendation and the pure LRIC approach is not proportionate or consistent with ComReg's statutory duties as set out in, among other places, Article 8 of the Framework Directive and Articles 8 and 13 of the Access Directive. In particular, Vodafone states that the approach proposed by the 2009 Termination Rate Recommendation and which ComReg proposes in the Consultation Document to adopt is "*in fact highly likely to be inconsistent with ComReg's primary obligations*".

4.33 ComReg has responded elsewhere in this Document to submissions regarding the extent to which it has taken account of the 2009 Termination Rate Recommendation and the appropriateness of this (see, for example, paragraphs 4.56 to 4.65, 5.46 to 5.48, and 6.202 to 6.222). As regards these additional arguments relating to compliance with its statutory duties, ComReg notes that it cannot in any way be presumed that a recommendation adopted by the European Commission under Article 19 of the Framework Directive is not in furtherance of ComReg's statutory duties. On the contrary, Article 19 itself refers to recommendations being introduced "*in order to further the achievement of the objectives set out in Article 8 [of the Framework Directive].*" ComReg considers that there is no question of conflict between the 2009 Termination Rate Recommendation and ComReg's statutory objectives. In any event, contrary to what is claimed by respondents and as demonstrated in the Consultation Document and in this Document, ComReg has taken full and proper account of all of its statutory objectives and duties in arriving at the decisions provided for in this Document.

[46] However, insofar as ComReg in the Consultation Document and in this Document generally assesses the impacts of setting Termination Rates at any level above pure LRIC, the effects of continuing with the current voluntary glide-path arrangements are implicitly reflected since they would likely still result in Termination Rates above pure LRIC over the near term.

4.34 **Assessment of LRIC+ as a credible alternative cost-oriented remedy**

4.35 ComReg examined a range of cost orientation methodologies in detail in the Consultation Document as the basis for selecting the recommended cost oriented remedy for MTRs in the Irish market. In addition to the two methodologies examined in detail in the Consultation Document (pure LRIC and LRAIC+), which were mentioned by Vodafone, ComReg did in fact identify alternative approaches, such as LRIC+ or LRAIC, as cost-oriented pricing methodologies to be considered. The precise relationship between pure LRIC on the one hand and these LRAIC, LRIC+ and LRAIC+ costing variants (collectively referred to as LR(A)IC+ approaches) on the other is described in more detail in the below paragraphs and later in section 6.2.2 of this Document. For the purposes of this Document, the fundamental difference between pure LRIC and these other LR(A)IC+ approaches is that the latter result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services), i.e. they result in a value above pure LRIC.

Relationship between pure LRIC and LRAIC

4.36 The Final Analysys Mason Report considers the differences between LRAIC and pure LRIC and notes the following (page 5):

*“**LRAIC**, is another incremental cost only method in which the incremental costs are assessed across a broader ‘total traffic’ increment. However, LRAIC will not meet the same economic outcome as pure LRIC because the incremental cost does not reflect only the regulated service (wholesale termination) but instead represents the incremental costs of a mix of traffic types (termination, origination, SMS and data) with very different economic and competitive situations (for example, mobile data being a mobile-party-pays service). The per-minute LRAIC results[47] are very likely to also be somewhere between LRAIC+ and pure LRIC, therefore this approach will most likely give rise to intermediate effects when compared with the cases of LRAIC+ and pure LRIC”.*

[47] It is worth noting that the Norwegian NRA chose to use LRAIC as its costing basis in 2010, and found that LRAIC was between LRAIC+ and pure LRIC. Norway is not an EU Member State. See: http://www.npt.no/marked/markedsregulering-smp/marked/marked-7/_attachment/2391?_ts=139be48bbee.

4.37 LRAIC thus provides for a broader increment than pure LRIC by including services other than just the wholesale voice call termination service. Where there are avoidable costs which are joint to wholesale voice call termination and other services included in the increment, then some share of these joint costs would typically be allocated to the wholesale voice call termination service. Therefore, most reasonable approaches to LRAIC would typically result in a cost for wholesale termination greater than pure LRIC if scope economies are significant.

4.38 LRAIC will thus likely result in a Termination Rate value somewhere between pure LRIC and LRAIC+. Since LRAIC typically results in a wholesale termination cost greater than pure LRIC, the key insights regarding the relative performance of pure LRIC and LRAIC+ against the Assessment Criteria would also apply to a comparison of pure LRIC and LRAIC against the same Assessment Criteria set out in Chapters 5 and 6 below. As noted in paragraph 4.35 above, the comparative assessment framework implicitly assesses the relative merits and demerits of a pure LRIC approach to setting Termination Rates compared to other cost orientation approaches that result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services), with LRAIC+ being a representative approach for the latter.

4.39 *Relationship between pure LRIC and LRIC+*

4.40 While it is unclear from Vodafone's response precisely what it means by LRIC+ (as this depends on the increment defined, i.e. whether that is 'wholesale voice call termination traffic only', 'all voice traffic', or something else), the Final Analysys Mason Report (page 5/6) notes that the essential difference is whether the resulting Termination Rate is above pure LRIC or not:

*"**LRIC+,** is another total cost method that includes a mark-up for common costs. This method is distinguished from LRAIC+ by the choice of increments (in [Analysys Mason's] interpretation, with LRIC using small, possibly service-specific, increments and LRAIC using large multi-service increments). There will be some differences in the per-minute results obtained using LRAIC+ and LRIC+, depending on the choice of mark-up mechanism (EPMU, Ramsey pricing or other method), choice of LRIC increments, and the long-run cost structure of the network. However, the result of a LRIC+ method, because it includes total costs, is likely to be similar to LRAIC+ and relatively high compared to pure LRIC results".*

4.41 LRIC+ is thus a 'total' cost method similar to LRAIC+. While the increment for pure LRIC is defined as 'wholesale call termination', the LRIC+ approach, as defined in the Final Analysys Mason Report, may also reflect the 'wholesale call termination service' or could reflect a larger increment (such as the incremental cost of 'voice traffic'). Common costs are also included in the final result using a mark-up (the '+') applied to the relevant defined increment. The outcome of LRIC+ may therefore be higher or lower than LRAIC+ depending on the scope of the relevant defined increment[48]. In any case, the fundamental insight for the purposes of the present Document is that a LRIC+ outcome will be higher than a pure LRIC outcome.

4.42 ComReg has also considered how LRIC+ would perform under each of its Assessment Criteria relative to a pure LRIC approach. As noted in the Final Analysys Mason Report (page 5/6), Termination Rates based on a LRIC+ methodology would show similar characteristics to LRAIC+ Termination Rates in that a share of common costs are recovered from termination services. The costs included in both LRIC+ and LRAIC+ calculations include more than just the pure incremental costs of the wholesale voice call termination service. Both approaches to setting MTRs would therefore have the same drawbacks associated with Termination Rates that exceed the pure LRIC levels when compared against ComReg's Assessment Criteria.

4.43 As a result, the detailed assessment of appropriate cost orientation methodologies focused on two representative methods that have been typically used for setting wholesale Termination Rates in the EU to date - pure LRIC and LRAIC+ - as this yields sufficient information to understand the key impacts resulting from the application of an 'incremental cost only' method where the relevant increment is the wholesale call termination service and costing methods that result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). ComReg is of the view that this approach provides sufficient insight to expose the key cost orientation remedy decision to be taken in Ireland.

4.44 *Relationship between pure LRIC and other LR(A)IC+ approaches more generally*

4.45 Contrary to Vodafone's assertions, therefore, ComReg did consider a range of different cost methodology options in the Consultation Document and has also done so in this Document. Specifically, this analysis has considered cost orientation of Termination Rates both at pure LRIC and at some level above pure LRIC reflecting an allocation of common costs (and possibly also some avoidable costs joint with other services). ComReg considers that it does not

[48] Where the services included in the underlying increment used to calculate LRAIC are subject to economies of scope, LRAIC will tend to exceed the LRIC for at least some of the component services in the increment considered.

need to define the exact reasons for, nor the extent of, any mark-up above pure LRIC in order to consider the merits and demerits of cost regulation at pure LRIC against a standard above pure LRIC.

4.46 LRAIC and LRIC+, while implicitly assessed where effects of any deviation from a pure LRIC outcome are considered, were not considered to yield a materially different outcome relative to a LRAIC+ approach when compared to pure LRIC against the Assessment Criteria. Thus, ComReg focussed its analysis on the most established cost methodologies for setting Termination Rates, namely pure LRIC and LRAIC+ as representative scenarios and assessed how these cost orientation methodologies (and variants thereof) would perform against the specific Assessment Criteria. ComReg considers that this approach simplified its analysis without any loss of generality, as the merits and demerits of cost orientation at pure LRIC versus cost orientation above pure LRIC are fully exposed.

4.47 **Impact of pure LRIC approach on fixed and common cost recovery and efficient investment and innovation incentives**

4.48 This issue is addressed in detail *inter alia* in paragraph 5.54 in Chapter 5 and paragraphs 6.98 to 6.104 and 6.166 to 6.186 in Chapter 6 and paragraphs 7.160 to 7.181 in Chapter 7.

4.49 **Viability of the proposed pure LRIC benchmarking approach to MTRs and regulatory certainty**

4.50 In response to Vodafone's comments around benchmarking in response to this question (see paragraph 4.18) and in light of further analysis conducted since issuing the Consultation Document, ComReg has decided to set MTRs based on benchmarking against those EU countries where: a) a pure BU-LRIC model has been notified to the European Commission, b) the modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation and c) the approach has been adopted by the relevant NRA as a final decision setting a BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision. Thus, ComReg has decided to take a simple average of MTRs in the 7 countries[49] which have thus far notified and adopted a pure BU-LRIC methodology for MTRs to the European Commission under Article 7 as the benchmark. This approach is recommended by the

[49] Belgium, France, Portugal, Italy, Spain, Denmark and the United Kingdom.

European Commission[50] and provides a clear guide to the selection of benchmarked countries.

4.51 While ComReg agrees that the benchmarking methodology could possibly be more robust if more countries were available for benchmarking, it can be observed that MTRs based on pure BU-LRIC models are within a relatively limited range from approximately 0.8 to 1.27 cent per minute despite the variety of country and model characteristics in the benchmarked countries. Therefore, this cannot be regarded as a widely dispersed sample. Furthermore, it is ComReg's opinion that the average MTR value would not change significantly if more countries were to be included in the benchmark calculation. This is because (distinct from the LRAIC+ calculation which reflects all of the incremental and common cost elements needed to deliver a call termination minute) the pure LRIC calculation reflects just the incremental costs of carrying wholesale call termination volumes and thus can be expected to be less likely to be sensitive to country variations than, for instance, the total cost of network deployment.

4.52 Furthermore, a significant review of the various inputs and outputs of the models built in other Member States where that information is available (see the '**Analysys Mason Benchmarking Report**'[51]) provides additional confidence that a pure BU-LRIC model for MTRs in Ireland is not likely to yield a result that would lie significantly outside of the benchmarked pure BU-LRIC range. ComReg intends to review the benchmarked pure LRIC rate every 6 months and, where appropriate, to update the benchmark to ensure it is up to date as more Member States notify the European Commission based on a pure BU-LRIC model. In light of the conclusions in paragraph 4.50 above in relation to the addition of more countries to the benchmark calculation, ComReg does not consider that this approach gives rise to regulatory uncertainty

[50] See case LV/2012/1356: Voice call termination on individual mobile networks in Latvia, Comments pursuant to Article 7(3) of Directive 2002/21/EC, 13/08/2012, concerning the benchmarking methodology adopted by Latvian NRA. Please refer to the table in Annex 4, paragraph A 4.11 of this Document.

[51] ComReg Document 12/125b: Analysys Mason: Final Report for the Commission for Communications: Suitability of the benchmarking approach proposed by ComReg for setting mobile termination rates in Ireland; published on 21 November 2012 ('**The Analysys Mason Benchmarking Report**').

4.53 The Analysys Mason Benchmarking Report (section 3) has performed an additional analysis on suitability of the benchmarking approach for setting MTRs in Ireland. The Analysys Mason Benchmarking Report examines whether the underlying cost drivers of MTRs differ significantly between countries, and provides a comparison between Ireland and other Member States regarding the characteristics that can materially affect mobile termination costs. The main conclusions reached from the comparison are as follows:

- Two of the factors analysed (the extent of network coverage and voice usage) may lead to termination cost being higher in Ireland than the average of the benchmarked countries.
- One of the factors analysed (market share) may lead to termination cost being lower in Ireland than the average of the benchmarked countries.
- For five factors analysed (spectrum allocations, 2G/3G traffic mix, population density, radio deployment costs and WACC) it is not obvious at this stage whether they may lead to termination cost being higher or lower in Ireland than the average of the benchmarked countries.
- Seven factors analysed (spectrum fees, topography, subscriber penetration, mobile broadband usage, switching network topology and costs, backhaul technology and model duration) would probably not lead to termination cost being different from the average of benchmarked countries.

4.54 Further to the Analysys Mason Benchmarking Report, ComReg is of the view that Ireland has broadly similar characteristics to other Member States, when considering avoidable costs of wholesale call termination, and that the results from a detailed pure BU-LRIC modelling exercise would likely not fall significantly outside of the range of the mobile termination costs calculated using pure BU-LRIC models in other EU countries. Based on the Analysys Mason Benchmarking Report, ComReg also concludes that the proposed benchmarking approach (i.e. a simple average benchmark based on the rates used by NRAs in other Member States) would be suitable to reflect the pure LRIC wholesale termination costs incurred by an Irish MSP in the provision of MVCT services to a third party in the period prior to the implementation of a BU-LRIC model in 2014.

4.55 ComReg notes that in its response to the Consultation Document on the appropriate benchmarking approach and its proposal to defer to a cost model, Vodafone also neglects to take into account the risks that a deferral of pure LRIC MTRs beyond July 2013 would have for the overall competitive process (in particular between FSPs and MSPs and/or between Service Providers with asymmetric market shares and traffic flows) as well as for the development of the internal market. Having undertaken, with the assistance of Analysys Mason, a significant review of the pure BU-LRIC models built in other Member States, ComReg considers that its benchmarking approach generates a sufficiently reliable result for the Irish market and does not consider it proportionate to defer implementation of pure LRIC-based MTRs until completion of a pure BU-LRIC cost model by ComReg in 2014. Contrary to Vodafone's view, ComReg believes that the benchmark adopted in this Document is appropriate from 1 July 2013 and sufficiently represents the prevailing incremental mobile termination cost conditions in Ireland.

4.56 **Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation**

4.57 Insofar as the provision of electronic communications networks, electronic communications services and associated facilities are concerned, ComReg's relevant statutory objectives under section 12 of the Communications Regulation Acts 2002 to 2011 are: (i) to promote competition, (ii) to contribute to the development of the internal market, and (iii) to promote the interests of users within the Community. Further relevant statutory functions, objectives and obligations are set out in Regulation 16 of the Framework Regulations, and in Regulation 6, Regulation 8(6) and Regulation 13 of the Access Regulations. In this regard, ComReg has considered a broad range of Assessment Criteria, aligned to ComReg's statutory objectives against which to assess the available regulatory options. As noted in the Final Analysys Mason Report (page 4), the balanced assessment used therein was designed to support ComReg's statutory objectives using clear economic, competitive and procedural criteria[52].

4.58 These Assessment Criteria include a) Efficiency (both in a static and dynamic sense), b) Competition (in both the fixed and mobile sectors), c) Equity (for all user groups), d) Ease of deciding on and implementing approach (i.e. proportionality), e) Transparency/Regulatory Certainty, as well as f) the Need to take utmost account of the 2009 Termination Rate Recommendation (reflecting ComReg's internal market objective)[53]. Since neither the Communications Regulation Acts 2002 to 2011 nor the EU regulatory framework attribute a higher or lower weight to any of ComReg's individual statutory objectives, ComReg considers that, in order to meet these objectives, it is appropriate to include the internal market objective as one of its Assessment Criteria in the overall assessment framework.

4.59 Paragraph 5.2 and Figure 5.1 of the Consultation Document explicitly map the above Assessment Criteria back to ComReg's statutory objectives as follows:

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[52] As noted in the Final Analysys Mason Report "*As a result of our relative assessment framework, one issue cannot 'trump' another, and our recommended approach to ComReg considers all issues in a balanced way*".

[53] The 2009 Termination Rate Recommendation specifically notes at recital 1 that according to "*Article 8(3) of [the Framework Directive] (NRAs) shall contribute to the development of the internal market, inter alia, by cooperating with each other and with the Commission in a transparent manner to ensure the development of consistent regulatory practice*". It notes that this is a key objective of the Recommendation where it states: "*The lack of harmonisation in the application of cost accounting principles to termination markets to-date demonstrates a need for a common approach which will provide greater legal certainty and the right incentives for potential investors, and reduce the regulatory burden on existing operators that are currently active in several Member States. The objective of coherent regulation in termination markets is clear and recognised by the NRAs and has been repeatedly expressed by the Commission in the context of its assessment of draft measures under Article 7 of Directive 2002/21/EC*".

Figure 4.1: Assessment Grid for Regulatory Approaches

ComReg's statutory criteria		Criteria applied by Analysys Mason	
Promotion of competition	Ensuring no distortion or restriction of competition	Competition	Fixed–fixed
			Mobile–mobile
			Fixed–mobile
	Encouraging efficient investment and innovation	Efficiency	Allocative
			Productive
			Dynamic
Contributing to development of an internal market		Taking utmost account of the EC Recommendation	
Promoting interests of end users		Equity	
Other issues		Ease of decision and implementation of the approach	
		Transparency and regulatory certainty	

4.60 As regards the specific weighting approach taken by Analysys Mason in its comparative assessment of the regulatory options against the Assessment Criteria (also reflected by ComReg in Section 6 of the Consultation Document), it should be noted that, since three sub-criteria are considered under each of the 'Competition' and 'Efficiency' Assessment Criteria, the assessment framework has implicitly attributed comparatively significant analysis to Efficiency and Competition Assessment Criteria[54].

4.61 The Final Analysys Mason Report clarifies (on page 93) that:

"In determining which price control method best fits the assessment criteria, we gave each criterion an equal weighting. As a result of our relative assessment framework, one issue cannot 'trump' another, and our recommended approach to ComReg considers all issues in a balanced way".

[54] ComReg also notes however that there is no tension between the conclusions reached under the 'Efficiency' and 'Competition' Assessment Criteria and the 'Need to take utmost account of the 2009 Recommendation' respectively, as all three Assessment Criteria indicate the relative superiority of pure LRIC over other cost standards which include mark-ups of various possible forms above pure LRIC.

4.62 Indeed, the ‘Efficiency’ and ‘Competition’ Assessment Criteria in any case indicate the relative desirability of pure LRIC over higher Termination Rates (as would arise under LR(A)IC+ approaches) and so do not conflict with the 2009 Termination Rate Recommendation. In the absence of any tension between these Assessment Criteria, the question of the relative weighting of ‘Competition’ and ‘Efficiency’ on the one hand, and the ‘Need to take utmost account of the 2009 Termination Rate Recommendation’ on the other, is moot.

4.63 Thus, contrary to Vodafone’s assertion, ComReg has not given disproportionate weight to the ‘Need to take utmost account of the 2009 Termination Rate Recommendation’ relative to other Assessment Criteria, nor treated the Recommendation as a default position.

4.64 ComReg, when imposing, maintaining or amending a price control obligation, is required to consider which is the most appropriate price control mechanism for the particular market circumstances, taking into account all of its relevant statutory objectives, including the objectives to promote efficiency and sustainable competition and to maximise consumer benefits. It would not be appropriate to carry over an existing approach without considering whether other available options would be appropriate to achieve ComReg’s objectives for the relevant price control period.

4.65 Finally, ComReg does not accept that its reasoning in respect of the 2009 Termination Rate Recommendation is flawed. While the Recommendation is not legally binding, this does not mean that it is devoid of legal effect. ComReg is required by virtue of Article 19(2) of the Framework Directive (as implemented by Regulation 30(1) of the Framework Regulations) to take “utmost account” of the Recommendation, one of the aims of which is to ensure a common approach throughout in the EU in the application of remedies to voice call termination markets. As required, ComReg has taken utmost account of the Recommendation and, in so doing, has had regard to the Recommendation in the context of its application to the particular circumstances of the Irish market and to parties operating within it. ComReg believes it is clear from the Consultation Document that all options were fully considered before arriving at the proposals set out in that document. All options were further considered in light of responses received from interested parties before finalising this Document. Having evaluated all of the Assessment Criteria, and its statutory objectives, ComReg has concluded that there are no compelling reasons to adopt an approach to Termination Rates that differs from that recommended in the 2009 Termination Rate Recommendation.

Interrelationship between proposed price control remedies and the market review process

4.66 Conducting the market analysis and remedies consultations and final decisions in parallel is fully in line with the EU regulatory framework and the need to ensure timely and effective *ex ante* remedies where an absence of effective competition and potential competition problems have been identified. The conclusion of the MVCT review, which was subject to an 8-week consultation period[55], is that there is in fact SMP in six relevant MVCT markets and that potential competition problems of excessive and discriminatory pricing justify an *ex ante* price control measure of cost orientation.

4.67 Conducting a comprehensive and complete regulatory determination, including potential competition problems and appropriately specified *ex ante* remedies to address such identified problems, is entirely in line with best EU regulatory practice and ensures timely, effective and appropriate regulation.[56]

4.68 ComReg does not accept that holding consultations on these two issues in parallel has negatively impacted on the ability of interested parties to respond fully to either consultation.

[55] ComReg Document 12/46, Market Review, Voice Call Termination on Individual Mobile Networks, Consultation and Draft Decision, 23 May 2012.

[56] Specifically Article 16(4) of the EU Framework Directive notes that where an NRA finds no effective competition in a relevant market, it should impose appropriate specific ex ante obligations. In addition, Recital 10 of the European Commission Recommendation of 15.10.2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services clarified that: "*In order to improve the efficiency of the notification mechanism, to increase legal certainty for national regulatory authorities and market players and to ensure timely implementation of regulatory measures, it is desirable that a notification by a national regulatory authority covering a market analysis also includes the remedies proposed by the national regulatory authority to address the market failures identified*".

Chapter 5

5 Assessment criteria

5.1 Overview:

5.1 In Chapter 5 of the Consultation Document, ComReg set out the appropriate Assessment Criteria that have been used by ComReg (and in the First Analysys Mason Report) for the purposes of assessing each of the regulatory approaches set out in Chapter 4 of the Consultation Document (and summarised in Chapter 4 of this Document). The Assessment Criteria were also mapped to ComReg's statutory objectives as set out in the Communications Regulation Acts 2002 to 2011 (and as reiterated in Regulation 16 of the Framework Regulations).

5.2 Possible Assessment Criteria of the Regulatory Approaches:

5.2.1 ComReg's Preliminary View from the Consultation Document

5.2 The Assessment Criteria examined were:

- Efficiency
- Competition
- Equity
- Need to take utmost account of the EC Recommendation / Contribution to the development of the Internal Market
- Ease of decision and implementation of the approach (proportionality)
- Transparency and regulatory certainty

5.3 **Efficiency**

5.4 Section 5.2 of the Consultation Document discusses the 'Efficiency' Assessment Criterion and refers to three types of efficiency sub-criteria which are important for maximising economic efficiency i.e. allocative efficiency, productive efficiency and dynamic efficiency. Each of these sub-criteria is discussed in Section 4.2 of the First Analysys Mason Report and in Sections 5 and 6 of the Consultation Document.

5.5 Section 5.2.1 of the Consultation Document discusses allocative efficiency and notes that this is one of the goals in moving to a pure incremental approach as recommended in the 2009 Termination Rate Recommendation and is also a fundamental aim of the further regulation of MTRs and FTRs in Ireland. Paragraph 5.9 of the Consultation Document identifies that allocative efficiency *"...is achieved by an allocatively efficient set of prices that recover the Service Providers' costs in the least distortionary way to competition and end-users."* Issues relating to the recovery of common costs, the levels of price elasticity and the existence of retail price discrimination for different consumer groups were discussed in Paragraph 5.10 of the Consultation Document.

5.6 Paragraphs 5.11 – 5.18 of the Consultation Document discuss the three factors that affect ***Allocative efficiency*** i.e. Network externalities, Call externalities and Price differentiation.

5.7 ***Network externalities*** (discussed in Section 4.2.1 of the First Analysys Mason Report and Paragraphs 5.13 – 5.15 of the Consultation Document) refer to the benefit gained as the number of users to a specific network increases[57]. In terms of identifying the role of network externalities in an Irish context at the current stage of market development, relevant factors considered included:

- the high mobile penetration and multiple SIM ownership,
- low network cost of keeping a user on the network,
- low-usage mobile customers being on average quite high-spending on a per minute basis,
- growing availability of cheaper SIM-only packages,
- availability of second-hand handsets,
- commercial incentives to retain marginal subscribers due to positive network effects generated for other (higher-volume) network users,
- high level of on-net calls which might reduce the impact of any Termination Rate reductions, etc.

[57] As noted in the First Analysys Mason Report, arguments for a subsidy in order to internalise network externalities refer to situations where either i) some potential subscribers need a subsidy to *join* the network; or ii) where the costs of *maintaining* a subscription to a network are heavily subsidised and a large proportion of the user base would disconnect without this ongoing subsidy.

5.8 The possible distortions and social costs caused by a pricing policy focused solely on perceived network externalities were also discussed, e.g. where higher Termination Rates subsidise services to particular groups of consumers etc. which can have implications for equity and the proper functioning of the competitive process.

5.9 Paragraphs 5.16 - 5.18 and Paragraph 6.72 of the Consultation Document discuss ***Call Externalities***, in particular the importance of recognising the two-sided aspect to a calling relationship in any pricing decision. If this is not taken into account, there is concern that externalities can arise and an efficiently low level of calls may result. This is discussed further in Section 4.2.1 of the First Analysys Mason Report. However, while call externalities might in theory affect the assessment of efficient Termination Rates, they are not a decisive factor in the overall scoring since, while the existence of receiver benefits is not disputed, their precise magnitude is unknown. Nonetheless, the role of call externalities in influencing strategic behaviour in retail markets was taken into account when comparing the overall competitive effects of the various regulatory approaches.

5.10 Paragraph 5.2.2 of the Consultation Document and Section 4.2.2 of the First Analysys Mason Report discuss '***Productive Efficiency***' and identify that this is achieved when output is produced at minimum, average cost. This will be dependent to a significant extent on the level of retail competition and the extent to which retail competitive pressures exert cost efficiency on the network elements which would also be used to deliver wholesale call termination services. It also clarifies that, while reductions in Termination Rates can be expected to have a positive impact on productive efficiency, the magnitude of the impact will be dependent on the competitive structure of the retail market.

5.11 ***Dynamic Efficiency*** is discussed in Paragraph 5.2.3 of the Consultation Document and Section 4.2.3 of the First Analysys Mason Report. Dynamic efficiency is a measure of a Service Provider's productive efficiency over time and can be affected by the Termination Rates paid between Service Providers in three ways, i.e. the competitive balance between Service Providers due to inflows and outflows of termination payments, whether the Service Provider uses high or low cost technology, and whether the Service Provider undertakes additional investment. Paragraph 5.23 of the Consultation Document identifies that if Termination Rates are set in line with the cost of an efficient Service Provider the correct economic environment for dynamic efficiency would be created, as it would minimise the impact of financial imbalances and competitive distortions between Service Providers with different on-net/off-net traffic profiles (thereby lowering the barriers to entry faced by late entrants to the market). The First Analysys Mason Report notes in this regard how a necessary condition for dynamic efficiency is a competitive environment and that rivalries among suppliers are expected to encourage innovation. Paragraph 5.25 further refers to the First Analysys Mason Report which notes how regulatory certainty is also key to promoting investment (which will have implications on dynamic efficiency). Furthermore, a competitively neutral framework would favour investment by both incumbents and new entrants.

5.12 **Competition**

5.13 Paragraphs 5.26 – 5.39 of the Consultation Document consider the impact of FTR and MTR regulation on Mobile Competition, Fixed Competition and Fixed-Mobile Competition. Paragraph 5.27 of the Consultation Document notes that above-cost Termination Rates create a floor to retail pricing and affect the intensity of retail competition for off-net calls.

5.14 Paragraphs 5.29 – 5.32 of the Consultation Document and Section 4.3.2 of the First Analysys Mason Report discuss the impact of FTR and MTR regulation on ***Mobile Competition***.

5.15 As regards the impact of MTRs on mobile competition, the First Analysys Mason Report notes the oligopolistic structure of mobile retail markets and identifies that one of the observed profit-maximising approaches used by MSPs is to set MTRs and retail off-net charges above cost and so discriminate between the retail price of on-net and off-net calls. Paragraph 5.30 of the Consultation Document identifies that such price discrimination generates "tariff-mediated externalities"[58] resulting in a competitive advantage for larger Service Providers and a potential reduction in the degree of competition that can be brought to bear by smaller Service Providers. The First Analysys Mason Report discusses this in greater depth and also explains that tariff-mediated externalities implemented via on-net/off-net tariff differentials can reinforce barriers to entry/expansion and put smaller networks at a disadvantage, while benefitting networks that have a larger customer base. The First Analysys Mason Report notes (page 42) that those customers on smaller networks will have a smaller pool of individuals who can call them on the cheaper and more attractive on-net prices than those on larger networks. As a result, in order to compete, smaller networks may be obliged to offer even lower prices than would otherwise be the case, presumably to offset switching costs for customers within calling circles (such as families or groups of friends) as all must otherwise switch network together to maintain access to on-net discounts. A restriction of competition via such barriers to entry/growth could thus have a negative effect on dynamic efficiency. In addition, where some (typically late entrant) MSPs have asymmetrically higher MTRs than other (incumbent) MSPs, paragraph 5.3.1 of the Consultation Document goes on to explain that the high MTRs for late entrants can help the larger MSPs to justify higher off-net retail tariffs. This can in turn have the unintended consequence of reinforcing tariff-mediated network externalities and associated barriers to entry/growth.

5.16 Regarding the impact of FTRs on mobile competition, Analysys Mason in its report anticipates only minor effects due mainly to the lower impact of FTRs on the MSPs' cost base compared to the larger impact of MTRs on the FSPs' cost base.

[58] Tariff-mediated externalities are defined in the First Analysys Mason Report in Section 4.2.1 as *"the benefit subscribers to one network gain from being able to make calls to other members of the same network at lower prices, if there is price discrimination between on-net and off-net calls"*

5.17 Paragraphs 5.33 – 5.37 of the Consultation Document and Section 4.3.3 of the First Analysys Mason Report consider the impact of FTR and MTR regulation on ***Fixed Competition***. As regards the impact of FTRs on fixed competition, paragraph 5.33 of the Consultation Document notes that FSPs also have profit-maximisation incentives to set FTRs at high levels absent regulation. In addition to lowering the price floor for off-net (fixed-to-fixed) calls thereby impacting positively on off-net retail call competition, as discussed generally in paragraph 5.27 of the Consultation Document, paragraph 5.35 also explains that regulation of FTRs at efficient cost should help promote competition among FSPs given that a lower symmetric FTR helps reduce the scope for tariff-mediated externalities to materialise[59]. As regards the impact of FTRs on mobile competition, paragraph 5.36 of the Consultation Document clarifies that, although MTRs have no *direct* impact on fixed competition (as all FSPs pay the same MTR to a given MSP), there is an *indirect* impact due to the way in which MTRs constrain what FSPs can do on the retail side[60]. This is discussed further in paragraph 5.37 of the Consultation Document.

5.18 Paragraphs 5.38 – 5.39 of the Consultation Document and Section 4.3.4 of the First Analysys Mason Report discuss the impact of FTR and MTR regulation on ***Fixed-to-Mobile Competition***. Paragraph 5.39 explains that regulation of FTRs has evolved differently to MTRs with cost-based pricing for the fixed networks having been implemented some time ago. Paragraph 5.38 explains that MTRs are still notably higher than FTRs, which results in net transfers of resources from the fixed to the mobile sector. In circumstances where such transfers are magnified by above-cost MTRs, this could impact on investments and innovation in the fixed sector. It also identifies that mobile and fixed networks are involved in some degree of competition because the services (mobile and fixed voice calls respectively) may be partially substitutable. High MTRs, however, limit the extent to which larger allowances of fixed-to-mobile calls can be included within FSPs' retail packages.

5.19 **Equity**

5.20 Paragraphs 5.40 – 5.54 of the Consultation Document and Section 4.4 of the First Analysys Mason Report discuss the Equity Assessment Criterion. Paragraph 5.41 of the Consultation Document explains that an assessment of the equity criterion is based on the potential impact of a reduction in MTRs and FTRs to efficiently incurred costs which may benefit various consumer groups.

[59] While on-net/off-net price discrimination is not currently a widely observed retail pricing practice in respect of fixed voice services, the potential for on-net/off-net retail price discrimination and associated tariff-mediated network externalities nonetheless remains, absent regulation. Hence, whilst much less of a risk in fixed voice markets, pure LRIC arguably further minimises the scope for such tariff-mediated externalities to materialise in fixed voice retail packages.

[60] Section 4.3.3 of the First Analysys Mason Report.

5.21 The effects on retail prices and consumer choice were discussed in paragraphs 5.43 – 5.45 of the Consultation Document. In particular, it was highlighted that a reduction in MTRs may result in a reduction in cross-subsidisation of mobile subscriptions by the fixed sector, which could remove distortions in consumer behaviour and lower the price of fixed-to-mobile calls and/or off-net mobile calls. While recognising the argument that lower MTRs may make certain customer groups unattractive to service, ComReg noted that, in reality, the likely penetration impacts were much more complex. It was recognised that if MTRs fall, retail mobile prices may rise slightly over time (due to the waterbed effect[61]), which may cause subscription levels to decline modestly. It was identified, however, that incentives to retain existing marginal mobile customers must be assessed in a more dynamic context. For example, as noted in paragraph 5.7 of this Document, relevant considerations which might imply less significant penetration impacts resulting from reductions in off-net Termination Rates include *inter alia*: high mobile penetration and multiple SIM ownership, low network cost of keeping a user on the network, commercial incentives to retain marginal subscribers due to positive network effects generated for other (higher-volume) network users, high level of on-net calls which might reduce the impact of any Termination Rate reductions, other revenue opportunities which such marginal users may generate over time, etc.

5.22 In addition, it was noted that if the Termination Rate is at or above incremental cost then the calls do not actually lose money and the cost of retaining existing pre-pay users on the network is relatively low. Therefore, MSPs still have incentives to retain customers who are efficient to serve (i.e. prepared to pay the costs of serving them).

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[61] A 'waterbed effect' occurs in two-sided markets in that when prices are pushed down on one side of the market (e.g. in the wholesale call termination market), this may result in a re-balancing of prices on the other side (e.g. in retail voice markets) similar to how a waterbed would react if you were to push down one side of it. There are good theoretical reasons to expect retail prices of mobile services to be somewhat affected by changes in MTRs, as this may affect the profitability of *marginal* customers. However, it is not reasonable to expect this waterbed effect to be complete due to imperfect retail competition (even if no provider is dominant) and consumers being heterogeneous in their use of different services. Empirical evidence bears this out. Economic studies undertaken by Genakos and Valletti (2008) and Schiff (2008) respectively both found evidence of a waterbed effect. A 2011 analysis by Genakos and Valletti has also stated that a 10% decrease in MTRs resulted in mobile prices of the terminating MSP increasing between 2% to 15%, with an average price increase of 5%. The authors thus note that the waterbed effect, while significant, is not complete. The authors also find that the waterbed effect is more diluted for pre-paid than for billpay customers and that in the case of the latter it shows up in particular on the fixed rather than the variable component of the contract. Furthermore, they acknowledge that their analysis falls short of showing the precise channels that may have led to an increase in mobile retail bills following regulatory cuts of wholesale termination rates. In addition the research focuses on identifying the impact of fixed-to-mobile termination rate reductions on mobile retail prices but acknowledges that the effect of reducing mobile-to-mobile termination rates is less clear given that such reductions may also impact the intensity of competition in retail mobile markets.

5.23 The effects on different user groups and how they result in welfare transfers between groups was discussed in paragraphs 5.46 – 5.54 of the Consultation Document. In particular, the mobile versus fixed user grou*ps, the o*ff-net versus on–net user groups and the impact on vulnerable groups were considered.

5.24 The effects on *mobile versus fixed user groups* were discussed in paragraphs 5.47 – 5.48 of the Consultation Document. It was argued that a fall in MTRs is likely to benefit fixed-only consumers with mobile customers losing *on average* via the waterbed effect (given the reduction in revenues faced by their Service Provider from fixed-to-mobile calls). It was, however, recognised that this was dependant on the sensitivities of the consumer to retail price changes and whether they subscribe to a late entrant or a more established incumbent. Some mobile customers may gain (e.g. if they make many off-net calls). The barriers to growth faced by late entrants could also be partly alleviated by the reduction in tariff-mediated network externalities which would contribute to a stronger competitive dynamic and so benefit the mobile subscriber (in terms of price and service). This was discussed in Section 4.4 of the First Analysys Mason Report.

5.25 The effects on *off-net versus on-net user groups* were discussed in paragraphs 5.49 - 5.50 of the Consultation Document. It was recognised that Termination Rates above efficient cost shift welfare between fixed and mobile consumers and between on-net and off-net consumers. It was recognised that on-net mobile-to-mobile calls are not subject to any explicit MTRs; therefore the marginal cost associated with such calls will be reduced compared with off-net mobile-to-mobile calls. Paragraph 5.50 went on to explain that while on-net discounts have been justified by some as being a rational reaction to call externalities within a Service Provider's own network, it was pointed out by Analysys Mason in Section 4.4 of its first report that, where subscribers of large Service Providers benefit more from these on-net discounts, smaller Service Providers and their consumers will be at a comparative disadvantage where more of their outgoing and incoming calls are off-net. This may also make groups of customers on the same network, who call each other frequently through on-net tariffs, reluctant to switch to a different network (see pages 42 and 47 of the First Analysys Mason Report).

5.26 Paragraphs 5.51 to 5.54 of the Consultation Document discuss the impact of changes in Termination Rates on *vulnerable groups*. It was identified that certain disadvantaged consumer groups (e.g. the elderly) are more likely to use more fixed services and so benefit from the downward regulation of MTRs to efficient costs (to the extent that such users call mobile networks), having less opportunity to access on-net tariffs when dialling a mobile number. Having considered Analysys Mason's assessment of ComReg's survey data in relation to equity data for Ireland, it was concluded that positive equity effects on fixed-only users will tend to be emphasised in the older segments of the population, whereas any negative effects on mobile-only users should not be disproportionately prominent in low-spending segments of the society. It was identified that the reduction in financial transfers from fixed-to-mobile networks will contribute to ensuring the on-going provision of fixed line services, particularly for the elderly group of users. In addition, any pass-through of the fixed-to-mobile Termination Rate reductions to call charges (e.g. fixed-to-mobile or other call types) or fixed voice subscription charges will mean that the fixed line consumers will benefit. Furthermore, a more competitively neutral framework would favour more sustained pricing and innovation benefits to both fixed and mobile users over time.

5.27 **Need to take utmost account of the EC Recommendation / Contribution to the development of the Internal Market**

5.28 This is discussed in paragraphs 5.55 – 5.59 of the Consultation Document. Paragraph 5.55 of the Consultation Document identified that ComReg is obliged to take "utmost account" of the 2009 Termination Rate Recommendation. The key objective of this Recommendation, as noted in the accompanying Staff Working Document, is to "*consolidate the development of the internal market for telecoms service*s." Hence, this Assessment Criterion was considered important to ensure that ComReg meets its statutory objective of contributing to the development of the internal market.

5.29 Paragraph 5.56 of the Consultation Document set out the key recommendations made by the 2009 Termination Rate Recommendation, specifically that:

- by the end of 2012, NRAs should set symmetric FTRs and symmetric MTRs (with any asymmetry being fully justified)
- costs should be based on the costs incurred by an efficient operator
- costs should be calculated using a bottom-up "pure" LRIC model based on current costs using the most efficient technologies

5.30 Paragraph 5.58 of the Consultation Document referred to the Staff Working Document (which accompanied the 2009 Termination Rate Recommendation) which outlined that consumers should have the "...*opportunity to benefit from such enhanced competition and investment through lower prices and innovative services*".

5.31 **Ease of decision and implementation of the approach**

5.32 Paragraphs 5.60 - 5.61 of the Consultation Document refer to the First Analysys Mason Report and its assessment of the various regulatory approaches under this Assessment Criterion and concluded that, from a proportionality perspective, the approaches which required minimal resources and which are not time consuming to implement achieved the highest scores.

5.33 **Transparency and regulatory certainty**

5.34 As set out in paragraph 5.62 of the Consultation Document, and following an assessment by Analysys Mason, the regulatory approaches that provide more transparency and certainty to Service Providers and consumers score well under this Assessment Criterion.

5.35 Based on the six Assessment Criteria described above, ComReg asked the following question in its Consultation Document:

Q. 2 Do you agree with the assessment criteria, as set out above, as being appropriate criteria to use to evaluate the five possible regulatory approaches identified in Chapter 4? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

5.2.2 Views of Respondents

5.36 In response to ComReg's question concerning the appropriateness of the Assessment Criteria, most respondents that submitted comments on this question, broadly agree with the approaches considered by ComReg. BT had no comment in relation to this question and TMI did not respond directly to this question.

5.37 Vodafone argues that ComReg has provided no indication of the weighting that applied to each of the Assessment Criteria and therefore is of the view that it is "*impossible*" to comment on the overall reasonableness of ComReg's assessment. Vodafone provides the example of 2009 Termination Rate Recommendation as an Assessment Criterion. In Vodafone's view this criterion appears to have received a *"substantial weighting*" in ComReg's Consultation Document which Vodafone does not agree with. O2, while agreeing broadly with the framework adopted, is also ultimately of the view that there has been a predetermination of the regulatory approach. According to O2, the 2009 Termination Rate Recommendation is the overriding Assessment Criterion. O2 points to BEREC and ERG guidelines on Termination Rates which it claims are not given the same importance or consideration as the 2009 Termination Rate Recommendation. Furthermore, it points to other EU Recommendations and cites the example of the accounting separation recommendation, which, in O2's view, was not given the same prominence.

5.38 O2 is of the view that, ultimately, implementation as proposed by ComReg would conflict with ComReg's overriding functions and objectives and would lead to a flawed process and disproportionate implementation.

5.39 Vodafone also disagrees with ComReg's analysis of network externalities. In its response, Vodafone states that an assessment of network externalities requires an understanding of price elasticities for different consumer groups as well as the measurement of network externalities in the Irish market. It argues that without such empirical analysis, ComReg cannot be in a position in which it is satisfied that network externalities are unlikely to be significant.

5.40 In Vodafone's view, ComReg has, in assessing the competition effects, ignored economics literature which states that high MTRs may increase competition between Service Providers. Furthermore, Vodafone concludes that the impact of lowering Termination Rates on competition is not clear and can only be thoroughly assessed via empirical analysis.

5.41 In relation to dynamic efficiency, Vodafone is of the view that ComReg has assumed that Service Providers will recover their fixed and common costs through higher charges for other services. Vodafone argues that the reasonableness of this assumption is dependent on the level of competition in the retail market.

5.42 Eircom essentially agrees with the Assessment Criteria set out and notes that, in terms of ease of implementation and transparency and regulatory certainty, it is in favour of setting a "*single cost oriented rate for fixed termination*" as well as MTRs in Ireland. Eircom makes a further point around implementation that these Termination Rates should be implemented in full symmetry including in terms of time-of-day treatment which should be set the same across industry (i.e. Termination Rates should be set on a flat-rate basis without allowing for the charging of different rates depending on the time of day or day of the week on which the relevant call is receiving by the terminating Service Provider).

5.43 TMI, while not responding directly to the question, makes the point that ComReg must ensure that it does not adjust the competitive landscape to ensure that only one niche of the marketplace can be addressed by new or developing entrants.

5.44 Please refer to ComReg Document No. 12/110 for a published version of all the non-confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

5.2.3 ComReg's Assessment of Responses and Final Position

5.45 Having considered the views of interested parties, and for the sake of clarity, ComReg has decided to address each of the issues raised by the respondents under the following respective headings:

- Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation
- Empirical analysis of network externalities
- Empirical analysis of competition effects
- Dynamic efficiency and interdependency between fixed and common cost recovery and the level of retail competition
- Proposal for a single cost-oriented rate for fixed termination
- ComReg's approach to impact assessment

5.46 **Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation**

5.47 ComReg's approach to weighting criteria has been clear and transparent and fully in line with its specific statutory objectives, as discussed in paragraphs 4.56 to 4.65 above. ComReg rejects O2's allegations of bias and a pre-

determination in favour of the 2009 Termination Rate Recommendation. ComReg has considered a broad range of Assessment Criteria (aligned to ComReg's statutory objectives) against which to assess the available regulatory options.

5.48 However, by virtue of the fact that ComReg (and the First Analysys Mason Report) consider three sub-criteria under each of the 'Competition' and 'Efficiency' Assessment Criteria, the assessment framework has implicitly attributed comparatively significant analysis to 'Efficiency' and 'Competition' Assessment Criteria. For this reason, Vodafone's and O2's assumption that ComReg has given disproportionate weight to the 'Need to take account of the 2009 Termination Rate Recommendation' relative to other Assessment Criteria is simply not correct. See paragraphs 4.56 to 4.65 above for a fuller explanation in this regard. ComReg considers that there is no tension between the conclusions reached under the 'Efficiency' and 'Competition' Assessment Criteria and the 'Need to take utmost account of the 2009 Recommendation' respectively, as all three Assessment Criteria indicate the relative superiority of pure LRIC over other cost standards which include mark-ups of various possible forms above pure LRIC.

5.49 **Empirical analysis of network externalities**

5.50 The extensive qualitative and quantitative analysis undertaken by ComReg (see paragraphs 6.79 to 6.113 and 6.117 to 6.123 below) of the role and impact of network externalities on an allocatively efficient level of Termination Rates in Ireland relates to the comparative assessment of the available regulatory options for setting Termination Rates. ComReg has reached the view that any price restructuring, as a result of applying pure LRIC-based Termination Rates, is unlikely to lead to a material reduction in mobile ownership rates in Ireland. Nevertheless, even if there were a small reduction in mobile ownership rates – which ComReg considers is unlikely – the impact on other telecoms customers through network externalities is likely to be immaterial given the existing high level of mobile penetration in Ireland. This view is based on a wide-ranging assessment of relevant qualitative and quantitative indicators.

5.51 **Empirical analysis of competition effects**

5.52 Contrary to Vodafone's claims, ComReg has assessed a wide range of potential competition effects and associated economic literature as further discussed in Chapter 6 (see paragraphs 6.142 to 6.153) below.

5.53 **Dynamic efficiency and interdependency between fixed and common cost recovery and the level of retail competition**

5.54 Contrary to Vodafone's claims, it is ComReg's view that pure LRIC has greater potential than other cost-oriented approaches (which result in the inclusion of some additional joint/common costs shared with other services) to promote competition through lower barriers to entry and growth thus enabling smaller Service Providers to compete more effectively, thereby improving dynamic efficiency incentives over time. The pure LRIC approach also has greater potential for dynamic efficiency in the fixed networks. This issue is addressed in further detail in Chapter 6 (see paragraph 6.166 –6.178 below).

5.55 **Proposal for a single cost-oriented rate for fixed termination**

5.56 Following consideration of the comments made by respondents in setting a single cost-oriented rate for FTRs as well as MTRs in Ireland, ComReg has revised its position. For a detailed analysis of this, please refer to paragraph 7.66 to 7.67 of this Document.

5.57 **ComReg's approach to impact assessment**

5.58 ComReg notes TMI's comment that ComReg must ensure that it does not adjust the competitive landscape such that only one niche of the marketplace can be addressed by developing or new entrants.

5.59 While the issues raised here are more relevant to the issues addressed in Chapters 6 and 8 of this Document, ComReg nonetheless reiterates the fact that it has considered the financial impacts of its proposals on all stakeholders in detail as part of its assessment of the alternative options. In this respect, ComReg has had to balance the reduction in the transfer of wholesale revenues (predominantly from the fixed sector to the mobile sector) with the negative asymmetric impact that continuing with the current system of Termination Rates above efficient cost may have on the profitability of FSPs in general, as well as for smaller MSPs (both through the direct impact of net termination payments above the efficient rate and because of relative competitive disadvantages created by higher Termination Rates for such parties). While some net recipients of termination revenues (e.g. MSPs traditionally benefiting from higher asymmetric MTRs) will inevitably face a reduction in their wholesale receipts (albeit recognising some opportunities to counterbalance this with additional retail revenues or cost savings discussed further in Chapter 6 below), ComReg's obligation is to promote the overall competitive environment rather than promoting or preserving the existing competitive positions of individual Service Providers supported by inefficiently high Termination Rates.

5.60 As noted in section 6.3 of this Document, asymmetric MTRs charged in excess of efficient cost significantly risk facilitating a range of other important retail distortions, including:

- the promotion of inefficient entry risking the inappropriate recovery of inefficiently incurred costs or costs related to network elements/investments which do not affect the delivery of voice call termination services;
- the restriction of retail pricing flexibility for off-net calls (including limiting the development of innovative tariffs involving off-net call minutes and restricting commercial opportunities for Service Providers who want to attract a more mixed user base such as users with higher outbound call volumes); and/or
- reinforcing the ability of larger Service Providers to implement on-net/off-net retail tariff differentials thereby generating tariff-mediated network externalities which can further impede entry and growth of smaller Service Providers over time.

5.61 Subsidising one group of customers via interconnection payments ultimately comes at the expense of another group of consumers, i.e. those users making off-net calls to the 'subsidised' networks. The Consultation Document noted that "*Financial and competitive distortions generated by high inter-operator wholesale payments further implies that consumers as a group will ultimately pay more in terms of reduced competition, innovation and higher prices*"[62].

5.62 ComReg's ultimate proposal thus draws on an inclusive assessment considering the net impact on the (fixed and mobile) sector and consumers as a whole. ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders, ComReg also has to balance this against dynamic competition and equity impacts and the need to ensure its decisions protect the integrity of the competitive process and equity as a whole, rather than protecting or furthering the interests of particular Service Providers only.

[62] See paragraph 5.13 in the Consultation Document.

Chapter 6

6 Assessment of the regulatory approaches

6.1 Overview

6.1 Chapter 6 of the Consultation Document summarises the comparative assessment (using the Assessment Criteria set out in Chapter 5) of each of the regulatory approaches (discussed in Chapter 4). Chapter 6 of the Consultation Document also sets out ComReg's preliminary views on the most appropriate regulatory approach to setting a price control for both MTRs and FTRs in Ireland.

6.2 Assessment of the regulatory approaches

6.2.1 ComReg's Preliminary View from the Consultation Document

6.2 Paragraphs 6.2 - 6.5 of the Consultation Document referred to the First Analysys Mason Report, in particular its table (see Figure 6.1 below) which summarised its assessment of the suitability of each approach to fulfil the Assessment Criteria.

6.3 The Consultation Document then went on to assess each of the six possible approaches (making reference to the First Analysys Mason Report and the Assessment Criteria contained therein) and set out ComReg's preliminary findings following such an assessment. These are summarised in the following from paragraph 6.8 below.

6.2.2 ComReg's Assessment of Cost Orientation Options (i.e. Pure LRIC versus LRAIC, LRIC+ and/or LRAIC+)

6.4 As regards certain comments raised in responses to the Consultation Document regarding the various cost orientation options assessed, ComReg considers it appropriate to clarify its position regarding the comparative assessment framework used. In particular, ComReg believes it appropriate to clarify that its comparative assessment framework implicitly assesses the relative merits and demerits of a pure LRIC approach to Termination Rates compared to other cost orientation approaches that result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services).

6.5 Thus, while the comparative assessment in Chapter 6 of the Consultation Document focuses primarily on a comparison of pure LRIC and LRAIC+ approaches to cost orientation, the key insights regarding the relative performance of pure LRIC and LRAIC+ against the Assessment Criteria would also apply to a comparison of pure LRIC and LRAIC and to a comparison of a pure LRIC and LRIC+ approaches respectively.

6.6 As noted in the Executive Summary above, these LRAIC, LRIC+ and LRAIC+ approaches (collectively referred to as LR(A)IC(+) approaches) have the common feature that the wholesale Termination Rate includes some part of costs that are joint/common with other service(s) and so ultimately result in values above a pure LRIC outcome. This higher Termination Rate value (than that which arises under a pure LRIC outcome) might be facilitated through an explicit mark-up of LRIC (i.e. LRIC+). Alternatively, where a broader increment including services other than just wholesale voice call termination is used (i.e. LRAIC) and there are avoidable costs that are joint to wholesale voice call termination and other services included in the increment, then some share of these joint costs would typically be allocated to the wholesale voice call termination service. Therefore, most reasonable approaches to LRAIC would typically result in a cost for wholesale termination greater than pure LRIC.

6.7 Thus, while the following summary of Chapter 6 of the Consultation Document focuses primarily on a comparison of pure LRIC and LRAIC+ approaches to cost orientation against the Assessment Criteria, the fundamental objective of the exercise is to compare pure LRIC against any costing method which results in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). Thus, under ComReg's subsequent assessment framework, the same conclusions arise regarding the comparative merits of pure LRIC vis-à-vis LRAIC+ and any costing method which includes a broader service increment and/or a mark-up for additional common costs (i.e. pure LRIC versus LR(A)IC(+) approaches more generally). For the purposes of the comparative assessment framework, pure LRIC and LRAIC+ are referred to as representative scenarios for how 'incremental cost only' and 'total cost' approaches to setting Termination Rates (and variants thereof) would perform against the specific Assessment Criteria.

Figure 6.1: Summary of Assessment Criteria

Criteria		No price control	Fair and reasonable	B&K	RPP	Cost orientation	
						LRAIC+	Pure LRIC
Need to take utmost account of EC Recommendation		○	◔	○	○	◑	●
Efficiency	Allocative	○	◔	◕	◑	◕	●
	Productive	○	◔	◕	◑	◕	◕
	Dynamic	○	◔	●	◑	◕	●
Competition	F–F	◔	◑	●	●	◕	◕
	M–M	◔	◑	●	●	◕	●
	F–M	◔	◔	Neutral or ◑	●	◕	●
Equity		◔	◑	◑	◑	◑	◕
Ease of deciding on and implementing approach		●	◕	●	○	◑ (for mobile model) ◕ (for fixed model) ◕ (for mobile benchmark) ◕ (for fixed benchmark)	◔ (for mobile model) ◔ (for fixed model) ◕ (for mobile benchmark) ◔ (for fixed benchmark)
Transparency/regulatory certainty		○	◔	●	●	● (for model) ◑ (for price benchmark)	● (for model) ◑ (for price benchmark)

Source: Analysys Mason, 2012

No Price Control (as a baseline scenario only)

6.8 Under a ***'No price control'*** approach (discussed under Chapter 4, paragraph 4.4 of this Document above), both MSPs and FSPs would decide what MTRs and FTRs to charge one another. With the exception of being easy to decide and implement, this approach did not score well against the Assessment Criteria (see Figure 6.1 above) for a number of reasons, summarised as follows:

6.9 Performance of 'No price control' option against the Assessment Criteria

- Need to take utmost account of the EC Recommendation/Contribution to internal market

It is inconsistent with proposals contained in the 2009 Termination Rate Recommendation, with general EU practice and with ComReg's responsibilities to contribute to an internal market for electronic communications (see paragraph 6.9 of the Consultation Document).

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency fares poorly as Service Providers try to maximise their profits by exploiting market power that each Service Provider has in wholesale call termination; no consideration of welfare promotion. Productive efficiency mainly driven by retail competition but, if the intensity of retail competition reduced (e.g. by high Termination Rates), this could further lower incentive to reduce production cost. Dynamic efficiency incentives likely to be reduced over time by continuance of tariff-mediated network externalities (see paragraph 6.10 of the Consultation Document).

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

Potential for high Termination Rates and tariff-mediated network externalities are increased, thus negatively impacting all forms of competition which would not be appropriate in light of competition problems identified (see paragraph 6.11 of the Consultation Document).

- Equity

Risk that MSPs and FSPs would set Termination Rates in order to maximise profits rather than consider distributional impact on all end users (see paragraph 6.12 of the Consultation Document).

- Ease of Deciding on and Implementing Approach

Does not require any resources to implement so scores well under this

Criterion but potential for disputes may raise costs under the transparency/regulatory certainty Assessment Criterion.

- Transparency/Regulatory Certainty

Service Providers set Termination Rates based on their own agenda and may change such rates at their own discretion therefore reducing regulatory certainty (see paragraph 6.14 of the Consultation Document).

6.10 In light of the above, and given ComReg's own concerns with this approach, specifically with regard to:

- Its inconsistency with contributing towards the development of the internal market
- Its negative impact on incentives to innovate or improve efficiency,
- Impact of high Termination Rates on competition and ultimately consumers (e.g. due to barriers to entry/expansion associated with tariff-mediated network externalities faced by Service Providers)
- Failure of Service Providers (left to own devices) to arrive at Termination Rates set at an efficient/equitable level taking different user group interests into account
- Lack of regulatory transparency/certainty

ComReg was of the preliminary view that a ***'No price control'*** approach was not deemed appropriate (see paragraphs 6.7 - 6.20 of the Consultation Document).

6.11 **Fair and reasonable**

6.12 A ***'Fair and reasonable'*** approach (discussed under Chapter 4, Section 4.5 of this Document above) essentially involves the parties involved finding a resolution, within specific defined parameters that is perceived to be 'fair and reasonable' to all parties involved. As with the '***No price control'*** approach, this approach, while being easy to decide and implement, did not score well against the other Assessment Criteria (see Figure 6.1 above) for a number of reasons, summarised as follows:

6.13 Performance of 'Fair and reasonable' option against the Assessment Criteria

- Need to take utmost account of the EC Recommendation/Contribution to internal market

This bi-lateral approach could facilitate different Termination Rates being set on a case-by-case basis and could result in asymmetry. Likely to be inconsistent with promoting the internal market (see paragraph 6.23 of the Consultation Document).

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency cannot be guaranteed due to uncertainty regarding what is fair and reasonable. Productive efficiency mainly driven by retail competition but, if the intensity of retail competition reduced (e.g. by high Termination Rates), this could further lower incentive to reduce production cost. Dynamic efficiency incentives also depend on the level of the Termination Rate that is set (see paragraph 6.24 of the Consultation Document).

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

Low Termination Rates would limit tariff mediated network externalities and promote fixed-to-fixed and mobile-to-mobile competition, although depends on the level of the 'fair and reasonable' Termination Rate. In addition, the impact on fixed-to-mobile competition is dependent on the MTR and FTR and any significant difference between the two (see paragraph 6.25 of the Consultation Document).

- Equity

Given that the Termination Rates could be higher compared with other approaches, the net effect on equity is not obvious and is dependent on the level of Termination Rates set (see paragraph 6.26 of the Consultation Document).

- Ease of Deciding on and Implementing Approach

Scores well under this Criterion as potentially less time consuming but requires some initial disputes to test concept and may raise costs under the transparency/regulatory certainty Assessment Criterion.

- Transparency/Regulatory Certainty

There is a lack of transparency/regulatory certainty given there is no pre-determined rate and is dependent on resolving disputes to determine what constitutes 'Fair and reasonable' Termination Rates in a particular set of

circumstances (see paragraph 6.28 of the Consultation Document).

6.14 Given the persistent risk of excessive pricing, ComReg is of the view that this approach in isolation would not be an appropriate or viable option (given the number, scale of and frequency of disputes etc.). This, in ComReg's view, could generate regulatory uncertainty and impact negatively on consumers (as well as MSPs and FSPs). In addition, this approach may not be a viable option in Ireland given it is inconsistent with contributing towards the development of the internal market and would not be sufficient to deal with specific competition problems (see paragraph 6.29 - 6.32 of the Consultation Document).

6.15 Following consideration of the Analysys Mason assessment, and in light of its own concerns, ComReg is of the preliminary view that a '***Fair and reasonable'*** approach is not appropriate in the context of a regulatory pricing approach for Termination Rates in Ireland (see paragraph 6.33 of the Consultation Document).

6.16 **Bill and keep**

6.17 A ***'Bill and keep (B&K)'*** approach (discussed under Chapter 4, Section 4.6 of this Document above) is one where the Service Provider originating the call bills the calling party and does not pay anything to the Service Provider terminating the call. This approach scored better than the ***'No price control'*** and the '***Fair and reasonable'*** *approaches* when assessed against the Assessment Criteria (see Figure 6.1 above). This approach scored as follows:

6.18 Performance of 'B&K' option against the Assessment Criteria

- Need to take utmost account of the EC Recommendation/Contribution to internal market

While discussed as a possibility by the 2009 Termination Rate Recommendation, the Explanatory Note recognises that there is no record of 'B&K' being mandated by a regulatory authority to date and notes difficulties in foreseeing it being implemented in current EU environment (see paragraph 6.35 of the Consultation Document). The Study on the Future of Interconnection Charging Methods prepared by Tera Consultants and Hogan Lovells ('**the Tera/Hogan Lovells Report**')[63] also noted possible consistency issues with Article 13 of the Access Directive.

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency could be better or worse than low Termination Rates depending on size of call externality. Negative externalities such as direct marketing spam are possible (although preventative measures also possible). Productive efficiency mainly driven by retail competition but, if retail market not fully competitive, low wholesale termination costs are to be preferred. However, a rate of zero provides no initially stronger incentive than a rate set at the efficient cost of production. Dynamic efficiency incentives also improved as incentives for tariff-mediated network externalities significantly reduced (see paragraph 6.37 of the Consultation Document).

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

Significantly reduces incentives for tariff-mediated network externalities and promotes incentives for fixed-fixed and mobile-mobile competition. The effect on fixed-to mobile competition however depends on whether a 'B&K' approach applies to payments between FSPs and MSPs (see paragraph 6.37 of the Consultation Document). Externalities could arise for specific Service Providers due to the caller creating costs that they do not pay directly themselves.

- Equity

While it was identified that the equity effect of a 'B&K' approach could potentially result in low usage customers with high inbound calls turning loss-making for Service Providers, it was identified by Analysys Mason that this does not appear to be the case in Ireland as lower usage groups broadly experience the same effects as other users following a reduction of wholesale

[63] Study on the Future of Interconnection, Prepared by Tera Consultants/Hogan Lovells, November 2010.

Termination Rates (see paragraph 6.38 of the Consultation Document).

- Ease of Deciding on and Implementing Approach

Scores well under this Criterion as no calculations to run or disputes to resolve (see paragraph 6.39 of the Consultation Document).

- Transparency/Regulatory Certainty

Transparency and regulatory certainty is facilitated as Service Providers know that Termination Rates are zero (see paragraph 6.39 of the Consultation Document).

6.19 Following consideration of the Assessment Criteria by Analysys Mason, and in light of ComReg's own concerns, specifically with regard to:

- Lack of international experience of B&K being mandated as a market-wide settlement policy through regulation to date. More likely to evolve commercially when networks exchange similar traffic patterns in environment of low Termination Rates
- Possible network routing/efficiency problems (as set out in the Explanatory Note to the 2009 Termination Rate Recommendation) which may require additional regulatory controls
- Potential externalities and implementation issues associated with the caller creating costs that they do not pay directly themselves. such as increases in SPAM traffic, although preventative measures are also possible

ComReg was of the preliminary view that a **'Bill and keep'** price control is not currently deemed appropriate in the context of a regulatory pricing approach for Termination Rates in Ireland at the current stage of market development (see paragraph 6.42 – 6.43 of the Consultation Document).

6.20 **Receiving party pays**

6.21 A ***'Receiving party pays ('RPP')'*** approach (discussed under Chapter 4, Section 4.7 of this Document above) is one where the terminating Service Provider bills the receiving party. This approach, similar to **'Bill and keep'**, scored well when assessed against the Assessment Criteria (see Figure 6.1 above).

6.22 <u>Performance of 'RPP' option against the Assessment Criteria</u>

- Need to take utmost account of the EC Recommendation/Contribution to the development of the internal market

While discussed as a possibility by the 2009 Termination Rate Recommendation, the Explanatory Note recognises implementation difficulties in the current established EU environment of calling party pays (see paragraph 6.50 of the Consultation Document).

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency likely to be improved by internalisation of call externality. Negative externalities such as direct marketing spam are possible (although preventative measures also possible). Productive efficiency incentives improved where all services become subject to retail competition. Dynamic efficiency incentives also improved as incentives for tariff-mediated network externalities significantly reduced (see paragraph 6.46 of the Consultation Document).

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

Similar positive competition benefits on fixed-fixed and mobile-mobile competition as B&K. The effect on fixed-to mobile competition is positive as more neutral competitive framework between FSPs and MSPs (see paragraph 6.46 of the Consultation Document).

- Equity

This approach benefits all consumers who would pay lower prices (see paragraph 6.46 of the Consultation Document).

- Ease of Deciding on and Implementing Approach

Does not score well under this Criterion (as it would require significant resources to implement).

- Transparency/Regulatory Certainty

While RPP does provide regulatory certainty and transparency, it was identified that it is initially more complicated for consumers due to changes in retail pricing structures (see paragraph 6.48 of the Consultation Document).

6.23 Following consideration of the Assessment Criteria by Analysys Mason (see paragraphs 6.44 – 6.49 of the Consultation Document), and in light of ComReg's own concerns, specifically with regard to:

- Feasibility of mandating this approach as a regulatory requirement (given the fact that neither fixed nor mobile retail calls are regulated)
- Potential to initially create significant disruption and costs to industry and consumers to introduce

ComReg was of the preliminary view that the option of a ***'Receiving party pays'*** approach is not currently appropriate in the context of a regulatory pricing approach for Termination Rates in Ireland (see paragraphs 6.50 – 6.51 of the Consultation Document).

6.24 A ***'Cost orientation: LRAIC+'*** approach (discussed in Section 6.52 of the Consultation Document) is an average costing approach which considers a large increment (e.g. all traffic services provided by the operator) plus one or more common cost mark-ups (e.g. overhead costs) which is then allocated to all relevant services. This results in cost orientation at a level above pure LRIC. This approach 'via a cost model' and 'via a benchmark' is assessed against the Assessment Criteria (see Figure 6.1 above).

6.25 **LRAIC + via a cost model**

6.26 Performance of 'LRAIC+ via a cost model' option against the Assessment Criteria

- Need to take utmost account of the EC Recommendation/Contribution to the development of the internal market

While the implementation of a given price control via a BU cost model does meet certain criteria set out in the 2009 Termination Rate Recommendation, LRAIC+ is not considered to be in line with the Recommendation as the European Commission noted divergences in the implementation of this price control methodology by NRAs to date. Pure LRIC is recommended as the appropriate methodology.

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency - LRAIC+ facilitates the recovery of some common costs, Analysys Mason notes that – abstracting from competitive effects - allocative efficiency could be better served if common costs were allocated using Ramsey Pricing principles as opposed to using Equi-Proportional Mark-Up ('EPMU'). However, due to the absence of elasticity data and possible distributional concerns, a Ramsey Pricing allocation would not be feasible in

Ireland. In addition, there is no clear efficiency case for a material network externality mark-up at this stage of market development (see paragraph 6.56 of the Consultation Document) and considering the likely small impact on mobile or fixed subscribership through any waterbed effect.

Productive efficiency is mainly driven by retail competition but, if the intensity of retail competition reduced (e.g. by high Termination Rates), this could further lower incentive to reduce production cost. Dynamic efficiency incentives may be affected if asymmetric Termination Rates reinforce scope for tariff-mediated network externalities (see paragraph 6.57 of the Consultation Document).

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

As LRAIC + allows MSPs and FSPs recover only the termination costs of an efficient operator, fixed-to-fixed, mobile-to-mobile and ultimately fixed-mobile competition will be facilitated (where termination revenues paid between Service Providers are reduced). However, while this approach may reduce the out-payments to other Service Providers, it is not to the same extent as other methodologies, e.g. pure LRIC, and so competitive benefits are more limited. ComReg notes (see paragraph 6.58 of the Consultation Document) that tariff-mediated network externalities may be more pronounced under LRAIC+ than under pure LRIC thereby posing a higher barrier to entry and expansion than under a pure LRIC methodology.

- Equity

As LRAIC+ (see paragraph 6.60 of the Consultation Document) allows Service Providers to recover some of the common costs, even marginal customers (with few originating minutes) should remain profitable for the Service Provider (without having to increase charges). Analysys Mason notes however (see Section 6.4) that, compared with pure LRIC, MTRs would stay relatively high which would have a detrimental effect on fixed only subscribers or those wishing to make high volumes of off-net calls.

- Ease of Deciding on and Implementing Approach

While a LRAIC+ cost model would require significant resources to build, Service Providers would be familiar with this methodology given ComReg has used LRAIC+ models in the past (e.g. for LLU and Leased Lines). Also recognised that this approach would avoid potential complication of unrecovered common costs in regulated fixed markets that may arise under a pure LRIC approach (see paragraph 6.62 of the Consultation Document).

- Transparency/Regulatory Certainty

Cost models can provide a good level of transparency and regulatory certainty as to future rates as they are typically used to set prices for the next three years.

6.27 **LRAIC + via a benchmark**

6.28 The Consultation Document (see paragraphs 6.63) identifies that while a benchmark approach is compliant with the 2009 Termination Rate Recommendation, the LRAIC+ methodology is not.

6.29 Analysys Mason's assessment of this approach against the Assessment Criteria (as set out in Figure 6.1), in particular its assessment against efficiency, competition and equity criteria is the same for LRAIC + via a cost model (as summarised above). Unlike a cost model approach, a benchmark approach would not require significant resources; however it can be time-consuming as it has to be reviewed at regular defined intervals to take account of any changes relating to the benchmarked countries. Finally, while this approach allows for a high level of transparency and regulatory certainty, this can however be compromised as there may be a need for revisions at defined periods in the future (see paragraphs 6.64 - 6.65 of the Consultation Document).

6.30 Following consideration of the Assessment Criteria by Analysys Mason (see paragraphs 6.52 – 6.65 of the Consultation Document), and in light of ComReg's own observations and concerns regarding its comparative performance relative to a pure LRIC approach (as is further summarised in paragraphs 6.202 to 6.221 of this Document), ComReg was of the preliminary view that cost orientation using a LRAIC+ methodology is not appropriate for the price control period irrespective of how it is implemented.

6.31 **Cost orientation: Pure LRIC**

6.32 A ***'Cost orientation: Pure LRIC'*** approach (discussed in Section 6.67 of the Consultation Document) is described as a cost methodology that considers a small increment model (whereby each service is considered as an increment). As with the LRAIC+ approach, this approach was assessed against the Assessment Criteria 'via a cost model' and 'via a benchmark' (see Figure 6.1 above).

6.33 **Pure LRIC via a cost model**

6.34 This was discussed in paragraphs 6.67-6.84 of the Consultation Document. In terms of its performance against the Assessment Criteria, this is set out as follows:

6.35 <u>Performance of 'Pure LRIC via a cost model' option against the Assessment Criteria</u>

- Need to take utmost account of the EC Recommendation/Contribution to internal market

Fully compliant with the 2009 Termination Rate Recommendation and scores full marks under this Assessment Criterion (see paragraph 6.69 of the Consultation Document).

- Efficiency: Allocative, Productive and Dynamic

Allocative efficiency – Given the higher proportion of retail revenues retained by operators under a pure LRIC than under a LRAIC+ approach, operators will have opportunities to manage common cost recovery from their own customers, rather than from subscribers of other networks taking into account factors such as willingness to pay, affordability, and myriad of mechanisms available for tariff re-balancing at retail level, etc. Performs marginally better than LRAIC+ due to problems with achieving allocatively efficient Ramsey prices via latter approach.

Productive efficiency mainly driven by retail competition but, if the intensity of retail competition reduced by high Termination Rates based on LRAIC+, lower wholesale Termination Rates based on pure LRIC to be preferred. Dynamic efficiency incentives may be improved relative to LRAIC+ approach where more effective retail market results from more competitively neutral framework.

- Competition: Fixed-Fixed, Mobile-Mobile, and Fixed-Mobile

Reduces incentives for tariff-mediated network externalities relative to a LRAIC+ approach and smaller Service Providers will face lower barriers to entry/expansion. It will (as set out in paragraph 6.76 of the Consultation Document) impact positively on mobile-to-mobile and fixed-to-fixed (albeit less than mobile-to-mobile in the case of the latter). Fixed-to-mobile competition would also be impacted positively by the ability to put more innovative fixed-mobile retail offers together. ComReg was of the view (see paragraph 6.77 of the Consultation Document) that lower Termination Rates achieved under a pure LRIC approach would translate into greater retail pricing flexibility (for calls and other services), and facilitate greater competition and diversity for the consumer (e.g. more off net calls included in bundles and packages). The First Analysys Mason Report (see paragraph 6.78 of the Consultation Document) identified that, while a move to pure LRIC would mean that MSPs would no longer be able to rely on a net flow of revenues from FSPs, it could be partly offset by adapting retail pricing and cost structures (e.g. fewer

handset subsidies, fewer bonus credits and promotions, etc.).

- Equity

Fixed-only subscribers would benefit, as would mobile customers who make many off-net calls. Since low-usage mobile consumers in Ireland appear to have a high spend per minute, even after removing the effect of reduced Termination Rates (see paragraph 6.82 of the Consultation Document), the First Analysys Mason Report concluded that there would be no strong reason for MSPs to increase their retail prices materially for this group of customers. It was further identified that, if this group of customers reduce further their number of calls, the network externality benefits of being able to contact those subscribers would persist. Also a significant number of SIM-only packages and second-hand working handsets are likely to help off-set negative penetration impacts resulting from lower handset subsidies. Based on survey data it was also noted that the concerns that older people (who are fixed line users) have in relation to the cost of calling mobile numbers would be "significantly reduced with this price control option" and that, while there is a low risk of certain low-spending customers disconnecting, penetration levels are not anticipated to be materially affected and many mobile-only users are furthermore not disproportionately drawn from lower social segments. Overall, pure LRIC is expected to perform better than LRAIC+ under this Assessment Criterion.

- Ease of Deciding on and Implementing Approach

While a pure LRIC approach would be a new approach for Ireland for interconnection rates, it was recognised that the 2009 Termination Rate Recommendation has been published for over three years with many key players in the mobile market in Ireland already involved in the pure LRIC debate in other European countries (see paragraphs 6.83-6.84 of the Consultation Document). While ComReg has a LRAIC+ model for FTRs, there is no MTR model and therefore ComReg would have to build a pure LRIC MTR model for the first time. However, increasing EU experience implies that a pure LRIC modelling approach does not present material drawbacks relative to a LRAIC+ modelling approach and it thereby currently performs only very marginally behind LRAIC+ via a cost model under this Assessment Criterion.

- Transparency/Regulatory Certainty

While a pure LRIC approach would be a new approach for Ireland, it was recognised that the 2009 Termination Rate Recommendation has been published for over three years with many key players in the mobile market in Ireland having been already involved in the pure LRIC debate in other European countries. Fact that termination markets are two-sided means that

reductions in costs will also help manage uncertainties over Termination Rate level. Increasing evidence on development of pure LRIC cost models would also help manage uncertainty (see paragraphs 6.83-6.84 of the Consultation Document). Therefore, pure LRIC performs similarly well to LRAIC+ in terms of contributing to transparency and regulatory certainty.

6.36 **Pure LRIC via a benchmark**

6.37 This is discussed in paragraphs 6.85 – 6.90 of the Consultation Document. The Consultation Document identified that benchmarking is an alternative methodology (allowed by the 2009 Termination Rate Recommendation) and which can be used in the short term.

6.38 It was identified (see paragraph 6.87 of the Consultation Document) that the assessment for efficiency, competition and equity is the same whether pure LRIC is implemented via a model or via a benchmark. However, in contrast to a cost model, a pure LRIC approach implemented via a benchmark would not require significant resources but can prove time-consuming as they have to be reviewed at regular defined intervals (to reflect changes in the benchmarked countries) – see paragraph 6.88 of the Consultation Document. In terms of implementation and regulatory certainty, it was identified (see paragraph 6.88 of the Consultation Document) that a benchmark approach allows for a high level of transparency due to the public availability of such benchmark information. However, with the need for revisions at defined periods of time, regulatory certainty can be partly compromised.

6.39 Following consideration of the Assessment Criteria by Analysys Mason and ComReg's own views (as summarised above), ComReg was of the preliminary view that cost orientation by means of a pure LRIC methodology is the most appropriate approach in particular in terms of meeting ComReg's objectives related to contribution to the development of the internal market, efficiency (particularly effective at meeting dynamic efficiency), competition and equity. As regards the implementation process, ComReg proposed different approaches depending whether it is a fixed or mobile network.

6.40 In its Consultation Document, ComReg asked the following question:

Q. 3 Do you agree that cost orientation by means of a pure LRIC methodology is the most appropriate approach to set Termination Rates in Ireland? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

6.2.3 Views of Respondents

6.41 In response to ComReg's question whether respondents agree that cost orientation by means of a pure LRIC methodology is the most appropriate approach, some respondents did agree, whereas some other respondents did not agree. Vodafone and O2 fundamentally disagreed. H3GI believes that "*bill and keep*" is the most appropriate approach; however, in its absence H3GI is of the view that a pure LRIC methodology is the most appropriate approach to set Termination Rates in Ireland, effectively favouring an even lower Termination Rate than pure LRIC (i.e. zero). ALTO, Eircom and Magnet are broadly in agreement with the approach, but ALTO underlines that its members were not unanimous in its support for a pure LRIC methodology. Magnet points out that it was initially not in favour of a pure LRIC model but having read ComReg's Consultation Document and various EC comments letters, Magnet is now of the view that pure LRIC is the most appropriate methodology to set Termination Rates. BT did not comment on this question. TMI did not respond directly to the question asked, but raised a number of points which are identified and addressed below.

6.42 Vodafone bases its disagreement on a number of points. In Vodafone's view, ComReg has not shown why the current voluntary glidepath approach is no longer appropriate. Vodafone also believes that ComReg has not considered LRIC+ in detail. Furthermore, Vodafone believes that ComReg has failed to carry out the required level of empirical analysis, in particular Irish specific empirical analysis. According to Vodafone the analysis that ComReg has carried out is "*simplistic, flawed and not robust enough to support a finding in favour of LRIC*". Vodafone argues that ComReg has not carried out sufficient analysis to calculate an appropriate level of Termination Rate for Ireland. Vodafone is of the view that the proposed Termination Rates could be above or below the actual LRIC for Ireland. According to Vodafone, if it is below the actual Irish LRIC and Vodafone suggests that it is likely to be so, then ComReg's proposed remedy will have "*detrimental impacts*". In its submission Vodafone also claims that ComReg has not considered the *"potential countervailing competition impacts associated with reducing MTRs",*

6.43 Vodafone then raises its specific concerns as regards ComReg's assessment of both allocative and dynamic efficiencies. Vodafone believes that "*an appropriate policy choice can only be made on the basis of empirical assessment*". In its view, ComReg has not completed such an assessment. Vodafone is of the opinion that ComReg has only carried out a partial qualitative assessment and *"disagrees strongly"* with ComReg's assessment of network externalities. Furthermore, Vodafone is of the view that ComReg's assessment of the call externalities has been over-stated.

6.44 Vodafone strongly disagrees with ComReg's assessment of *network externalities* and sets out what in its view ComReg would need to consider in order to assess the network externalities i.e. assess the current level of subsidy to customers; assess potential impact of reduced MTRs on the access subsidy; assess the number of marginal customers; and assess the level of social value of marginal customers. Vodafone disagrees with ComReg's conclusions and the conclusions of Analysys Mason regarding high penetration; market saturation; and second hand handsets. In Vodafone's view ComReg ignores what it terms *"other likely economic and social impacts of the reduction and /or withdrawal of device subsidies"*. In addition, Vodafone claims that public policy objectives around *"the Knowledge Economy"* would be undermined if for example the current device subsidies on smart phones and tablets were unavailable. Vodafone then reiterates its view that neither ComReg nor its advisors have undertaken the necessary *"analysis to assess network externalities, and, to the extent that ComReg has assessed network externalities, its analysis is flawed."*

6.45 Vodafone also disagrees with ComReg's assessment of *call externalities*. Essentially Vodafone disagrees with paragraph 5.13 of the First Analysys Mason Report (attached as Annex A to the Consultation Document) as Vodafone claims that it appears to imply that call externalities are a significant factor justifying significant reductions in MTRs or even the setting of Termination Rates below costs. Vodafone, in its submission to ComReg, highlights a number of concerns with ComReg's conclusions regarding call externalities, namely, that ComReg has failed to recognise that the majority of call externalities will be internalised; ComReg has not provided any quantification of the magnitude of call externalities and so it cannot be in a position to assess whether they are greater than network externalities; and Vodafone does not believe that call externalities are material (it makes reference to Annex C which it submitted to ComReg with its response to the Consultation Document) and so they should not influence the setting of efficient cost-oriented Termination Rates. Vodafone concludes that given ComReg's failure to adequately assess the magnitude of network and call externalities, ComReg cannot be in a position to determine that pure LRIC will give rise to improved allocative efficiency. Vodafone believes that "*such an assessment would demonstrate that network externalities are likely to be considerably greater than call externalities, thereby suggesting that a LRIC + standard is likely to produce more efficient outcomes."*

6.46 According to Vodafone, a pure LRIC costing approach would lead to Termination Rates being set below average costs, as this approach only allows the recovery of efficient incremental costs. As a result, Vodafone argues that a pure LRIC methodology is not consistent with maximising *productive efficiency*.

6.47 In relation to *dynamic efficiency and competition effects*, Vodafone disagrees with the First Analysys Mason Report conclusions that pure LRIC improves dynamic efficiency in that the closer the Termination Rate moves to zero the better the dynamic efficiency as the tariff-mediated network externalities are removed or reduced. It also disagreed with the parallel effects on competition as noted in the First Analysys Mason Report. Vodafone believes that ComReg's analysis is *"speculative and partial"* and that ComReg has failed to consider fully the potential impacts on competition as a result of a change in termination rates. Vodafone argues that the mobile market is competitive as evident from entry and expansion in the market; the fact that prices are falling and usage is increasing. Furthermore, it claims in its submissions that ComReg has not done any competition analysis of the market to support its assertion that the current MTRs act as a *"barrier to entry or expansion".*

6.48 Vodafone also disagrees with the conclusions in the First Analysys Mason Report that *on-net / off- net retail price differentials* are driven solely by high MTRs. In Vodafone's view such conclusions are *"false"* as such retail price differentials also exist in markets where RPP is used. According to Vodafone, ComReg has failed to consider the fact that *"lowering MTRs may also lower the intensity of competition between operators".* Vodafone believes that the presence of indirect revenues (from the calls made from customers to other networks) has a positive impact on the incentives for Service Providers to compete for customers. As a result, Vodafone believes that a reduction in MTRs may lead to two competition effects that work in opposite directions. According to Vodafone, ComReg has only considered one of these impacts and therefore cannot be in a position to conclude that a pure LRIC approach leads to improved dynamic efficiency and competition and is the most appropriate.

6.49 Furthermore, Vodafone points to the example of Mobile Virtual Network Operators ('**MVNOs**') where it claims that reducing MTRs to pure LRIC levels means that a key source of revenues for MVNOs would be severely undermined, not only reducing the attractiveness of further new entry, but potentially increasing the probability of market exit by existing MVNOs. In Vodafone's opinion, this contradicts ComReg's claims that reducing MTRs to the level that recovers efficient incremental costs only could advance dynamic efficiency through intensified competition. Vodafone claims that it is more likely that *"competition (in terms of number of market players) and choice would be reduced*".

6.50 TMI similarly argues that reduced MTRs will have a negative impact on smaller MSPs and competitive entry. TMI believes that the proposed pure LRIC approach would not encourage competitive entry into all parts of the market and that ''*[w]ith rapid changes in MTRs levels it is likely that the major operators will be in a stronger position to maintain their market shares and possibly to grow their share at the expense of the smaller operators*''. Furthermore, TMI believes that reduced termination revenues ''*may provide a strong disincentive to invest*'' for small MSPs such as TMI.

6.51 Vodafone continues that if MTRs are set at a level that only allows recovery of efficient incremental costs; this would mean that there would be dynamic inefficiency. Furthermore, Vodafone claims that *"an inefficiently disproportionate contribution to recovery of these costs would be required from origination charges, leading to distortions to consumption and demand for services. As operators cannot recover the total costs of provision of termination directly from termination rates…they will be disincentivised from efficient investment in the associated network components in the future."*

6.52 TMI similarly argues in its response to the Consultation Document that "*ComReg has not substantiated how the rebalancing or waterbed effect will also lead to lower retail tariffs*''. In its view "*the majority of the network costs need to be recovered from outgoing calls*''. Furthermore, TMI notes that '*'there is a clear link between reductions of MTRs and the reduction of network subsidies on handsets*''.

6.53 Vodafone previously noted what it terms *"ComReg's failure to consider whether there is any empirical support for the benefits it asserts that a move to pure LRIC will give rise to".* Vodafone points to its submitted Frontier study that looks at the impact of accelerating MTR cuts on the performance of the mobile market and its consumers since 2009. According to Vodafone the Frontier Study's key findings (i.e. that there is no link to usage and prices; no evidence of a link between MTR reductions and market position of smaller players; and there is a potential risk of lower take-up and investment) do not concur with ComReg's key conclusions.

6.54 In its response to the Consultation Document, TMI also encourages ComReg to determine the actual impact of MTR reductions in countries '*'where the reductions have been already implemented*''. TMI considers that ComReg has not provided any foundation or examples for its claims regarding competition and innovation under a pure LRIC approach.

6.55 Vodafone also disagrees with ComReg's assertion that a further fall in MTRs towards *"the pure LRIC rate will correct for an under-consumption of fixed to mobile and mobile cross-net calls".* Vodafone, in its submission provides confidential information to support its disagreement.

6.56 Vodafone disagrees with ComReg that its assessment of the effects of pure LRIC on efficiency and competition are unaffected by whether it implements the proposed solution using a pure BU-LRIC cost model or a benchmark. Vodafone criticises ComReg's proposed benchmark approach, in particular regarding the limited size of the eligible countries for inclusion in the benchmark. Vodafone also points to the differences in Ireland and the size and scale of the Service Providers compared to the countries that could potentially form the benchmark. Furthermore, Vodafone points to what it terms the *"substantial variance in the rates"* of the countries that could potentially be included as part of the benchmark.

6.57 Vodafone also notes what it terms *"ComReg's failure to assess appropriately the transparency, regulatory risk and regulatory uncertainty issues of the measures it proposed"*. Vodafone notes that *"…the only benefit of transparency to operators of a future regulatory approach… is to provide operators with sufficient information to ensure that they do not undertake future investment that would be uneconomic in the context of an environment of onerous regulation of the lever of MTR charges."* Vodafone claims that ComReg believes that since the 2009 Termination Rate Recommendation was published, industry was aware of the potential changes in MTRs. Vodafone claims that the 2009 Termination Rate Recommendation is not automatically binding and therefore Vodafone could not prejudge any assessment that ComReg would ultimately carry out. Similarly, O2 claimed that the process followed by ComReg fundamentally discloses a bias and pre-determination in favour of the 2009 Termination Rate Recommendation.

6.58 Vodafone does not agree with ComReg's equal weighting of all Assessment Criteria. In particular, Vodafone believes that higher weights should be attached to the efficiency criteria and lesser weights to what Vodafone terms the *"non binding Commission Recommendation".* Vodafone is of the view that cost-oriented MTRs can only be those that allow the recovery of total costs (i.e. an appropriate contribution to the fixed costs of the network as well as a proportionate contribution to business overheads) of an efficient operator.

6.59 As regards the impact of regulation on competition, Vodafone points to what it terms *"divergent conclusions"* (which Vodafone claims are not adequately justified in the consultation) with respect to Service Providers concerning the *"incomplete pass through of MTR reductions by fixed operators"* on the First Analysys Mason Report page 46.

6.60 In relation to *allocative efficiency*, Vodafone does not believe that because Ramsey mark-ups are difficult to determine accurately, the appropriate approach is not to include a mark-up. In Vodafone's view, an allocation of common costs on the basis of equi-proportional mark-up ('**EPMU**') is an appropriate *"second-best solution*" that would achieve a cost-oriented MTRs.

6.61 Vodafone also notes what it terms *"the impact of Spillover of MTR regulatory price control approach related to SMP Markets".* According to Vodafone, the First Analysys Mason Report in Section 3.4.3 recognises that the treatment of MTRs on a cost-oriented LRIC basis will lead to compatibility issues with pricing in other regulated markets. Vodafone is of the view that *"ComReg's failure to address the end to end effects of these proposals in a coordinated fashion across the various active consultation processes gives rise to problems of equity, discrimination and proportionality as between regulated MNOs and SMP undertakings in linked markets."*

6.62 As regards *information on equity criteria*, as previously noted, Vodafone considers the analysis carried out by Analysys Mason and ComReg to be "*partial in not addressing all effects, and makes inadequately supported assertions about the size of these effects."* Vodafone reiterates its call for what it terms *"comprehensive quantitative evidence based cost-benefit analysis"* to verify the distributional impacts of all the possible mobile termination price control remedies including LRIC+ and pure LRIC methodologies. Vodafone also disputes Analysys Mason's assessment of data on the distributional effects on different user groups that are set out in section 4.4 of the First Analysys Mason Report. Vodafone's assessment of the data indicates a concentration of mobile-only households among relatively lower income groups; households among older age groups are not necessarily economically disadvantaged; and, any welfare gains (from reductions in MTRs) for households with fixed lines would possibly arise only to the extent that there is a pass through by the fixed incumbent in particular (and Vodafone claims historically this has not been the case).

6.63 TMI also notes (in its response to the Consultation Document) that while "*Heavy users may well benefit more from MTR reductions"*, the benefits to '*'low spending users are not so clear"*. As regards equity effects, TMI furthermore disputes Analysys Mason's assessment of data on the distributional effects on different user groups. In TMI's view, the data indicates the Analysys Mason's conclusion that "*lower socioeconomic customers will not be adversely affected*'' is contradicted. In addition, TMI states that "*mobile only customers are more likely to have a medium spend given that they have no fixed line on which to make calls*'' and that "*ComReg's data conversely indicate that the lower socioeconomic groups will be adversely affected by the MTR changes*''.

6.64 Finally, Vodafone disagrees with the overall Harvey Balls comparative assessment set out on page 85 of the First Analysys Mason Report. In particular, Vodafone believes that both LRAIC+ and LRIC + should score a lot higher than a pure LRIC approach in terms of the efficiency criteria and that the LRAIC+ and LRIC+ methodologies score at least as well as the pure LRIC methodology with regard to the competition, equity, and transparency/regulatory certainty criteria.

6.65 O2 fundamentally disagrees with ComReg's proposals and notes that ComReg is "*proposing a methodology not followed in Ireland before and provide no empirical evidence why pure LRIC is appropriate for Ireland when to date other methodologies have been preferred.*" According to O2, ComReg does not appear to consider investment or the expectation of a return on investment. Furthermore, O2 claims that ComReg's proposals will in fact "*…lead to a reduction in future investment or innovation in the marketplace, as the potential for recovery of such investment would be practically restricted*". O2 also notes that in its view ComReg's proposals will severely curtail any anticipated LTE[64] roll out by Service Providers.

6.2.4 ComReg's Assessment of Responses and Final Position

6.66 Having considered the views of interested parties, and for the sake of clarity, ComReg has decided to address each of the issues raised above under the following respective headings:

- Proposed implementation of B&K
- Proposed continuation of current voluntary glide path based on BEREC benchmark
- Consideration of LRIC+ as a credible alternative price control option
- Claims regarding flawed analysis of impacts on allocative efficiency, including:
    - Claim of insufficient empirical analysis of network externalities
    - Claim of insufficient analysis of other potential economic and social impacts of the reduction and /or withdrawal of device subsidies such as the promotion of the 'Knowledge Economy'
    - Claim of insufficient empirical analysis and overstatement of the quantity of uninternalised call externalities in the Irish mobile market
- Claims regarding flawed analysis of impacts on productive efficiency

[64] Long Term Evolution ('**LTE**') marketed as **4G LTE**, is a standard for wireless communication of high-speed data for mobile phones and data terminals.

- Claims regarding flawed analysis of impacts on dynamic efficiency, investment, innovation and competition, including:

    - Need to consider full impacts on retail competition
    - View that claimed references to on-net / off- net retail price differentials being driven solely by high MTRs are "false"
    - Claims that reduced Termination Rates may give rise to two competition effects which work in opposite directions
    - Claims that competition (in terms of number of market players) and choice would be reduced
    - Claims regarding a lack of empirical support for the benefits which the Consultation Document asserts that a move to pure LRIC will facilitate.
    - Dynamic efficiency and interdependency between fixed and common cost recovery and the level of retail competition[65]
    - Claims regarding dynamic inefficiency and negative investment incentives
    - Claims that pure LRIC will distort consumption by shifting the burden of fixed and common cost recovery entirely onto other services (e.g. call origination)

- Validity of proposed pure LRIC benchmarking approach and claims regarding insufficient regulatory transparency/certainty regarding proposed implementation of pure LRIC approach

- Consistency regarding proposal for cost recovery options in the FVCT and MVCT markets

- Impact of spillover of MTR regulatory price control approach related to SMP markets

- Distributional effects on different user groups

- Summary of comparative assessment of relevant regulatory approaches

6.67 **Proposed implementation of B&K**

6.68 ComReg acknowledges that Bill and Keep ('B&K') potentially reduces the need for cost-based regulatory intervention and has other potentially beneficial characteristics such as further reducing the potential for tariff-mediated network externalities to distort retail competition. At the same time, however, paragraph 6.19 of this Document noted some additional concerns with regard to:

[65] While this issue was raised by Vodafone under its response to Chapter 5 and Question 2 of the Consultation Document, ComReg sets out its response to this issue in Chapter 6 of this Document in view of its interrelationship with other issues raised by Vodafone under the dynamic efficiency sub-criterion.

- Lack of international experience of B&K being mandated as a market-wide settlement policy through regulation to date. More likely to evolve commercially when networks exchange similar traffic patterns in environment of low Termination Rates;

- Possible network routing/efficiency problems (as set out in the Explanatory Note to the 2009 Termination Rate Recommendation) which may require additional regulatory controls;

- Potential externalities and implementation issues due to the caller creating costs that they do not pay directly themselves. such as increases in SPAM traffic, although preventative measures are also possible.

6.69 Based on the above, ComReg remains of the view that a B&K price control is still not appropriate in the context of a regulatory pricing approach for Termination Rates in Ireland (see paragraph 6.42 – 6.43 of the Consultation Document). This view was also broadly shared by the Tera/Hogan Lovells Report which concludes that:

"In summary, taking account of theoretical and empirical economic literature as well as the short case studies, we conclude that there is only a weak case to mandate BAK instead of improved "pure" LRIC cost-based CPNP in Europe, given the expected impact of the Recommendation of 7 May 2009','

6.70 Taking account of the evolution of cost-based regulation to date, ComReg considers that promoting regulatory certainty and consistency with the internal market justifies a continuation of a cost-based regulatory approach over the forthcoming price control period. For the reasons listed above, ComReg has decided that regulation of Termination Rates based on cost orientation is preferred to the B&K system at the current stage of market development, taking account also of the evolution of regulation in these markets to date and the need to promote regulatory certainty and consistency across the EU.

6.71 **Proposed continuation of current voluntary glide path based on BEREC benchmark**

6.72 In response to Vodafone's comments that ComReg has not shown why the current voluntary glidepath approach is no longer appropriate, please refer to ComReg's earlier detailed response on this issue (see paragraph 4.24 of this Document) regarding Question 1 of the Consultation Document.

6.73 In addition, in response to Vodafone's comments around what it termed "*ComReg's failure to assess appropriately the transparency, regulatory risk and regulatory uncertainty issues of the measures it has proposed*" (see paragraph 6.57), ComReg does not accept that the remedies give rise to regulatory uncertainty or that it has failed to assess appropriately the transparency and regulatory risks associated with the remedies. On the contrary, this price control measure is designed to promote regulatory certainty for all MSPs operating in the Irish market.

6.74 This price control measure provides certainty for Service Providers by: a) specifying the cost-oriented approach adopted by ComReg; b) identifying the process for benchmarking the MTR applicable for Ireland against the pure BU-LRIC MTRs that have been notified to date to the European Commission; c) analysing how Ireland's specific characteristics compare to the benchmarked countries in terms of pure BU-LRIC cost drivers (see the Analysys Mason Benchmarking Report); d) specifying the timing of updates to the benchmark and updates to the countries to be included in the benchmark calculation; and e) defining how and when a pure BU-LRIC based model would be adopted in Ireland.

6.75 Furthermore, by ensuring any remaining differences between maximum FTRs and MTRs stem only from the avoidable costs related to providing FVCT and MVCT services respectively, ComReg considers that its proposed pure LRIC approach will foster better regulatory transparency and certainty for FSPs.

6.76 **Consideration of LRIC+ as a credible alternative price control option**

6.77 ComReg has already clarified its assessment of all LR(A)IC+ approaches (including LRIC+) vis-à-vis a pure LRIC approach to cost orientation in paragraphs 4.34 to 4.46 and section 6.2.2 above. The comparative assessment framework implicitly assesses the relative merits and demerits of a pure LRIC approach to setting Termination Rates compared to other cost orientation approaches that result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services), with LRAIC+ being a representative scenario for the latter. However, alternative cost approaches, such as LRAIC and LRIC+, do not generate materially different conclusions (than LRAIC+) regarding their relative performance compared to pure LRIC against each of ComReg's Assessment Criteria. ComReg is satisfied that these various comparisons of different cost orientation approaches fully demonstrate that pure LRIC is preferable to alternative methodologies that set a cost standard above pure LRIC (e.g. LRAIC, LRIC+, or LRAIC+ in typical cases) due to the benefits of more intense and less distorted retail competition as is further summarised in paragraphs 6.202 to 6.222 below.

6.78 **Claims regarding flawed analysis of impacts on allocative efficiency, including**:

- Claim of insufficient empirical analysis of network externalities
- Claim of insufficient account being taken *inter alia* of extent to which mobile customer currently being subsidised and other potential economic and social impacts of the reduction and /or withdrawal of device subsidies (such as the promotion of the 'Knowledge Economy')
- Claim of insufficient empirical analysis and overstatement of the quantity of uninternalised call externalities in the Irish mobile market

6.79 **Empirical analysis of network externalities**

6.80 Contrary to Vodafone's assertions regarding the level of empirical analysis of network externalities, ComReg has assessed a broad range of qualitative and quantitative evidence in coming to the view that there is unlikely to be a materially negative impact on mobile subscriptions in Ireland following the implementation of a pure LRIC approach to setting maximum Termination Rates. This evidence is set out according to a number of headings below. ComReg's overall conclusion is that mobile network subscription in Ireland is currently saturated and that the response of MSPs to lower MTRs would not be to adopt commercial strategies that materially reduced incentives for network connection.

6.81 *High mobile market penetration and presence of some multiple SIM ownership in Ireland*

6.82 Mobile phone penetration levels in Ireland were at 107.2% as of Q2 2012. This implies that there are few, if any, marginal non-subscribers who would be attracted to join the network through subsidised access. As noted by the European Commission[66], given market saturation MSPs may be more likely to concentrate their offers, such as handset discounts, on enticing existing customers away from their competitors rather than necessarily increasing the overall number of marginal mobile subscriptions[67].

[66] European Commission, Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU – Implications for Industry, Competition and Consumers, SEC(2009) 599, 7 May 2009.

[67] See for instance the discussion in Albon, R. and York, R. (2008) "Should mobile subscription be subsidised in mature markets?", *Telecommunications Policy* (32), p.294-306. According to Albon and York, handset subsidies in the retail mobile market in Australia are not primarily directed at attracting new mobile subscriptions, rather a substantial proportion of the handset subsidies are directed at enticing existing customers to particular networks and to migrating customers to 3G.

6.83 The Final Analysys Mason Report notes that any penetration impacts are also complicated by the fact that there is a segment of consumers with multiple subscriptions[68] and, to the extent that they scale back to one subscription as a result of any such price changes, this would not impact on overall mobile ownership levels[69]. Also, to the extent that MTRs are above efficient levels, we must recognise that there may be excessive incentives to win and retain retail mobile customers in some cases.

6.84 Vodafone does not provide evidence about the number of Irish consumers exiting the market in the event of a decrease in MTRs.[70] However, Figure 6.6 below shows that, even though MTRs have declined in Ireland in recent years (although still above a pure LRIC level), overall mobile subscriptions have increased, rather than decreased as hypothesised by Frontier Economics.

6.85 Also it is important to note that data services are not typically subject to network externalities in the same way as voice calls were when mobile penetration was initially modest. Data services use the internet which is effectively fully interconnected. Any particular service that needs data connectivity (e.g. Facebook) is accessed from many different platforms, not just mobile phones. The impact of additional mobile take-up on the utility of services such as Facebook is minimal.

6.86 <u>*Commercial incentives for MSPs to generate network effects by retaining marginal subscribers*</u>

6.87 ComReg believes that MSPs, even when faced with lower MTRs, have incentives to have as many (profitable) subscribers on their networks as possible because subscribers benefit from being able to call other subscribers located on the same networks (through on-net/off-net price differentials). In terms of any retail price re-optimisation potentially impacting on the number of mobile subscriptions in Ireland (in the event of lower MTRs), the incentive for operators to create/maintain communities of interest suggests MSPs would seek to employ strategies to retain their communities of users (whether pre-paid or post-paid), so that their higher volume, revenue-generating customers

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[68] According to ComReg Document 12/46a, 5% of residential customers surveyed had more than one mobile phone number (slide 21 of the 2011 Mobile Market Research).

[69] As noted by C. Genakos and T. Valletti "Regulating prices in two-sided markets: the waterbed experience in mobile telephony", December 2011: "*If the "marginal" subscriber would not give up his mobile phone even after the waterbed effect, the increase in calling volumes following a cut in termination rates should be the prevailing effect, thereby increasing social welfare. Similarly, if this marginal subscriber was a holder of several SIM cards and, say, would drop one them due to the waterbed, there would not be a loss in network externalities as he would still be reachable, and regulatory cuts would still be fully justifiable*".

[70] Vodafone submitted a Frontier Report prepared in July 2008 entitled "*Assessing the impact of lowering mobile termination rates*" in its submission on the Consultation Document which forecasted a potential reduction in EU mobile penetration levels of between 9-16% (or 1-4% if call externalities are high) as a result of the European Commission proposals.

continue to benefit from being able to call a broader audience of subscribers (including low usage customers).

6.88 *Relatively moderate cost of maintaining low volume mobile subscribers on the network*

6.89 The cost to Service Providers of keeping their existing pre-pay users in the network can be calculated as the cost (the incremental on-going costs of serving a subscriber who is already on the network) of maintaining customer records on the Home Location Registry ('**HLR**'), as noted by Analysys Mason. This value is relatively low which suggests that maintaining low-volume existing customers is relatively inexpensive (compared to the acquisition costs of a new subscriber).[71] On that basis, it is not clear that increases in retail subscription prices or minimum commitment obligations would be the optimal commercial response of MSPs to lower MTR revenues.

6.90 MSPs are constantly evaluating customer lifetime value (CLV)[72] to establish customer acquisition costs and pricing options to identify whether such existing/new subscribers would be profitable over the lifetime of their subscription. MSPs may need to alter their subscription packages so as to either increase revenue (for example, increasing subscription prices or charging for a SIM) or reduce the acquisition costs (for example, by offering a lower handset subsidy or reducing advertising spend).

[71] In the UK Competition Commission's 2003 report on the charges for terminating calls from fixed and mobile networks, it was also noted that *"the incremental cost to MNOs of maintaining low users on their networks is very small – one MNO told us that it amounted to a few pence a month, which represented the cost of maintaining them on the HLR".*

[72] In the context of the UK Competition Commission's 2009 inquiry into the UK mobile market, the Competition Commission referred to information from Vodafone which noted that each MSP sets its prices to any particular customer or class of customers according to the MSP's ex ante expectation of the NPV of the revenues to be earned from the customer or class of customers over their period of subscription to the MSP's network. The NPV of such revenues is known as the customer lifetime value or CLV. Each MSP has an incentive to expend resources on winning customers that generate a positive CLV.

6.91 In respect of the CLV of low-usage subscribers, the Final Analysys Mason Report notes (page 66), that, based on Service Provider data on a decile and user group basis, there is an inverse relationship between usage and revenue per minute, with customers in the lowest-usage group paying the highest approximate price per minute (ppm) for the calls that they make and very-high-usage customers **[✂………………………………..]** paying the lowest ppm. This is supported by redacted information from the Final Analysys Mason Report (Figure 5.10) which sets out average revenue per outgoing minute (including on-net) for a number of mobile operators in Ireland. This highlights the fact that, contrary to Vodafone's assumptions, low usage customers are valuable to MSPs and MSPs are likely to provide pricing options that retain them on the network, even if MTRs are set at a pure LRIC level.

6.92 Analysys Mason has considered further the extent to which MSPs are currently subsidising the costs of handsets offered to customers when they join or remain a subscriber on an Irish mobile network. In this respect, the Final Analysys Mason Report notes (page 67) that the MSP provides an upfront subsidy of around **[✂……]** for a basic handset, with consumers typically paying around **[✂….]** out-of-pocket. Basic voice prepaid packages generally see lower upfront subsidies **[✂………………….]**, while smartphones typically involve a handset subsidy of the order of **[✂**…………**]**. MSPs expect to recoup these subsidies through monthly and usage charges over the (expected) lifetime of the customer. Since the proportion of overall handset subsidy in Ireland that is spent on basic voice prepaid packages is very low, basic handset subsidies should not be materially affected by lower MTRs.

6.93 Analysys Mason also carried out a static analysis of the revenue impact of a change in MTRs and FTRs (applying a scenario of 1 cent/min for MTRs and 0.1 cent/min for FTRs) across the Service Providers' various customer groups according to their respective traffic and usage profiles and found mixed results.

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6.94 This evidence implies that low-usage groups in particular are not heavily reliant on the termination revenue they accrue to their Service Provider in order to be profitable to serve and these groups are not necessarily at risk of being forced to cancel their subscription following a reduction in Termination Rates. The above analysis also shows that revenue impacts are likely to be mixed depending on whether the particular Service Provider is a net payer or net recipient of termination revenues. Furthermore, the above quantitative assessment is a static analysis which does not account for the ability of the Service Providers to off-set any forgone wholesale revenues through adapting retail pricing structures (or their customer acquisition costs) so as to moderate any possible subscription impacts among the more price-sensitive groups (considered further *inter alia* in paragraphs 6.98 to 6.104 below).

6.95 *Growing take-up of SIM-only (no handset) offers*

6.96 In addition, Analysys Mason finds that the importance of SIM-only packages (with no handset) in Ireland is growing significantly with approximately **[✂…….]** SIM-only packages being sold per month[73]. In the 2011 Mobile Market Research[74] 20% of household respondents indicated they had purchased a SIM-only package (with no handset) when signing up with their current Service Provider (see slide 34).

Figure 6.3: 2011 Mobile Market Research

[73] See page 68 of the Final Analysys Mason Report.
[74] According to ComReg Document 12/46a which contains the 2011 Mobile Market Research carried out by the Research Perspective Ltd. on behalf of ComReg as part of the Mobile Voice Call Termination Market Review. See: http://www.comreg.ie/_fileupload/publications/ComReg1246a.pdf

6.97 This clearly indicates that there must be a large available base of (unlocked) working mobile phones, either sold second-hand or freely recycled and that the availability of handset subsidies is not the only driver of mobile network subscriptions. ComReg's 2011 Mobile Market Research[75] indicated that the range of handsets available was a much less important reason for selecting an MSP (only 8% of all mobile residential respondents) compared with being on the same network as family or friends (40%) thereby reflecting the impact of tariff-mediated network externalities on customer choice[76].

6.98 _*Variety of cost recovery options and likely subscription elasticities in mature mobile markets*_

6.99 Lower MTRs are unlikely to lead to a material reduction in subscriptions due to the ability of Service Providers to adapt their retail pricing structures according to the different willingness of their various groups of heterogeneous customers to pay. ComReg has observed relatively sophisticated retail customer segmentation strategies pursued by MSPs in Ireland according to customers' general willingness-to-pay. Service Providers, which today optimize tariffs across different subscription levels, will re-optimize their prices in response to the change in MTRs. While it is difficult to predict in advance precisely how any price changes and/or cost savings would be implemented (e.g., via the volumes of minutes, data or texts in a bundle, level of access charges, handset subsidies and/or rate of handset replacement, and/or various changes to pre-pay or post-pay tariffs offered, e.g. taking into account the range of call types, promotions, etc. and/or potential changes to customer acquisition costs, etc.), it is likely that some combination of the above options will be considered by the Service Providers to maximise the CLV of new and existing customers and moderate the likelihood of any customer switching. The Final Analysys Mason Report (page 24) also notes the various forms of tariff re-balancing available to Service Providers faced with an overall reduction in revenues due to the application of pure LRIC for Termination Rates: *"The majority of MNOs revenues are derived from unregulated services sold in competitive retail markets, therefore network operators will be in a position to decide how to manage the burden of overall cost recovery in the situation of lower wholesale termination revenues…".*

[75] ComReg Document 12/46a (slide 56).

[76] These results were similarly reflected in ComReg's ICT usage survey in 2011 which noted that when selecting a mobile phone provider available handsets was cited as the most important reason by only 3% of respondents by comparison to the cost of calls which was cited as the top reason by 56% of respondentshttp://www.comreg.ie/_fileupload/publications/ComReg1196a.pdf

6.100 Even if there is some increase in the costs of mobile services (through a partial waterbed effect) following a reduction in Termination Rates, it does not follow therefore that there will be a substantial impact on mobile subscribership in view of the range of retail customer optimisation opportunities available to Service Providers. Whilst some MSPs might suggest that the impact of higher retail tariffs might fall disproportionately onto more price-sensitive, potentially disadvantaged mobile customers, this is a somewhat simplistic argument that does not take into account the complex myriad of opportunities available to MSPs to distribute the impacts of any 'lost' wholesale revenues across its heterogeneous user base. Mobile tariffs are highly optimised, with a ladder of different tariff packages being offered across which customers self-select. If all these tariffs are optimised, then by changing one, it must be optimal to change all of them to some extent. This means that if an MSP needs to recover more common cost from retail services as its wholesale termination revenue declines, then it may be optimal to smear the increase across all of its customers or across a number of customer groups, rather than load that increase only on one group. Indeed, there is likely a strong commercial imperative to specifically avoid the most price-sensitive customers where possible.

6.101 While ComReg acknowledges that it has not examined subscription elasticities as part of this analysis, it believes that doing so would not provide meaningful conclusions. ComReg would need to come to a view as to likely commercial strategies (e.g., the amount of any MTR reduction that a MSP would like to recover through higher prices rather than through lower customer acquisition costs) that an MSP would adopt, in order to estimate the impact of such price changes in the face of demand elasticities.

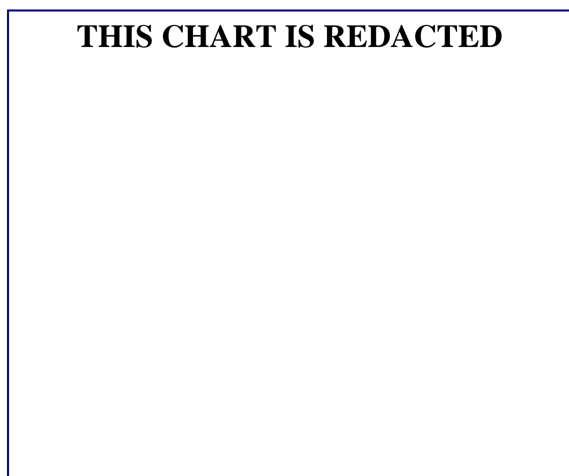
6.102 Given the wide range of potential commercial strategies that an MSP could use in response to lower MTRs, only some of which involve increasing retail calls or subscription prices, and the fact that such price changes and customer responsiveness may differ across customer segments, ComReg did not believe that any such analysis would be robust. The UK Competition Commission similarly placed little weight on the subscription elasticities presented during the recent appeal of Ofcom's MTRs Decision[77].

[77] Competition Commission (2012), ''British Telecommunications plc v Ofcom; Everything Everywhere Limited v Ofcom; Hutchison 3G UK Limited v Ofcom; Vodafone Limited v Ofcom and Telefónica UK Limited; Determination'', available at **http://www.competition-commission.org.uk/assets/competitioncommission/docs/appeals/telecommunications-price-control-appeals/final_determination.pdf**

6.103 In addition, the Final Analysys Mason Report also notes that termination is only a small share of most Service Providers' revenues in Ireland (as illustrated by the redacted Figures 5.11 and 5.12 in the Analysys Mason Report – presented below as redacted Figures 6.4 and 6.5) and that, with Termination Rate reductions, Service Providers become in control of a greater proportion of their retail revenues.

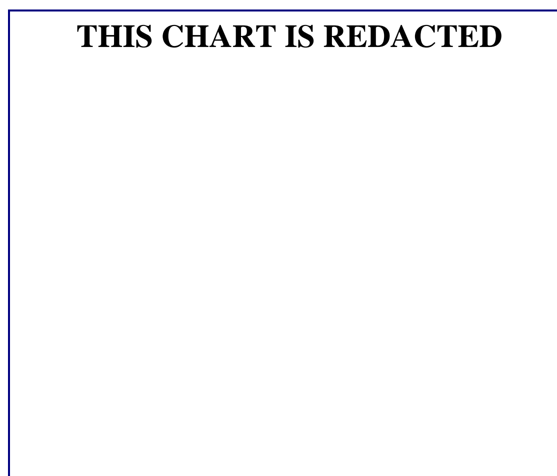
[✂Figure 6.4: Split of revenues for mobile operators based on Q3/Q4 2011 MTRs and FTRs (as a % of retail revenue)

[Source: Analysys Mason, 2012]



[✂Figure 6.5: Split of revenues for mobile operators with a EURc1 MTR and a EURc0.1 FTR (as a % of retail revenue)

[Source: Analysys Mason, 2012]



6.104 Through estimating the likely revenue impact of an MTR reduction to 1 cent/min, Analysys Mason notes that MSPs would see a reduction in the wholesale revenues from FSPs (a reduction of **[✂……..]** as a proportion of their own retail revenue) but they will retain an additional **[✂……]** of their own retail revenue internally by reducing the Termination Rates they pay to one another and also to FSPs. The overall impact on MSPs will be a reduction of about **[✂……]** of their total revenue coming from FSPs which would need to be recouped through changes in retail prices, or a reduction in customer acquisition costs, to maintain the same net revenue levels. The reduction in payments between wholesale (fixed and mobile) Service Providers would have no net impact on the Service Providers in aggregate, as one operator's revenue is another operator's expense.

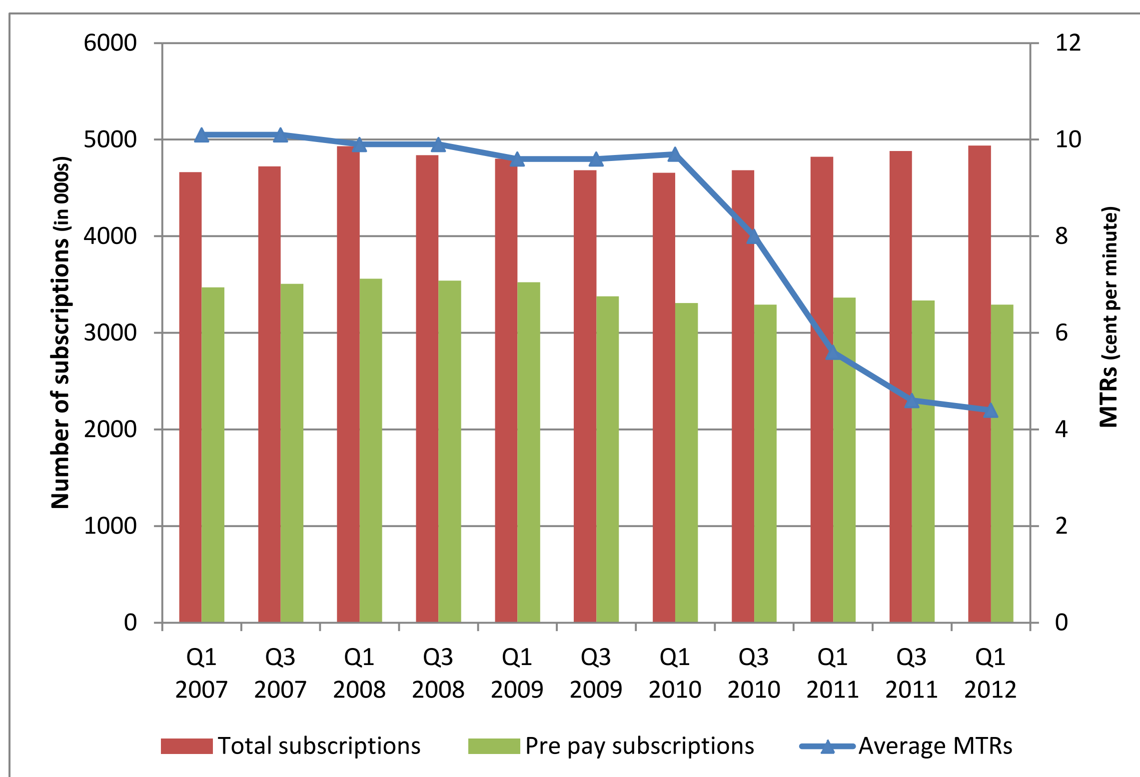
6.105 *National and international evidence of penetration and pricing impacts as a consequence of reduced MTRs to date*

6.106 Past evidence does not seem to indicate that a significant drop in penetration or a significant increase in outgoing retail prices should be expected to occur in response to a reduction in MTRs.

6.107 In the context of the Irish mobile market, successive MTR reductions have not been associated with a reduction in mobile subscription rates. The steady growth in mobile subscriptions, notwithstanding MTR reductions of 56% since 2009[78] is demonstrated by the following figure:

[78] The average Irish MTR reduced from over 9 cents per minute as of from the end of 2009 to approximately 4.15 cents per minute as of 1 July 2012, representing approximately a 56% cumulative reduction.

Figure 6.6: MTRs, Total and Pre-Pay Subscriptions



Source: BEREC and ComReg Quarterly Report Data

6.108 A similar response to reductions in MTRs was also observed in the UK. In 2002/2003 UK MSPs claimed that a reduction in MTRs would lead to retail price increases and a situation where low-income/low-usage customers would have to cease their mobile subscriptions as they would no longer be able to afford to have a mobile phone[79]. For example, Orange argued that some 25% of consumers would give up their mobile phones if retail prices rose to the degree they considered would be necessary to make up for the reduced MTRs imposed by Ofcom (then Oftel)[80].

6.109 However, these predicted negative impacts of a reduction in MTRs from approximately 10.2ppm to 4.2ppm on average (in 2008/09 prices) did not subsequently materialise. Prepay tariffs also remain the most popular form of mobile subscription in the UK (although consumers are moving towards post-pay tariffs).

[79] UK Competition Commission's Inquiry Report: Vodafone, O2, Orange and T-Mobile: Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks, 18 February 2003.

[80] Paragraph 12.88 of Vodafone, O2, Orange and T-Mobile: Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks, available at http://www.competition-commission.org.uk/rep_pub/reports/2003/fulltext/475c12.pdf

6.110 Even in the US, which has traditionally had lower MTRs (even zero in some cases), an initial focus on post-paid customers, and a lower mobile penetration rate than EU countries, the FCC's most recent mobile competition report refers to increasing mobile ownership penetration[81] and a growing focus on mobile prepaid plans[82]. The US prepaid segment increased by 15% at the end of 2006 to 19% of subscribers in 2009 and overall market penetration was at 93% at the end of 2009 up from 80% at the end of 2006. As the market for post-paid subscribers reaches saturation in the US, MSPs[83] are increasingly focusing their efforts on minority and youth demographics which prefer no-contract and prepay service plans.

6.111 *Conclusions on likely impacts of pure LRIC approach on network externalities in Ireland*

6.112 Based on the above analysis, ComReg has reached the view that any price restructuring, as a result of implementing pure LRIC Termination Rates, is unlikely to lead to a material reduction in mobile ownership in Ireland relative to the application of a cost orientation approach which results in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). ComReg has taken particular account of the following key quantitative and qualitative indicators:

- The current high levels of market penetration and presence of some multiple SIM ownership in Ireland;
- Service Providers' commercial incentives to create network effects;
- The relatively moderate cost of maintaining a mobile subscriber on the network and current profitability of low mobile users in Ireland;
- The growing take-up of mobile SIM-only (no handset) offers, which provide customers with additional options to manage their mobile spend;

[81] See FCC, Mobile Wireless Competition Report, 15th Annual, June 27 2011. The US is experiencing a steady incline in penetration which in the FCC's latest Mobile Wireless Competition Report was estimated at 93%. See also Analysys Mason, Case Studies of Mobile Termination Regimes in Canada, Hong Kong, Singapore and the USA: Report for Ofcom, 26 November 2008, London which found that once data on mobile take-up rates were corrected for multiple subscriptions which are more common in Calling Party Network Pays countries, there is little measurable difference in penetration rates in bill-and-keep countries versus "calling party network pays" countries with higher MTRs. Furthermore, according to the Analysys Mason Report, average monthly minutes of use were much higher in the US at 766 compared to 190 in the UK in 2007. According to Harbord and Hoernig (2011): *"While mobile usage, or call volumes, tend to be much higher in bill-and-keep countries, mobile subscription levels do not appear to depend on the level of MTRs in mature markets"* (Harbord and Steffen Hoernig, Welfare Analysis of Regulating Mobile Termination Rates in the UK with an Application to the Orange/T-Mobile Merger, 04 August 2011, page 19).

[82] FCC, Mobile Wireless Competition Report, 15th Annual, June 27 2011, page 66 and 67. .

[83] Such as TracFone, Sprint Nextel's Boost Mobile, Leap and Metro PCS.

- the ability of MSPs to re-balance tariffs at retail level, across a combination of monthly charges, call charges (e.g. taking account of the range of call types offered), minimum commitment thresholds, expiry periods for prepaid credit, handset subsidies, rate of handset replacement, acquisition (e.g. advertising) costs, bonus credits and promotions and/or other charges/features; and

- the availability to customers of a range of options for re-optimising their expenditure across available product offerings, e.g. take up of a SIM-only offer for a lower cost, scaling back to owning one SIM only, replacing a handset less frequently, relying on second-hand handsets, or opting for a different tariff structure (e.g. move to low-usage post-pay offer) to avail of varying levels of inclusive minutes, promotions, etc.

6.113 While arguments regarding network externalities have been mainly used by MSPs to justify higher Termination Rates, many of the above considerations are also relevant in a fixed context. The evidence also points to fixed networks being relatively mature with gradually declining subscription levels. Furthermore, in a fixed context USO-type obligations mean that low-income fixed subscribers do not require a subsidy from higher FTRs as such marginal users will continue to have access to cheap voice services regardless of any impact that a change in Termination Rates might have on fixed voice service prices (see pages 37/38 of the Final Analysys Mason Report). Thus, network externality arguments would also not justify a broader costing approach than pure LRIC for FTRs over the relevant price control period.

6.114 With regard to Vodafone's claims regarding the ability to apply a Ramsey pricing approach to wholesale call termination markets, ComReg notes that part of the "inelasticity" of wholesale call termination (which under a Ramsey pricing approach would suggest this service should bear a greater allocation of the common cost mark-up) arises specifically because each and every terminating Service Provider has market power in terminating calls to its own customers. The Final Analysys Mason Report notes (pages 33/34) the general 'Ramsey' insight that (if the accurate elasticity information was available which it is not) for a multi-service firm it may be theoretically more efficient for customer groups to carry a share of the common costs that is inversely related to their demand elasticity. However, in the context of wholesale call termination markets, competition and equity concerns (between FSPs and MSPs as well as between asymmetrically-sized Service Providers) would potentially outweigh the presumed benefits of any Ramsey pricing approach. Furthermore, Ofcom noted that the result that Ramsey pricing yields an efficient structure of prices is typically (but not necessarily) based on the assumption that the prices of all of the firm's services are set as linear charges. This is not currently the case as retail call charges are often non-linear. With two-part tariffs, it may be possible to recover common costs more efficiently from retail services.

6.115 In addition, converged networks are providing a range of services of which voice is just one. Therefore, Ramsey-style mark-ups would potentially allow the costs of network functionality improvements that potentially provide no benefit to voice callers to a particular network to be recovered in part from the Termination Rate.

6.116 In respect of Vodafone's comments regarding the depth of ComReg's analysis of the economic and social impacts of a reduction and /or withdrawal of device subsidies, ComReg makes a number of specific observations (in addition to the above qualitative and quantitative assessment of the role of network externalities in an Irish context) which refute Vodafone's particular claims below:

6.117 **Extent to which mobile customer access is currently being subsidised and the potential impact of reduced MTRs on the access subsidy**

6.118 For Vodafone's assertion to be valid, it would be necessary to show that, absent subsidies generated from MTRs, customer access to the network would be reduced. ComReg has taken into account a range of factors, as described in detail in paragraph 6.112 above, including *inter alia*: a) high mobile market penetration and evidence of multiple SIM subscriptions by some customers; b) a relatively moderate cost for a MSP to maintain a marginal subscriber on the mobile network and the current profitability of low mobile users in Ireland; c) the growing take-up of SIM-only offers (which

provide no subsidy for access), and d) the low level of handset subsidy provided to basic pre-paid packages, in coming to the view that subscription subsidies do not play an important role for the ongoing internalisation of network externalities in the Irish mobile market. ComReg has also shown that whilst MTRs in Ireland have reduced from over 9 cents per minute in 2009 to over 4 cents per minute in mid 2012, mobile penetration has not declined at all. This supports the rejection of Vodafone's assertion that there is a direct relationship between MTRs and a welfare-maximising access subsidy (meaning that marginal customer access is subsidised and subscription would otherwise decline with lower MTRs).

6.119 As shown above, ComReg does not believe that there are significant access subsidies observed in the current Irish mobile market that would be materially affected by lower MTRs. Even if access subsidies were substantial, ComReg does not believe that lower MTRs would directly lead to a reduction in those access subsidies, to an extent that subscribers would materially leave the network. This is because, as discussed in paragraph 6.86 to 6.87 above, Service Providers have commercial incentives to create and maintain network effects and have a variety of cost recovery options which means that lower MTRs would not necessarily lead one-for-one to lower access subsidies.[84] In addition, national and international evidence of penetration and pricing impacts as a consequence of reduced MTRs to date is not consistent with Vodafone's predictions of negative penetration impacts following Termination Rate reductions. At the same time, ComReg recognises that these Termination Rate reductions to date have been to levels still in excess of the pure LRIC of wholesale voice call termination. However, taking into account the range of factors considered in paragraphs 6.79 to 6.119 above, ComReg does not anticipate a material reduction in mobile penetration levels in the event of further Termination Rate reductions to pure LRIC.

6.120 **Other economic and social costs of reduced device subsidies, such as impact on the 'Knowledge Economy'**

6.121 Vodafone refers to the economic and social impacts of a reduction or withdrawal of device subsidies in the price of smart phones in particular. If, however, the ultimate concern is whether handset prices will affect the level of subscribers on the network and associated network externalities, the most important factor is whether the cost of basic handsets will be materially affected (bearing in mind the current low proportion of overall handset subsidy

[84] Notwithstanding the paucity of elasticity estimates for specific mobile user groups in Ireland, ComReg has noted that Service Providers are able to engage in relatively sophisticated (albeit imperfect) price discrimination to a significant extent by offering a complex array of tariff structures catering for different customer segments with different needs and different willingness-to-pay.

that is spent on basic voice packages) and the existence of sufficiently cheap handsets to marginal subscribers (even if these are basic or old handsets). ComReg has addressed these issues from paragraph 6.79 to 6.119 above.

6.122 As also noted in the Final Analysys Mason Report (page 67): *"A better approach to achieving such a government objective to improve broadband internet access in this way (should it indeed be the policy) would be to offer the largest subsidy on smartphones to the least-wealthy subscribers (i.e. prepaid or low-usage packages) or at least the same subsidy regardless of mobile subscription choice. We do not observe this situation in the Irish market therefore any claim that the subsidy of smartphones supports access to the internet is not benefitting low-end mobile users nor fixed-only users*".

6.123 Furthermore Vodafone, by focussing on broadband access among mobile subscribers, neglects to take account of the importance of fixed broadband access and the role that reduced MTR payments would potentially play in increasing investment potential and or access to fixed broadband.

6.124 **Claim of insufficient empirical analysis and overstatement of uninternalised call externalities in the Irish mobile market**

6.125 ComReg did not argue whether the size of call externalities is significant or that such call externalities are larger than network externalities in an Irish context. It recognises that there are various factors arising from potential externalities which mean that efficient Termination Rates – if the information were available to assess such call externalities, which it is not – need not automatically be above pure LRIC. At the same time, however, ComReg's ultimate conclusion under the allocative efficiency sub-criterion, that pure LRIC performs marginally better than LRAIC+, does not rely on the quantitative value of call externalities but rather on other observations, such as efficient cost recovery options available under a pure LRIC and LRAIC+ approach respectively.

6.126 While ComReg recognises that the quantitative benefit of the call externality is indeed unknown and call externalities were thus not precisely quantified under the efficiency Assessment Criterion, ComReg is of the view that the existence of call externalities (whether internalised or not) is still relevant to its assessment of the performance of pure LRIC and LRAIC+ approaches under the competition Assessment Criterion.

6.127 The 2009 Frontier Report, which Vodafone submitted as Annex B in its response to the Consultation Document, discusses the extent to which any call externalities are internalised and claims low evidence on the magnitude of call externalities. As part of its submission on the Consultation Document, Vodafone also included a report by Sandbach and Van Hooft (2008)[85] as Annex C which concluded that it is likely that the call externality is often internalised and, although the average residual call externality is positive, it is very small.

6.128 Harbord and Pagnozzi (2008) note however that, even if call externalities are partially or fully internalized, to the extent that a call to a subscriber on a rival network benefits the receiver, a network still has a strategic incentive to set inefficiently high off-net prices to reduce the number of calls received by rival networks' subscribers. The UK Competition Commission (2012) also did not accept Vodafone's contention regarding the importance of considering only call externalities that are not internalized through reciprocal communication patterns because of the links between the presence of call externalities, the existence of calling circles and costs associated with switching networks when members of calling circles subscribe to the same network. That is, even where call externalities are internalised through coordination of network choice in order to take advantage of cheaper on-net calls, this can contribute to enhanced switching costs for the members of the specific calling club or circle[86].

6.129 Thus, even where call externalities are largely internalised, they are still a relevant consideration under the competition Assessment Criterion when comparing available cost methodologies for setting Termination Rates since it is the existence of receiver benefits (whether internalised or not) which reinforces the strategic incentives to engage in off-net/on-net retail price discrimination, which in turn reinforces the attractiveness of larger networks and poses a barrier to entry and expansion for smaller networks. Therefore, a network still has a strategic incentive to set inefficiently high off-net prices to reduce the number of calls received by rival networks' subscribers, reinforced by high off-net Termination Rates. ComReg thus considers such (internalised and uninternalised) receiver benefits under the competition Assessment Criterion

[85] J. Sandbach and L. van Hooft "Using on-net/off-net price differential to measure the size of call externalities and its implications for setting efficient MTRs".

[86] The UK Competition Commission Determination, 9 February 2012 further refers to academic literature for support such as Gabrielsen and Vagstad (2008) which showed that when allowance was made for calling circles even symmetric incumbent networks might prefer high access charges. They explained that on-net/off-net price discrimination based on call termination would increase individual switching costs because consumers would be more reluctant to relocate away from their calling club.

6.130 **Claims regarding flawed analysis of impacts on productive efficiency**

6.131 The comparative performance of pure LRIC relative to LRAIC+ under productive efficiency is set out in paragraphs 2.23, 5.10, 6.26 and 6.35 above. ComReg recognises that, since the underlying network assets for wholesale call termination services are broadly shared with retail access/call origination services, retail competition in the latter should contribute substantially towards the ongoing efficiency of those assets irrespective of whether a pure LRIC or LRAIC+ approach is adopted for setting Termination Rates. This same consideration regarding productive efficiency arises for both fixed and mobile networks. This view was also shared by Ofcom in the case of MTRs where it noted:

"Origination and termination are jointly produced and, hence, as long as there is sufficient competition at the retail level, mobile operators seek to minimise costs. Furthermore, both LRIC+ and pure LRIC would involve setting MTRs on the basis of the efficient costs incurred and projected. This means that productive efficiency would be unlikely to be a significant concern"[87].

6.132 Where, however, reduced competition on the retail market (partly) stems from Termination Rates above efficient cost, then setting lower Termination Rates under a pure LRIC approach is more consistent with promoting productive efficiency.

6.133 **Claims regarding flawed analysis of impacts on dynamic efficiency, investment, innovation and competition, including:**

6.134 *Need to consider full impacts on retail competition and any empirical support for the benefits which the Consultation Document asserts that a move to pure LRIC will give rise to*

6.135 Since Vodafone's points relate specifically to the impact of a pure LRIC approach on the performance of the mobile market, ComReg focuses its responses on retail mobile market dynamics. However, ComReg notes that many of the below observations regarding the comparative performance of pure LRIC and LR(A)IC+ approaches in terms of promoting competition would similarly apply in a fixed context.

[87] Ofcom Consultation Wholesale mobile voice call termination (April 2010), §A12.22

6.136 While there is still debate regarding the precise intensity of retail mobile competition[88], even if the market were theoretically subject to strong competition (albeit imperfect), increased competitiveness is still possible, and the level of wholesale Termination Rates can continue have a significant influence on the structure and dynamic of retail competition. The Irish market is relatively concentrated with the three largest MSPs accounting for over 90% of subscriptions. ComReg believes that it has a valid concern that higher Termination Rates under costing methods which result in the inclusion of some additional joint/common costs shared with other services have a greater potential (than Termination Rates set under a pure LRIC method) to reinforce the asymmetric nature of the existing mobile market by putting smaller Service Providers at a particular competitive disadvantage by further entrenching barriers to entry and growth.

6.137 When Termination Rates are set at pure LRIC rather than at LR(A)IC+, ComReg believes that the potential to distort competition, by operating to the disadvantage (or advantage) of smaller Service Providers, is reduced.

6.138 ComReg concurs with the UK Competition Commission (2012) conclusion: "*That the market was competitive does not, in our view, preclude the possibility that it could have been more competitive. As Ofcom noted, this remains an industry with four networks and characterized by high barriers to entry and growth, and adopting a LRIC+ cost standard had the potential to put one of these networks at a competitive disadvantage*".

6.139 *Vodafone's view that claimed references to on-net / off- net retail price differentials being driven solely by high MTRs are "false"*

6.140 ComReg rejects Vodafone's assertion and recognises that, while lowering MTRs to pure LRIC may not eliminate (but will help reduce the scope for) on-net/off-net pricing differentials, even small price differentials can still have non-trivial competition effects. ComReg believes that it is therefore important to ensure that the cost methodology adopted for Termination Rates does not accentuate the risk and magnitude of such tariff-mediated network externalities, and maximises the potential for competition between competing networks.

[88] The Final Analysys Mason Report states (page 46/47): "The nature of mobile competition is oligopolistic, as noted by Genakos and Valletti: "*Mobile markets worldwide are dominated by a small number of firms. Competition among them is expected to be somewhere between the two extreme scenarios of perfect competition and monopoly. Under these more general (oligopolistic) market conditions, the same economic logic applies*".

6.141 When choosing the optimal approach to setting Termination Rates for the price control period, it is important to ensure that the approach taken is the one which is least likely to accentuate barriers to entry and growth associated with tariff-mediated network externalities. This is reinforced by economic research[89] which suggests that *"once tipped in favour of a larger provider's network, asymmetric market structures may persist as groups that have switched en masse to join groups of friends on a network may be more difficult to win back"*[90].

6.142 **Claims that reduced Termination Rates can give rise to two competition effects which work in opposite directions**

6.143 Contrary to Vodafone's claims, ComReg has considered a range of academic literature in developing its recommendations, not just those papers cited by Vodafone in its response which noted that, under certain *strict* assumptions, high MTRs may increase competition between Service Providers. As summarised in the 2009 Frontier Report submitted by Vodafone as Annex B to its response to the Consultation Document, a number of papers (e.g. Gans and King 2001[91]; Armstrong and Wright 2009[92]) have argued that reducing MTRs will reduce consumer surplus and possibly welfare in the mobile market. Vodafone claims that the general conclusion of the economic literature, cited by it, is that high MTRs may lead to more intense competition and thus lowering MTRs could have a competition-dampening effect which it claims ComReg has ignored. As noted in the UK Competition Commission's 2012 report, the positive competition effects referred to in these papers were based *inter alia* on assumptions of just two (typically symmetric) networks and uniform call patterns (i.e. that all subscribers call all other subscribers with equal probability).

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[89] See, for example, Birke, D and G. Swann (2010) "Network effects, network structure and consumer interaction in mobile telecommunications in Europe and Asia", Journal of Economic Behaviour & Organization, 153-167. Birke and Swann (2010) have estimated the importance of tariff-mediated network effects and the impact of a consumer's social network on their choice of mobile provider. The authors examined data from surveys of students in several European and Asian countries, and found that the respondents strongly coordinated their choice of mobile phone providers, but only if the provider induced the network effects in the first place.

[90] Tazneem Azad, Dotecon Perspectives, The day of the discounts, Spring 2011, available from: http://www.dotecon.com/assets/images/perspec6.pdf

[91] J. Gans and S. King, "Using "bill and keep" arrangements to soften network competition", Economics Letters, vol. 71:413-421.

[92] M. Armstrong and J. Wright, "Mobile Call Termination", October 2008.

6.144 However, ComReg notes that the results in these academic papers are sensitive to the specific assumptions on which the analysis is based, which do not accurately describe the relevant features of the Irish mobile market. ComReg notes that there is a broader more recent economic literature that demonstrates that the literature cited by Vodafone is incomplete (e.g., Harbord and Hoernig (2011))[93]. More realistic assumptions on the structure of the market and behaviour of subscribers, implies that MTRs set above cost have the potential to generate competitive distortions by contributing to higher on-net/off-net price differentials, thereby impeding the ability of smaller networks to compete by creating access deficits which could result in a permanent net outflow of termination payments to larger networks. Such competition effects cannot be disregarded.

6.145 In addition, the literature cited by Vodafone also seems to recognise the potential for higher MTRs to put smaller networks at a competitive disadvantage[94], a significant consideration in the Irish market which comprises four mobile network operators of different sizes and several MVNOs. Thus, Vodafone's arguments regarding the competitive effects of higher MTRs are partial and depend critically on the starting point chosen. If one starts from an initially sufficiently *asymmetric* situation, the higher MTRs increase the competitive advantage that larger Service Providers have over smaller Service Providers through on-net discounting. Therefore, the conclusions vary dramatically depending on what the initial starting point is assumed to be.

6.146 When call externalities and a more realistic number of competing networks are factored into the analysis (such as is observed in the Irish mobile market), Harbord and Hoernig (2011) note (at page 19) that "*In mobile markets with more than two firms, mobile subscribers' consumer surplus is not necessarily increasing in the mobile-to-mobile termination rate… Indeed, [their] results show that if call externalities are significant and if a realistic number of networks is taken into account then mobile consumer surplus is actually decreasing in the termination rate".*

[93] David Harbord, Steffen Hoernig, Welfare Analysis of Regulating Mobile Termination Rates in the UK with an Application to the Orange/T-Mobile Merger, 04 August 2011.

[94] Armstrong (2002) said that much of the analysis assumed symmetric competition between networks and so might be relevant to situations where competition was well established and mature. He said that in the earlier stages of market liberalization competition was likely to be skewed in favour of the incumbent and that the analysis needed to be extended to cover such situations. Armstrong and Wright (2009) furthermore said that incumbent networks might prefer high mobile-to-mobile termination charges as these could act to deter entry or induce exit of a smaller rival. They explained that by setting above-cost mobile-to-mobile termination charges, incumbent networks could induce network effects which made entry less attractive.

6.147 Harbord and Pagnozzi (2010)[95] also noted that when an incumbent network increased its off-net prices, relative to those for on-net calls, subscribers to smaller networks would receive relatively fewer calls thus reducing the utility from joining a smaller network. Hoernig (2007) [96] found that, in response to call externalities, large networks would charge higher off-net prices and create higher on-net/off-net price differentials than smaller networks, further impeding the ability of smaller networks to compete by creating access deficits which could result in a permanent net outflow of termination payments to larger networks.

6.148 ComReg therefore believes that the subsequent literature cited above, which analyses the robustness of the results cited by Vodafone to certain assumptions, suggests that, when more realistic assumptions on the structure of the market and the behaviour of consumers are taken into account, the results cited by Vodafone are overturned. In addition to the potentially pro-competitive effect of setting MTRs above costs, the literature also commented on the potential for higher MTRs to deter entry and disadvantage smaller networks by reinforcing the network effects of larger networks and increasing the barriers to entering and expanding within markets for smaller MSPs. As noted by the UK Competition Commission (2012), it is therefore not a clear result of the economic literature that setting MTRs above LRIC would be otherwise expected to lead to more intense competition. Indeed, the thrust of the literature is that higher MTRs have adverse dynamic effects on competition between Service Providers of different sizes.

6.149 Furthermore, Vodafone's arguments regarding higher MTRs benefiting mobile competition ignore the competition and efficiency impacts for consumers in fixed voice markets. MTRs set above pure LRIC distort the quantity of fixed-to-mobile calls downwards therefore negatively impacting on welfare in the fixed telephony market, with an even larger distortion to welfare if externalities are taken into account. The Final Analysys Mason Report also recognises a degree of competitive interaction between fixed and mobile services (pages 49 and 50) and that where MTRs are above cost these transfers leave the fixed sector at a competitive disadvantage.

[95] David Harbord & Marco Pagnozzi, "Network-Based Price Discrimination and `Bill-and-Keep' vs. `Cost-Based' Regulation of Mobile Termination Rates," 2010. Review of Network Economics, Berkeley Electronic Press, vol. 9(1), pages 1.

[96] See S. Hoernig, D. Harbord and A. Mantzos, Regulating Call Termination Rates in the UK Mobile Market A Report for H3G UK By Market Analysis Ltd, 28 July 2009, page 12. http://stakeholders.ofcom.org.uk/binaries/consultations/mobilecallterm/responses/Hutchison_3G_UK_LimitedAnnex.pdf

6.150 In line with its statutory objectives, ComReg, therefore has taken into account the impacts of proposed regulation on all stakeholders (both fixed and mobile) and, unlike Vodafone, does not take a partial approach to impact assessment. ComReg's ultimate proposal thus draws on an inclusive assessment considering the net impact on the entire sector (fixed and mobile) and consumers as a whole. ComReg's role is to promote the competitive process as a whole rather than to protect or further the interests of specific operators only.

6.151 Based on all these factors, ComReg believes that the more recent academic literature cited above is more reflective of the Irish market situation, and its conclusions that higher MTRs have a negative impact on competition are more persuasive than the academic papers referred to by Vodafone in the Frontier Report, which in any case also recognise the potential competitive effects associated with high Termination Rates for asymmetrically-sized networks.

6.152 Incurring interconnection expenses for outgoing calls does have a major impact on the competitive strategy of MSPs, especially the smaller Service Providers, since these smaller networks may have higher outgoing calls volumes. To be competitive, the smaller networks must offer lower off-net call prices, in order to attract customers away from the larger networks. Higher MTRs place more of their revenues at risk, as explained by H3GUK in its submission to the UK Competition Commission[97], especially when they are trying to attract high volume customers, which are an attractive customer segment from a market share point of view. Hence, higher MTRs create a barrier to retail price competition, as they act as a floor for some retail call prices, thereby restricting the competitive opportunities of the smaller MSPs.

6.153 Pure LRIC-based MTRs therefore, are more likely to create a pro-competitive environment, compared to LRAIC+ MTRs which would give rise to increased potential for competitive distortions. While the points raised by Vodafone and the economics literature referred to mainly considers the competitive impacts of higher/lower MTRs, ComReg also considers that the above observations regarding the stronger potential of pure LRIC to minimise the risk of competitive distortions generated by inter-operator termination transfers to be similarly applicable in a fixed context.

[97] Ofcom Statement (Wholesale mobile voice call termination, annex 3, 15 March 2011), §A3.112-3.117. Taking into account information provided by H3G, Ofcom also considered that MTRs above pure LRIC could raise retail prices for mobile-to-mobile off-net calls leading to on-net/off-net retail price differentials, as the level of MTRs effectively sets a floor for retail off-net call prices set by the MSPs. Such differentials could operate to the advantage of the larger networks generating 'club effects', discussed further *inter alia* at paragraph 2.15 above.

6.154 **Claims that competition (in terms of number of market players) and choice would be reduced**

6.155 ComReg comprehensively assesses the impacts of proposed regulation on all stakeholders and does not take a partial approach to impact assessment. ComReg's ultimate proposal draws on an inclusive assessment considering the net impact on the (fixed and mobile) sector and consumers as a whole. ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders, ComReg also has to ensure its decisions protect the integrity of the competitive process as a whole, rather than protecting or furthering the interests of particular operators.

6.156 In a dynamic context regulatory decisions aimed at promoting the competitive process and at reducing the impact of any tariff-mediated network externalities should also benefit later market entrants, such as MVNOs, with a more limited network and the likelihood of a greater volume of off-network outgoing calls. Furthermore, MSPs, including MVNOs, have a range of options available to them for recouping any costs no longer recouped from fixed to mobile revenues, as discussed in paragraph 6.112 above. ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders, including MVNOs, ComReg also has to ensure its decisions protect the integrity of the competitive process as a whole, rather than protecting or furthering the interests of particular Service Providers.

6.157 As regards TMI's specific situation, to date TMI has charged an MTR that significantly exceeds those of other MSPs (TMI's current weighted average MTR is 12.21 cent per minute[98], compared to Vodafone, O2 and Meteor with an average MTR of 3.68 cent per minute). Since ComReg proposes to move towards a symmetric pure LRIC MTR based on costs that would be incurred by an efficient operator, TMI's revenue per minute for terminating calls will (by virtue of its comparatively much higher starting position) initially reduce by a greater amount than the corresponding reduction in the cost it incurs per minute for terminating calls on other networks. However, at the same time, this static calculation does not take account of the ability for TMI to dynamically adapt its retail pricing structure to accrue additional retail revenues or to implement cost savings or stimulate types of usage to offset the financial difference.

[98] I.e. rates applicable from 1 August 2012.

6.158 As noted above, ComReg has taken into account the direct and immediate financial impact of the Termination Rate reductions on all Service Providers. However, asymmetric MTRs charged in excess of efficient cost significantly risk facilitating a range of other retail distortions, including promoting inefficient entry, impeding retail pricing flexibility for off-net calls and/or reinforcing the ability of larger Service Providers to generate tariff-mediated network externalities which can further impede entry and growth of smaller Service Providers (see section 6.3 discussing symmetry/asymmetry further below). Chapter 7 of this Document further underlines the importance of moving to symmetric pure LRIC-based Termination Rates by mid-2013 to ensure that there are no unnecessary delays in the ability of the industry as a whole (i.e. including net termination payers and net termination recipients) and consequently consumers to benefit from a more balanced and competitively neutral framework under a pure LRIC approach.

6.159 While high MTRs subsidise one particular group of Service Providers (e.g., MSPs), this subsidy comes at the expense of another group of Service Providers (e.g. FSPs, or smaller MSPs who want to attract a more mixed user base such as users with higher outbound call volumes).

6.160 **Claims regarding a lack of empirical support for the benefits which the Consultation Document asserts that a move to pure LRIC will facilitate**

6.161 ComReg has assessed all relevant wholesale and retail pricing trends in the Irish mobile and fixed sector when coming to its view on an appropriate price control methodology. However, ComReg acknowledges that there are a myriad of external factors that are likely to affect retail prices and the purchasing decisions of end users and it is difficult to isolate the impact of decreasing MTRs on indicators such as price, usage and penetration.

6.162 Subject to the caveats noted in the above paragraph, the main trends observed by ComReg in the mobile market include:

- While steady decline in MTRs (56% reduction in MTRs from over 9 cent/min as of the end of 2009 to approx 4.15 cent/min as of July 2012), stable/increasing mobile voice penetration (to near saturation levels) over the corresponding period to 107.2% as of Q2 2012[99], with multiple SIMs held by some users

- The majority of mobile plans still involve the purchase/acquisition of a new handset, however there is also a growing trend towards SIM-only offers

[99] See page 50 in ComReg Document 12/101 (R), Quarterly Key Data Report (R), Data as of Q2 2012, 13 September 2012.

- A decline in average revenue per mobile call minute (ARPM as a basic proxy for retail price[100]) over the period 2010-2012 from 14 cents per minute to 10 cents per minute[101]

- Products and pricing still notably favour the use of on-net mobile calls compared to off-net mobile and fixed-to-mobile calls[102]

- Some inclusion within fixed voice call bundles of set amounts of designated inclusive minutes that can be used for calling mobiles, although the number of such inclusive minutes tends to be low[103]

- On-net mobile call traffic increased steadily between 2007-2010 and decelerated before peaking in H1 2011 and has been in gradual decline since then

- Off-net mobile call minutes have remained relatively steady with an average growth rate of 3.2% per year since 2007

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[100] The prevalence of product differentiation, two-part tariff structures (e.g. fixed monthly fee plus usage-based per minute charges), different call types, and bundling in the provision of mobile phone equipment services means that it is inherently difficult to measure retail mobile price changes over time. For example, mobile products often include varied bundles of off-peak and peak-time minutes and texts (on-net and off-net) and data allowances that change over time. For that reason, prices cannot be easily compared over time. It is also difficult to separate the cost of per-minute calls made to a mobile network from the broader price of the package and hand-set. While recognising these inherent difficulties in identifying a representative price, ComReg considers that a measure of average revenue per call minute (ARPM) over time may provide some general indication of overall price movements.

[101] The general trend has been one of initially increasing ARPM between Q1'07 and Q3'07 with a subsequent sharp decline of approximately 30% between Q4'07 and Q1'09. After a period of relatively stable, if not gradually increasing, ARPM through 2009, ARPM has since fallen sharply again by 30% between 2010 and 2012 from 14 cents per minute to 10 cents per minute.

[102] For example, a website search of 8 October 2012 of a selection of pre-pay, post-pay and SIM-only tariff plans showed that Vodafone, O2, Meteor, eMobile, 3Ireland and Tesco all have tariff plans with free on-net mobile call minutes (e.g. the following pre-pay offers all had free on-net call minutes, albeit subject to certain minimum top-up requirements in certain cases - Vodafone's 'Free Vodafone calls and texts', O2's 'Experience Plus', Meteor's 'Anytime Choice Free Meteor Talk', 'e-mobile Thirty20, Thirty30', 3Ireland's '3Pay €10, €20 etc. top ups' and Tesco's 'Anyone Anytime' offers) by comparison to retail call tariffs for off-net mobile minutes for the same packages ranging from a minimum of 20 cent/min (in the case of Tesco's 'Anyone Anytime' offer), to a maximum of 29/30 cent/min (for the Vodafone, O2, Meteor and 3Ireland pre-pay options cited above). Slide 64 of ComReg's 2011 Mobile Market Research (included as Annex 1 of ComReg's mobile termination market review) also shows that consumer respondents indicated that 67% of calls made from their mobiles were on-net calls. Whether or not this is directly attributable to the cost of on-net calls is unclear, however, the observed tendency for discounted/free on-net call costs amongst a significant number of MSPs' price plans is likely to be a relevant factor. For further information on retail mobile pricing structures please see the 2012 MVCT Decision.

[103] When the FSP is also operating within the retail mobile market, the volume of such minutes tends to be slightly higher, but restricted to calling mobile subscribers on the Service Provider's own mobile network.

- Fixed-to-mobile call minutes declined significantly between 2007 and 2012 (corresponding with a fall in fixed subscriptions and overall fixed traffic)[104]

- Entry of MVNOs - TMI and Lycamobile – in the Irish retail mobile market

- Notwithstanding recent growth of small MSPs in the mobile market (H3GI and Tesco Mobile[105]) a relatively asymmetric/concentrated retail mobile market structure persists with the 3 largest MSPs (Vodafone, O2 and Meteor) still accounting for over 90% of retail mobile market share

- Growing smartphone take-up[106] and recent evidence of data-driven network investments

- The formation of strategic investment agreements between Vodafone/H3GI and O2/Meteor aimed at achieving network cost reductions/efficiencies[107].

6.163 In addition to noticing the above trends, observing empirical data can be a useful way of identifying potential correlations between trends. For example, ComReg has already noted above that, whilst MTRs in Ireland have declined along a regulated glide-path since Q1 2010 to 56% of the pre-2010 rate (as shown in Figure 6.6 above), mobile penetration has not declined at all.

6.164 While the above trends have occurred in a scenario where Termination Rates were still notably in excess of the pure LRIC of providing the service, ComReg has not identified any aspect of these trends which would undermine ComReg's broader assessment of the likely impacts of reducing MTRs further to pure LRIC over the forthcoming price control period.

[104] See page 23 in ComReg Document 12/101 (R), Quarterly Key Data Report (R), Data as of Q2 2012, 13 September 2012.

[105] See Figure 2 in ComReg Document No. 12/46: Market Review – Voice Call Termination Rates on Individual Mobile Networks; published on 23 May 2012 ('**ComReg Document No. 12/46**'). H3GI's share of retail mobile subscriptions was static in the three years from 2008 until 2010. Then in H3 2010 H3GI's share of subscriptions grew from 2.4% to 4.6% over an 18 month period to the end of 2011 (a 92% increase in market share). TMI entered the market on the back of an MVNO commercial arrangement with O2, and accumulated 2.9% of mobile subscriptions in its first twelve months of operation to Q4 2011.

[106] See paragraph 3.52 in ComReg Document No. 12/46: Market Review – Voice Call Termination Rates on Individual Mobile Networks; published on 23 May 2012 ('**ComReg Document No. 12/46**'). ComReg estimated that since Q2 2009 smartphone usage in Ireland has grown by 38%.

[107] See footnote 111 below.

6.165 Furthermore, taking account of the fact that the fixed sector has experienced entry by a number of smaller FSPs since 2007 and that important fixed network upgrades are currently underway as well as some initial evidence of convergent offers (e.g. Vodafone's One-Net Express Service)[108], ComReg considers that reducing fixed-mobile cross-subsidies generated by Termination Rates above efficient cost should generate positive benefits for fixed users by freeing up funds that can potentially be usefully directed towards fixed services and investments. This may also permit tariff innovation by FSPs who might be able to bring fixed-to-mobile calls into calls bundles or to develop fixed-mobile converged offerings.

6.166 **Dynamic efficiency and interdependency between fixed and common cost recovery and the level of retail competition**

6.167 As noted above, ComReg is of the view that the waterbed effect is likely to be partial with the overall impact on MSPs' profits being relatively contained. This view was also shared by Ofcom and the Competition Commission in the UK[109] and draws largely on the empirical examination undertaken by Genakos and Valletti which found evidence of a significant but incomplete waterbed effect. There is no reason to believe that the operation of the waterbed effect in an Irish context should be materially different in this regard, although it depends on the intensity of retail competition and the behaviour of marginal customers (i.e. those most ready to switch networks).

6.168 Furthermore, contrary to Vodafone's claim regarding the negative correlation between the waterbed effect and the intensity of retail competition, Valletti and Genakos[110] find that the waterbed effect is stronger the more intense competition is in markets with high levels of market penetration and high Termination Rates.

[108] See ComReg Documents 12/96 and 12/117 for a fuller description of relevant retail trends for fixed voice services.
109 UK Competition Commission Determination, 9 February 2012, paragraph 2.837.
[110] See footnote 61 above.

6.169 Moreover, in relation to Vodafone's claims concerning the intensity of retail competition and impacts for dynamic efficiency, Analysys Mason notes (page 41) that a necessary condition for dynamic efficiency is in fact a competitive environment. Service Providers' incentives to invest are driven by a range of factors and not just the level of their wholesale Termination Rates. As noted by the Final Analysys Mason Report (page 70) retail competition will encourage Service Providers to invest in their network if they want to keep up with their competitors. Incentives to invest in infrastructure will be driven by the need to deliver call origination and access services (which share underlying network assets with call termination services). There is also no compelling evidence to suggest that countries with very low MTRs (e.g. USA, Canada) have experienced materially different levels of investment and innovation in mobile services as a direct consequence of such low interconnection charges. Furthermore, investment cost reductions (e.g. through network sharing[111]) may further facilitate opportunities for new investments and innovations to take place.

6.170 Finally, ComReg notes that Vodafone's claims regarding reduced investment incentives do not take into account the possibility that lower MTRs might increase smaller MSPs' incentives to invest in their own mobile networks, and that the reduced wholesale expenses of MTRs might also encourage FSPs to invest in fixed networks. As noted by the Final Analysys Mason Report (page 81), a more effective retail market may arise from the ability of smaller Service Providers to compete for customers through improved quality of service rather than through network size, thus improving dynamic efficiency. ComReg nonetheless addresses these claims regarding dynamic inefficiency/negative investment incentives arising from reduced Termination Rates in further detail below.

6.171 It is ComReg's view, therefore, that pure LRIC has greater potential than other costing approaches which result in the inclusion of additional joint/common costs shared with other services to promote competition through lower barriers to entry and growth in both fixed and mobile markets, thus enabling smaller Service Providers to compete more effectively, thereby improving dynamic efficiency incentives over time.

6.172 **Claims regarding dynamic inefficiency/negative investment incentives**

6.173 Vodafone alleges that there is a risk that reduced MTRs may undermine

[111]See Vodafone and Three Ireland announcement on 13 July 2012 of strategic partnership to share physical site and network infrastructure at approx. 2000 locations across the country - http://www.londonstockexchange.com/exchange/news/market-news/market-news-detail.html?announcementId=11264759. See also Eircom and O2 announcement on 06 April 2012 of a strategic network-sharing partnership - http://www.o2online.ie/o2/uploads/pdfs/press/2011-Apr-06-NIKE-Press-release.pdf

incentives to invest. O2 also claims that ComReg's proposals will in fact "*…lead to a reduction in future investment or innovation in the marketplace, as the potential for recovery of such investment would be practically restricted*". O2 also notes that, in its view, ComReg's proposals will severely curtail any anticipated LTE roll-out by Service Providers. It, however, provides no evidence of why it considers that LTE investment will be curtailed. TMI also claimed potentially negative impacts arising from MTR reductions on investment incentives.

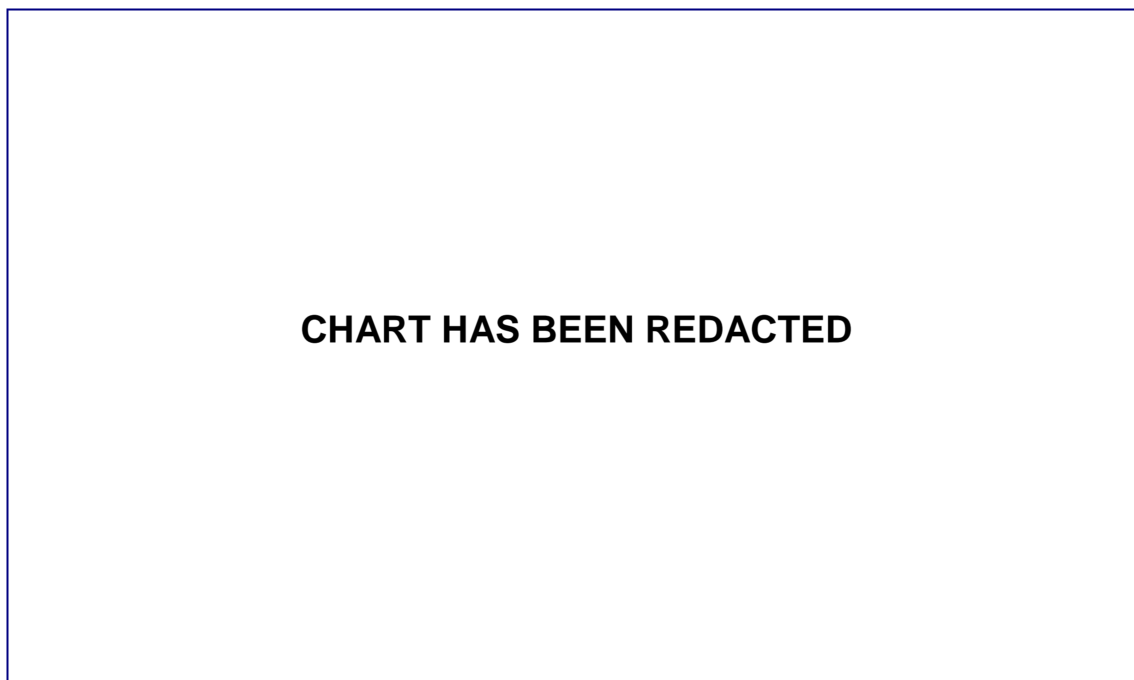
6.174 ComReg disagrees with these assertions on the basis that there are a diverse range of factors that are likely to influence investment levels, not just the revenues from MTRs. These might include the ability of MSPs to gain access to capital, and planning around ComReg's auction of 4G spectrum[112]. It is also likely that new investments will likely be substantially driven by the need to cater for growing data volumes on a forward-looking basis. In addition, incentives to invest in infrastructure and technology used to deliver call origination and access will remain strong in a competitive retail market, and those assets are largely shared with termination services. As already discussed above, the Final Analysys Mason Report (page 70) notes that retail competition will incentivise Service Providers to invest in their network if they want to keep up with their competitors due to the need to deliver quality retail call origination and access services (which share underlying network assets with call termination services). Competition in the mobile retail market should therefore compel MSPs to invest efficiently so as to maintain a high level of service. However, as noted by the Final Analysys Mason Report (page 81), a more effective retail market may also arise from the enhanced ability of smaller Service Providers to compete for customers (due to a reduction in financial transfers associated with Termination Rates above incremental cost and a reduction in incentives for tariff-mediated network externalities), thus improving dynamic efficiency.

6.175 Rivalries among suppliers are expected to encourage innovation, thereby reducing future costs and improving the quality and variety of products. Furthermore, Analysys Mason noted (page 70) that investors would be given flawed investment signals if the decision to invest in 4G spectrum and new data services is based materially on the amount of incoming wholesale mobile voice call termination revenue.

[112] See ComReg Document 12/123 'Information Notice – Results of Multi Band Spectrum Auction'

6.176 Recent evidence of investment levels in Ireland also refute Vodafone's and O2's assertions. Despite declining MTRs, Vodafone Ireland still announced in 2011 that it would boost network investment by 20% to mainly cater for its increasing smartphone user base[113]. In addition, the recent purchase of spectrum by MSPs represents a significant investment related to the provision of core mobile services. The spectrum allocation will enable the roll-out of 4G services, which will involve further investment in technology[114]. The following chart further represents mobile investment on an annual basis between 2007 and 2011. The chart does not show a definitive trend one way or the other, and certainly does not indicate any damaging impacts of reduced MTRs on investment during this time period. For example, 2010 shows a relatively high level of investment despite being the first year in which MTR revenues would have decreased markedly for MSPs.

✂Figure 6.7: Mobile Investment 2007 -2011[115]



[113] http://www.siliconrepublic.com/business/item/21824-vodafone-ireland-plans-to
[114] http://www.irishtimes.com/newspaper/breaking/2012/1115/breaking25.html
[115] Source: ComReg Quarterly Questionnaire Data.

6.177 ComReg has also noted a recent trend towards joint investment in mobile network infrastructure by a number of MSPs. In particular, O2 and Meteor formed a strategic partnership involving mobile network sharing such as site equipment, power supply, technology and transmission sharing.[116] Vodafone Ireland and Three Ireland announced a strategic partnership in July 2012 to share network infrastructure.[117] Such cost savings may be used to fund new/improved services/investments on a forward-looking basis independently of the level of Termination Rates.

6.178 In addition to the above evidence, ComReg's view is that pure-LRIC-based MTRs are likely to provide incentives for efficient investment through promoting competition between smaller and larger Service Providers as well as between FSPs and MSPs more generally (see section 4.2.3 of the Final Analysys Mason Report). The Final Analysys Mason Report states (page 95) that "*The calculated pure LRIC should include a reasonable return on investment for those assets which contribute to the incremental cost of wholesale termination traffic. Contributions to the pure LRIC of mobile voice termination are unlikely to include material LTE expenditures during the time period of ComReg's next price control, as LTE is unlikely to be a significant contributor to the efficient cost of supplying voice termination until such time as voice over LTE is a commonly used and efficient technology for this service.*"

6.179 **Claims that pure LRIC will distort consumption by shifting the burden of fixed and common cost recovery entirely on to other services**

6.180 Vodafone argues that a pure LRIC approach would distort consumption by shifting the burden of common cost recovery onto other services such as origination.

6.181 As outlined above in paragraphs 6.98 to 6.104, MSPs currently optimise their price offers in the market for mobile services, and in response to changes in MTRs, will re-optimise those prices and service offerings depending on the commercial environment. In re-optimising the service offerings, MSPs have a number of options to maintain net revenues in response to a decline in MTR revenues, for example through increased monthly charges, increased prices for calls, higher minimum commitment thresholds, quicker expiry periods for pre-paid credit, lower handset subsidies, slower rate of handset replacement, reduced customer acquisition costs, etc.

116 http://pressroom.eircom.net/press_releases/article/eircom_and_O2_Announce_Strategic_Network_Partnership/

117 http://www.vodafone.com/content/index/media/group_press_releases/2012/vodafone_three_network.html

6.182 The Final Analysys Mason Report (page 24) notes the various forms of tariff re-balancing available to Service Providers faced with an overall reduction in revenues due to the application of pure LRIC for Termination Rates: "*The majority of MNOs revenues are derived from unregulated services sold in competitive retail markets, therefore network operators will be in a position to decide how to manage the burden of overall cost recovery in the situation of lower wholesale termination revenues (considering their handset, connection, subscription, voice, data and value-added service revenues), or whether to place some of the implications of lower revenues with shareholders*".

6.183 Ofcom expected[118] a switch to pure-LRIC to lead to MSPs recovering common costs from the retail side of the market without causing significant inefficiencies (due to existing relative sophisticated price discrimination strategies at the retail level).

6.184 The burden of common cost recovery, therefore, will not fall entirely onto one specific service, such as call origination, or any particular customer group unless this is a commercially optimal strategy for the MSP, but is more likely to be spread across a range of possible strategic responses. Furthermore, as shown in the Final Analysys Mason Report (redacted Figure 6.4 in this Document) even at current MTRs the 'burden' of cost recovery within the mobile market already falls largely on retail services **[✂.. ....**]. As a result, ComReg shows that there will not be a dramatic shift in the burden of cost recovery, as implied by Vodafone's assertion.

6.185 Notwithstanding the need to take account of the impacts of Termination Rate changes on the sector as a whole (fixed and mobile), ComReg has however considered whether the reduction of this Termination Rate transfer from the fixed to the mobile sector is likely to generate materially undesirable effects for mobile users in (allocative and dynamic) efficiency terms contrary to ComReg's statutory objectives. In particular, ComReg has examined whether setting Termination Rates at pure LRIC might generate:

- possible material reduction in mobile penetration (network externalities), and/or
- possible material concerns regarding MSPs' ability to finance their investments going forward.

[118] Ofcom Statement (Wholesale mobile voice call termination, annex 3, 15 March 2011), §A3.63

6.186 As noted above, ComReg has not identified material concerns regarding either mobile penetration or investment rates as a result of moving to a pure LRIC methodology for setting Termination Rates in Ireland. Furthermore, ComReg considers that reducing fixed-mobile cross-subsidies generated by Termination Rates above efficient cost should generate positive benefits for fixed users by freeing up funds that can be usefully directed towards fixed services and investments and which would not be offset by any corresponding material decline in mobile services and investments.

6.187 **Validity of proposed pure LRIC benchmarking approach and claims regarding insufficient regulatory transparency/certainty regarding proposed implementation of pure LRIC approach**

6.188 ComReg does not accept that the remedies give rise to regulatory uncertainty or that it has failed to assess appropriately the transparency and regulatory risks associated with the remedies. The extent to which the proposed pure LRIC benchmarking approach contributes to regulatory transparency/ certainty is already addressed in detail in paragraph 6.74 above.

6.189 Mindful of the fact that one of ComReg's core statutory objectives is to contribute to the development of the internal market, the stable commitment of the European Commission to the policy of setting Termination Rates based on a pure LRIC methodology should have been clear to all Irish Service Providers. Furthermore, while it was not automatically predetermined or presumed that the 2009 Termination Rate Recommendation would necessarily be implemented in an Irish context, Article 19 of the Framework Directive specifies that Member States shall ensure that NRAs take utmost account of such Recommendations when carrying out their tasks. As a result, operators were on notice of the type of methodology that ComReg was due to consider, and indeed the possibility that ComReg would adopt the pure LRIC approach set out in the Recommendation, even though the existence of the Recommendation did not operate to replace ComReg's consultation and decision-making process. There was no presumption on the part of ComReg that a pure LRIC approach would be adopted and ComReg has adopted a full and detailed consultation process in order to determine the appropriate methodology in this case.

6.190 **Consistency regarding proposal for cost recovery options in Relevant FVCT and MVCT Markets**

6.191 Contrary to Vodafone's claims ComReg does not identify any contradiction in Analysys Mason's views in respect of any incomplete pass-through of MTRs by FSPs to fixed-to-mobile call charges, which it claims may be efficient if subscription charges are reduced at the same time, and its views on the subsidisation of mobile devices via Termination Rates.

6.192 In the fixed sector which has witnessed gradually declining fixed voice subscriptions in recent years and which is currently at approx. two-thirds of Irish households in terms of penetration[119], the channelling of economic rents back to fixed consumers as lower subscription charges (or reduced charges for other types of call) rather than being retained by FSPs as profits, would be efficient insofar as it subsidised take-up of additional fixed voice subscriptions/prompted additional usage of different call types.

6.193 However, subsidising mobile handsets (particularly smartphones) is not equivalent to subsidising ownership of additional voice subscriptions, since the mobile market is already highly saturated in terms of both subscriptions and ownership, and smartphones are not a necessary means of gaining mobile access. Thus, high Termination Rates result in consumers as a group paying more (e.g. because the handset subsidy often encourages handset replacements/upgrading before the end of the lifetime of the handset). In the case of the mobile sector, network externalities (the benefit of greater penetration) are no longer a valid argument for a MTR subsidy in Ireland with higher than 100% subscription penetration and low (network) costs for maintaining a subscription on the mobile network. As noted by the Final Analysys Mason Report (page 93), given that a significant proportion of off-net incoming wholesale mobile termination revenues are paid for by FSPs, it is unlikely that these FSPs would support the subsidised over-supply of mobile subscriptions (i.e. more than 100%) for their mobile competitors – particularly given the situation in Ireland where fixed voice subscription penetration is at comparatively lower levels, i.e. two-thirds of Irish households.

6.194 **Impact of spillover of MTR regulatory price control approach related to SMP Markets**

6.195 The section to which Vodafone refers primarily concerns cost recovery for Service Providers which are already regulated in other wholesale/retail markets, i.e. it mainly concerns the incumbent FSP Eircom which is also regulated *inter alia* in other wholesale voice markets as well as in wholesale (non-voice) markets such as broadband access, leased lines, etc. While cost recovery issues also arise for the MSPs, the fact that MSPs are only regulated in wholesale call termination markets and can otherwise determine their prices (subject *inter alia* to elasticity constraints, etc) across the range of retail and wholesale markets in which they are active implies that the regulator does not have to additionally consider how cost recovery should be facilitated from such other markets. ComReg fails to see how revisiting any approach to cost recovery in fixed wholesale markets could disadvantage MSPs since it relates

[119] See ComReg Document 12/96a, Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location, Appendix A: Market Research prepared by The Research Perspective Ltd, August 2012, published 03/09/2012, ('the 2012 Market Research'), Slide 11.

to the pricing flexibility of the regulated incumbent FSP and to ensuring that it does not experience a material disadvantage vis-à-vis its wholesale call origination customers with whom it competes in retail voice markets. By contrast, MSPs are already free to recover the non-incremental common costs which will no longer be recovered through MTRs from other wholesale and/or retail mobile or fixed markets as they see fit.

6.196 **Distributional effects on different user groups**

6.197 As noted from paragraph 6.79 to 6.119 above, ComReg has carried out extensive qualitative and quantitative analysis of the role and impact of network externalities on an allocatively efficient level of Termination Rates in Ireland. As noted in paragraph 6.112 above, ComReg considers there is a low risk of low usage or marginal users opting to disconnect from the network in response to an MSP's retail strategy in the event of an MTR reduction to a pure LRIC level.

6.198 Evidence presented in section 4.4 of the Final Analysys Mason Report (which analyses anticipated impacts of Termination Rates on retail prices and on different user groups including mobile vs. fixed, off-net vs. on-net, MVNO subscribers vs. MNO subscribers, and vulnerable groups such as low-income users and the elderly) suggests that low-usage groups are not disproportionately reliant on the termination revenue they accrue to their Service Providers in order to be profitable to serve, implying that these groups are not necessarily at risk of being forced to cancel their mobile subscription following a reduction in Termination Rates. Analysys Mason found that low-usage mobile customers are on average quite high-spending on a per minute basis, even after removing the effect of termination payments, while it is typically higher usage users who pay the lowest price per minute in Ireland.

6.199 Low-usage customers are thus not necessarily the most affected by Termination Rate reductions as they are already paying higher per minute charges. If *all* MSPs face lower Termination Rates and have to recover more common cost from their subscribers, they are in a similar position and the primary strategy will not be to prompt significant customer switching between networks. Rather, since pricing incentives are driven by the behaviour of marginal customers (i.e. those most ready to switch networks) Service Providers will likely face incentives to re-optimise their retail tariff packages in such a way as to minimise the switching of marginal customers away from their networks.

6.200 ComReg has analysed whether a reduction in Termination Rates is likely to generate a significant reduction in mobile ownership across various user groups, including the elderly which may be more vulnerable to social exclusion as a result. ComReg also does not dispute Vodafone's comment that households among older age groups are not necessarily economically disadvantaged.[120] However, while material deprivation may decrease with age, the level of social exclusion can be expected to follow the reverse pattern. Exclusion in terms of social participation generally increases as people grow older[121] such that reduced access to mobile networks among elderly user groups could have important consequences in terms of reduced social participation. This is balanced by the fact that the benefits experienced by fixed-line users of pure LRIC MTRs should significantly reach the older population who are much more likely to be fixed line users and least likely to live in mobile-only households. Pure LRIC should also facilitate more balanced equity across on-net and off-net and MNO vs. MVNO user groups.

6.201 As to the level of fixed pass-through of MTR reductions to date, it is important to note that such MTR reductions have been to levels that are still in excess of pure LRIC and still significantly higher than corresponding FTRs. Hence, historic evidence is not necessarily a reliable guide to likely future commercial behaviour where MTRs are actually reduced to a pure LRIC level. Since it is broadly assumed that, in the presence of ex ante regulation, the retail fixed voice calls market is competitive, one would expect cost savings to be passed through to fixed voice calls subscribers, (as noted by Analysys Mason (page 46 of the Final Analysys Mason Report), possibly through lower subscription charges, or reduced charges for one or more call types (e.g. fixed-to-mobile, fixed-to-fixed, or international calls), rather than being retained by the FSPs entirely as profit.

6.202 **Summary of comparative assessment of relevant regulatory approaches**

6.203 ComReg has already set out in detail its view (based on a wide range of qualitative and quantitative evidence) on the comparative performance of pure LRIC and other cost-oriented approaches that result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). This is further re-capped in this summary of the comparative assessment of the available regulatory approaches below.

[120] On a relative basis, the elderly are the social group least at risk of poverty according to the Combat Poverty Agency statistics (see http://www.cpa.ie/povertyinireland/whoispoor.html)

[121] For example, see Gerda Jehoel-Gijsbers and Cok Vrooman 'Social Exclusion Of The Elderly A Comparative Study Of EU Member States', Enepri Research Report No. 57 Aim Wp8.1, September 2008 (see http://aei.pitt.edu/9443/2/9443.pdf)

6.204 The Consultation Document and Chapter 6 of this Document were intended to explore the suitability of different regulatory approaches for setting FTRs and MTRs in Ireland over the forthcoming price control period. In Chapter 4, ComReg introduced a number of potential approaches for regulating FTRs and MTRs. These included:

- Fair and reasonable agreement between Service Providers
- Bill and keep
- Receiving party pays
- Cost orientation (e.g. Pure LRIC or LRAIC+ as representative scenarios)

6.205 ComReg has assessed each of the potential regulatory options to decide which approach, if any, best meet ComReg's objectives for the relevant price control period. To that end, ComReg established a set of Assessment Criteria in Chapter 5 (directly mapped to ComReg's statutory objectives) against which the various possible approaches to setting Termination Rates in Ireland are assessed. These include:

- Efficiency
- Competition
- Equity
- Consistency with the 2009 Termination Rate Recommendation/Contribution to the development of the Internal Market
- Ease of deciding upon implementation approach
- Transparency and regulatory certainty

6.206 ComReg proposed in the Consultation Document that, on balance, a cost-oriented pure LRIC approach scores most favourably against the above Assessment Criteria, and therefore better meets ComReg's regulatory objectives (with regard to the *promotion of competition*, *contribution to the development of the internal market* and *promotion of the interests of users within the Community*). ComReg received a number of submissions in respect of its draft assessment, both dissenting and in agreement with its proposed approach, which have been assessed throughout this chapter.

6.207 ComReg's assessment indicates that the cost-oriented approach to setting MTRs and FTRs compares favourably to the alternative options when analysed against the Assessment Criteria set out in Chapter 5. For example, while the lighter touch regulatory option of 'fair and reasonable' pricing is relatively easy to decide upon and implement initially, it does not perform well in terms of promoting efficiency, competition, equity, consistency with the 2009 Termination Rate Recommendation or facilitating transparency/regulatory certainty. This less favourable performance can be mainly attributed to uncertainty regarding what is meant by a 'fair and reasonable' price level.

6.208 While alternative industry settlement mechanisms such as 'Bill and Keep' and 'Receiving Party Pays' perform well on the competition Assessment Criterion, possible implementation difficulties (including feasibility of mandating these approaches through regulation) are recognised. In particular, the potential for the Receiving Party Pays approach to initially create significant disruption and costs to industry and consumers are noted. The Bill and Keep approach performs comparatively better than Receiving Party Pays on most of the Assessment Criteria. However, it performs marginally worse than a pure LRIC approach under the Assessment Criteria relating to allocative efficiency, equity and need to take utmost account of the 2009 Termination Rate Recommendation/internal market. This comparatively weaker performance may be attributed *inter alia* to possible negative externalities/network efficiency issues which could arise. In addition, its consistency with the 2009 Termination Rate Recommendation/contribution to the internal market remains untested due to the lack of international experience of Bill and Keep being mandated through regulation as a market-wide settlement policy.

6.209 The regulatory approaches assessed as possible alternatives to a cost orientation approach in the Consultation Document were generally not supported by the interested parties. The exception was the Bill and Keep method which H3GI supported. However, taking account of its comparative performance under the Assessment Criteria and the evolution of cost-based regulation of FTRs and MTRs in the EU to date, ComReg considers that regulatory certainty, consistency and stability justifies a continuation of a cost-orientation approach over the forthcoming price control period.

6.210 In addition, recognising the continued ability and incentives for SMP MSPs and FSPs, absent ex ante regulation, to raise the price for wholesale call termination above efficient cost, and mindful of EU regulatory practice to date, ComReg remains of the view that a cost-oriented approach best meets ComReg's regulatory objectives of promoting competition, contributing to the internal market and facilitating maximum end-user benefits for the relevant price control period.

6.211 On that basis, ComReg eliminates the alternative non-cost orientated options in the initial phase of the assessment undertaken in Chapter 6 to focus more specifically on assessing the suitability of two cost-oriented approaches (and implicitly variants thereof) –

- a 'pure LRIC' approach, which is an *incremental cost only* approach where the increment is defined as the wholesale call termination service, and includes only the avoidable cost associated with providing the wholesale call termination service, and

- a 'LRAIC+' approach, which is a *total cost* approach and assumes a broader relevant increment taking all of the Service Provider's traffic-related services into account and includes an allocation of common costs as a mark up (+) to the relevant underlying increment. This approach is representative of a broader set of alternative costing methodologies which would result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services).

6.212 As noted in section 6.2.2 above, ComReg implicitly considered a range of different cost methodology options including cost orientation of Termination Rates both at pure LRIC and at some level above pure LRIC reflecting an allocation of common costs (and possibly also some avoidable costs joint with other services) e.g. as reflected by LR(A)IC+ approaches more generally. ComReg focussed its analysis on the most established cost methodologies for setting Termination Rates, namely pure LRIC and LRAIC+ as representative scenarios, and assessed how these cost orientation methodologies (and variants thereof) would perform against the specific Assessment Criteria. ComReg considers that under this approach the merits and demerits of cost orientation at pure LRIC versus cost orientation above pure LRIC are fully exposed.

6.213 These cost orientation approaches perform similarly against ComReg's Assessment Criteria of ease of deciding on and implementing approach, and transparency/regulatory certainty. The notable difference between them is that, under the pure LRIC approach, Service Providers can only recover incremental/additional costs through their Termination Rates which are specifically related to the provision of the wholesale call termination service, whereas the LRAIC+ approach facilitates a broader recovery of fixed and common costs which may not be solely attributable to just the wholesale call termination service in question.

6.214 In terms of the efficiency assessment ComReg recognises that, abstracting from competition considerations, the arguments between pure LRIC and LRAIC+ tend to be finely balanced in terms of their comparative performance under the static efficiency measures of allocative and productive efficiency.

6.215 While ComReg acknowledges that, where pure LRIC pricing is implemented, the required re-allocation of non-avoidable common and fixed network costs by Service Providers to other retail and/or wholesale services (or a reduction in customer acquisition costs or other cost savings) may be required and the impacts are likely to be felt differently across different stakeholders, this will not come materially at the expense of attracting and maintaining customers on the network. ComReg believes that such re-allocation will occur without encouraging significant numbers of mobile customers to drop their subscriptions. Since a greater proportion of retail revenues would be under the Service Providers' control following a move to pure LRIC (and also considering the likelihood, supported by the economics literature, of a significant but partial waterbed effect, retail price optimisation strategies should provide Service Providers with efficient opportunities to manage fixed and common cost recovery at retail level. By contrast, ComReg notes the inability to rely on Ramsey pricing at wholesale level to achieve allocative efficiency under a LRAIC+ approach. Hence, ComReg considers that pure LRIC is likely to perform marginally better than LRAIC+ in terms of allocative efficiency.

6.216 In terms of productive efficiency, pure LRIC and LRAIC+ both perform similarly well as Service Providers' incentives to invest are driven by many factors other than the level of Termination Rates, especially because most of the assets used to provide call termination are also used to provide other services. However, where retail competition is not fully effective (e.g. potentially due to higher Termination Rates), low wholesale termination costs facilitated by a pure LRIC approach are to be preferred. In addition, when competition considerations are factored into the dynamic efficiency assessment, ComReg considers that a pure LRIC approach would contribute better to a more competitively neutral framework and would be more consistent with promoting sustainable dynamic efficiency incentives over time than a LRAIC+ approach.

6.217 Pure LRIC also performs better than LRAIC+ under the competition and equity Assessment Criteria. In respect of the competition assessment, inter-operator termination transfers are moderated under both approaches, however they are not reduced to the same extent under a LRAIC+ approach as under a pure LRIC approach. Pure LRIC thus contributes better to an easing of financial barriers to entry and growth for net termination payers. In addition, pure LRIC has better potential to reduce tariff-mediated network externalities and to facilitate greater retail pricing flexibility for off-net calls than a LRAIC+ approach. In this respect, ComReg notes that the pure LRIC has a significant comparative advantage under the competition (and related dynamic efficiency) assessment vis-à-vis any costing method which includes a broader increment and/or a mark-up for additional costs (e.g. LRAIC, LRIC+, LRAIC+) The further Termination Rates depart from the pure incremental cost of the wholesale call termination service, the greater the inter-operator termination transfers, the higher the retail price floor for off-net calls, and the greater the potential for the resulting Termination Rates to accentuate tariff-mediated network externalities.

6.218 In respect of the equity assessment, both pure LRIC and LRAIC+ costing approaches perform similarly well, with pure LRIC having a better potential to achieve more balanced equity across all user groups (fixed and mobile, and on-net and off-net). A key source of comparative advantage for pure LRIC under this Assessment Criterion arises from the fact that fixed consumers or consumers wishing to make high volumes of off-net calls ultimately fare better from lower Termination Rates under a pure LRIC approach than under a LRAIC+ approach.

6.219 As regards consistency with internal market considerations, pure LRIC is fully compliant with the 2009 Termination Rate Recommendation and thus scores better than LRAIC+ under this Assessment Criterion. By considering a higher proportion of (non-avoidable) network costs as potentially relevant under a LRAIC+ approach (or any costing approach which assumes a broader increment than the wholesale call termination service and/or a mark-up for additional common costs), a differing regulatory treatment of a single cost component to cost orientation can generate significantly diverging results across EU Member States. By considering only the avoided costs of the wholesale call termination service as relevant for the purposes of the pure LRIC cost calculation, a pure LRIC approach is less likely to be sensitive to cross-country variations and performs better than the LRAIC+ approach in meeting ComReg's objective to contribute to the development of the internal market.

6.220 As illustrated in ComReg's Harvey Balls chart at Figure 6.1 of this Document, ComReg thus considers that on-balance the two cost-oriented approaches of pure LRIC and LRAIC+ perform similarly against the Assessment Criteria identified in Chapter 5. However, in respect of the Assessment Criteria related to dynamic efficiency, competition, equity and internal market considerations, pure LRIC scores higher than other cost-oriented methodologies which result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). Its key source of comparative advantage arises with respect to its better potential to facilitate a competitively neutral framework between Service Providers and to enhance competition to the ultimate benefit of consumers. Pure LRIC performs better than the other costing approaches considered in this Document through reducing inter-operator termination transfers, lowering the retail price floor for off-net calls, reducing the scope for tariff-mediated network externalities, and enabling FSPs and smaller Service Providers to better compete on the basis of their retail offers rather than according to their historic traffic flows and Termination Rates. As pure LRIC is less likely to be sensitive to cross-country variations, it is the cost orientation approach which is also most consistent with ComReg's statutory objective to contribute to the development of the internal market.

6.221 On the basis of the above structured and balanced assessment, ComReg considers that pure LRIC is the preferred regulatory approach to cost orientation. While this Document as a whole constitutes a regulatory impact assessment, the observed impacts on specific Service Providers and stakeholder groups are highlighted/summarised in the Regulatory Impact Assessment ('**RIA**') (Chapter 8).

6.222 The existing system of regulation of the FTRs charged by SMP FSPs is described at Section 2.2 above. In order to ensure symmetry between the FTRs of SMP FSPs, ComReg proposed in the Consultation Document to withdraw the obligations imposed on SMP FSPs (other than Eircom) under Sections 10.3, 10.4 and 10.5 of the Decision Instrument annexed to Decision D06/07 and to replace these with an obligation of cost orientation on each such SMP FSP. No objections were raised by respondents to the consultation in this regard. ComReg has now decided to proceed to amend Decision D06/07 so as to impose a cost orientation obligation on each SMP FSP (other than Eircom) and to require each such SMP FSP to ensure that its FTRs are set in accordance with the pure LRIC costing methodology, for the reasons explained above.

6.2.5 ComReg Decision:

Eircom shall ensure that its maximum FTRs are set in accordance with the Pure LRIC costing methodology.

Other FSPs' obligations set out in Decision Instrument D06/07 shall be withdrawn and replaced with an obligation of cost orientation. Such Service Providers shall ensure that their maximum FTRs are calculated in accordance with the Pure LRIC costing methodology.

For the purpose of further specifying requirements relating to the cost orientation obligation, each SMP MSP shall ensure that its maximum MTRs are set in accordance with a Pure LRIC costing methodology.

6.3 Symmetry versus asymmetry

6.3.1 ComReg's Preliminary View from the Consultation Document

6.223 This is discussed in paragraphs 6.91-6.98 of the Consultation Document. Given that symmetry is part of the 2009 Termination Rate Recommendation, the adoption of an approach based on symmetrical FTRs and MTRs scores well on the need to take utmost account of the 2009 Termination Rate Recommendation/contribution to the internal market objective.

6.224 Regarding an assessment against the efficiency Assessment Criterion, it was identified (see paragraph 6.93 of the Consultation Document) that any assessment would be dependent on the rate set, e.g. symmetry at low rates tends to increase consumption compared to symmetry at high rates.

6.225 Paragraph 6.94 – 6.95 of the Consultation Document discusses the impact of symmetry on competition. It identifies that, due to reduced incentives for tariff-mediated network externalities, symmetry for MSPs at a pure LRIC level would have a positive implications for mobile-to-mobile competition; while symmetry for FSPs would have positive implications for fixed-to-fixed competition. In addition, it was identified that asymmetric Termination Rates could send the wrong signals to potential new entrants, generate uncertainty and lead to possible disputes between new entrants and existing Service Providers.

6.226 In assessing the equity impact, it was noted that while there may be consequences for some consumer groups in the short term, all consumers are likely to benefit from the positive competition effects in the long term. In relation to regulatory certainty and transparency, all Service Providers are treated the same and the Termination Rates are set in the public domain.

6.227 For the reasons set out above (and in paragraphs 6.91 – 6.98 of the Consultation Document) ComReg was of the preliminary view that symmetry of rates for both the fixed and mobile markets respectively is appropriate.

6.228 In its Consultation Document, ComReg asked the following question:

Q. 4 Do you believe that asymmetry should be allowed for any FSPs or MSPs going forward? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

6.3.2 Views of Respondents

6.229 In response to ComReg's preliminary view that symmetry of Termination Rates in Markets 3 and 7 respectively is appropriate, Vodafone and Eircom essentially support ComReg's view. Vodafone, however, is of the view that it can be achieved using the existing voluntary glide path based on the existing BEREC benchmarks. Eircom believes that any proposal to allow Service Providers to charge higher rates supplies "*incentives to game the Decision*" by managing the criteria under which symmetry would not apply. Furthermore, Eircom proposes that its primary Termination Rates should be the FTRs in Ireland.

6.230 O2, H3GI, Magnet and ALTO disagree with ComReg's preliminary view that symmetry of Termination Rates in Market 3 and 7 respectively is appropriate. O2 supports asymmetry in the short term and is of the view that any potential issues around asymmetry could be avoided if "*clear guidance*" is provided by ComReg. H3GI is of the view that asymmetry should only be allowed where an FSP or MSP can demonstrate an objective justification for such asymmetry. Both Magnet and ALTO believe that smaller Service Providers are at a disadvantage if asymmetry is not allowed as they may not be recovering their costs while larger Service Providers may be making a profit at the same Termination Rate. Magnet and ALTO are of the view that MSPs generally have a sufficient market share which would ultimately ensure that they are not discriminated against if a symmetrical MTR is imposed. In contrast, Magnet and ALTO are of the view that, in the FVCT market, very few FSPs have a market share in excess of 10% and therefore, symmetrical FTRs based on the incumbent may be discriminatory.

6.231 BT has no comments on this question. TMI does not respond directly to this question but did make arguments regarding its individual position and its contention that it should benefit from an asymmetric regulatory approach. For example, TMI claimed that ComReg's proposed transition must reflect the obvious differences between TMI and the major MSPs. It also refers to European Commission comments that "*a delay – if very limited – in the implementation of cost-oriented rates is acceptable, taking account of the need to minimise business and regulatory uncertainty in the… markets flowing from an important decrease in MTRs*".

6.232 Please refer to ComReg Document No. 12/110[122] for a published version of all the non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

[122] ComReg Document 12/110 'Voice Termination Rates in Ireland – Non-confidential submissions received from respondents'; published on 11 October 2012.

6.3.3 ComReg's Assessment of Responses and Final Position

6.233 Having considered the views of interested parties, ComReg has decided to apply a symmetric approach to setting maximum FTRs and MTRs for all Service Providers in Ireland. ComReg proposes to address the issues raised by the stakeholders above under two key headings as follows:

- Arguments for asymmetric Termination Rates for MSPs
- Arguments for asymmetric Termination Rates for FSPs

6.234 **Arguments for asymmetric Termination Rates for MSPs**

6.235 ComReg remains of the view that higher MTRs for smaller MSPs significantly risks facilitating a range of important retail distortions:

- Rewarding a MSP for its smaller size can give inappropriate investment signals, inhibits incentives to gain customers and risks promoting inefficient entry. This risks the inappropriate recovery of inefficiently incurred costs or costs related to network elements/investments which do not affect the delivery of voice call termination services;
- Setting a higher price floor for off-net calls risks a restriction of retail pricing flexibility for off-net calls (including limiting the development of innovative tariffs involving off-net call minutes and restricting commercial opportunities for Service Providers who want to attract a more mixed user base such as users with higher outbound call volumes); and/or
- Asymmetric Termination Rates can help larger Service Providers to justify higher off-net retail tariffs reinforcing the ability of larger Service Providers to implement on-net/off-net retail tariff differentials thereby exploiting tariff-mediated network effects which may further raise switching costs for customers within calling circles (such as families or groups of friends) thereby potentially muting retail competition.

6.236 ComReg also notes that the 2009 Termination Rate Recommendation essentially states that by the end of 2012, NRAs are recommended to mandate symmetric Termination Rates for FSPs and MSPs respectively and that any asymmetry for new mobile entrants should be objectively justified and limited in time (so as to avoid promoting inefficient entry and/or providing additional reinforcement of tariff-mediated network externalities). The 2009 Termination Rate Recommendation further specifies that asymmetries should only be allowed in very specific circumstances where retail impediments to entry and expansion have been identified, as highlighted in point 10 which stipulates that:

"*In case it can be demonstrated that a new mobile entrant operating below the minimum efficient scale incurs higher per-unit incremental costs than the modelled operator, after having determined that there are impediments on the retail market to market entry and expansion, the NRAs may allow these higher costs to be recouped during a transitional period via regulated termination rates. Any such period should not exceed four years after market entry.*"

6.237 ComReg has not received any relevant evidence supporting the need for asymmetric MTRs for smaller MSPs based on objectively justifiable exogenous cost differences relevant to wholesale call termination services over the relevant price control period.

6.238 In taking the decision to move to a symmetric maximum MTR for all MSPs from July 2013, ComReg has in particular considered:

- the superior comparative performance of pure LRIC relative to other cost orientation approaches against ComReg's Assessment Criteria (which are in turn mapped to ComReg's statutory objectives);

- the relatively significant asymmetric Termination Rates which a number of late entrant MSPs in Ireland have already benefited from to date (see Tables 1-6 of the 2012 MVCT Decision);

- the scope for high asymmetric Termination Rates to contribute to other potentially enduring retail distortions associated with inefficient entry, a restriction of retail pricing flexibility, and/or tariff-mediated network externalities and associated switching costs;

- the more direct mechanisms which ComReg has employed in addressing barriers to entry and expansion in mobile markets (such as competitive spectrum auction processes and effective number portability processes);

- the view reached by ComReg that any price restructuring, as a result of implementing pure LRIC-based Termination Rates, is unlikely to lead to a material reduction in mobile ownership in Ireland relative to the application of a LRAIC+ approach (see paragraph 6.112 above);

- the absence of convincing cost-based evidence supporting persistent asymmetries for smaller MSPs, recognising in particular that the most recent entrants in the Irish mobile market have been MVNOs which, in the case of MVNOs, through leasing relevant network inputs from the mobile network operators, may reduce the impact of economies of scale implying that low unit costs could potentially be achieved at low levels of output;

- ComReg's role in promoting the competitive process as a whole, taking account of the fact that termination revenue for one Service Provider is a termination expense for another Service Provider; and

- ComReg's role in contributing to the internal market, since asymmetric Termination Rates can reinforce cross-country variations in Termination Rates, thereby generating regulatory uncertainty for cross-border investment decisions.

6.239 **Arguments for asymmetric Termination Rates for FSPs**

6.240 ComReg notes that the existing asymmetries between FTRs has not resulted in on-net/of-net price differentiation to date and as a result, tariff-mediated network externalities appear to be of a negligible magnitude in the provision of fixed voice calls services at this time. At the same time, however:

- Rewarding a FSP for its smaller size can give inappropriate investment signals, inhibits incentives to gain customers and risks promoting inefficient entry. This risks inappropriate recovery of inefficiently incurred costs or costs related to network elements/investments which do not affect the delivery of voice call termination services; and/or

- FTRs set above efficient cost may reduce the flexibility for retail pricing innovations to occur (such as, in the offering of more inclusive any network minute bundles or unlimited call offerings). High per-minute termination rates effectively create a floor to retail pricing and tend to make it difficult for Service Providers to offer innovative calling plans with larger volumes of inclusive off-net minutes to fixed numbers due to uncertainty regarding customer take-up and usage.

- Whilst currently much less of a risk in fixed voice markets than in mobile voice markets, symmetric pure LRIC rates arguably further minimise the scope for tariff-mediated externalities to materialise in fixed voice retail packages

6.241 ComReg has not received any relevant evidence supporting the need for asymmetric FTRs for smaller FSPs and Magnet and ALTO's concern that a smaller FSP's unit cost may be higher than the unit cost incurred by larger FSPs appears to be assumptive without the supporting evidence. Furthermore, paragraph 17 of the 2009 Termination Rate Recommendation notes that the European Commission did not perceive there to be a need to allow new entrants in fixed markets to benefit from asymmetric Termination Rates, since such new entrants *"have the opportunity to achieve low unit costs by focusing their networks on high-density routes in particular geographic areas and/or by renting relevant network inputs from the incumbents."*

6.242 This ability for new entrant FSPs to overcome economies of scale is further reiterated in the Explanatory Note to the 2009 Termination Rate Recommendation where it notes: *"Firstly, in fixed networks operators have the ability to rent infrastructure and to purchase interconnection. Secondly, fixed operators have the opportunity to build their networks in a particular geographic area and focus on higher-density routes. Consequently, fixed operators can potentially achieve low unit costs at low levels of output and thereby reduce the impact of economies of scale".*

6.243 Therefore, in absence of convincing evidence supporting asymmetries for smaller FSPs, and taking account also of the ability of FSPs to reduce the impact of economies of scale, ComReg has reached a decision that there are insufficient grounds to allow asymmetric FTRs over the relevant price control period.

6.244 As regards Magnet and ALTO's view that in the FVCT market very few Service Providers have a market share in excess of 10% and, therefore, symmetrical FTRs based on the incumbent may be discriminatory, ComReg is of the view that the maximum FTR should where feasible be based on the costs of a hypothetical *efficient* Service Provider. If the regulation of termination charges was based on the *actual* costs of the Service Provider, this would not provide the right incentives for Service Providers to innovate and increase efficiency, as their inefficiency would be covered by their competitors and their competitors' customers (see page 7 of the Explanatory Note to the 2009 Termination Rate Recommendation).

6.245 As also noted in the Explanatory Note the 2009 Termination Rate Recommendation (page 24) "*When deciding on the appropriate single efficient scale of the modelled operator, NRAs should take into account the need to promote efficient entry, while also recognising that under certain conditions smaller operators can produce at low unit costs by operating in smaller geographic areas. Furthermore, smaller operators which cannot match the largest operators' scale advantages over broader geographic areas can be assumed to purchase wholesale inputs rather than self-provide termination services*".

6.246 In taking the decision to move to a symmetric maximum FTR for all FSPs from July 2013, ComReg has in particular considered:

- the superior comparative performance of pure LRIC relative to other cost orientation approaches against ComReg's Assessment Criteria (which are in turn mapped to ComReg's statutory objectives);
- the relatively significant asymmetric Termination Rates which a number of late entrant FSPs in Ireland have already benefited from to date (see Figures 21 and 22 of ComReg Document 12/96);
- the scope for high asymmetric Termination Rates to contribute to other potentially enduring retail distortions associated with inefficient entry, a restriction of retail pricing flexibility, and/or (while less of a risk in fixed voice markets) tariff-mediated network externalities and associated switching costs;
- the absence of convincing cost-based evidence supporting persistent asymmetries for smaller/new entrant FSPs, recognising in particular the opportunity for new entrant FSPs to achieve low unit costs by focusing their networks on high-density routes in particular geographic areas and/or by renting relevant network inputs from the incumbents;
- ComReg's role in promoting the competitive process as a whole, taking account of the fact that termination revenue for one Service Provider is a termination expense for another Service Provider; and
- ComReg's role in contributing to the internal market, since asymmetric Termination Rates can reinforce cross-country variations in Termination Rates, thereby generating regulatory uncertainty for cross-border investment decisions.

6.3.4 ComReg Decision

There shall be a symmetric maximum MTR for all SMP MSPs from 1 January 2013. In addition there shall be a symmetric maximum FTR for all SMP FSPs from 1 July 2013.

Chapter 7

7 Implementation of the Preferred Price Control

7.1 Overview

7.1 Chapter 7 of the Consultation Document identified that while the 2009 Termination Rate Recommendation sets out clear guidelines to NRAs on the implementation timelines that the European Commission recommends should be adopted, it is necessary for ComReg to set out how and when the proposed methodology should take effect in the relevant Irish markets.

7.2 Paragraphs 7.4 – 7.5 of the Consultation Document set out ComReg's proposal to commence a pure BU-LRIC cost modelling exercise in respect of MTRs in 2013. It is anticipated that data will be gathered by ComReg from the MSPs in order to build an appropriate pure BU-LRIC model for MTRs (with ComReg intending that the maximum permitted MTR from July 2014 will be set on the basis of that model). In the intervening period, ComReg considered in the Consultation Document that an alternative approach based on benchmarking against the modelled pure BU-LRIC MTRs in other EU Member States could be used to arrive at an appropriate MTR for SMP MSPs in Ireland from 2013. This is discussed in more detail below.

7.3 As regards FTRs (which to date have only been regulated insofar as Eircom is concerned), paragraphs 7.6 – 7.7 of the Consultation Document identified that ComReg has to date used a BU-LRAIC+ model based on Eircom's fixed line network infrastructure (adjusted to reflect the costs of an efficient operator). Given that this model was built several years ago, ComReg proposed in the Consultation Document to update this model for the purposes of arriving at a pure BU-LRIC FTR for all SMP FSPs with effect from 1 July 2013. Regarding the FTRs for SMP FTRs other than Eircom, ComReg proposed (see paragraph 7.10 of the Consultation Document) that these FSPs should charge no more than the FTR derived from the proposed updated pure BU-LRIC model, in the absence of any further information from such FSPs containing robust costing data to support an alternative rate.

7.4 Chapter 7 of the Consultation Document then went on to discuss the implementation of the cost orientation obligation in the MVCT and FVCT markets together with the process of common cost recovery if a pure LRIC cost methodology is adopted by ComReg.

7.2 Cost Orientation in the MVCT Market

7.2.1 ComReg's Preliminary View from the Consultation Document

7.5 The regulation of MTRs to date was discussed in paragraphs 7.12 to 7.17 of the Consultation Document. It was identified that, to date, MTRs of SMP MSPs in Ireland have been set on the basis of a benchmarked voluntary glide path approach, with the average being derived from a combination of the BEREC six monthly snapshot reports and any known updates by NRAs in Member States not recorded in the most recent snapshot. To date this approach has led to reductions in MTRs every six months by those MSPs designated with SMP in 2004 and 2008 (i.e. Vodafone, O2, Meteor and H3GI).

7.6 Under the current benchmark approach[123] (and as identified in paragraph 7.16 of the Consultation Document) the MTRs for Vodafone, O2, Meteor and H3GI[124] will be symmetrical rates by the end of 2012. However, the proposed move to a pure LRIC methodology will mean that all SMP MSPs will experience a steeper decline than experienced under the voluntary glidepath used to date. This is because the BEREC average (which has been the basis for benchmarking of MTRs to date) may include Member States that have not yet implemented the 2009 Termination Rate Recommendation, whereas the approach to benchmarking of MTRs proposed in the Consultation Document (and as modified in this Document) will only include Member States which have final and binding decisions consistent with the approach recommended in the 2009 Termination Rate Recommendation. Accordingly, the BEREC average MTR (which has been the basis for benchmarking of MTRs to date) is likely to be higher than a benchmark which includes only those Member States that have adopted a pure LRIC cost methodology that is consistent with the 2009 Termination Rate Recommendation.

[123] ComReg Document No. 10/82: Further reductions in mobile termination charges by Vodafone, O2, Meteor and Hutchison 3G (Ireland); published on 8 October 2010.

[124] ComReg Document No.12/46 proposed that TMI and Lycamobile should be designated with SMP in the MVCT market in which each operates. The 2012 MVCT Decision has confirmed this designation.

7.7 As set out in paragraph 7.18 of the Consultation Document, it was ComReg's preliminary view that all MSPs designated (or proposed to be designated) with SMP should set MTRs on the basis of a pure LRIC methodology. As noted previously, ComReg has decided in the 2012 MVCT Decision to re-designate Vodafone, O2, Meteor and H3GI with SMP and to designate two additional MSPs with SMP for the first time (i.e. TMI and Lycamobile). In terms of implementation (and as discussed in paragraphs 7.18 to 7.81 of the Consultation Document), there are two options considered by ComReg to calculate MTRs i.e. use of a pure BU-LRIC model or a benchmark derived from EU Member States in which NRAs have a final and binding decision providing for the imposition of MTRs on the basis of a pure BU-LRIC model.

7.8 As identified in paragraphs 7.20 – 7.21 of the Consultation Document, ComReg does not currently have a pure BU-LRIC model to determine MTRs. Although the 2009 Termination Rate Recommendation recommends that NRAs should implement a pure BU-LRIC methodology by 31 December 2012, it was not considered feasible in Ireland to have such a model prior to 2013 given that it takes a significant amount of time to build a model and, like many NRAs across Europe, resources are limited in ComReg to allow the appropriate amount of time to develop a pure BU-LRIC model[125] by 2013.

7.9 Paragraphs 7.27 – 7.29 of the Consultation Document proposed that, in the absence of a pure BU-LRIC model, a benchmark approach should be applied. Paragraph 7.28 of the Consultation Document identified that benchmarking is specifically mentioned in the 2009 Termination Rate Recommendation as an alternative methodology that can be used in the short term (until July 2014) and where the NRA has limited resources. Paragraphs 7.30 – 7.40 of the Consultation Document discussed the implementation of the 2009 Termination Rate Recommendation by other NRAs and the comments made by the European Commission. An update of developments which have taken place since the publication of the Consultation Document is set out in Annex 4 to this Document.

7.10 ComReg's proposed approach in the Consultation Document for benchmarking MTRs is set out in paragraphs 7.41 to 7.45 of the Consultation Document i.e. the benchmark MTR should be the simple average of the results of pure BU-LRIC models adopted by NRAs in other EU Member States with a final and binding decision in place. At the time of publishing the Consultation Document, France was the only Member State to have a final and binding decision in place in relation to MTRs set on the basis of a pure LRIC cost methodology.

[125] ComReg has however set out its intention to commence a modelling exercise to establish an appropriate pure BU-LRIC model for MTRs to meet the 1 July 2014 timeline set out in the 2009 Termination Rate Recommendation.

7.11 Having considered both approaches, ComReg was of the preliminary view that the pure LRIC methodology for MTRs should be implemented using a benchmark approach (as set out in paragraph 7.47 of the Consultation Document. This benchmarked MTR being the maximum MTR that should be applied until such time as a fit for purpose pure BU-LRIC cost model is available for MTRs in Ireland (which ComReg intended would be no later than July 2014).

7.12 In the Consultation Document, ComReg asked the following question:

Q. 5 Do you agree or disagree with the proposed benchmarking approach for MTRs set out above? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.2.2 Views of Respondents

7.13 Of the eight responses to the Consultation Document, set out below are the high level views of respondents regarding the proposal that in the short term the pure LRIC cost methodology for MTRs should be implemented by means of a benchmarking approach:

- Four respondents (H3GI, Eircom, Magnet and ALTO) essentially agree with ComReg's proposal, one respondent partially agreed (O2);
- One respondent (Vodafone) disagrees; and
- Two respondents (BT and TMI) have no direct comments in relation to this question.

7.14 O2 agrees in principle with the use of a benchmarking approach provided any benchmarking is "*robust and objectively suitable to a small market such as Ireland"*. However, O2 underlines that it would not support a benchmark based only on those markets where pure LRIC is in place. Furthermore, it re-iterates its support for a continuation of the current voluntary approach. H3GI also supports the proposed benchmark pending the implementation of a cost model.

7.15 Vodafone disagrees with the proposed approach. In its view ComReg is proposing to benchmark against an exceptionally small sample *of* countries and has carried out *"no analysis*" to suggest this is appropriate. Vodafone believes that there are compelling reasons which indicate that the resultant Termination Rate is likely to be *"below the LRIC cost for Ireland"* and ultimately will result in the imposition of losses on Vodafone and other operators for every minute received in the context of MVCT. Vodafone

believes that this is likely to be the case due to the scale of Irish operators compared to the countries in ComReg's proposed benchmark. In Vodafone's view, Irish operators are unlikely to benefit from the same economies of scale. Vodafone also makes reference to Ireland's dispersed population which is likely to lead to higher traffic costs.

7.16 In Vodafone's opinion under a LRIC+ regime and using a benchmark incorporating more countries, NRAs would have a higher degree of certainty that even if the benchmark rate differs from the 'true' country specific cost, it is very unlikely in Vodafone's view that the MTR will be out of the LRIC – SAC range.

7.17 Furthermore, Vodafone does not agree with the Consultation Document assertion that ComReg's proposed benchmarked countries do not differ materially. Vodafone points to what it terms *"substantial variances"* in the MTRs with variances of almost 0.5 cents (i.e.0.8 cents in France compared to 1.27 cents in Portugal).

7.18 Vodafone also claims that ComReg's proposal will lead to an *"unreasonable degree of regulatory uncertainty"* because the benchmark will ultimately change as decisions become binding in more countries. In addition, given the small number of countries proposed in the benchmark, this could have a substantial impact on the benchmark. Vodafone argues that *"not knowing what one of its key drivers will be, whether its fixed costs will be recoverable, or potentially, whether it will be forced to make a loss on every minute it receives is simply not acceptable."*

7.19 Vodafone then goes into further detail around its disagreement with the proposed benchmark. In summary, Vodafone believes it is not a suitable approach because it does not consider the comparability between Ireland and the benchmarked countries (Vodafone provides examples such as mobile technology deployed, network usage and scale, geographic characteristics etc) and Vodafone also believes that the calculation of the average value is *"arbitrary and not sufficiently robust"* due for example to the small scale of the sample and significant variances between the selected countries. In Vodafone's view, the composition of the countries included in the benchmark is arbitrary and determined by regulatory and legal proceedings in other EU Member States. Furthermore, Vodafone claims that *"ComReg is now proposing, within a 10 month period, to cut termination rates by as much as 80%, making them the lowest in Europe."* Vodafone believes that such a cut is inappropriate based on what it terms such *"limited and flawed analysis"* and Vodafone claims that it could force operators to price MTRs below cost.

7.20 Please refer to ComReg Document No. 12/110 which sets out the published non-confidential responses and the accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.2.3 ComReg's Assessment of Responses and Final Position

7.21 Having considered the views of interested parties, it is clear that there are very mixed views with regard to ComReg's proposed approach of benchmarking MTRs in Ireland to other Member States. Vodafone in particular has set out a number of concerns which ComReg has considered in great detail. ComReg is cognisant of the possible issues with using a benchmark approach and the robustness of such an approach. To address these concerns and to minimise the uncertainty around the proposed approach, ComReg requested its Consultants, Analysys Mason to conduct a study of the pure BU-LRIC models developed in other Member States (the Analysys Mason Benchmarking Report). Analysys Mason has been involved in building pure BU-LRIC models in a number of countries (including some Member States that ComReg will use in its benchmark set). Analysys Mason therefore has a good understanding of the key characteristics that drive the level of incremental cost recovery in such pure BU-LRIC models. The full details of this analysis are set out in the Analysys Mason Benchmarking Report which has been published separately to this document[126]. This analysis has also allowed ComReg to address some of the concerns raised by Vodafone in more detail. A response to each of the key issues raised by Vodafone in its response and to the concerns raised by O2 has been either discussed previously in this Document or is set out below.

7.22 ComReg's views on many of Vodafone's comments around benchmarking (as set out in paragraph 4.18 and paragraphs 7.15 to 7.19) have already been considered by ComReg in its response to Question 1 in this Document. Please refer to paragraph 4.50– 4.55 above for the details of ComReg's views in this regard.

7.23 ComReg agrees that using only one country in the MTR benchmark is not appropriate and it is not now proposing to use such an approach. While France may be the only country to date to have in place *unchallenged* regulated MTRs based on a pure LRIC methodology effective in that market from 1 January 2013, other Member States have completed pure BU-LRIC models and notified the European Commission of the results of these pure BU-LRIC models. To date, seven Member States have notified the European Commission of MTRs using pure BU-LRIC models and those models have been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation. The relevant rate for each Member

[126] The Analysys Mason Benchmarking Report – see footnote 51 above.

State is the pure BU-LRIC rate adopted in the NRA's final decision.

7.24 The Analysys Mason Benchmarking Report concludes that, in terms of country-specific features that can potentially impact on the pure BU-LRIC costs, Ireland has broadly similar characteristics to other Member States for those characteristics that are relevant to the avoidable cost standard. The results from a detailed pure BU-LRIC modelling exercise for Ireland would likely not fall materially out of the range presented in the Analysys Mason Benchmarking Report regarding the mobile termination costs calculated for other Member States using a pure BU-LRIC methodology.

7.25 ComReg believes that Vodafone does not provide sufficient evidence to support its claim that MTRs based on the benchmarking methodology will be below true pure BU-LRIC costs in Ireland. Vodafone has put forward two country-specific factors which in its view would generate a higher pure BU-LRIC cost result for Ireland than the benchmarked range. These include: (i) the fact that Irish operators are relatively small compared to those in the benchmarked countries and, thus it is claimed by Vodafone, they are unlikely to be able to benefit from the same economies of scale, and (ii) the fact that the population dispersion in Ireland is likely to be higher than in the other Member States, which Vodafone claims would lead to higher traffic costs. However, neither of these examples conclusively shows that a pure BU-LRIC cost model would yield a higher result for Ireland, taking into account also the several other important cost drivers analysed in the Analysys Mason Benchmarking Report. For example, the reference to a smaller MSP size would likely not be a materially upward influencing factor as suggested by Vodafone since the pure BU-LRIC model in other countries has typically been built on the basis of reflecting the costs of a hypothetical efficient operator. Hence, the market share reflected in pure BU-LRIC models to date has typically reflected the average market share of the operators rather than individual operators' allocation. The Analysys Mason Benchmarking Report notes further that the presence of four mobile network operators in the Irish market implies, a relatively smaller market share than in countries with fewer operators which could potentially lead to a lower pure BU-LRIC outcome.

7.26 A significant review of the various inputs and outputs, as set out in the Analysys Mason Benchmarking Report, of the pure BU-LRIC models built in other Member States and relevant country-specific factors shows that all of the main cost characteristics of the Irish network are likely to be broadly between the upper and lower values of the countries with modelled MTRs. Hence, contrary to Vodafone's view, ComReg believes that a benchmark based on a simple average of the MTRs adopted in the seven countries available (i.e. where a) those NRAs have notified the European Commission of MTRs using pure BU-LRIC models, b) those models have been accepted

by the European Commission as being consistent with the 2009 Termination Rate Recommendation, and c) the relevant NRA has adopted a final decision setting a BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision) is appropriate and is sufficiently representative of the prevailing incremental mobile termination cost conditions in Ireland.

7.27 In response to Vodafone's points outlined in paragraph 4.18, while ComReg agrees that the benchmarking methodology could potentially be more robust if more countries were available for benchmarking, it can be observed that MTRs based on pure BU-LRIC models are within a relatively limited range of between 0.8 and 1.27 eurocent per minute despite the variety of country and model characteristics in the benchmarked countries. Therefore, it is not that this is a widely dispersed sample. Furthermore, having undertaken a significant review of the various inputs and outputs of the models built in other Member States where that information is available (see the Analysys Mason Benchmarking Report), ComReg has not identified country-specific characteristics that would clearly place Ireland above or below the simple average of the benchmarked countries. It is therefore ComReg's opinion that the robustness of the proposed MTRs would likely not be increased significantly by the inclusion of more countries in the benchmark calculation.

7.28 ComReg would also like to note that the benchmark will be reviewed every 6 months and may, where appropriate, be updated on foot of such a review to ensure that Irish MTRs continue to be consistent with the simple average of the modelled pure BU-LRIC MTRs adopted by NRAs in countries where: a) the relevant NRAs have notified the European Commission of MTRs using pure BU-LRIC models, b) those models have been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation, and c) the relevant NRA has adopted a final decision setting a BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision. Such a periodic review should continue to ensure a robust benchmarking approach as more NRAs are expected to notify modelled pure BU-LRIC MTRs to the European Commission in the forthcoming months. While there is a risk that the inclusion of more countries with a modelled pure BU-LRIC MTR in the upper range could lead to a higher simple average, ComReg does not believe this risk can be quantified and, based on ComReg's review of the Analysys Mason Benchmarking Report, it believes that the risk of a modelled rate being materially higher than the benchmark rate proposed is relatively low.

7.29 ComReg considers that its revised approach also addresses concerns raised

by O2. ComReg considers that the benchmarking exercise as adopted in the final decision is robust, objectively suitable to a small market such as Ireland, proportionate and consistent with its obligations under EU and national law

7.30 ComReg has now decided to set the MTR for Ireland based on a simple average of the modelled pure BU-LRIC MTRs notified by, to date, seven Member States to the European Commission (and where the notified models have been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation and the relevant NRA has adopted a final decision setting a BU-LRIC MTR, irrespective of whether that decision is currently under appeal. The relevant rate for each Member State for the purposes of the calculation of the average is the pure BU-LRIC rate adopted in the NRA's final decision. ComReg does not believe this calculation is arbitrary, nor will it impose the "lowest" termination rates in Europe, as stated by Vodafone. ComReg believes that the inclusion of seven countries in the benchmark makes the calculation sufficiently robust, given the relatively small variation across the notified MTR values, namely 0.8 to 1.27 eurocent per minute. While MSPs may assert that even this difference is material in terms of wholesale revenue to their business, the purpose of the benchmark exercise is to reflect, as closely as possible, the likely pure incremental cost to an Irish MSP of terminating voice calls. ComReg can see no objective justification for allowing a higher MTR to enable the recovery of pure incremental cost above the simple average of the modelled pure BU-LRIC MTRs and no such justification has been provided by MSPs. Furthermore, having undertaken a significant review of the various inputs and outputs of the models built in other Member States where that information is available; ComReg has not identified country-specific characteristics that would clearly or unambiguously place Ireland above or below the simple average of the benchmarked countries.

7.31 ComReg acknowledges that, as with any averaging calculation, there is a confidence interval around the average, which is related to the size of the sample being averaged, and the range of values in the sample. ComReg believes that, to minimize the confidence interval around the average, as many countries as feasibly possible should be included in the average. To take this into account and consistent with guidance provided by the European Commission[127], ComReg has decided to set MTRs based on benchmarking EU countries where a pure BU-LRIC model has been notified to the European Commission and has been accepted as being consistent with the 2009 Termination Rate Recommendation the relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision. Therefore, the

[127] See case LV/2012/1356: Voice call termination on individual mobile networks in Latvia, Comments pursuant to Article 7(3) of Directive 2002/21/EC, 13/08/2012, concerning the benchmarking methodology adopted by Latvian NRA.

seven countries[128] which have notified a pure BU-LRIC model for MTRs to the European Commission under Article 7 to date (and where that modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation and the relevant NRA has adopted a final decision setting a BU-LRIC MTR, irrespective of whether that decision is currently under appeal will be included in the benchmark calculation. The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision.. ComReg agrees that specific conditions that affect the incremental costs of MTRs in Ireland could potentially differ from those conditions in particular benchmarked countries. For this reason, Analysys Mason, in its Benchmarking Report, has performed an additional analysis on suitability of the benchmarking approach for setting MTRs in Ireland. The Analysys Mason Benchmarking Report examines whether the underlying cost drivers of MTRs differ between countries, and provides a comparison between Ireland and other Member States regarding the characteristics that can materially affect the pure incremental cost of terminating mobile calls. The main conclusions reached from the comparison are as follows:

- Two of the factors analysed (the extent of network coverage and voice usage) may lead to termination cost being higher in Ireland than the average of the benchmarked countries.
- One of the factors analysed (market share) may lead to termination cost being lower in Ireland than the average of the benchmarked countries.
- For five factors analysed (spectrum allocations, 2G/3G traffic mix, population density, radio deployment costs and WACC) it is not obvious at this stage whether they may lead to termination cost being higher or lower in Ireland than the average of the benchmarked countries.
- Seven factors analysed (spectrum fees, topography, subscriber penetration, mobile broadband usage, switching network topology and costs, backhaul technology and model duration) would probably not lead to termination cost being different from the average of benchmarked countries.

7.32 The Analysys Mason Benchmarking Report concludes that Ireland has broadly similar characteristics to other Member States and that the results from a detailed pure BU-LRIC modelling exercise would likely not fall materially outside of the range of the mobile termination costs calculated using pure BU-LRIC models in other countries. Whilst acknowledging that a definitive conclusion cannot be reached on a number of the pure LRIC cost

[128] Belgium, France, Portugal, Italy, Spain, Denmark and the United Kingdom.

drivers noted above, ComReg believes the benchmark is suitable to reflect the pure LRIC incurred by a MSP in the provision of MVCT services to a third party in the period from 1 July 2013.

7.33 ComReg will monitor developments in Europe closely, will review the benchmark every six months and, where appropriate, may update the benchmark on foot of such a review to ensure that to ensure that Irish MTRs continue to be consistent with the simple average of the modelled pure BU-LRIC MTRs adopted by NRAs in countries in which a pure BU-LRIC model has been notified to the European Commission and where those models have been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation. As the MTR now proposed will be in place from 1 July 2013, the next possible review of the benchmark will be late 2013. As it is ComReg's intention to develop a pure BU-LRIC model in 2013, a modelled rate for Ireland may be available by late 2013 which may also inform any such review. While MSPs and FSPs have requested as much certainty and stability as possible, ComReg does not believe, based on the analysis carried out of typical models already built across Europe, that an Irish modelled MTR will be materially different to the MTR now being set which is to take effect from 1 July 2013. Therefore, to the extent that a pure LRIC-based MTR will have an impact on the pricing strategies of Service Providers, ComReg believes this Document provides sufficient assurances about likely future changes to the MTR.

7.34 ComReg has considered the likely (static) financial impacts of its proposals in detail on the wholesale revenues of the FSPs and MSPs. To date, call termination (fixed and mobile combined) is a net cost for FSPs and for smaller MSPs but is a net income stream for the larger MSPs or for those MSPs which have traditionally benefitted from high asymmetric MTRs. To date, the transfer of funds has predominantly been from the fixed sector to the mobile sector as MTRs are significantly higher than FTRs. Any change to this will clearly reduce the MSPs' wholesale revenues but it will also reduce a significant cost of sale for the FSPs. Continuing with the current system of Termination Rates above efficient cost can have significant negative effects on the profitability of FSPs and MSPs with fewer subscribers. Furthermore, any assessment of the impacts on the profits of operators which are currently net receivers of termination revenues should take into account the opportunities which arise for such operators to recover forgone wholesale revenues from the retail side of the market both on a static and dynamic basis.

7.35 While the large MSPs have complained that they will be negatively impacted by this Decision, this argument is based on a selective assessment of the impacts on net receivers only and neglects to take into account the competitive effects for all stakeholders arising from Termination Rates set above efficient cost including net payers (both through the direct impact of net termination payments above the efficient rate and because of relative competitive disadvantages created by higher Termination Rates for such parties). Higher Termination Rates under a LR(A)IC+ approach magnifies the financial outflows which networks with fewer subscribers potentially face where a greater number of their calls are made to subscribers located on other (typically larger) networks. This potentially gives rise to a competitive imbalance between smaller networks which are frequently net termination payers and larger networks which are frequently net termination receivers based on data to date. There are some exceptions to this where some smaller MSPs have charged significantly more for termination than their competitors.

7.36 In addition, higher Termination Rates under a LR(A)IC+ approach (relative to a pure LRIC approach) potentially reinforces the ability of larger Service Providers to implement on-net/off-net retail tariff differentials thereby generating tariff-mediated network externalities which can further impede entry and growth of smaller Service Providers over time.

7.37 Furthermore, the significant difference in the level of regulated MTRs and FTRs to date has resulted in a significant asymmetric financial transfer from fixed to mobile networks with possible implications for the ability of FSPs to invest *inter alia* in fixed services or to compete in respect of bundles incorporating fixed-to-mobile call minutes, etc. It is this holistic perspective, taking into account the possible impacts on all affected stakeholders, that has informed ComReg in arriving at its current decision as regards the timing of any Termination Rate reductions.

7.2.4 ComReg Decision:

MTRs shall be based on a pure LRIC cost methodology based on a benchmark approach until such time as a 'fit for purpose' pure BU-LRIC model is available for Ireland.

The benchmark calculation shall be a simple average of the pure BU-LRIC MTRs calculated using the pure BU-LRIC models that have been built in other EU Member States which have been notified, accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation, and the relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision.

ComReg shall review the range of benchmarked countries every six months and may amend it, where appropriate, on foot of such a review in order to ensure that the benchmark has been appropriately updated to reflect any further notifications to the European Commission in relation to Member States with MTRs set using a pure BU-LRIC model. It is anticipated that the first such review will be in September 2013.

7.3 Adoption of Benchmarking in Ireland

7.3.1 ComReg's Preliminary View from the Consultation Document

7.38 Following ComReg's preliminary view (as set out in paragraphs 4.49 to 4.55 above), that benchmarking is the most appropriate approach for setting MTRs, ComReg considered (in paragraphs 7.48 – 7.75 of the Consultation Document) how this could be adopted in order to determine the MTRs for the SMP MSPs in Ireland.

7.39 Figure 7.2 of the Consultation Document set out the EU Member States that ComReg considered[129] should be included in deriving the benchmark. Based on the six[130] relevant Member States identified in the Consultation Document (excluding the Netherlands, given its decision was annulled), Figure 7.3 of the Consultation Document set out the MTR ranges i.e. 0.8 to 1.27 cents.

7.40 It was noted in the Consultation Document that while there was a very limited range of EU Member States that have a final and binding decision, the number may in fact have increased by the time ComReg made its final decision. An updated assessment has therefore been provided and is set out below in paragraphs 0 - 7.71 under *'ComReg's Assessment of Responses and Final Position'*.

7.41 Paragraph 7.59 of the Consultation Document identified that following implementation of its decision, the benchmarked pure LRIC MTR would be reviewed every six months (by monitoring the EU Member States in which there are decisions in force based on a pure BU-LRIC model for MTRs) and may need to be reviewed.

7.42 In terms of the implementation date, two options were considered in the Consultation Document i.e. a benchmark approach (with effect from 1 January 2013 or with effect from 1 July 2013) of those EU Member States who have a final and binding decision in place, based on a pure BU-LRIC model.

Option 1 – Benchmark based on implementation of pure LRIC MTRs from 1 January 2013

7.43 Paragraphs 7.62 to 7.67 of the Consultation Document set out the constraints on ComReg with regard to the implementation timeline of 31 December 2012 recommended in the 2009 Termination Rate Recommendation, specifically with regard to the following:

[129] The Member States that were considered for inclusion in the benchmark in the Consultation Document were the Netherlands, Belgium, France, Italy, Spain, UK and Portugal.
[130] France, Portugal, Spain, UK, Belgium and Italy.

- the current MTR glide path will only expire at the end of 2012 and a Decision is likely to be made towards the end of 2012;
- need to strike a balance between protecting customer welfare and impact any final decision may have on MSPs;
- the requirement to allow sufficient time for MSPs to adjust their business plans (given the financial impact of the proposed approach);
- the exact amount of the MTR reductions may not have been budgeted for by FSPs and MSPs; and
- consumers may not see the full benefits of the reductions as MSPs and FSPs may not have time to adjust their retail tariffs and strategies in early 2013.

Option 2 – Benchmark based on implementation of a straight line reduction to pure LRIC MTRs from 1 July 2013

7.44 Paragraph 7.69 of the Consultation Document identified that if this approach was implemented there would be a need to extend the current glide path approach applied to the four existing SMP MSPs (i.e. in respect of the period from 1 January 2013 to 30 June 2013) by making a step change to the MTRs which would reach the compliant pure LRIC MTR by 1 July 2013. As regards the two additional MSPs proposed to be designated with SMP (i.e. TMI and Lycamobile), it was proposed in the Consultation Document that these MSPs be subject to the same MTRs as other SMP MSPs from 1 January 2013. Figure 7.4 in the Consultation Document, exhibited that based on an estimated current average MTR of 4.01[131] cent per minute and a pure LRIC MTR at the lower end of the range proposed in the Consultation Document of 0.8 cent per minute from 1 July 2013 (see Figure 7.3 of the Consultation Document), a MTR of 2.42 cent would apply for the intervening period (i.e. from 1 January 2013 to 30 June 2013).

7.45 Figures 7.5 and 7.6 of the Consultation Document provided a graphical representation of the movements in MTRs for each MSP under the two options.

[131] 4.01 cent was an estimate at the time of the publication of 12/67. The figure submitted and published in 1 July 2012 BEREC termination rate snapshot report is 4.15 cent, which is based on more up-to-date information (e.g. market shares, etc)

7.46 Paragraphs 7.73 to 7.75 of the Consultation Document, identified a further calculation is required as a result of differentiated MTRs (i.e. peak, off peak and weekend rates) set by Irish MSPs. Under the current voluntary glidepath approach, it is the responsibility of each SMP MSP to ensure that the weighted average of its peak, off peak and weekend MTRs complies with the average permitted. ComReg was of the view (see paragraph 7.74 of the Consultation Document) that this approach should continue to be permitted so long as it did not give rise to unintended gaming and was consistent with the spirit of the regulatory regime for MTRs. The basis of the calculation of the weighted average MTRs together with the proposed formula is set out in paragraph 7.75 and Figure 7.6 of the Consultation Document.

7.47 Having considered the issues/concerns associated with both implementation dates, ComReg (as set out in paragraph 7.79 of the Consultation Document) was minded towards option 2 i.e. the implementation of a benchmarked pure LRIC MTR with effect from 1 July 2013. With regard to proposed MTR changes, ComReg was of the preliminary view that each SMP MSP should pre-notify ComReg two months in advance of any proposed amendment to its MTRs coming into effect (by submitting a compliance statement) and notify other Service Providers including Eircom at least 35 days in advance of the date on which any such amendment was due to come into effect. However, ComReg's proposals in the Consultation Document also allowed for a derogation from the requirement to notify ComReg two-months in advance, where such a derogation was agreed by ComReg.

7.48 In its Consultation Document, ComReg asked the following question:

Q. 6 Do you consider that it is appropriate for ComReg to impose, with effect from 1 January 2013, a maximum weighted average symmetric MTR calculated on the basis of a benchmark approach which uses the MTRs imposed by NRAs in other EU Member States where there is a decision in force on MTRs based on a pure BU-LRIC model? Alternatively, do you consider that it would be appropriate for ComReg to apply that approach instead with effect from 1 July 2013 and to adopt the proposed glide path approach for the period from 31 December 2012 to 1 July 2013? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.3.2 Views of Respondents

7.49 Of the eight responses to the consultation, set out below are the high level views of respondents regarding on the preferred implementation date of the benchmarked pure LRIC MTR:

- Four respondents (H3GI, Magnet, Eircom and ALTO) essentially agree with Option 2 - implementation date of 1 July 2013;
- Vodafone, O2 and TMI strongly disagree with the proposed approach; and
- BT has no comment in relation to this question.

7.50 Vodafone does not believe that either of the approaches is appropriate for the reasons set out in its response to Question 5. In O2's view, ComReg's analysis of the current status of decisions on pure LRIC reinforces the view that ComReg's proposed approach is not appropriate and is in O2's view only being implemented by NRAs on account of the 2009 Termination Rate Recommendation. O2 underlines that under ComReg's proposed approach, it is possible that Irish MTRs would be set in line with the French MTR on the premise that it is the only applicable rate to be included in ComReg's benchmark. Furthermore, O2 points to the potential confusion and uncertainty as to what MTRs would apply (depending on how many countries gradually qualify as part of the benchmark) and it may lead to substantial variances (upwards in direction according to O2) in the short to medium term.

7.51 O2, while noting its disagreement with the proposed approach, outlines its preference for implementation under Option 2 on 1 July 2013. O2 also disagrees with the interim step from 1 January to 30 June 2013. In O2's view, ComReg should continue with the existing benchmarking arrangements until the methodology has been agreed. Furthermore, O2 believes that ComReg should consult further in 2013 on the appropriate implementation to the cost methodology and the benchmarking timetable and approach.

7.52 TMI did not respond directly to this question; however it did make reference to the timescales for implementation in its submitted response. In TMI's opinion, ComReg has not given sufficient consideration to implications of its proposals particularly with regard to the rapid imposition of what it terms "*drastic*" MTR reductions at very short notice. TMI claims that the timescales are "*unacceptable and unreasonable*" and that "*consumer welfare and competition will be damaged*". **[✂………………………………………………………………………………… ………………………………………………………………………………………… ………………………………………………………………………………………… ……………………………………………]**. TMI also points to a comment made by the European Commission to the Spanish NRA where it states that "*…a delay – if very limited – in the implementation of the cost-oriented rates is acceptable, taking account of the need to minimise business and regulatory uncertainty in the Spanish markets flowing from an important decrease in MTRs*".

7.53 Furthermore, TMI claims that a longer glidepath is required and suggests a glidepath running over the next two or three years. It is TMI's view that ComReg has not found the appropriate balance between consumer welfare and the disruptive impact on MSPs and claims that the *"disruption"* caused by ComReg's proposals will not assist consumer welfare in the medium to long term. TMI goes on to use this as an example where NRAs have chosen to extend the transition periods where there have been concerns over the impact on competition. It also makes comparisons between TMI and Yoigo's experience in Spain and to the EU average of 8.8 years of asymmetric MTRs. TMI makes reference to the fact that Yoigo have been afforded a level of asymmetry until 1 July 2013 in Spain.

7.54 TMI has not found any precedent in the EU for the scale and pace of the MTR reductions that ComReg is proposing (i.e. TMI claims it is nearly a 12 cents reduction per minute within seven months of ComReg's decision). According to TMI, a glidepath or graduated reduction over several years is more likely to realise benefits to consumers than ComReg's proposals.

7.55 Eircom, while agreeing with ComReg's Option 2, queries the basis for the MTR of 2.42 cents for the period 1 January 2013 to 30 June 2013 proposed by ComReg in its Consultation Document. Eircom noted that it does not understand the basis for ComReg's calculation when calculating the rate proposed as an extension to the glide path approach. Eircom noted that ComReg appears to calculate a median rate based on the current MTRs with H3GI at 7.44c per minute. However, Eircom believes that H3GI is already due to achieve symmetry by 1 January 2012[132], therefore the average rate prior to 1 January 2013 should include H3GI with an MTR of 3.68c, in which case the median rate would be 2.38c, as opposed to the rate of 2.42c proposed in the Consultation Document.

7.56 Eircom also stated that where wholesale prices are set on a pure incremental costs basis then there is no valid economic rationale for setting different "time of day" rates. Time of day rates, in Eircom's opinion are normally set by operators to reflect a "Ramsey Pricing" approach to the recovery of a higher proportion of fixed costs from consumers that may be more inelastic than others, for example peak time customers.

[132] In ComReg Document No. 09/34 ComReg states that H3GI indicated to ComReg its intention to apply a symmetrical rate by January 2013.

7.57 While not directly responding to this specific question a number of respondents disagree with continuing to allow MSPs and FSPs to set peak/off-peak/weekend rates, and that both MTRs and FTRs should be set as flat rates. In response to Question 9, Eircom believes that, in the interests of transparency, symmetry, and predictability, the move to set call Termination Rates to recover pure LRIC presents the opportunity to remove the time-of-day gradient from prices charged for both FTRs and MTRs. Magnet and ALTO, in their general comments, believe that there is a need for both FTRs and MTRs to be set at flat rates, which they believe increases certainty and consistency, and removes the risk of competition being distorted by one or more operators. Magnet and ALTO believe that where Termination Rates vary, for example by time of day, peak / off peak variations, etc., there is potential scope for operators to exploit flexibility in price controls.

7.58 Please refer to ComReg Document No. 12/110 which set out the published non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.3.3 ComReg's Assessment of Responses and Final Position

7.59 While all respondents welcomed the additional time proposed for implementation of the pure LRIC cost recovery methodology, some MSPs clearly remain of the view that further time should be allowed with a continuation of the glidepath similar to that in place to date.

7.60 ComReg has already set out its views on the voluntary glide-path arrangement in detail in paragraphs 4.24 to 4.31 above. As noted above, that arrangement was never envisaged as a long term solution. ComReg considers that it has been clear to all the then designated SMP MSPs, at least since 2010, that it was ComReg's intention to revisit the price control obligation taking into account the 2009 Termination Rate Recommendation prior to the end of the glide-path period with a view to a revised regime being in place with effect from 1 January 2013. ComReg also notes that the fixed and mobile industry has been aware since 2009 of the Termination Rate Recommendation and the target implementation date of 31 December 2012.

7.61 As ComReg has concluded in this Document, on the basis of its comparative assessment framework, it now sees no reason to deviate from the 2009 Termination Rate Recommendation and its potential implications have been clear to industry for some time now. ComReg believes that the additional six months (i.e. delaying the implementation of pure LRIC MTRs until 1 July 2013) is sufficient time for Service Providers to review any implications the Decision might have on their business plans and retail pricing strategies.

7.62 With regard to the specific comments from TMI, ComReg does not believe there is any objective justification for allowing any further asymmetry for TMI beyond 1 January 2013. TMI has been in the Irish market for a number of years and has had sufficient time to achieve scale. The current MTRs charged by TMI are significantly in excess of an efficient rate and could give rise to distortions in the market between different consumers groups and networks. This is one of the key issues this Decision is trying to address, i.e. to ensure that no one end-user on a particular network is disincentivised from calling another end-user on an alternative network simply as a result of the high MTR being passed on through retail tariffs.

7.63 In section 6.3 of this Document, ComReg has clearly set out its views on why it is now appropriate to move to symmetric cost-oriented maximum MTRs for all MSPs. In particular, paragraph 6.235 sets out the range of possible retail distortions which a continuance of asymmetric MTRs can potentially facilitate/reinforce. Furthermore, paragraph 6.238 sets out key considerations which ComReg took into account in taking the decision to move to a symmetric maximum MTR for all MSPs from July 2013.

7.64 It is also the case that TMI does not own its own mobile network architecture and it is not clear what the current high MTR is covering in terms of TMI's underlying wholesale cost other than to support a specific retail pricing strategy. TMI has not provided any objective justification for its current MTR and the costs that it is recovering. Indeed, paragraph 6.238 above notes that in the case of MVNOs the opportunity to lease relevant network inputs from the mobile network operators may reduce the impact of economies of scale. As regards TMI's reference to the European Commission comments with respect to the Spanish NRA, this was considered by ComReg. ComReg, as set out below, is not implementing pure LRIC MTRs until 1 July 2013 to minimise business and regulatory uncertainty in an Irish context. ComReg notes TMI's comments with respect to a level of asymmetry afforded to Yoigo in Spain up to 30 June 2013. ComReg notes that Yoigo will have asymmetric MTRs of between 4% to 6% higher than other SMP MNOs in Spain in the first half of 2013. CMT afforded this small level of asymmetry in 2013 to Yoigo, as an MNO, not an MVNO, where CMT clearly set out that MVNOs MTR should be equal to that of their host MNO[133].

[133] Ref: European Commission decision concerning Case ES/2012/1314: Voice call termination on individual mobile networks in Spain.

7.65 With regard to the comments raised by Eircom on the appropriate MTR from 1 January 2013, ComReg does not believe it is necessary to make corrections to the starting MTR level used by ComReg for the straight line reduction (i.e. 4.15 cents per minute). In calculating the median rate to be effective on 1 January 2013, ComReg sets out in Figure 7.2 below that the MTR to be effective from 1 July 2013 is 1.04 cent per minute. Therefore, as the current Irish average (actual) rate in the market is 4.15 cent per minute[134], based on a straight line reduction, then the MTR (or median rate) effective on 1 January 2013 will be 2.60 cent. ComReg notes that H3GI will reach a symmetric MTR, in line with all SMP MSPs, by 1 January 2013 (see ComReg Document No. 09/34).

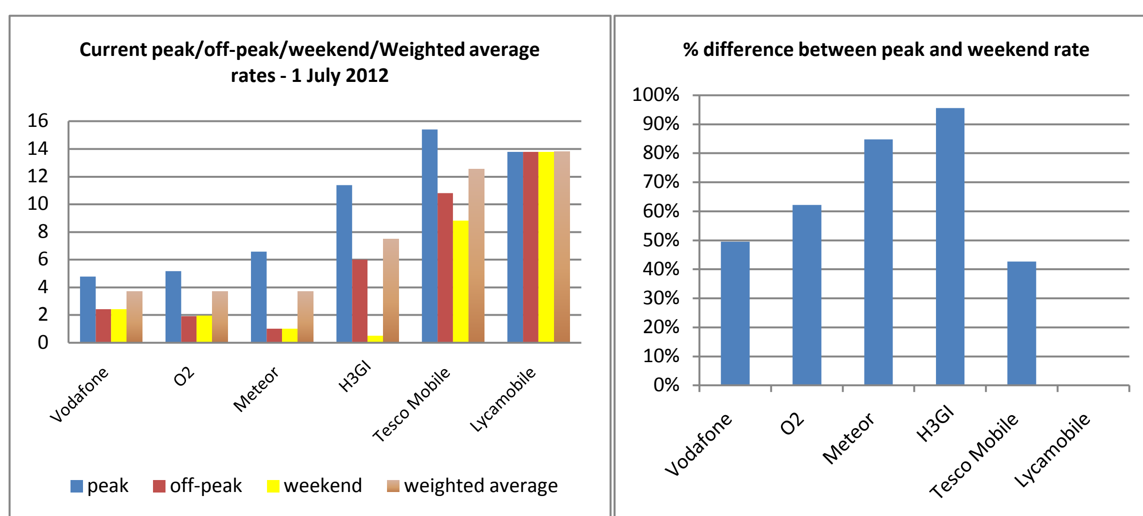
7.66 With respect to points raised by respondents about allowing FSPs and MSPs to continue to apply differentiated Termination Rates (i.e. peak/off-peak/weekend rates), ComReg has revised its position in this regard. ComReg, having considered the views of respondents, is now of the view that FSPs and MSPs should apply flat-rate FTRs and MTRs, respectively, with effect from 1 July 2013. This is in line with best practice across the 27 EU Member States[135] which shows that MTRs, in particular, are in almost all cases based on flat rates, with no time-of-day differentiation. As set out in Figure 7.1 below, there are currently significant variances from one MSP to another when comparing the various peak/off-peak/weekend MTRs in Ireland. For example, there is a 96% difference between H3GI's peak and weekend MTRs. If ComReg allows a differentiated MTR by time of day going forward, even at a pure LRIC based MTR, MSPs could continue to charge a much higher MTR in say peak time where they believe that this is more beneficial to them. However, this higher MTR may have a disproportionate impact on other MSP and FSP customers, depending on their calling patterns.

[134] Irish average rate as of 1 July 2012 - http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/972-termination-rates-benchmark-snapshot-as-of-july-2012-integrated-report-on-mobile-termination-rates-sms-termination-rates

[135] With the exception of Bulgaria, Lithuania and Luxembourg.

7.67 As a result of this Decision, from 1 July 2013, there will be no permitted differentiation between MTRs depending on the time-of-day or day of the week of a call. This Decision removes such distortions from Termination Rates and instead, all SMP MSPs will be required, from 1 July 2013, to apply flat-rate, symmetric MTRs. As MTRs are moving to a pure LRIC cost recovery method, ComReg considers that there is little or no reason to continue with time-of-day differentiation at the wholesale level for MTRs. For the avoidance of doubt, ComReg has decided to allow the continuation of differentiated tariffs by peak, and off peak and weekend up until 30 June 2013 (see further below).

Figure 7.1: Illustration of MSPs MTR rates as at 1 July 2012[136] and the percentage difference between each MSP's peak and weekend rates



Source: Eircom Wholesale STRPL, Table 101, Effective rates from 1 July 2012

[136] http://www.eircomwholesale.ie/Reference-Offers/RIO/

7.68 ComReg in the Consultation Document proposed that a benchmarked MTR should be based on those Member States where a final and binding Decision, based on a pure BU-LRIC model, would be in full effect. However, in light of the submissions received in response to the Consultation Document and taking into account recent Article 7 comments letters from the European Commission, ComReg will now include the seven[137] Member States which satisfy the following conditions: (i) the relevant NRA has notified pure BU-LRIC MTRs (i.e. calculated on the basis of a pure BU-LRIC model developed by that NRA) to the European Commission; (ii) that modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate; and (iii) the relevant NRA has adopted a decision setting a pure BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision.

7.69 As set out in Chapters 4 and 6, as well as in section 7.2.3 and this current section 7.3.3, the main reason for this change is two-fold. Firstly the European Commission has outlined in more detail what should be included in a benchmark approach to determine pure LRIC MTRs. Secondly the benchmark is more robust given the greater number of Member States included in it. ComReg believes that seven Member States is a reasonable number on which to set a benchmark.

7.70 With respect to the actual benchmark MTR to be applied, ComReg set out in its Consultation Document in Figure 7.3 that the benchmarked pure LRIC rate would be in the range of between 0.8 cent per minute and 1.27 cent per minute. ComReg has now decided that the benchmarked pure LRIC MTR shall be 1.04 cent based on a benchmark of the seven Member States which satisfy the following conditions that ComReg has now decided to apply: (i) the relevant NRA has notified pure BU-LRIC MTRs (i.e. calculated on the basis of a pure BU-LRIC model developed by that NRA) to the European Commission; (ii) that modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation; and (iii) the relevant NRA has adopted a final decision setting a pure BU-LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision (see Figure 7.2 below). It should be noted that the benchmarked pure LRIC MTR of 1.04 cent resulting from this calculation is the maximum permitted MTR which may be charged by any SMP MSP.

[137] France, Portugal, Spain, UK, Belgium, Italy and Denmark.

Figure 7.2: Benchmark of countries where final measures, based on BU pure LRIC, have been notified to the European Commission

Member State	Target Rate (Cent per minute)
Denmark[138]	1.07[139]
France[140]	0.8
Portugal[141]	1.27
Spain[142]	1.09
UK[143]	0.99[144]
Belgium[145]	1.08
Italy[146]	0.98
Simple Average	1.04

[138] European Commission decision concerning Case DK/2012/1342: Voice call termination on individual mobile networks in Denmark

[139] DKK 0.08 = 1.07 cent (as of 13 November 2013, 1 DKK = EUR 0.134092)

[140] European Commission decision concerning Case FR-2010-1128: Voice call termination on individual mobile networks in France

[141] Commission decision concerning Case PT/2012/1312: Price control for voice call termination on individual mobile networks in Portugal

[142] European Commission decision concerning Case ES/2012/1314: Voice call termination on individual mobile networks in Spain

[143] European Commission decision concerning case UK/2010/1068: Voice call termination on individual mobile networks. A further submission with respect to the adoption of revisions to SMP Conditions in accordance with the directions of the Competition Appeal Tribunal of 8 May 2012, was communicated to the European Commission on 13 June 2012.

[144] Adjusted rate by Ofcom following the CATs judgment according to which the MTRs glide-path would target 0.67ppm (2008/09 prices) in real terms. Adjusted for inflation, the target rate is estimated to be 0.794ppm in nominal terms in 2013. This would equal 0.991 €ct/min using exchange rate of 13 November 2012 (1 GBP = 1.24906 EUR).

[145] European Commission decision concerning case BE/2010/1086: voice call termination on individual mobile networks in Belgium

[146] European Commission decision concerning Case IT/2011/1219: Voice call termination on individual mobile networks in Italy

7.71 The target rate noted in recent European Commission guidance[147], referring to a publication by Ofcom[148], represents the real rate (expressed in 2008/09 prices). Analysys Mason in section 4 of its Benchmarking Report also notes that the UK target rate referenced by the European Commission is based on 2008/09 prices before any adjustment for UK inflation. Therefore, after further consideration of the mechanics of the rate set by Ofcom, ComReg believe it would be prudent and technically correct to adjust the real rate of £0.67 pence into the nominal value for 2013. The adjustment can be calculated using the Ofcom calculated nominal value for 2012/13[149] and adjusting it for the forecast inflation of 2.5%[150] for 2013/14, resulting in a nominal rate for 2013/14 of £0.79pence. Therefore, a pure LRIC rate of 0.99 cent per minute[151] with respect to the UK, expressed as the nominal target rate for the period 2013, should be included in the benchmark. While ComReg has notified its draft measure to the European Commission using a UK real rate of 0.83cent per minute (i.e. 0.67£pence), ComReg is now amending this rate to reflect a nominal rate of 0.99cent per minute (i.e. 0.79£pence). This inflation adjustment to the UK rate has the impact of increasing the rate slightly from the simple average benchmark notified, resulting in a revised simple average of 1.04 cent per minute. ComReg does not believe this amendment to be material and therefore ComReg has not re-notified this revision to the European Commission.

7.72 **Comments from the European Commission**

7.73 ComReg notified its draft measures in relation to Termination Rates to the European Commission ("the Commission") on 12 October 2012 in accordance with Article 7 of the Framework Directive. The Commission responded with a comments letter to ComReg dated 12 November 2012 pursuant to Article 7(3) of the Framework Directive.

7.74 **Implementation Date**

7.75 Regarding ComReg's proposal to set MTRs in Ireland on the basis of a benchmarking method until the adoption of a pure BU-LRIC model (expected

[147] See case LV/2012/1356: Voice call termination on individual mobile networks in Latvia, Comments pursuant to Article 7(3) of Directive 2002/21/EC, 13/08/2012, concerning the benchmarking methodology adopted by Latvian NRA

[148] Mobile Call Termination: Adoption of revisions to SMP Conditions in accordance with the directions of the Competition Appeal Tribunal of 8 May 2012 http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/statement/smp_conditions.pdf

[149] Nominal value for 2012/13 based on CAT Direction – Ref: Mobile Call Termination: Adoption of revisions to SMP Conditions in accordance with the directions of the Competition Appeal Tribunal of 8 May 2012

[150] Ofcom forecast used (footnote 4) – Ref: Mobile Call Termination: Adoption of revisions to SMP Conditions in accordance with the directions of the Competition Appeal Tribunal of 8 May 2012

[151] 0.79 €pence equal 0.99 €ct/min using exchange rate of 13 November 2012 (1 GBP = 1.24906 EUR).

by 1 July 2014 at the latest), the Commission acknowledged that the 2009 Termination Rate Recommendation does provide for an alternative approach (e.g. benchmarking), but noted that:

7.76 "...*even in those circumstances, NRAs must comply with the deadline of 31 December 2012*...."

7.77 Regarding ComReg's contention that a delay until 1 July 2013 for the introduction of cost-efficient FTRs would better match business expectations, the Commission noted that the 2009 Termination Rate Recommendation was issued in 2009 and that market players are therefore aware of the implementation dates. The Commission went on to note that:

7.78 "*The timeframe set out in the Recommendation aims not only to ensure the sustainability of the sector but also to maximise consumer benefits as soon as possible.*"

7.79 The Commission stated that it considered that ComReg should review its proposed glide paths for both FTRs and MTRs and to align its implementation dates with the deadline of 31 December 2012 set out in the 2009 Termination Recommendation. Ultimately, however, the Commission acknowledged that the introduction of cost-efficient MTRs in Ireland as of 1 January 2013 would result in a steep reduction over a very short time period and acknowledged that ComReg was of the view that the same implementation dates should apply in respect of the imposition of pure LRIC FTRs and MTRs in order to minimise distortions and ensure consistent application. Against that background, the Commission considered :

7.80 "....*that a short delay in implementing the cost-orientated fixed and mobile termination rates, which in no circumstances should last beyond 1 July 2013, may exceptionally be acceptable in this case*."

7.81 **Benchmarking approach**

7.82 As regards ComReg's proposed benchmarking approach for MTRs, the Commission underlined in its comments letter that for the purpose of benchmarking, an average of termination rates set by the NRAs by way of final decisions in the Member States should be applied (it stated that this was without prejudice to an appeal pending against a final decision, as far as the rates adopted therein are implemented i.e. in force). The Commission acknowledged that in the case of the draft measures notified by ComReg:

7.83 "...*the proposed MTR (€c1.02/min) appears to be consistent with the EU simple average of the Member States that have implemented a pure BU-LRIC model by way of a final decision, and that therefore the outcome of ComReg's benchmarking is in line with the Commission's recommended approach.*"

7.84 With regard to future reviews of the benchmark rate, the Commission invited ComReg to clarify in its final decision that it:

7.85 "....*includes in its benchmarking exercise all pure BU-LRIC MTRs notified to the Commission, at the target level, and as specified in the final decisions taken by the NRA*."

7.86 As regards ComReg's proposed implementation date of 1 July 2013 for the imposition of pure LRIC FTRs and MTRs, the Commission noted in its comments letter that this approach:

7.87 "...*is not in line with the Commission's Termination Rates Recommendation, according to which, NRA's should ensure that termination rates are implemented on a cost-efficient (BU-LRIC) level by 31 December 2012.*"

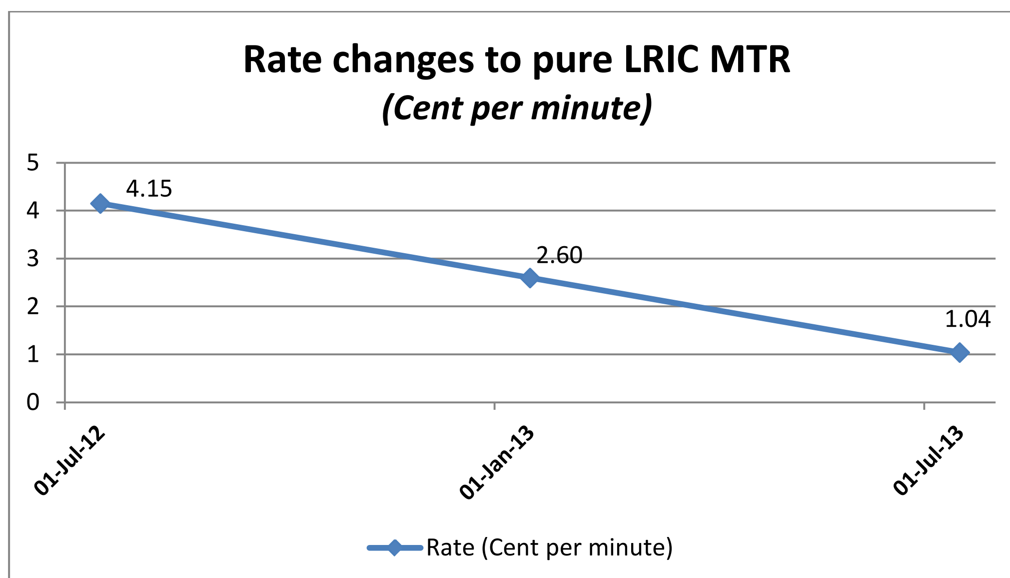
7.88 ComReg will review the benchmark based on those Member States which have notified final measures, based on pure BU-LRIC models, to the European Commission, where the notified approach has been accepted by European Commission as being consistent with the 2009 Termination Rate Recommendation and where the relevant rate for each Member State is the pure BU-LRIC rate adopted in the NRA's final decision. For the avoidance of doubt, ComReg will review the benchmark for the first time, following publication of this Decision, in September 2013. Where ComReg decides on foot of such a review to update the benchmark and hence to amend the benchmarked MTR, ComReg will notify operators 3 months in advance of any revised maximum permitted MTR coming into effect to ensure regulatory certainty. However, as ComReg plans to commence work on a pure BU-LRIC model for MTRs in 2013, ComReg hopes to have at its disposal a provisional pure BU-LRIC MTR for Ireland to inform any such review at that point.

7.89 ComReg is of the view that MSPs should be allowed sufficient time to adjust their business plans for the pure LRIC MTR. On that basis ComReg has decided that the pure LRIC MTR will come into effect on 1 July 2013 with a step change reduction from 1 January 2013.

7.90 ComReg has considered the European Commission's comment in relation to the proposed implementation of its approach to MTRs, in particular the Commission's proposal to call on ComReg to implement the target MTR levels by 31 December 2012. However, ComReg has noted at paragraph 7.43 et seq. above the constraints associated with this approach, in particular that to do so would not provide operators with sufficient time to adjust their business plans in order to implement the change, and has decided to continue with the step change reduction towards full implementation on 1 July 2013. ComReg notes that the Commission has ultimately accepted the short delay in implementing the full regime

7.91 The current weighted average of MSPs' MTRs in Ireland is 4.15[152] cent per minute. A straight line reduction from this figure of 4.15 cent per minute to the pure LRIC MTR of 1.04 cent per minute (which will apply with effect from 1 July 2013) results in a maximum symmetric MTR from 1 January 2013 of 2.60 cent. The pure BU LRIC MTR of no more than 1.04 cents shall apply from 1 July 2013.

Figure 7.3: The straight line reduction to arrive at the maximum rate from 1 January 2013



7.92 In light of the responses received and having made reference to other ComReg decisions, ComReg is now of the view that MSPs should pre-notify Eircom (and every other Undertaking with which that MSP has entered into a contract in respect of access to MVCT) of its amended MTRs at least 30 days (as opposed to the 35 days originally proposed by ComReg in the Consultation Document) before the date on which such amendments are due to come into effect. It is envisaged that 30 days will allow sufficient time for Eircom and other Service Providers to amend their billing systems and adjust retail prices, where such changes are necessary.

[152] Irish average rate as of 1 July 2012 - http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/331-tr-benchmark-snapshot-as-of-january-2012-integrated-report-on-mtr-sms-tr-and-ftr

7.93 As this Decision will be published close to the end of 2012 and the initial step change is required to be in place by 1 January 2013, ComReg has decided to allow the continuation of differentiated tariffs by peak, off peak and weekend for the initial six months only of the price control period. However, from 1 July 2013 this will no longer be allowed and SMP MSPs must use the simple average flat-rate of 1.04 cent regardless of the profile of traffic terminating on their network. ComReg is allowing the additional six months as it believes that MSPs and FSPs may require additional time to amend pricing strategies and update billing systems as a result of the change from peak/off-peak/weekend rates to flat rates. ComReg has therefore decided that a weighted average rate of 2.60 cent per minute shall be applied from 1 January 2013. MSPs will be required to calculate their respective peak/off-peak/weekend rates, notify their compliance with the weighted average rate of 2.60 cent per minute to ComReg and notify Eircom and other Service Providers of the new rates prior to the implementation date of 1 January 2013. This is the same process that was set out in Paragraph 7.73 to 7.75 of the Consultation Document. For the avoidance of doubt, the "Weighted Average Mobile Termination Rate" should be calculated in accordance with the definition of that term in Section 2.1 of the MTR Decision Instrument (see Annex 2 below) and in accordance with the detailed formula set out in the table below:

Figure 7.4: Formula for calculating the Weighted Average Mobile Termination Rate

Weighted Average Mobile Termination Rate (MTR) shall be calculated as follows:

(Peak MTR * X%) + (Off-peak MTR * Y%) + (Weekend MTR * Z%)

Whereby:

X = Peak Terminating Minutes as a percentage of the total Terminating Minutes, on the MSP's network for the provision of MVCT

Y = Off-peak Terminating Minutes as a percentage of total Terminating Minutes, on the MSP's network for the provision of MVCT

Z = Weekend Terminating Minutes as a percentage of total Terminating Minutes, on the MSP's network for the provision of MVCT

Terminating Minutes for the purpose of calculating the Weighted Average Mobile Termination Rate shall mean the actual terminating minutes on the MSP's network for the provision of MVCT during the most recent six month period prior to 1 January 2013 for which the MSP has the relevant data available.

7.94 ComReg previously indicated that it will reserve the right to allow a derogation from the timeline set out in Paragraph 7.73 to 7.75 of the Consultation Document 12/67 where necessary and appropriate. As a result of the timing of this Decision ComReg is allowing a derogation from the timeline set out and also allowing derogation to Eircom with respect to the normal four week publication lead time of the Eircom Wholesale STRPL prior to new rates coming into effect. For the avoidance of doubt, for the 1 January 2013 MTR implementation, the following implementation timeline shall apply.

1 January 2013 MTR implementation Timeline	**Date**
ComReg Decision D12/12 directs MSPs to charge no more than a weighted average MTR of 2.60 cent per minute from 1 January 2013.	21 November 2012
MSPs must notify ComReg of their proposed peak/off-peak/weekend rates, demonstrating compliance with a weighted average MTR of 2.60 cent per minute.	20 December 2012
ComReg to review MSPs' proposed peak/off-peak/weekend rates to ensure MSPs have demonstrated compliance with the weighted average MTR of 2.60 cent per minute.	21 December 2012
MSPs will notify Eircom, for update in the Eircom Wholesale STRPL, and other Service Providers of new peak/off-peak/weekend MTRs to be applied from 1 January 2013. ComReg is providing derogation to Eircom with respect to the timeframe for updating the Eircom Wholesale STRPL.	21 December 2012
New weighted average MTR of 2.60 cent per minute becomes effective.	1 January 2013

7.95 As set out previously, ComReg will review the MTR benchmark every six months (post the 1 July 2013 change) and, where appropriate, may update the maximum permitted MTR on foot of such a review. Where a change to the MTR is appropriate, ComReg will communicate the updated benchmark and advise on any MTR change to MSPs at least three months in advance of the effective date of the change in MTR. MSPs will then be required to notify ComReg of their compliance with the new MTR, at least 60 days in advance of the date on which the revised maximum permitted MTR comes into effect. MSPs will then be required to inform Eircom (and every other Undertaking with which that MSP has entered into a contract in respect of access to MVCT) of the amended MTR at least 30 days before such amended MTR comes into effect. The timeline is illustrated in Figure 7.5 below, with an example shown of the process for the MTRs to be effective from 1 January 2014.

Figure 7.5: 6-monthly benchmark review and implementation timeline of any subsequent MTR changes

ComReg will perform a 6 monthly review of benchmark and advise MSPs of changes to MTR from next effective date (if any)	-90 days
MSPs will notify ComReg and confirm the MTR changes (if any) to be applied in advance of notifying other MSPs and FSPs	-60 days
MSPs must notify Eircom for updates to STRPL and every other Undertaking with which that MSP has entered into a contract in respect of access to MVCT of changes (if any)	-30 days
Implementation of new MTRs (if required)	0

7.3.4 ComReg Decision:

The maximum permitted weighted average MTR shall be no more than 2.60 cents from 1 January 2013 weighted for time of day traffic profile. The maximum permitted flat-rate MTR shall be 1.04 cents from 1 July 2013 regardless of time of day traffic profile.

ComReg shall pre-notify Service Providers three months in advance of the effective date of any change to the MTR which results from the six monthly review of the benchmark. The first such review will be in September 2013.

MSPs shall pre-notify ComReg and confirm any changes to their MTRs 60 days* in advance of the effective date of any such changes.

MSPs shall pre-notify Eircom for updates to the STRPL (and every other Undertaking with which that MSP has entered into a contract in respect of access to MVCT) of changes if any to MTRs 30 days* in advance of the effective date of any such changes.

*** ComReg may decide on a case by case basis if a shorter notification period is appropriate.**

7.4 Cost Orientation in the FVCT Market

7.4.1 ComReg's Preliminary View from the Consultation Document

7.96 The process to date was discussed in paragraph 7.82 – 7.89 of the Consultation Document. It was explained (see paragraph 7.88 of the Consultation Document) that Eircom's current FTRs are set using a TD model based on the current cost of Eircom's legacy public switched telephone network ('**PSTN**') switching equipment over a Synchronous Digital Hierarchy ('**SDH**') transmission layer. While Eircom's FTRs comprise of primary, tandem and double tandem, it was highlighted that it is only the primary FTR that is relevant as the tandem and double tandem termination rates are defined as 'transit' and so subject to a price control from that market. The transit market is currently under review by ComReg and it is anticipated that a consultation will be published shortly in this regard.

7.97 As set out in Chapter 6 of the Consultation Document, it was ComReg's preliminary view that FTRs should be set on the basis of a pure LRIC methodology. In terms of implementation (and as discussed in paragraph 7.91 to 7.100 of the Consultation Document), there are two possible options available to ComReg in order to set FTRs using a pure LRIC methodology:

- A benchmark approach that derives an approximate rate to a pure BU-LRIC model based on an efficient operator; or
- A pure BU-LRIC model based on an efficient operator.

7.98 While a benchmarking approach is specifically allowed for in the 2009 Termination Rate Recommendation to implement a pure LRIC approach, it was identified that there appears to be only one country (i.e. France) in which a final and non-annulled pure BU-LRIC FTR decision has been adopted and on which ComReg could therefore base a benchmark for FTRs. In addition and given the fact that Eircom has been subject to regulation over the last ten years (see paragraph 7.95 of the Consultation Document), it was recognised that there is a significant volume of costing/network information available to ComReg which can be used to arrive at a pure BU-LRIC FTR.

7.99 With regard to the development of the pure BU-LRIC model, ComReg already has an existing BU model for FTRs from previous pricing reviews of the Eircom regulated rates for Call Origination, Call Termination and Call Transit. With the additional information received from Eircom ComReg noted in the Consultation Document that it could update the existing BU model for FTRs in a much shorter timeframe compared with the time that would be required to model the mobile network for the first time. Given the lack of costing/network information available for other SMP FSPs, ComReg proposed (see paragraph 7.10 of the Consultation Document and paragraph 7.3 above) that SMP FSPs should charge no more than the FTR derived from the proposed updated pure BU-LRIC model, as ComReg believes that this would be representative of an efficient FSP in Ireland (see paragraphs 7.96 – 7.98 of the Consultation Document for a more detailed discussion).

7.100 Having considered the above, ComReg was of the preliminary view that for FTRs the pure LRIC methodology should be implemented by means of a pure BU-LRIC model based on an efficient operator. It was further clarified that in the absence of submissions from other SMP FSPs, the maximum FTR charged by FSPs from 2013 should be the FTR produced by the proposed updated pure BU-LRIC FTR model.

7.101 In its Consultation Document, ComReg asked the following question:

Q. 7 Do you agree with the proposed BU pure LRIC modelling approach for FTRs? Please provide reasons for your response. Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.4.2 Views of Respondents

7.102 Of the eight responses to the consultation, set out below are the high level views of respondents regarding the proposal to use a pure BU-LRIC model to determine the FTRs:

7.103 Four respondents (H3GI, Magnet, Eircom and ALTO) broadly agree with ComReg's proposals although Magnet and ALTO have reservations around symmetry of FTRs (as expressed earlier in response to Question 4);

7.104 One respondent (Vodafone) stated that it has set out its views as to the inappropriateness of a pure LRIC approach to setting Termination Rates in its response to the earlier questions regarding MTRs;

7.105 Two respondents (BT and O2) did not have any comments in relation to this question;

7.106 One respondent (TMI) did not respond directly to this question.

7.107 Eircom agrees with ComReg's proposals around a pure BU-LRIC approach and expands on its views as to why benchmarking in the case of FTRs is not appropriate. It also states that the termination service is single switch or primary termination and in Eircom's view it is *"likely that all efficient operators in Ireland will have very similar unit costs for such termination. It is equally likely that the incremental portion of these costs will be closely aligned across operators."*

7.108 Please refer to ComReg Document No. 12/110 which sets out the published non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.4.3 ComReg's Assessment of Responses and Final Position

7.109 While all FSPs agree in principle with the pure LRIC method for recovering efficient costs, some of the smaller FSPs disagree with how this would be implemented. Having considered all views, in particular detail in section 6.3 of this Document, ComReg's position remains that all SMP FSPs currently in the market should charge no more than the efficient FTR derived from the pure BU-LRIC model available to ComReg. No Service Provider provided objective justification for an asymmetric FTR other than the fact they have a small customer base.

7.110 ComReg considers that a small customer base is not a sufficient reason for ComReg to deviate from the principles being applied in this Document in respect of the SMP FSPs. ComReg is of the view that the maximum FTR should where feasible be based on the costs of an *efficient* Service Provider. In this respect, ComReg has noted in paragraph 6.240 that asymmetric FTRs risk facilitating a range of possible retail distortions, including:

- Rewarding a FSP for its smaller size can give inappropriate investment signals and risks promoting inefficient entry and inappropriate recovery of inefficiently incurred costs; and/or

- FTRs set above efficient cost may reduce the flexibility for retail pricing innovations to occur (such as, in the offering of more inclusive any network minute bundles or unlimited call offerings). High per-minute termination rates effectively create a floor to retail pricing and tend to make it difficult for Service Providers to offer innovative calling plans due to uncertainty regarding customer take-up and usage.

7.111 Furthermore, paragraphs 6.241 to 6.245 of this Document note the ability for new entrant FSPs to potentially overcome economies of scale "*by focusing their networks on high-density routes in particular geographic areas and/or by renting relevant network inputs from the incumbents".* Paragraph 6.246 of this Document furthermore sets out the range of factors considered by ComReg in coming to its decision that symmetric pure LRIC FTRs should apply to all of the SMP FSPs.

7.112 ComReg believes that the imposition of the pure LRIC methodology on FSPs will have very positive effects on the consumers of fixed voice services, so long as the savings are passed on either through reductions to retail tariffs or through further investment and innovation in fixed line services and/or technologies. This applies to both small and large FSPs.

7.4.4 ComReg Decision:

The FTRs shall be based on a pure LRIC costing methodology using a BU LRIC model of a hypothetically efficient FSP.

7.5 Key Inputs and Assumptions for a FTR BU pure LRIC Model

7.5.1 ComReg's Preliminary Views from the Consultation Document

7.113 Paragraphs 7.101 – 7.142 of the Consultation Document considered the principles, methodologies and inputs to be applied when developing a pure BU-LRIC model for voice termination.

7.114 Having set out the specific set of principles and methodologies (as recommended in the 2009 Termination Rate Recommendation) to be applied when developing a pure BU-LRIC model for voice termination, ComReg identified the main areas of cost or inputs to consider.

- The Appropriate Efficient Network Topology;
- The Likely Demand;
- The Efficient Network Costs;
- The Treatment of Depreciation;
- The Appropriate Level of Efficient Operating Costs;
- The Appropriate Allocation of Costs to Services; and
- The appropriate determination of Results.

The Appropriate Efficient Network Topology

7.115 This was discussed in paragraphs 7.105 – 7.107 of the Consultation Document. ComReg proposed that the pure BU-LRIC model for FTRs should be based on an NGN core network. It was also proposed that internet protocol ('**IP**') switching equipment at the switching layer and wavelength division multiplexing ('**WDM**') at the transmission layer would be used as the modern equivalent assets ('**MEA**') in the model together with the existing fibre and trench of Eircom.

7.116 Figure 7.8 of the Consultation Document provided an overview of the typical network topology for an NGN core network. It proposed that the network topology should be based on a scorched node approach, based on Eircom's current deployment of nodes (see Figure 7.9 of the Consultation Document). ComReg remains of the view that the network topology as set out in the Consultation Document is representative of an efficient network topology over which fixed voice will be delivered and remains the most appropriate network topology.

The Likely Demand

7.117 In the Consultation Document ComReg recognised that while the demand for voice is calculated based on current demand and the likely future demand, the accuracy of these forecasts is less relevant for termination rates as the materiality of costs recovered from pure LRIC termination rates may be low – see paragraph 7.108 of the Consultation Document. While it was proposed that the inputs be based on Eircom's experience of fixed call routing it was identified that they should be amended as appropriate for NGN type network structure.

The Efficient Network Costs

7.118 It was identified in the Consultation Document that while the 2009 Termination Rate Recommendation recommends that the most efficient network deployment should be considered, it was highlighted that it was not clear when voice carried over the traditional fixed network will be fully IP enabled. For this reason, ComReg did not believe that it was appropriate to model FTRs based on a fully enabled IP network given that it was not clear when and how such a network would evolve in practice in Ireland - see paragraphs 7.110 – 7.113 of the Consultation Document.

The Treatment of Depreciation

7.119 As set out in paragraphs 7.115 – 7.118, ComReg proposed that depreciation be determined based on a tilted annuity approach which is consistent with other regulatory decisions relating to Eircom's core network - see proposed tilted annuity formula (as set out in paragraph 7.116 of the Consultation Document) below.

Economic Depreciation formula with Price Trend

$$Annuity(Age) = \frac{Invest}{Fi} * \frac{(1+PriceTrend)^{(Age-1)}}{(1-PriceTrend)}$$

where

$$Fi = \frac{1-(1+h)^{(-AssetLife)}}{h}$$

$$h = (1+WACC)*(1-PriceTrend)-1$$

***Age**: Age of the asset*
***Invest**: Initial investment for the asset*
***WACC**: nominal WACC since the cost model is in nominal terms (designed to set the CPI – X formulae)*

7.120 While identifying that the impact of the depreciation approach is not likely to be material, the most material capital costs being software licence costs, general IT development, media gateways etc. it was recognised that only a proportion of such costs might relate to FVCT.

The Appropriate Level of Efficient Operating Costs

7.121 As set out in paragraph 7.118 of the Consultation Document, ComReg proposed that operating costs should be determined on a top down basis using Eircom's actual historical operating costs adjusted for efficiencies to reflect the likely costs of operating a forward looking IP based network.

The Appropriate Allocation of Costs to Services

7.122 Paragraph 7.119 of the Consultation Document recognised that in the proposed updated pure BU-LRIC FTR model, ComReg used the engineering rules from Eircom (as assessed by TERA) to arrive at the appropriate allocation of capital and operating costs to the various services (and which are consistent with the principles of cost causation, non discrimination and transparency). It was recognised that while this approach may be relevant for multiple products/services, it is less relevant when calculating the pure increment of one product/service given it may not be appropriate to recover common costs – see paragraph 7.120 of the Consultation Document.

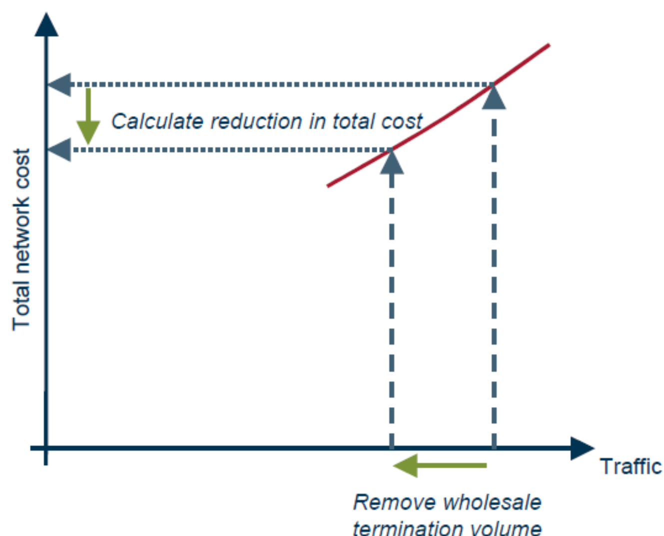
Determine the Results

7.123 In order to determine the proposed FTR, paragraphs 7.121 – 7.133 set out the relevant calculations i.e. in summary the steps set out in the Consultation Document were as follows:

- the calculation of the total capital costs ('CAPEX') including an appropriate rate of return
- the calculation of the total OPEX costs (adjusted for efficiencies)

- determination of the pure LRIC cost – the increment being defined as the "costs avoided when not offering the service"
- the cost increment is then divided by the total service volume to determine the FVCT unit costs. This is illustrated in Figure 7.10 of the Consultation Document (and repeated below).

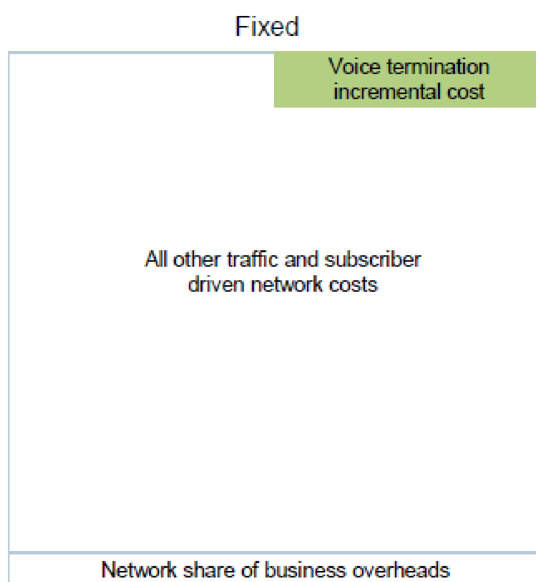
Figure 7.6: Calculating pure LRIC



Source: ComReg

7.124 Before determining the pure LRIC costs, there is a need to determine the relevant increments i.e. the wholesale termination services (which includes only the avoidable costs), non traffic related costs and common costs being disregarded – see Figure 7.7 below (which was figure 7.11 in the Consultation Document).

Figure 7.7: The relevant increment



Source: ComReg

7.125 ComReg, in the Consultation Document, put forward the view that the relevant increment associated with FVCT can be determined based on the costs associated with transport across the NGN core network and the costs arising from the NGN voice control layer. Paragraph 7.127 of the Consultation Document identified that the relevant increment was also dependent on the network modelled:

- Full IP network – increment may be transport only
- IP/TDM hybrid – increment may include other transport costs and other NGN voice control layer costs over that associated with a full IP voice network

7.126 Regarding transport costs, and in assessing the increment, it was identified there is a relevant increment associated with the costs of links that are traffic driven and may need to be taken into account (see paragraph 7.128 of the Consultation Document). In addition and with respect to the NGN voice control layer, there are relevant increments associated with call per minute and per call costs:

- Per minute increments – Assuming that Eircom's network will be based on a full IP enabled network and given that all FSPs will be unlikely to have fully IP enabled networks, Eircom will have to deploy a Media Gateway with C7 / TDM technology (to allow conversion). It is proposed that the NGN media gateway costs should be part recovered from voice termination (i.e. cost per port at busy hour traffic / associated traffic). In addition, there may be costs associated with software call processing (which are driven by volumes of traffic) which should also be recovered from voice termination – see Paragraphs 7.130-7.131 of the Consultation Document.

- Per call increments – Paragraphs 7.132 – 7.133 of the Consultation Document identify two costs i.e. costs of Session border controllers ('**SBCs**') and costs associated with a next generation intelligent network ('**NGIN**'). SBCs are devices employed in VoIP to exert control over signalling. The incremental cost being driven by the purchase price of the SBCs, volume of calls and the average call duration of 2.66 minutes. The NGIN increment being identified as the routing costs associated with FVCT which is driven by the purchase price of the NGIN, the volume of calls and the average call duration of 2.66 minutes.

7.127 In determining a pure BU-LRIC model for FTRs in Ireland, ComReg was of the preliminary view (see Paragraph 7.134 of the Consultation Document) that the proposed cost model assumptions and inputs as set out in subsection 7.3.3 (and summarised above) were appropriate.

7.128 In its Consultation Document, ComReg asked the following question:

Q. 8 Do you agree with the cost model inputs and assumptions proposed by ComReg in relation to the pure BU-LRIC model for FTRs? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.5.2 Views of Respondents

7.129 Of the eight responses to the consultation, set out below are the high level views of respondents regarding the proposed cost model inputs and assumptions in relation to the pure BU-LRIC model for FTRs:

- Two respondents (Magnet and ALTO) essentially agree with ComReg's proposals;

- Two respondents (Eircom and Vodafone) made some proposals regarding the cost model inputs, which are further discussed below;
- One respondent (BT) disagrees for the reasons set out below;
- One respondent (O2) had no comments in response to this question;
- One respondents (H3GI) reserves its position pending ComReg's consultation in respect of its proposed BU LRIC MTR model
- One respondent (TMI) did not respond directly to this question in its submission.

7.130 Vodafone is of the view that a forward looking assessment of costs should be based on an IP based core for exchanges which will be NGN enabled within the timescale of the review. Vodafone believes that it would not be appropriate to use this costing model for exchanges that remain outside the proposed NGN footprint at the end of the proposed FTR control period. Vodafone believes that these exchanges should be costed using the existing TDM cost model. According to Vodafone, this hybrid approach should lead to a lower FTR.

7.131 Eircom does not agree with ComReg's assumptions around the MEA technology. According to Eircom, almost all FSPs (including Eircom) use TDM-C7 networks and are likely to continue to do so through the period of the price control. Eircom is of the view that the architecture and cost structure of a network using IP/NGN for voice switching will have a pure LRIC for call conveyance that is well below that for a TDM network. Therefore, Eircom believes that if ComReg sets FTRs based on the pure LRIC of an IP network, most operators will not recover even the pure LRIC for termination on their network from their call termination revenues.

7.132 In Eircom's opinion, there are three possible network inputs in modelling the pure LRIC for call termination – the existing TDM/C7 Eircom network, IMS implementation of VoIP on the Eircom network delivering call termination using C7 interconnection or a fully integrated NGN. Eircom refers to other ComReg consultation documents where it rejects VoIP as the MEA for POTS; which Eircom claims has not been consistent with ComReg's proposals in the Consultation Document. It is Eircom's view that the existing TDM/C7 network is the most appropriate for the purposes of building a pure BU-LRIC model to calculate FTRs.

7.133 BT disagrees with ComReg's proposed approach and in its view given the majority of voice traffic is still carried over traditional TDM networks, it is more appropriate to use a hybrid approach for the current control period. BT, in its response, lists what it perceives to be the reasons for using a hybrid approach. It notes that additional costs will be experienced during the transition from the traditional platform to a new VoIP platform. Therefore, such costs should be factored into the FTR for this review period or until the traditional voice service becomes a minority service. For example, BT notes that during the transition there will be a requirement to run in parallel the traditional and the new switch platforms as one of the several migration strategies are adopted.

7.134 Please refer to ComReg Document No. 12/110 which sets out the published non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.5.3 ComReg's Assessment of Responses and Final Position

7.135 Having considered the views of interested parties ComReg has decided to refine the pure BU-LRIC model for FTRs to take into account the likelihood that the current network for terminating the majority of fixed traffic in Ireland, i.e. Eircom's core network, is unlikely to be a fully upgraded network by 2013, which is likely to be the case for other FSPs also. This is also clear from recent announcements by Eircom where they have stated that voice will continue to be delivered via traditional TDM equipment for the short to medium term even where broadband is delivered from the upgraded Next Generation Access network (which is due for launch in early 2013).

7.136 However, ComReg also acknowledges that this may not be the case for the medium term and therefore the price control should reflect what would be the efficient evolution of a typical FSP. Indeed many other FSPs across Europe are moving to IP voice platforms, however only a small number have done so for a majority of their traffic.

7.137 ComReg agrees with Vodafone that some traffic may remain on the traditional TDM equipment where the core network has not been upgraded and where it may not make commercial sense to upgrade it over the next three to five years. While such costs are likely to be immaterial when assessing the avoidable cost of terminating this traffic, the model will acknowledge that some of Eircom's network will remain on TDM outside the NGN core network. Therefore, where such costs are fully written off the model will reflect this.

7.138 ComReg has decided to amend the pure BU-LRIC model for FTRs, from that proposed in the Consultation Document, to a mix of PSTN and NGN as the incumbent (i.e. Eircom) and OAOs have confirmed that they have not yet procured an NGN voice solution for 2013 and will gradually introduce the upgrade, possibly from 2014. This approach is consistent with the European Commission's guidance that the cost model should be based on the most efficient technologies subject to their availability in the timeframe considered by the model[153]. ComReg is of the view, based on responses from FSPs to ComReg Document 12/27[154] that it will take some time to put a full NGN voice solution in place and such a solution will require significant industry co-ordination for interconnect purposes. At this stage in the process, ComReg therefore believes that the most efficient means of terminating fixed calls for 2013 and 2014, in the absence of a fit for purpose NGN solution, is the current network in place i.e. TDM equipment, albeit with a transition to a NGN solution envisaged in 2014. ComReg is now amending the pure BU LRIC model for FTRs as follows to reflect the most efficient technologies likely to be available in the timeframe considered by the pure BU LRIC model:

- From 1 July 2013 to 30 June 2014, the FTR is calculated based on a full TDM network;
- From 1 July 2014 to 30 June 2015, the FTR is calculated using a hybrid network (i.e. partially TDM and partially NGN);
- From 1 July 2015 onwards, the FTR is calculated based on a full NGN network, with TDM interconnection capabilities.

7.139 Therefore, ComReg is amending the appropriate efficient network topology from that proposed in the Consultation Document to reflect the evolution from a TDM core with PSTN technology at the switching layer to an NGN core with IP switching technology at the switching layer over the price control period. This is modeled together with the existing fibre and trench of Eircom. This is reflected in Figure 7.8 below.

7.140 The network topology should be based on a scorched node approach reflective of Eircom's current deployment of nodes. This is reflective in Figure 7.9 below. ComReg believes that this deployment is representative of an efficient network topology over which fixed voice will be delivered.

[153] ComReg notes for example section 5.1.1 of the European Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, Explanatory Note, SEC(2009) 600, 7 May 2009.

[154] ComReg Document 12/27, Next Generation Access ('NGA'), Proposed Remedies for Next Generation Access Markets, Response to Consultation, Further Consultation and Draft Decision, 04/04/2012.

Figure 7.8: Overview of Network topology, based on evolution of the most efficient technologies available in Ireland over the price control period

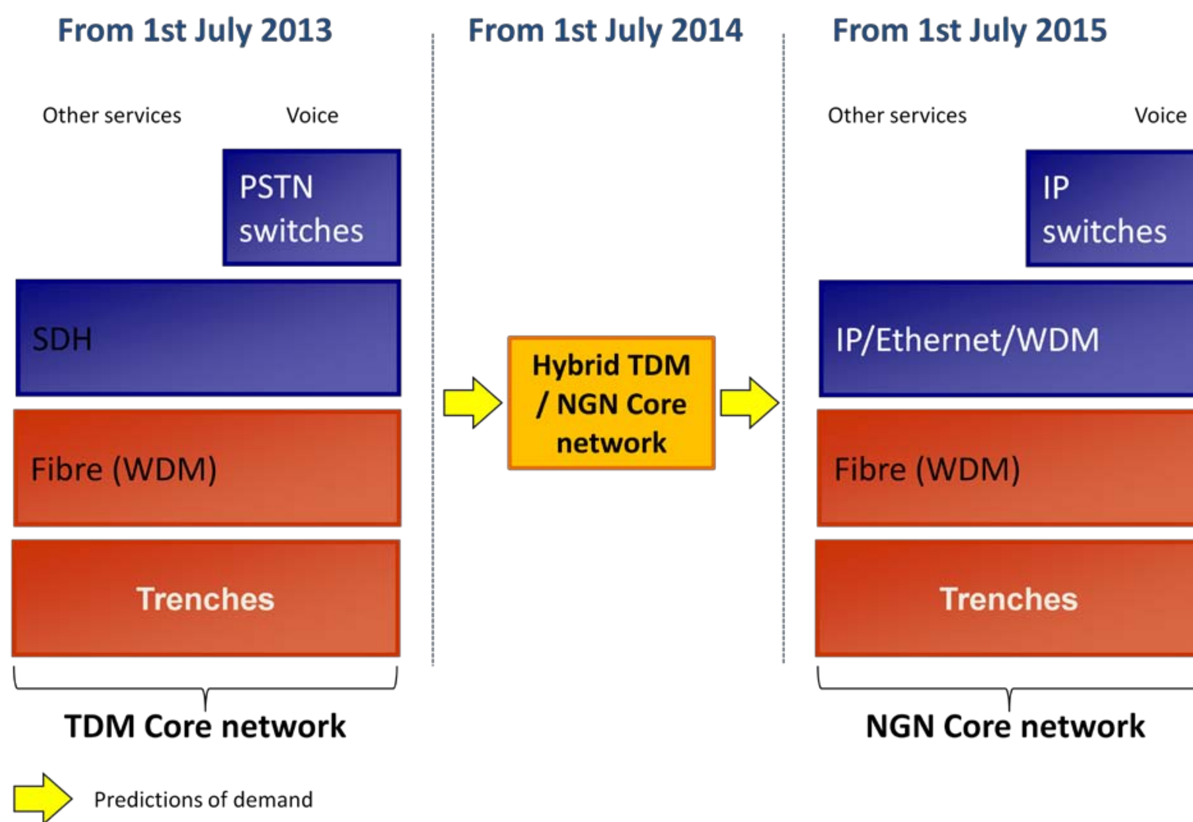
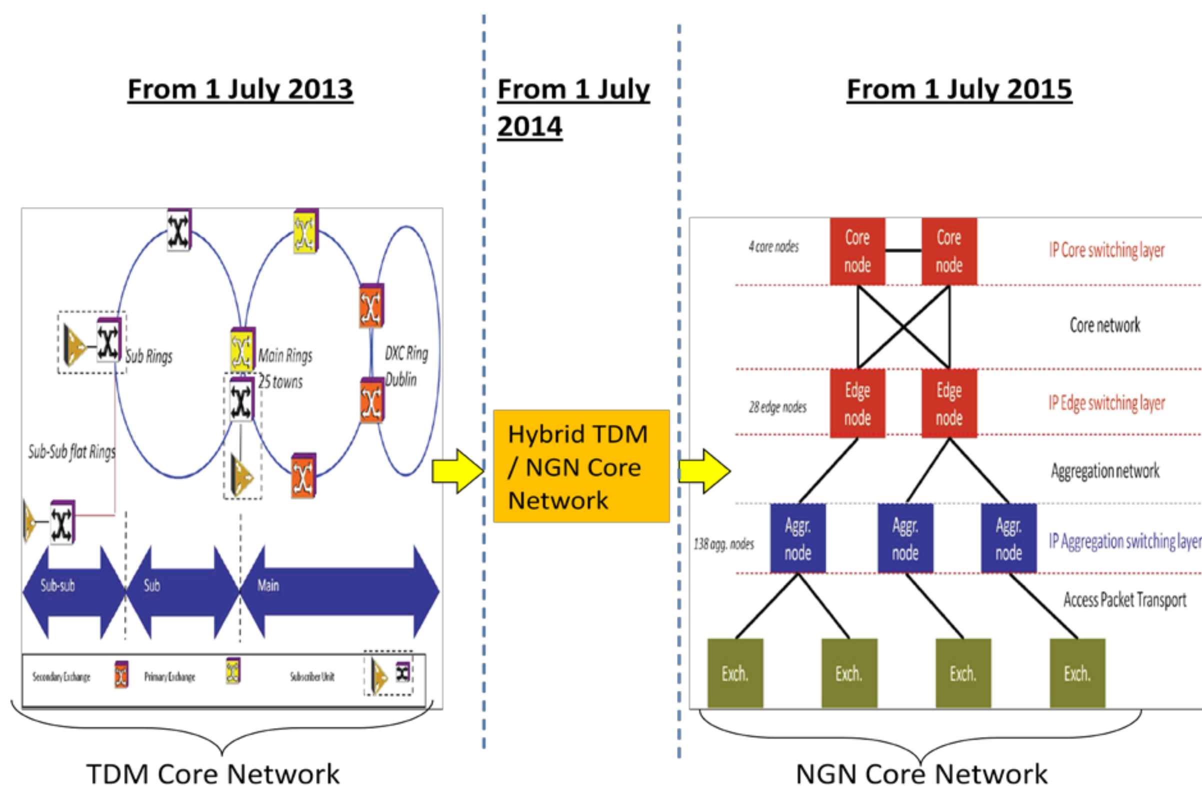


Figure 7.9: Scorched earth approach: Evolution from TDM to NGN based on Eircom's current TDM and NGN network(s)



7.141 ComReg also acknowledges that that there are NGN voice control layer costs over that associated with full IP voice network. This was previously discussed in section 7.3.3 of the Consultation Document. With the deployment of a full IP enabled network and given that all FSPs will be unlikely to have fully IP enabled networks, Eircom will have to deploy a Media Gateway with C7 / TDM technology (to allow conversion). In addition, there may be costs associated with software call processing. ComReg also acknowledges that there are also other costs to be considered, primarily that of SBCs and costs associated with a next generation intelligent network ("NGIN").

7.142 ComReg agrees with BT that there may be additional costs experienced by FSPs during the transition from the traditional fixed voice technology to a new VoIP platform. This has been taken into account in the modelling excercise where it now reflects the transition from TDM to NGN voice and the likely efficient costs associated with the transition.

7.5.4 ComReg Decision:

The pure BU-LRIC model for FTRs shall be based on the inputs and assumptions set out in Section 7.5 of this Decision Document.

7.6 Results of the Pure BU- LRIC Model and Application of the FTRs

7.6.1 ComReg's Preliminary View from the Consultation Document

7.143 Based on the above approach, Figure 7.12 of the Consultation Document set out the proposed range of the FTRs (i.e. 0.02 to 0.07 cents per minute and 0.00 (zero) to 0.07 cents per call) for FVCT (which are dependent on the relevant increments considered).

7.144 Paragraphs 7.137 – 7.139 of the Consultation Document set out ComReg's view that regardless of the change to the FTRs, FSPs providing FVCT on fixed networks are likely to continue the practice of levying their customers based on peak, off-peak and weekend usage. ComReg, in its Consultation Document proposed that FTRs should be determined based on the pure BU-LRIC modelling exercise with the resulting FTRs set as a maximum, symmetrical FTR applicable to all SMP FSPs based on the result of the BU-LRIC model. It was proposed that FSPs could continue to differentiate between time of day when setting rates while ensuring those rates would not lead to the recovery of any more than the average rate directed.

7.145 Given recent reductions to Eircom's FTRs in July 2012 and in light of the expectation that such rates would be in place for at least twelve months (up to the 30 June 2013), ComReg was of the preliminary view that the implementation date for the pure LRIC FTRs should be with effect from 1 July 2013. In addition and in terms of notification procedures, ComReg was of the preliminary view that all SMP FSPs should pre-notify ComReg two months in advance of the date on which any proposed amendment to their FTRs was due to come into effect and that this notification would also be accompanied by a statement confirming that the proposed revised FTRs comply with the maximum permitted FTR – see paragraphs 7.141 – 7.142 of the Consultation Document.

7.146 In its Consultation Document, ComReg asked the following question:

Q. 9 Do you agree with ComReg's proposals in relation to the implementation of its proposed pure BU-LRIC model for FTRs? Please provide reasons for your response. Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.6.2 Views of Respondents

7.147 Of the eight responses to the consultation, set out below are the high level views of respondents regarding ComReg's proposals in relation to the implementation of its proposed pure BU-LRIC model for FTRs:

- Five respondents (Vodafone, Magnet, ALTO, H3GI and Eircom) generally agree with ComReg;
- One respondent (O2) has no comments in relation to this question;
- Two respondents (TMI and BT) do not respond directly to this question.

7.148 Vodafone, in agreeing with ComReg's proposals stated that it is both "*equitable and reasonable*". Magnet and ALTO also agree and find ComReg's approach the "*most practical and reasonable proposal*".

7.149 Eircom while essentially agreeing with ComReg's proposals highlights that this does not mean it agrees with the range of FTRs listed in the Consultation Document. It also points to two implementation issues – firstly the separation of termination costs into those driven by the numbers of calls and those driven by the volume of call minutes; and secondly what Eircom refers to as a "*time of day gradient*" that may apply to the average unit cost to set the rates at different times.

7.150 In relation to the first issue, Eircom believes based on an experience of modelling networks used for call conveyance that significant differences are evident in the costs driven by the number of call events as opposed to the costs driven by the volume of call traffic. Eircom believe that this difference will persists in the pure LRIC for call termination, and Eircom argue that the distinction of per call and per minute elements should be maintained in the price structure, when setting FTRs. Eircom believes that a a move to pure LRIC is likely to have the effect that networks may have a shorter average duration for calls terminated (i.e. a higher intensity of call events per call minute conveyed) and therefore require a mechanism to recover the higher network cost to convey the same volume of traffic. Eircom also makes reference to MTRs and how they may demonstrate a similar cost structure as that of fixed networks as they move to cost oriented levels (based on pure LRIC). Eircom noted that once a future MTR modelling exercise has been carried out, the option to change the price structure from the current per minute charging should, according to Eircom, be considered by ComReg.

7.151 In its submission, to address the second issue, Eircom states that there are three options for the correct implementation to deal with the "*time of day gradient*". According to Eircom, these are to use a single 24 hour price; to use

the Eircom gradient for all FSPs and set "*deemed to be*" rates across all FSPs or for FSPs to determine their own gradient and to set their rates to reflect the traffic / revenue mix on their network. Eircom is of the view that the move to set Termination Rates to recover pure LRIC should be used to remove the "*time of day gradient*" from prices charged for both FTRs and MTRs.

7.152 Please refer to ComReg Document No. 12/110 which sets out the published non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.6.3 ComReg's Assessment of Responses and Final Position

7.153 As ComReg noted in Consultation Document No. 12/67, ComReg has consulted bi-laterally with Eircom in relation to the updated FTR model as most of the data in the current model relates to Eircom's core network. ComReg sets out in Consultation Document No. 12/67 and again in this Consultation Document the changes made, the reasons for these changes together with the pure LRIC FTRs that result from the model. While ComReg believes there is sufficient information set out in this Consultation Document to allow a considered understanding of the Decision made, ComReg will – upon request by any respondent to this Consultation Document – share further details of the proposed BU-LRIC FTR model, including its make-up (in a non-confidential format).

7.154 Having considered the views of interested parties, ComReg as set out above has amended the modelling approach for FTRs to reflect the most efficient technologies available in the timeframe of the price control period, where ComReg has updated the model to reflect the evolution from current TDM networks to NGN networks. As such ComReg has set FTRs on an annual basis over the price control period to reflect the evolution to an NGN network. This has the effect of increasing the maximum permitted FTR from 1 July 2013, from the range set out in the Consultation Document, however the modelled rate is significantly below those currently in the market.

7.155 The output of the pure BU-LRIC model is a cost per minute and a cost per call. This is set out in Figure 7.10 below.

Figure 7.10: Applicable FTRs for the price control period based on results of pure BU-LRIC Model

	Cent per Minute	Cent per Call
1 July 2013 – 30 June 2014	0.070	0.075
1 July 2014 – 30 June 2015	0.060	0.068
1 July 2015 – 30 June 2016	0.049	0.060

7.156 However it is clear from the Eircom Switched Routing and Transit Price List ("STRPL") that the method for charging for FTRs varies considerably from one FSP to another. Some charge based on a "per call and per minute" basis, while others charge on a "per minute" basis only. ComReg does not have a view on which method is the most appropriate at this time and has decided that operators may apply the pure LRIC FTRs set out in this Decision on either basis. However, it is important to make an assumption when a FSP decides to apply a per minute only FTR and that any such FTR fully complies with the per call and per minute rate which has been derived from the pure BU-LRIC model. The assumption to be made relates to an average duration of a call that terminates on fixed networks in Ireland. Currently, based on data from Eircom, the average duration of such calls is approximately 2.66 minutes. It is likely that some operators may have different average durations; however ComReg does not believe that there should be a material divergence across industry and therefore charging on a per minute basis should not give rise to a significant over/under recovery from the relevant per call/per minute cost derived from the pure BU-LRIC model. Therefore, ComReg will allow FSPs, that wish to continue to charge on a "per minute" only basis, to charge no more than the average pure LRIC cost based on an average call duration of 2.66 minutes. This gives a blended rate for each of the years set out above, and these rates are illustrated in Figure 7.11 below. ComReg will keep this under review to ensure FSPs comply with the cost orientation obligation set out and where issues arise with the charging mechanism adopted by FSPs, ComReg may intervene to ensure any anomalies are remedied as soon as possible.

Figure 7.11: Applicable FTRs for the price control period based on a blended "per minute" rate

	Blended cent per minute*
1 July 2013 – 30 June 2014	0.098
1 July 2014 – 30 June 2015	0.085
1 July 2015 – 30 June 2016	0.072

** Equals the blended rate per minute = cost per minute + (cost per call / average duration of a call) where the average duration of a call = 2.66 minutes*

7.157 With regard to the views of Eircom and other respondents relating to the time of day gradient, ComReg considers that there is merit to the view that a time of day gradient price structure for FTRs is no longer appropriate or necessary. Similar to the view expressed earlier with regard to an MTR "time of date" rate, ComReg now believes that this may allow for significant asymmetry between operators which is not in line with the objectives of this Decision. The imposition of flat-rate Termination Rates will also allow for a simpler billing arrangement between operators and is more transparent. This will not have any impact on the cost recovery of the SMP FSPs as the same cost will be recovered.

7.158 Having considered the views of interested parties, ComReg remains of the view that the revised pure LRIC FTRs for all SMP FSPs should come into effect on 1 July 2013 and not 1 January 2013 for the reasons out lined in the Consultation Document.

7.159 ComReg's intention is to review the pure LRIC BU Model for FTRs in 2016, however where this review is not complete the rates set out in Figure 7.11 commencing 1 July 2015 will apply until such time as a review is complete.

7.6.4 ComReg Decision:

With effect from 1 July 2013, the maximum permitted flat-rate FTRs charged by FSPs shall be the cent per call and cent per minute rates, or the blended cent per minute rates (where appropriate), as set out in Figures 7.10 and 7.11 of this Decision.

Where FSPs do not apply the two-part charging of a "cent per minute" and a "cent per call" rate, a FTR of no more than the Blended cent per minute as set out in Figure 7.11 of this Decision shall apply.

FSPs shall charge flat-rate FTRs with no differentiation between peak/off-peak/weekend rates being permissible.

7.7 Treatment of Common Costs not Recovered under pure LRIC

7.7.1 ComReg's Preliminary View from the Consultation Document

7.160 The treatment of common costs not recovered under pure LRIC was discussed in paragraphs 7.143 – 7.171 of the Consultation Document. While the adoption of a pure LRIC methodology would mean that common costs could no longer be recovered through MTRs or FTRs, it was necessary to also discuss the likely implications of this on other services or parts of the business of the Service Provider. It is not clear to ComReg what the materiality of this issue is as there is a significant lack of information with regard to the relevantcosts currently included in the Termination Rates of Service Providers (that is for operators other than Eircom). While Eircom's FTRs have been subject to price control obligations for many years, ComReg has a greater understanding (from its TD cost model) of the proportion of common costs which have been included in FTRs. ComReg, in considering the impact of the reallocation of common costs, identified (see paragraph 7.413 of the Consultation Document) that while the costs now not recovered from FVCT may be material to that service, such costs, if shared amongst other wholesale services, may not give rise to a material shift in the associated unit cost of other services, e.g. voice and data services.

7.161 The Consultation Document, in recognising that there is no common position amongst other NRAs in relation to the treatment of common costs not recovered under a pure LRIC approach for FTRs, provided an overview of its treatment to date in other EU/EFTA Member States (see paragraph 7.146 - 7.152 of the Consultation Document).

7.162 The Consultation Document then considered the options available to Eircom, other SMP FSPs and SMP MSPs to recover common costs not recovered through FTRs and MTRs when a pure LRIC methodology is applied (see paragraph 7.154 – 7.169).

7.163 For **Eircom,** it was proposed that it could recover the unrecovered common costs from the price it charges for originating services, where such prices may need to change (especially where they are regulated). Given Eircom's accounting separation and cost accounting obligations, it was recognised that costs must be allocated appropriately across all relevant services on a cost causation basis.

7.164 Regarding the choice of recovery methodology, ComReg (in paragraph 7.159-7.160) was of the preliminary view that pure LRIC was not appropriate for both termination and origination as the Service Provider would end up selling both services for less than their average cost of production and their common costs would be unrecovered. Under this scenario, it was recognised that Eircom could be at a disadvantage to those buying origination as they would not recover the fully efficient cost of providing the call origination service. While a LRIC + approach for origination reduces the disadvantage that operators face when selling origination compared with those buying origination, an anomaly would still be created as the Service Provider e.g. Eircom Wholesale would still not recover the full efficient costs of production.

7.165 Finally, ComReg in its Consultation Document considered LRIC plus an additional mark-up for unrecovered (termination) common costs. The Consultation Document identified two options i.e. allocation of unrecovered common costs across origination calls or allocation to other services (e.g. broadband access, leased lines etc.). ComReg considered that allocation to origination services may be the most appropriate for Eircom as firstly it allows the common costs to be recovered and secondly the cost of the assets relating to call origination may need to be adjusted to better reflect the MEA rather than the full cost of legacy TDM technology.

7.166 For **Other SMP FSPs** ComReg set out in paragraphs 7.164 -7.166 of the Consultation Document that the SMP FSP has the discretion to recover such costs from either the wholesale or retail services.

7.167 For **the SMP MSPs** we set out in paragraphs 7.167 -7.169 that given that the SMP MSPs are not regulated across a number of markets, they can recover the common costs (**n**ot recovered through MTRs if a pure LRIC methodology is applied) either from other wholesale or retail services. Given that ComReg has no details on the costs or mark ups included in current MTRs, it is not possible for ComReg to comment on the likely level of under-recovery if a pure LRIC methodology is adopted. However, as a pure LRIC MTR does not allow for the recovery of fixed and common costs, MSPs may have adjustments to make to ensure any costs previously recovered from MTRs are recovered elsewhere. In summary, ComReg (see paragraph 7.170 of the Consultation Document) was of the preliminary view that if Eircom's FTRs are set using a pure LRIC cost methodology, any unrecovered efficient common costs should, in the first instance, be allocated across the call origination services whereby the common costs are recovered across the originating related services, from both OAOs and Eircom Retail. In circumstances where this gives rise to a significant increase in call origination prices, then Eircom should assess how best these costs should be allocated to ensure the least distortion is caused to both the other FSPs and its own retail business.

7.168 In the case of other SMP FSPs and the SMP MSPs, ComReg (see paragraph 7.171 of the Consultation Document) was of the preliminary view that it is up to each such Service Provider to decide the most appropriate and reasonable approach that is in its best interests.

7.169 In its Consultation Document, ComReg asked the following question:

Q. 10 Do you agree with ComReg's preliminary views as set out above regarding the treatment of common costs not recovered from pure LRIC for Eircom, the other SMP FSPs and the SMP MSPs? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.7.2 Views of Respondents

7.170 Of the eight responses to the consultation, set out below are the high level views of respondents regarding the treatment of common costs not recovered from pure LRIC:

- Three respondents (Magnet, ALTO and H3GI) generally agree with ComReg's proposals;
- Two respondents (Vodafone and O2) disagree;
- One respondent (Eircom) discusses the various options but does not appear to agree or disagree conclusively with ComReg's proposals;
- One respondent (BT) has no comments in relation to this question; and
- One respondent (TMI) did not respond directly to this question in its submission.

7.171 H3GI, while broadly agreeing with ComReg's proposals, reserves its position in relation to the treatment of unrecovered common costs for Eircom pending ComReg's consultation on a pure BU-LRIC model for MTRs.

7.172 Eircom makes the point, in its submission, that ComReg should make it clear that it will not accept MSPs increasing origination charges in order to recover fixed network costs no longer recovered from call termination revenues. Eircom distinguishes what it perceives to be the two types of costs that are no longer recovered. [✂………………………………………………………………………… ………………………………………………………………………… …………………………………………………………………………..]

7.173 Vodafone does not believe that ComReg's proposal is "*proportionate, reasonable or justified*". In Vodafone's view, ComReg is proposing that the common costs of call conveyance are "*fully recoverable in one rather than the other call conveyance wholesale market*". According to Vodafone, ComReg has not provided a substantive analysis to illustrate that "*inverting the position where origination is priced on a pure LRIC basis with its common costs recovered in the termination market would not yield a superior welfare surplus"*.

7.174 O2 strongly disagrees and believes that ComReg's proposal "*gives rise to the potential of further damage to the competitive landscape and a detrimental effect of future investment and innovation in the Irish marketplace."*

7.175 Please refer to ComReg Document No. 12/110 for a published version of all the non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.7.3 ComReg's Assessment of Responses and Final Position

7.176 **FTRs**

7.177 Having considered the views of interested parties, ComReg remains of the view that, in the case of the regulated fixed incumbent Eircom, efficient costs no longer recovered from voice termination services could be recovered from other wholesale and/or retail voice/non-voice services as appropriate. As Eircom is subject to regulation over a number of Markets, it is necessary to give more specific guidance to it on this issue. ComReg agrees with Eircom that where the costs are recovered depends on the cause of the cost and also whether recovering the cost from a particular service could give rise to distortions in the market, for example a significant increase to the regulated call origination rates. As ComReg has the full cost of the Eircom core network available to it from the various modelling exercises carried out to date, it was possible to assess the likely impact of moving unrecovered costs from FTRs to other services. The conclusion of this exercise was that overall no particular service should require a significant price increase in order to recover the cost of the network.

7.178 **MTRs**

7.179 By contrast to the situation for Eircom's regulated FTRs above, MSPs are not regulated in other wholesale/retail markets and are thus already free to recover the non-incremental common costs which will no longer be recovered through MTRs from other wholesale and/or retail mobile or fixed markets as they see fit.

7.180 In relation to the comments from Vodafone and O2, ComReg has provided sufficient justification in the Consultation Document and throughout this Document on why MTRs and FTRs should be set on a pure LRIC basis, *inter alia*, on grounds related to the promotion of more effective and efficient competition, the promotion of consumer welfare (equity) and contribution to the development of the internal market. In particular, paragraphs 6.98 to 6.104 and paragraphs 6.180 to 6.186 of this Document note the various forms of tariff re-balancing options available to Service Providers faced with a reduction in wholesale terminating revenues. The Final Analysys Mason Report (page 24) notes: "*The majority of MNOs revenues are derived from unregulated services sold in competitive retail markets, therefore network operators will be in a position to decide how to manage the burden of overall cost recovery in the situation of lower wholesale termination revenues..*".

7.181 ComReg considers that is has carried out an appropriate regulatory assessment. ComReg gathered a significant amount of quantitative and qualitative data from operators to ensure it had sufficient information from the industry in order to form a view. ComReg also relied on survey data that was collected as part of its MVCT and FVCT market reviews. ComReg also carried out a confidential detailed financial impact assessment to understand the likely financial impacts on operators at the wholesale level.

7.8 Decision Instruments

7.182 **Fixed Termination:**

7.183 In the Consultation Document ComReg asked the following question in relation to the Decision Instrument in Chapter 8:

Q. 11 Do you believe that the draft text of the proposed Decision Instrument in relation to FTRs contained in Chapter 8 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain the reasons for your answer, clearly indicating the relevant section numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.8.1 Views of Respondents

7.184 In response to ComReg's draft text of the proposed Decision Instrument in relation to FTRs, Vodafone, O2, H3GI and BT do not have any comments. TMI does not respond directly to the question. Magnet and ALTO agree that ComReg's draft text is clear from a legal, technical and practical perspective. Eircom essentially agrees; however it notes ComReg's proposal to rely on ComReg Decision No. D06/07. Eircom notes a concern around what it terms the "*significant period of time"* that has elapsed since the market review for that decision. It also comments in relation to the definition of peak, off-peak and weekend FTRs and refers to its response in relation to Question 9 around its preference for a single flat rate.

7.185 Please refer to ComReg Document No. 12/110 for a published version of all the non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.8.2 ComReg's Assessment of Responses and Final Position

7.186 ComReg notes the comment from Eircom with regard to the length of time since the market review that preceded the adoption of Decision D06/07. However, ComReg notes that subsequent to the publication of the Consultation Document it published (on 3 September 2012) its updated review of the Fixed Voice Call Termination market, which sets out ComReg's preliminary conclusion that all FSPs currently designated with SMP under Decision D06/07 should be re-designated with SMP and that a number of FSPs not currently designated with SMP should be designated with SMP for

the first time.[155]

7.187 The FVCT consultation paper (ComReg Document No. 12/96) sets out updated analysis justifying the imposition of a cost-orientation obligation on SMP fixed operators, contains the draft FTR decision, and gives all operators an opportunity to make representations. In the event that on conclusion of that consultation process the designation of Eircom as having SMP or the appropriateness of the price control remedy is varied or revoked, the current decision will be amended accordingly.

7.188 Having considered the views of interested parties and reviewed the draft text of the FTR Decision Instrument, ComReg has made a number of structural and textual changes in the final Decision in relation to FTRs. These have been made with a view to improving the clarity of the FTR Decision Instrument and do not affect the substance of the Decision as published in draft form in the Consultation Document.

7.189 **Mobile Termination**:

7.190 In its Consultation Document, ComReg also asked the following question in relation to the Decision Instrument in Chapter 9:

Q. 12 Do you believe that the draft text of the proposed Decision Instrument in relation to MTRs in Chapter 9 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain the reasons for your answer, clearly indicating the relevant section numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

7.8.3 Views of Respondents

7.191 In response to ComReg's draft text of the proposed Decision Instrument in relation to MTRs, Vodafone and BT do not have any comments. TMI does not respond directly to the question. Magnet and ALTO agree that ComReg's draft text is clear from a legal, technical and practical perspective. H3GI essentially agrees with ComReg's draft text (with minor technical corrections) but in its view the Decision Instrument should make provision for the interim rate of 2.42c per minute and should "*revoke ComReg Decision Notice D05/08*".

7.192 Eircom essentially agrees; however in its view it is not necessary for ComReg to define the term "*Access*" as in this context it is according to Eircom

[155] See "Market Review: Wholesale Voice Call Termination Services Provided at a Fixed Location", ComReg Document No. 12/96, 3 September 2012.

"*unnecessary and confusing….it is sufficient to refer to the obligation of cost-orientation imposed in the relevant decision*". O2 does not agree with ComReg's draft text and its comments, previously made in response to earlier questions, as to the unsuitability of the mechanism and calculation used are reiterated. O2 also makes specific reference to ComReg's definition of BU pure LRIC MTRs fails to incorporate "*a minimum quantity of member states to create a realistic benchmark*".

7.193 Please refer to ComReg Document No. 12/110 for a published version of all the non confidential responses and accompanying annexes or reports submitted by respondents in response to the Consultation Document.

7.8.4 ComReg's Assessment of Response and Final Position

7.194 Having considered the views of interested parties ComReg remains of the view that the FTR and MTR Decision Instruments are sufficiently detailed, clear and precise.

7.195 ComReg notes the comment made by HG3I to the effect that the Decision Instrument for MTRs should make provision for the interim rate of 2.42c per minute. ComReg agrees in principle with this comment and the final MTR Decision Instrument set out in Annex 2 below now states that the interim weighted average MTR of 2.60 cent per minute will apply to all SMP MSPs with effect from 1 January 2013.

7.196 As regards the comment made by H3GI that the MTR Decision Instrument should revoke ComReg Decision D05/08, it should be noted that Section 14.1 of the Decision Instrument set out in Appendix I of the 2012 MVCT Decision expressly revokes ComReg Decision D05/08.

7.197 In relation to the comment from Eircom with regard to defining the term "Access", ComReg considers that it is appropriate to retain the definition of "Access" contained in the Draft MTR Decision Instrument. However, in order to address the concerns raised by Eircom regarding the scope of that term, ComReg has ensured that the final MTR Decision Instrument set out in Annex 2 below makes it clear that the term "Access" when used in that Decision Instrument relates to "Access to MVCT". Given that the definitions of Peak, Off-Peak and Weekend FTRs have been removed from the final FTR Decision Instrument, ComReg considers that it is no longer necessary to include any definition of "Access" in the final FTR Decision Instrument as set out in Annex 1 below.

Chapter 8

8 Final Regulatory Impact Assessment (RIA)

8.1 Overview

8.1 A Regulatory Impact Assessment (‘**RIA**’) is an analysis of the likely effect of proposed new regulation or regulatory change. The RIA should help to identify regulatory options, and should establish whether the proposed regulation is likely to have the desired impact. The RIA is a structured approach to the development of policy, and analyses the impact of regulatory options on various stakeholders.

8.2 ComReg notes that this Document, more broadly, explores the suitability of different regulatory approaches for setting FTRs and MTRs in Ireland. As such, the main body of the Document analyses the likely and potential impacts of various regulatory options, and addresses arguments that have been raised by interested parties in respect of ComReg’s comparative assessment of the proposed pricing methodologies in the Consultation Document. Therefore this chapter responds to specific issues raised regarding the RIA in the Consultation Document and summarises ComReg’s overall analysis of the impacts associated with the different regulatory pricing options considered. In doing so, this chapter will reference evidence and analysis contained throughout the main body of the Document.

8.3 Further to ComReg’s comparative assessment framework[156] according to which it assessed a range of different regulatory approaches[157] against a set of six Assessment Criteria[158] (mapped to ComReg’s statutory objectives), on balance cost-oriented approaches score most favourably against the Assessment Criteria, and therefore better meet ComReg’s regulatory objectives (with regard to the *promotion of competition*, *contribution to the development of the internal market* and *promotion of the interests of users within the Community*). The RIA thus focuses primarily on the two cost-oriented approaches that are analysed in detail by ComReg.

[156] See, in particular, Chapter 6 of the Consultation Document and Chapter 6 of this Document.

[157] The options considered included regulatory forbearance (as a baseline scenario only), a fair and reasonable pricing approach, a receiving party pays (‘RPP’) approach, a bill and keep (‘B&K’) approach, a LRAIC+ cost orientation approach (as representative of a broader set of alternative costing methodologies which would result in a cost standard above pure LRIC) and a pure LRIC cost orientation approach (where the relevant increment is the wholesale call termination service).

[158] The Assessment Criteria include Efficiency, Competition, Equity, Need to take utmost account of the 2009 Termination Rate Recommendation/Contribution to the Internal Market, Ease of deciding upon Implementation Approach, Transparency and Regulatory Certainty.

8.4 ComReg's approach to the RIA is set out in the Guidelines published in August 2007 in ComReg Document Nos. 07/56 & 07/56a. In conducting the RIA, ComReg takes into account the RIA Guidelines[159], issued by the Department of An Taoiseach in June 2009 under the Government's Better Regulation programme. Section 13(1) of the Communications Regulation Act 2002 requires ComReg to comply with Ministerial Policy Directions. Policy Direction 6 of February 2003[160] requires that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and international best practice and otherwise in accordance with measures that may be adopted under the Government's "Better Regulation" programme.

8.5 In conducting the RIA, ComReg has regard to the RIA Guidelines, while recognising that regulation by way of issuing decisions, e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation. Our ultimate aim in conducting a RIA is to ensure that all measures are appropriate, proportionate and justified. ComReg will take a common sense approach to ensure that a RIA is proportionate and does not become overly burdensome. As decisions are likely to vary in terms of their impact, if after initial investigation, a decision appears to have relatively low impact ComReg may carry out a lighter RIA in respect of those decisions.

8.6 ComReg notes that a number of Service Providers responding to the Consultation Document submitted that further quantitative analysis should be undertaken, and additional evidence should be provided to support the RIA.[161] As discussed above, this Document incorporates a full assessment of the various options for setting Termination Rates (for fixed and mobile services). In addition to this chapter, ComReg's overall analysis forms part of a broader regulatory impact assessment of available options that extends right throughout the Consultation Document and this Document. As part of that assessment, ComReg has undertaken empirical evidence-based analysis throughout the Consultation Document and this Document (including their respective Annexes), which supports ComReg's RIA and the final decision reached. This RIA should therefore be read in conjunction with these Documents as a whole.

8.7 In its Consultation Document, ComReg asked the following question in relation to the RIA as set out in Chapter 10 of that document.

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[159] See "Revised RIA Guidelines How to Conduct a Regulatory Impact Analysis", June 2009. http://www.betterregulation.ie/eng/Developments in Better Regulation Policy/Revised RIA Guidelines.pdf

[160] Ministerial Policy Direction made by the Minister for Communications, Marine and Natural Resources on 21 February 2003.

[161] Eircom, Vodafone, O2, TMI and Magnet (in relation to Magnet's submission, concerns were raised only in relation to the proposed time-of-day gradient in the regulated maximum Termination Rates which is addressed further below).

Q. 13 Do you have any views on the Regulatory Impact Assessment and are there other factors (if any) that ComReg should consider in completing its Regulatory Impact Assessment? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

8.2 Steps for assessing regulatory options

8.8 In assessing the available regulatory options, ComReg's approach to the RIA is based on the following five steps:

Step 1: describe the policy issue and identify the objectives

Step 2: identify and describe the regulatory options

Step 3: determine the likely impacts on stakeholders

Step 4: determine the likely impacts on competition

Step 5: assess the likely impacts and choose the best option.

8.9 Each step is discussed in detail below.

8.2.1 Step 1: Describe the policy issue and identify the objectives

8.10 Section 12(1) of the Communications Regulation Acts 2002 to 2011 states that, insofar as the provision of electronic communications networks, services and associated facilities are concerned, ComReg's objectives are to promote competition, to contribute to the development of the internal market and to promote the interests of users within the Community. As regards those objectives, Section 12(2) states that ComReg shall take all reasonable measures which are aimed at achieving those objectives, including:

- Ensuring that there is no distortion or restriction of competition in the electronic communications sector; and

- Cooperating with electronic communications national regulatory authorities in other Member States of the Community and with the Commission of the Community in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of Community law in this field.

8.11 ComReg's statutory objectives and functions are also further set out in Regulation 16 of the Framework Regulations (which transposes Article 8 of the Access Directive) and in Regulation 6 of the Access Regulations (which transposes Article 5 of the Access Directive). In particular, Regulation 6(1) of the Access Regulations states that ComReg shall encourage and, where appropriate, ensure, in accordance with the Access Regulations, adequate access, interconnection and the interoperability of services in such a way as to: (a) promote efficiency, (b) promote sustainable competition, (c) promote efficient investment and innovation, and (d) give the maximum benefit to end-users.

8.12 The European Commission published its 2009 Termination Rate Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates on 7 May 2009. The 2009 Termination Rate Recommendation emphasises that regulated Termination Rates should be brought down to the costs of an efficient operator by 31 December 2012 and that there should be a consistent application across all EU Member States. In particular, it recommends that Termination Rates be set based on a long-run incremental cost approach where the relevant increment is the wholesale call termination service and which includes only avoidable costs related to that service increment ('**pure LRIC'**). The stated aims of the 2009 Termination Rate Recommendation are to minimise the potential for regulated Termination Rates to contribute to:

- Fundamental competitive distortions, substantial transfers between fixed and mobile markets and consumers, significant payments from smaller to larger competitors and high retail prices for originating calls and correspondingly lower usage rates, thus decreasing consumer welfare[162].

- Regulatory uncertainty created by a lack of harmonisation in the setting of Termination Rates across the EU, which may deter potential investors, and impose a regulatory burden on operators active in several EU Member States[163].

[162] See recital 3 of the 2009 Termination Rate Recommendation.
[163] See recital 4 of the 2009 Termination Rate Recommendation.

8.13 The promotion of efficiency and competition to the ultimate benefit of end users, the development of the internal market and proportionate and consistent regulatory practice are important factors for ComReg in the context of the proposed measures assessed throughout the Consultation Document and in this Document. ComReg has analysed in detail the extent to which the available cost orientation measures contribute to the promotion of efficiency, competition and equity objectives. As to the internal market, the 2009 Termination Rate Recommendation notes that, although cost orientation is generally provided for in most EU Member States, a divergence between price control measures has prevailed across the EU Member States[164]. The 2009 Termination Rate Recommendation further notes that significant divergences in the regulatory treatment of FTRs and MTRs create fundamental competitive distortions[165]. ComReg has therefore also taken into account the extent to which the available cost orientation measures contribute to the furtherance of the internal market and to regulatory certainty and proportionality considerations.

8.14 Asymmetrical Termination Rates have been applied by some of the smaller Service Providers in both the fixed and the mobile sector over the past few years, in order to allow those smaller Service Providers to gain scale. The 2009 Termination Rate Recommendation allows for asymmetrical Termination Rates for new mobile entrants for a transitional period of up to four years after market entry where such entrants have objectively higher efficient costs and face impediments to reaching an efficient scale, so that they have sufficient time to recoup their higher incremental costs.

8.15 Given that a range of other related fixed markets are currently regulated, it has also been necessary for ComReg to consider the implications of the 2009 Termination Rate Recommendation on related regulated markets where relevant. ComReg considers that any decision to set the FTRs at pure LRIC in the case of the regulated fixed incumbent, Eircom, may result in some shared voice and common network costs left unrecovered from the regulated wholesale charge. Therefore, in the event that a decision on FTRs results in unrecovered efficiently incurred costs, these costs must be recovered elsewhere.

8.2.2 Step 2: Identify and describe the regulatory options

8.16 The purpose of Step 2 is to set out the appropriate options for consideration in the RIA. The options will later be assessed in Step 3.

[164] See recital 2 of the 2009 Termination Rate Recommendation.
[165] See recital 3 of the 2009 Termination Rate Recommendation.

8.17 Setting FTRs and MTRs involves making a number of important decisions regarding the regulatory approach to be applied:

- Methods of price regulation
- Methods of common cost recovery
- Cost modelling versus benchmarking
- Implementation timeline
- Symmetric versus asymmetric implementation

8.18 Each of these headings represents a range of regulatory options, which are described below. Once the regulatory options for FTRs and MTRs have been established, they will be assessed under Step 3.

8.2.2.1 Methods of price regulation

ComReg's Preliminary View on Starting Point for RIA

8.19 According to Regulation 13(1) of the Access Regulations, ComReg may impose on an operator obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems for the provision of specific types of access or interconnection in situations where a market analysis indicates that a lack of effective competition means that the operator concerned may sustain prices at levels above efficient cost or may apply a price squeeze to the detriment of end-users.

8.20 In its Consultation Document and in this Document, ComReg evaluated six different methods of price regulation. ComReg's assessment (see Chapter 6 of the Consultation Document) indicates that the cost-oriented approaches to setting MTRs and FTRs compare favourably to the alternative options when analysed against the Assessment Criteria. Thus, of the six possible regulatory approaches, two cost-oriented pricing methodologies were examined in detail. The assessment of the possible options and the impact on stakeholders, discussed below, is therefore based on (and limited to) the preferred form of price regulation – *cost orientation*.

8.21 In Chapters 4 and 6 of the Consultation Document and also in Sections 3 and 6 of the First Analysys Mason Report, there was a detailed analysis of the various potential regulatory approaches for setting the appropriate FTRs and MTRs in Ireland. These were then assessed again (in light of the responses received from interested parties) in Chapter 6 of this Document.

8.22 To date, the Termination Rates charged by Eircom, Vodafone, O2, Meteor and H3GI have been based on the European average as reflected by the BEREC six-monthly snapshots and other publicly available information. In the Consultation Document, ComReg proposed to amend the cost orientation obligation as it applies to all SMP FSPs (including Eircom) and to further specify that obligation as regards all SMP FSPs. ComReg also proposed to further specify the cost orientation obligation as it applies to SMP MSPs. In the 2012 MVCT Decision (which was adopted after publication of the Consultation Document), ComReg has imposed a cost orientation obligation on all of the SMP MSPs (including the newly-designated TMI and Lycamobile).

8.23 As noted in Chapter 6 of this Document, ComReg implicitly considered a range of cost methodology options, including cost orientation of Termination Rates both at pure LRIC and at some level above pure LRIC. ComReg focussed its analysis on the most established cost methodologies for setting Termination Rates, namely pure LRIC and LRAIC+ as representative scenarios for the above, and assessed how these cost orientation methodologies (and implicitly variants thereof) would perform against the specific Assessment Criteria. ComReg considers that, under this approach, the merits and demerits of cost orientation at pure LRIC versus cost orientation above pure LRIC are fully exposed.

8.24 On that basis, the two options for cost orientation methodologies considered under the RIA are:

- Pure LRIC which is an *incremental cost only* approach where the increment is defined as the wholesale call termination service, and includes only the avoidable cost associated with providing the wholesale call termination service; and

- LRAIC + which is a *total cost* approach and assumes a broader relevant increment taking all of the Service Provider's traffic-related services into account and includes an allocation of common costs as a mark up (+) to the relevant underlying increment. This approach is representative of a broader set of alternative costing methodologies which result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services) and thus result in a cost standard above pure LRIC.

8.25 These options are considered in light of Regulation 13(3) of the Access Regulation which states that: *the Regulator shall ensure that any cost recovery mechanism or pricing methodology that it imposes under this Regulation serves to promote efficiency and sustainable competition and maximise consumer benefits*.

8.26 These options were considered initially in Chapter 6 (subsection 6.6 and 6.7) of the Consultation Document and also in the First Analysys Mason Report at Section 6. The approaches were analysed again in Chapter 6 of this Document in light of the responses received from interested parties. The potential impact on the various stakeholders is discussed in more detail in Step 3 below.

Summary of Responses on Starting Point for RIA

8.27 Vodafone submitted that ComReg had not assessed the following options:

- Continuation of the current voluntary glide-path based on the BEREC benchmark (as also endorsed by O2)[166]; and
- LRIC+ option based on a cost model

ComReg's Assessment of Responses on Starting Point for RIA

8.28 <u>Continuation of the current voluntary glide-path based on the BEREC benchmark</u>

8.29 ComReg has addressed Vodafone's arguments regarding the continuation of the current voluntary glide path arrangement in detail in paragraphs 4.24 to 4.33 and paragraphs 6.71 to 6.75 of this Document. ComReg concluded in those paragraphs that the 'continuation of the current voluntary glide-path' approach should not be included in the comparative assessment because this approach was intended only as a short-term measure to remain until such time that a cost-oriented approach could be implemented taking the 2009 Termination Rate Recommendation into account. ComReg is required to consider which price control mechanism is most appropriate for the particular market circumstances over the relevant price control period, taking into account its statutory objectives. The continuation of the voluntary glide-path by ComReg would inter alia contradict the objective of providing certain and transparent prices for MTRs and, as all regulated Service Providers were fully aware, it was only ever intended by ComReg as a transitional measure.

8.30 <u>Assessment of LRIC+ option based on a cost model</u>

8.31 With regard to the range of cost orientation options considered in the comparative assessment, ComReg has set out its position in detail in paragraphs 4.34 to 4.35, section 6.2.2, paragraphs 6.76 to 6.77 and paragraphs 6.211 to 6.221 of this Document. ComReg considers that, when compared to a pure LRIC approach, alternative LRAIC or LRIC+ approaches would not to yield a materially different outcome relative to a LRAIC+ approach in terms of their performance against the Assessment Criteria. Irrespective of

[166] O2 also expressed its view that it is reasonable to continue to benchmark the BEREC average as it is has delivered MTR reductions of 50% in the past two years.

whether a LRAIC, LRIC+ or LRAIC+ approach is chosen for the comparative analysis vis-à-vis a pure LRIC approach, the fundamental insight that results in all of these LR(A)IC+ approaches performing similarly against the Assessment Criteria is that they all result in a Termination Rate above a pure LRIC outcome.

8.32 Thus, ComReg focussed its analysis on the most established cost methodologies for setting Termination Rates, namely pure LRIC and LRAIC+ as representative scenarios, and assessed how these cost orientation methodologies (and implicitly variants thereof) would perform against the specific Assessment Criteria. ComReg considers that this approach simplified its analysis without any loss of generality. The merits and demerits of cost orientation at pure LRIC versus cost orientation above pure LRIC remain fully exposed.

8.2.2.2 Cost modelling versus benchmarking

8.33 There are two options in terms of implementing cost orientation:

- Cost modelling
- Benchmarking.

8.34 Regulation 13(3) of the Access Regulations states that the Regulator shall ensure that any cost recovery mechanism or pricing methodology that it imposes under Regulation 13 serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard, the Regulator may also take account of prices available in comparable competitive markets.

8.35 The above options are considered in detail in Chapters 6 and 7 of the Consultation Document and in Section 6 of the First Analysys Mason Report.

8.36 In Chapter 7 of the Consultation Document and in Chapter 7 of this Document, ComReg discusses the reasons and justification for the proposed benchmarking approach in the context of determining the MTRs and the proposed cost model for determining the FTRs. For further details, please refer to the relevant analysis in Chapter 7 of this Document, which is summarised again in Step 3 of this RIA below.

8.2.2.3 Implementation timelines

8.37 ComReg considers that there are two options in terms of implementing the proposed pure LRIC approach for Termination Rates. These are as follows:

- Implementation date of 31 December 2012 (in line with the 2009 Termination Rate Recommendation)

- Implementation date of 1 July 2013.

8.38 Chapter 7 of the Consultation Document set out these options and the merits of each. Chapter 7 of this Document considers responses received from interested parties relating to the proposed timing for the implementation of the proposed benchmark approach. These comments largely related to the potential impacts of the timing of the implementation of the new Termination Rates on the individual MSPs and FSPs' immediate financial positions, rather than whether the options are appropriate for consideration on a sustainable industry-wide basis.

8.39 The responses received are considered within the main body of the Document (section 7.3.3 of this Document), as well as briefly in the next step (Step 3) of the RIA (the assessment of options).

8.2.2.4 Symmetric versus asymmetric implementation

8.40 ComReg is considering whether to impose:

- Symmetric (same) Termination Rates; or
- Asymmetrical (different) Termination Rates.

8.41 The 2009 Termination Rate Recommendation recommends that the rates for wholesale voice call termination should be set on a symmetric basis unless an operator can justify higher efficient costs on entry into the market and may in certain limited circumstances for mobile entrants with objectively higher costs (and after having identified that there are impediments on the retail market to entry and expansion) have a level of asymmetry for no longer than four years after market entry. However, there would be a concern that asymmetric Termination Rates could foster inefficient entry to the market which ultimately negatively impacts on consumers as well as potentially engendering a range of other retail distortions (see section 6.3 of this Document).

8.42 Chapter 4 and more particularly Chapter 6 (subsection 6.8) of the Consultation Document and also Sections 3 and 6 of the First Analysys Mason Report assess the symmetry and asymmetry options. Chapters 6 and 7 of this Document assess these options again in light of submissions made by interested parties.

8.43 The potential impact of symmetry versus asymmetry on the various stakeholders is set out in Chapters 6 and 7 of this Document and is summarised under Step 3 again below.

8.44 In the Consultation Document (paragraphs 7.73 to 7.75 and paragraphs 7.137 to 7.139 of the Consultation Document), ComReg also considered whether differentiated Termination Rates according to the time of day (i.e. peak, off-peak) or day of the week (e.g. weekend) a call is made would be appropriate over the relevant price control period. It was proposed that Service Providers could continue to differentiate between the time of day or week where those rates would not lead to the recovery of any more than the average rate directed and would not lead to unintended gaming.

8.2.2.5 Methods of common cost recovery

8.45 As discussed in Chapter 7 of the Consultation Document, unavoidable common costs, which would still be incurred if the wholesale voice call termination service was no longer provided, are not recovered through the Termination Rate under the pure LRIC approach.

8.46 For those Service Providers not regulated across a number of markets, e.g. the SMP FSPs other than Eircom and the SMP MSPs, ComReg considers that there should be discretion as to how they recover those common costs across their retail and/or wholesale services as appropriate.

8.47 However, ComReg has considered the implications of common cost reallocation specifically in the case of Eircom, which is subject to cost-oriented regulated prices in related markets. In the Consultation Document, ComReg proposed the following approaches with respect to how efficiently incurred common costs could be allocated:

- Allocating across origination calls, to compensate for the unrecovered common costs due to voice call termination being priced using a pure LRIC methodology.

- Allocating all or part of the additional common cost to other (i.e. non-voice) services depending on whether the costs are directly or indirectly related to making a call.

8.48 The potential impacts in terms of the recovery of common costs are discussed in the Consultation Document as part of the discussion of the overall options regarding the form and implementation of cost orientation obligations in the MVCT and FVCT markets. ComReg has considered responses received from interested parties in relation to this issue in section 7.7 of this Document, and concluded that Eircom would be able to recover these common costs across other wholesale and/or retail services (voice and non-voice) as appropriate.

8.49 In particular, ComReg has assessed the likely impact of moving unrecovered common costs to other wholesale services. The conclusion of this exercise was that overall no particular service should require a significant price increase in order to recover the cost of the network (which is currently recovered in part through Termination Rates).

8.2.3 Step 3: Determine the likely impacts on stakeholders

8.50 Now that the options have been established in Step 2 above, Step 3 involves summarising the potential impact of those regulatory options on stakeholders.

8.51 The impact on stakeholders has been assessed as follows:

- *Pure LRIC versus LR(A)IC+*[167]
  - Mobile voice call termination
  - Fixed voice call termination
- *Symmetric versus asymmetric implementation*
  - Mobile voice call termination
  - Fixed voice call termination
- *Cost modelling versus benchmarking*
- *Implementation timeline*
- *Methods of common cost recovery*

8.52 Each sub-section under Step 3 refers to ComReg's preliminary view presented in the Consultation Document, then summarises and assesses the arguments submitted by interested parties (referencing previous chapters).

8.2.3.1 Pure LRIC versus LRAIC+

ComReg's Preliminary View on Pure LRIC versus LRAIC+

[167] As discussed in paragraph 8.24 above, LRAIC+ is used as the representative scenario for all LR(A)IC+ methodologies, i.e. all available costing methodologies which would result in a cost standard above pure LRIC.

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8.53 Please refer to sections 6.6 and 6.7 and Chapter 10 (including sections 10.5.1 (for MTRs) and 10.5.2 (for FTRs)) of the Consultation Document for ComReg's preliminary views regarding the comparative impacts of LRIC versus LRAIC+ pricing on various stakeholders.[168]

Summary of Responses on Pure LRIC versus LRAIC+

8.54 ComReg received submissions from a number of Service Providers in relation to its comparative assessment of the impacts of pure LRIC and LRAIC+ approaches to Termination Rates. Here is a summary of those responses:

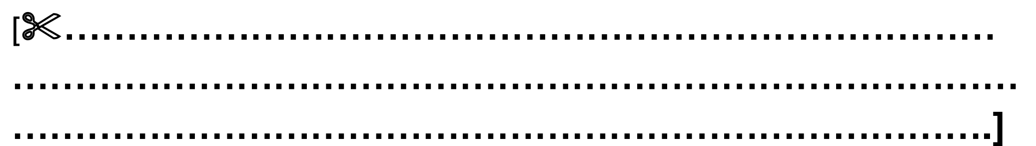
- *Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation:* Vodafone, TMI and O2 all expressed concern that ComReg was placing undue emphasis on the 2009 Termination Rate Recommendation in justifying its proposed move to a pure LRIC approach. O2 noted its view that the 2009 Termination Rate Recommendation is ComReg's overriding Assessment Criterion leading to a perceived bias and pre-determination of the pure LRIC outcome. Vodafone, O2 and TMI also emphasised the non-binding nature of the 2009 Termination Rate Recommendation. In disagreeing with ComReg's comparative assessment framework, Vodafone claimed that higher weight should have been attributed to Efficiency and Competition objectives. Vodafone furthermore claimed that that both LRAIC+ and LRIC+ methodologies score far higher than pure LRIC in terms of the Efficiency Assessment Criterion overall. Moreover, Vodafone considered that the LRAIC+ and LRIC+ methodologies score at least as well as the pure LRIC methodology with regard to the Competition, Equity, and Transparency/Regulatory Certainty criteria and that taking account of the 2009 Termination Rate Recommendation is as effectively fulfilled by the adoption of the LRAIC+ or LRIC+ methodologies as it is by the pure LRIC approach to cost orientation.

  In contrast, H3GI, Magnet, ALTO and Eircom broadly agreed with the comparative assessment framework established by ComReg, including the range of regulatory options considered for regulating FTRs and MTRs in Ireland and the relevant Assessment Criteria against which each regulatory option is assessed.

[168] http://www.comreg.ie/_fileupload/publications/ComReg1267.pdf

- *Suggested lack of supporting evidence for move to pure LRIC*: A number of respondents submitted that ComReg has provided insufficient evidence in the RIA to justify its conclusions. Eircom noted that, while it did not disagree with the broad conclusions set out in the RIA, it considered a need for the quantitative standard of RIAs to be raised in general. At the same time, it stated that it did not disagree with the conclusions reached.

  Vodafone considered that the RIA set out in the Consultation Document did not set out any material new information beyond that in previous sections of the Consultation Document and claimed there was a general lack of empirical evidence supporting ComReg's comparative analysis. TMI claimed that ComReg has not sufficiently considered the impact that its proposals will have on the smaller MSPs, competition, consumers or investment, including the immediate financial impacts on individual MSPs and disruptive effects of tariff rebalancing for consumers. TMI makes the point that ComReg should not adjust the competitive landscape to ensure that only one niche of the marketplace can be addressed by new entrants

  TMI considered that ComReg has not provided any foundation for its claims regarding competition and innovation under a pure LRIC approach. It furthermore suggested that ComReg should determine the impact of actual MTR reductions in countries where the reductions have been already implemented. O2 claimed that the RIA was speculative and that an artificial and disproportionate reduction in MTRs based on what it deems "*insufficiently supported analysis*" would unfairly impact competition between participants in the fixed and mobile markets.

  Magnet expressed its agreement that pure LRIC is the most appropriate method to set Termination Rates with the exception of the proposed time-of-day gradient in the regulated rates. ALTO, while welcoming the pure LRIC approach *"guardedly"*, makes a non-specific comment that it has reservations about the form and content of RIAs generally.

- *Assessment of distributional effects of pure LRIC on different user groups*: Vodafone called for what it terms *"comprehensive quantitative evidence based cost-benefit analysis"* to verify the distributional impacts of all possible mobile termination price control remedies noting also its view that there is a concentration of mobile-only households among lower income groups. In particular, Vodafone and TMI claimed that reduced MTRs are likely to result in the reduction and/or withdrawal of access/device subsidies which is claimed will impact negatively on low-spending/marginal customers. Vodafone claims that ComReg has ignored the likely economic and social impacts of this consequence and has undertaken insufficient empirical analysis of network externalities. As regards possible welfare gains for fixed users, Vodafone referred to incomplete pass-through of MTR reductions by FSPs to their fixed users date. Vodafone finally argued that ComReg has provided no evidence of negative impacts generated by the current MTR remedy for consumers. TMI argued that, contrary to Analysys Mason's findings, lower socioeconomic groups will be adversely affected by the MTR changes. It claimed that ComReg implies strongly that MSPs will be incentivised to move away from serving low-spending customers in order to seek customer groups who spend more. According to TMI, low-spending customers currently benefit from having some of the cost of reaching them on a mobile paid by the caller **[✂………………………………………………………………… …………………………………………………………….............]**. It claimed that post-pay users would benefit at the expense of pre-pay users. TMI also argued that ComReg had not provided any solid evidence to substantiate the claim that customers should 'ultimately' benefit.

  In contrast, Eircom noted that reductions in the cost-of-sale for Service Providers resulting from pure LRIC Termination Rates will allow for more intense competition in the structure and range of such bundles to the increasing benefit of price sensitive consumers. It furthermore agreed that the pure LRIC option scores highest against the Equity Assessment Criterion. Magnet also noted that the reduction in price will help the consumer to make cheaper mobile calls from landlines and *vice versa*, and overall *"all interested parties will benefit"*.

- *Impacts of move to pure LRIC on competition*: While H3GI believes that 'bill and keep' (i.e. zero Termination Rates) is the most appropriate approach, in its absence H3GI expressed the view that a pure LRIC methodology is the most appropriate approach to set Termination Rates in Ireland. TMI conversely argued that reduced MTRs would have a negative impact on smaller MSPs and competitive entry in the retail mobile market and pure LRIC would benefit larger rather than smaller Service Providers. Vodafone also pointed to the example of MVNOs where it claimed that reducing MTRs to pure LRIC levels would severely undermine a key source of revenues for MVNOs. Vodafone furthermore claimed that ComReg had failed to assess the possibility that high MTRs might conversely increase competition between Service Providers. Vodafone furthermore emphasised the competitive nature of the Irish mobile market and claimed that no competition analysis of the market has been undertaken to support ComReg's assertion that current MTRs act as a barrier to entry or expansion and that no supporting empirical evidence of the alleged competitive benefits of pure LRIC has been provided. O2 also claimed that insufficient market assessments or independent reviews of the mobile market had been undertaken to assess the impact of a move to pure LRIC on competition.

8.55 O2 claims that the contention that current MTRs are unduly high when compared to FTRs is fundamentally flawed and incorrect and cannot be justified without a complete market analysis. O2 claimed that a pure LRIC approach would unfairly impact the competitive bias between FSPs and MSPs, and also claimed certain parties with dual services might disproportionately benefit from the greater impact on their competitors acting only in the mobile market. Vodafone also disagrees with ComReg's assertion that a further fall in MTRs towards *"the pure LRIC rate will correct for an under-consumption of fixed to mobile and mobile cross-net calls"*. Vodafone, in its submission provides confidential information to support its disagreement (see paragraph 6.55 of this Document).

8.56 In contrast, Eircom argued that setting FTRs and MTRs on a pure LRIC basis will remove distortions that previously affected the viability of pricing for converged fixed/mobile telephony offers, and the ability of FSPs and MSPs to compete on an equal basis in the most price-sensitive corporate voice markets. It also noted that a price control based on pure LRIC is the approach that has the best practicable impact on competition and also scored highest against the Assessment Criterion which considered allocative, productive and dynamic efficiency.

- *Impact of move to pure LRIC on investment incentives*: Vodafone claimed that setting MTRs on a pure LRIC basis implies non-recovery of fixed and common costs of the network, a dramatic reduction in revenues, and detrimental impacts to efficient investment and innovation over the longer term and would give rise to a "*serious dynamic inefficiency*". Vodafone also referred to the impact of the MTR reductions and proposed benchmarking approach on "*regulatory uncertainty*" and thus on future investment incentives. O2 argued that any deviation from the established principle of price control obligations providing for a reasonable rate of return amounts to distortion of the reasonable expectation held by Service Providers that they would retain the possibility of recovering returns on current investment with consequent impacts for ongoing investment in infrastructure. O2 claimed there is no mention of investment and ComReg's proposals will curtail future investment and innovation in the marketplace (including LTE), since it claims the potential for recovery of such investments would be restricted. TMI noted the difficult commercial situation it would face as a result of what it deemed *"rapid reductions"* in MTRs and also noted that the dramatically reduced termination revenue accruing to it under a pure LRIC approach may provide a strong disincentive to invest.**[✂……………………………………………………………………… ………………………………………………………………………………… …………]**.

ComReg's Assessment of Responses on Impacts of Pure LRIC versus LRAIC+

8.57 **Approach to weighting criteria and claim of undue emphasis on the 2009 Termination Rate Recommendation**

8.58 ComReg has already thoroughly addressed responses relating to its comparative assessment framework and its approach to assessing pure LRIC and LRAIC+ options against a set of balanced and objective Assessment Criteria which inherently map back to each of ComReg's statutory objectives.

See paragraphs 4.56 to 4.65, paragraphs 5.46 to 5.48 and paragraphs 6.202 to 6.221 of this Document for ComReg's detailed response.

8.59 **Suggested lack of supporting evidence for move to pure LRIC**

8.60 ComReg has set out the significant quantitative and qualitative evidence relied on in assessing the impacts of different pricing methodologies on stakeholders throughout the Consultation Document and this Document (and their respective Annexes). As noted at the outset of this chapter, ComReg's entire comparative assessment framework as reflected in Chapters 4, 5 and 6 of this Document follows an options-based assessment. Hence, the Document as a whole should be interpreted as a RIA. Since the main body of the Document comprehensively analyses the likely and potential impacts of each of the regulatory options considered, and addresses arguments raised by interested parties regarding ComReg's comparative assessment framework, this RIA refers out to, and relies on the detailed qualitative and quantitative evidence presented throughout the overall Document.

8.61 In that regard, ComReg has in particular addressed claims regarding the overall depth of its empirical analysis and supporting evidence in:

- Paragraphs 6.79 to 6.138 and paragraphs 6.166 to 6.186 which set out the range of evidence used in ComReg's analysis of allocative, productive and dynamic efficiency.
- Paragraphs 6.139 to 6.159 which set out the range of evidence used in ComReg's assessment of competitive effects.
- Paragraphs 6.105 to 6.110, 6.134 to 6.138 and 6.160 to 6.165, ComReg Document No. 12/46 and the 2012 MVCT Decision which set out ComReg's assessment of the retail mobile market structure and empirical insights from relevant market trends regarding the potential impacts of a move to pure LRIC[169].
- Paragraphs 6.196 to 6.201 which set out the range of evidence used in ComReg's assessment of equity/distributional issues.

[169] The historical market trends discussed in detail in Chapter 6 have occurred in a scenario where Termination Rates were still notably in excess of the pure LRIC of providing the service, and therefore ComReg cannot conclude definitively that a precise causal relationship exists between the change in the level of MTRs, and the market dynamics. However, ComReg has not identified anything that would undermine its own broader assessment of the likely impacts of reducing MTRs further to pure LRIC over the forthcoming price control period.

8.62 **Assessment of distributional effects of pure LRIC on different user groups**

8.63 ComReg has already responded in detail to all of the arguments raised above regarding ComReg's assessment of the distributional/equity effects of a move to pure LRIC on different user groups, including low-spending groups which TMI claims will be particularly affected.

8.64 In that regard, ComReg has in particular addressed claims regarding the depth of its empirical analysis and supporting evidence concerning user impacts in:

- Paragraphs 6.196 to 6.201 which recall the extensive qualitative and quantitative analysis undertaken by ComReg of the distributional impacts on different user groups, e.g. for low-usage mobile groups, as well as for fixed users. In particular, it takes into account *inter alia* the relatively moderate cost of maintaining a mobile subscriber on the network, the fact that low-usage mobile customers are in fact already quite high-spending in an Irish context, the availability to customers of a range of options for re-optimising their expenditure across available product offerings, the fact that Service Providers' pricing incentives are driven by the behaviour of marginal customers, etc. On the basis of the wide range of evidence considered, including section 4.4 of the Final Analysys Mason Report) ComReg has come to the view that there is a low risk of low usage or marginal users materially opting to disconnect from the network in response to an MSP's strategy in the event of an MTR reduction to a pure LRIC level.

- Paragraphs 6.79 to 6.123 which set out ComReg's comprehensive analysis of the role of network externalities and the extent to which a move to pure LRIC Termination Rates is likely to impact on mobile subscribership in Ireland. Having considered a range of qualitative and quantitative indicators, ComReg's overall conclusion is that mobile and fixed network subscription in Ireland is currently broadly saturated (particularly in the case of mobile) and that the response of MSPs and FSPs to Termination Rate reductions would not be to adopt commercial strategies that materially reduced incentives for network connection. ComReg believes *inter alia* that, even if Service Providers cannot recover unavoidable common costs through MTRs, Service Providers have an incentive to maintain as many subscribers on their network as possible, through optimising their subscription offerings, including SIM-only and other packages, according to users' general willingness to pay and thus manage any subscription effects across their heterogeneous user base. ComReg has also taken into account national and international evidence of penetration and pricing impacts, etc. Moreover, ComReg has not been provided with any actual evidence that reduced MTRs would harm low-spend customers, taking into account their current profitability in an Irish context.

- Paragraphs 6.179 to 6.186 which consider claims that pure LRIC would distort consumption by shifting the burden of cost recovery onto any one particular user group. These paragraphs conclude *inter alia* that Service Providers have a number of mechanisms for tariff re-balancing and for re-optimising their prices and service offerings depending on the commercial environment and does not anticipate a dramatic shift in the burden of cost recovery. Rather, any recovery of additional retail revenues is more likely to be spread across a range of possible strategic responses. Following careful consideration, ComReg has also not identified any materially undesirable effects for mobile users in terms of mobile penetration or investment considerations as a consequence of any reduction in the Termination Rate transfer from the fixed to the mobile sector.

- Paragraph 6.218 also summarises ComReg's position in respect of the equity assessment that while pure both pure LRIC and LRAIC+ costing approaches perform similarly well, pure LRIC has a better potential to achieve more balanced equity across all user groups (fixed and mobile, and on-net and off-net). A key source of comparative advantage for pure LRIC under this Assessment Criterion arises from the fact that fixed consumers or consumers wishing to make high volumes of off-net calls ultimately fare better from lower Termination Rates under a pure LRIC approach than under a LRAIC+ approach. TMI's claims regarding unsubstantiated consumer benefits resulting from the pure LRIC approach are further addressed under the Competition Assessment Criterion where it is noted, based on detailed qualitative and quantitative analysis, that pure LRIC has a significant comparative advantage under the competition (and related dynamic efficiency) assessment vis-à-vis any costing method which includes a broader increment and/or a mark-up for additional common costs. Thus, pure LRIC has better potential to facilitate/deliver balanced and sustainable consumer benefits resulting from a more competitively neutral framework than LRAIC+ over the medium to longer term (see the following paragraphs below which summarise the competition analysis undertaken by ComReg).

- As regards arguments concerning the likely pass-through of benefits from Termination Rate reductions to fixed users, ComReg has responded to these potential impacts in paragraphs 6.190 to 6.193 and paragraph 6.201 of this Document. ComReg agrees that there is no guarantee of a full pass-through by FSPs of reduced MTRs into the price of calls to mobile numbers. At the same time, given the commercial objectives of the FSPs to maintain subscriber penetration and fixed traffic volumes, ComReg is satisfied that FSPs will face incentives to use the reduction in fixed-to-mobile cross-subsidy to attract new or maintain existing subscribers.

8.65 **Impacts of move to pure LRIC on competition**

8.66 ComReg has already responded in detail to all of the arguments raised above regarding ComReg's assessment of the competition effects of a move to pure LRIC.

8.67 In that regard, ComReg has in particular addressed claims regarding the depth of its empirical analysis and supporting evidence concerning competitive impacts in:

- Paragraphs 6.150 to 6.153 and 6.154 to 6.159 (and section 6.3) which address the argument that reduced MTRs would have a negative impact on smaller MSPs and competitive entry in the retail mobile market, in particular regarding MVNOs. ComReg explains *inter alia* that it has taken into account the direct and immediate financial impact of Termination Rate Reductions on all Service Providers. However, prolonging the application of asymmetric MTRs charged in excess of efficient cost risks facilitating a range of other important retail distortions, including promoting inefficient entry, impeding retail pricing flexibility for off-net calls, and/or reinforcing the ability of larger Service Providers to generate tariff-mediated network externalities which can further raise customer switching costs and impede entry and growth[170].

- Paragraphs 6.142 to 6.153 which address Vodafone's claims that high MTRs might lead to more intense competition. These paragraphs clearly set out the partial and incomplete nature of Vodafone's claims, their sensitivity to underlying assumptions which do not accurately describe the relevant (asymmetric) features of the Irish mobile market, and the fact that the economics literature referred to in fact recognises that higher MTRs have adverse dynamic effects on competition between Service Providers of different sizes. For example, the literature also commented on the potential for higher MTRs to deter entry and disadvantage smaller networks by reinforcing the network effects of larger networks (tariff-mediated network externalities) and increasing barriers to entering and expanding within markets for smaller MSPs. These competitive effects cannot be disregarded.

- In the above paragraphs, ComReg has also set out its views regarding the significant impact that Termination Rates set above pure LRIC can have on the particular competitive strategies chosen by retail market participants. Indeed, TMI's views on the competitive impacts for smaller operators are partial and reflect an individualised commercial strategy (i.e. attracting customers who are net receivers of traffic). TMI does not take into account the limiting effect that Termination Rates set above incremental cost can have for entrant/smaller MSPs wishing to pursue a more mixed commercial strategy, including attracting high volume customers which are an attractive customer segment from a market share (and sustainable growth) point of view.

[170] In addition, as noted in section 6.3, there is an absence of convincing cost-based evidence supporting persistent asymmetries for late entrants MSPs in Ireland. The most recent entrants to the Irish mobile market are MVNOs. However, MVNOs have the opportunity to reduce the impact of economies of scale through leasing relevant network inputs from the mobile network operators.

- ComReg thus anticipates that the implementation of pure LRIC MTRs for all MSPs will help reduce barriers to entry/growth associated with inter-operator financial transfers above efficient cost and contributes better (than LRAIC+) to mitigating the tariff-mediated network externality that raises switching costs and potentially poses a further barrier to entry and growth for new entrants and smaller MSPs. Pure LRIC Termination Rates for *all* SMP FSPs and SMP MSPs therefore has a better potential to enable these operators to compete on a level playing field and on a sustainable basis without the need to subsidise subscriptions by setting even higher MTRs. ComReg considers that pure LRIC pricing will allow entrants and smaller MSPs to have a greater variety of commercial strategies available to them to compete with established MSPs for customers.

- In further responding to TMI's comments regarding the anticipated revenue impacts, ComReg acknowledges that, on a static basis, TMI would initially see lower MTR revenues as a result of the proposed decision. At the same time, TMI's MTR expenses (i.e., the amount that TMI must pay other MSPs for out-going off-net calls) will also decrease. The net static impact of the change in MTR revenues and expenses will depend on the relative magnitude of off-net incoming and outgoing calls. The dynamic impact of lower MTRs should however enable TMI to offer lower off-net calling prices for its subscribers. This, in turn, should enable TMI, as an MSP with a smaller network, to overcome the barrier to expansion arising from the desire of mobile subscribers to join larger networks where their friends and family are already subscribers. The ability to attract customers from larger networks (through offering bundles with a larger number of call minutes, including off-net calls) should enhance the position of smaller operators such as TMI to pursue more varied commercial strategies, and provide opportunities for increased customer growth in the long-run. As explained in paragraph 7.64 of this Document, ComReg has distinguished the position of TMI from the position of Yoigo in the Spanish market, where the Spanish NRA permitted asymmetric MTRs for Yoigo of between 4% to 6% higher than other SMP mobile network operators up until 1 July 2013. ComReg does not consider its approach to constitute an unfair regulatory burden on TMI or to be unreasonable, disproportionate or discriminatory in light of the timing for implementation or of the historic treatment of other MSPs.

- Paragraphs 6.105 to 6.110, 6.134 to 6.138 and 6.160 to 6.165 as well as ComReg Document No. 12/46 and the 2012 MVCT Decision set out ComReg's assessment of the retail mobile market structure and empirical insights from relevant market trends regarding the potential impacts of a move to pure LRIC[171]. While there is still debate regarding the precise intensity of retail mobile competition, even if the market were theoretically subject to strong competition, increased competitiveness is still possible and ComReg considers it relevant that pure LRIC Termination Rates have a significantly better potential to provide a more competitively neutral and dynamic framework for retail market competition, that is less influenced historical traffic flows and the level of Termination Rates exchanged between operators at the wholesale level.

- As regards O2's claims that ComReg has not sufficiently substantiated its views regarding the relationship between current MTRs and FTRs, ComReg recognises in footnote 13 of this Document that cost drivers for the access elements of fixed and mobile networks differ and that a cost-oriented approach may still imply (cost reflective) differences between MTRs and FTRs, with the former likely being higher than the latter. At the same time, however, given the significant influence that Termination Rates can have on retail competition, paragraph 6.75 clarifies further that a pure LRIC approach has a better potential to ensure that any remaining differences between maximum FTRs and MTRs stem only from the avoidable costs related to providing those services and thus performs better than LRAIC+ in minimising the risk of competitive distortions arising from these wholesale transfers while still ensuring efficient cost recovery.

[171] The historical market trends discussed in detail in Chapter 6 have occurred in a scenario where Termination Rates were still notably in excess of the pure LRIC of providing the service, and therefore ComReg cannot conclude definitively that a precise causal relationship exists between the change in the level of MTRs, and the market dynamics. However, ComReg has not identified anything that would undermine its own broader assessment of the likely impacts of reducing MTRs further to pure LRIC over the forthcoming price control period.

- O2's claims of a competitive bias being induced between FSPs and MSPs as a result of MTRs reductions implicitly acknowledges that there is a degree of competitive interaction between FSPs and MSPs, taking into account that some of these Service Providers are active in both fixed and mobile markets. This would appear to reinforce ComReg's concern that, while recognising efficient underlying cost differences between fixed and mobile networks, the cost methodology for setting maximum Termination Rates should be applied in a competitively neutral manner such that evolving competitive interaction as well as any cross-market participation is not unduly affected by the level of wholesale termination charges. The fact that there has been a historic transfer of funds from FSPs to MSPs as a result of Termination Rates set above pure LRIC in the past does in itself not provide sufficient justification to prolong this transfer unnecessarily into the future. ComReg's proposal to set both FTRs and MTRs according to pure LRIC ensures that any remaining differences between maximum FTRs and MTRs stem only from the efficient costs related to providing those services.

8.68 **Impact of move to pure LRIC on investment incentives**

8.69 ComReg has already responded in detail to all of the arguments raised above regarding ComReg's assessment of the dynamic efficiency and investment effects of a move to pure LRIC.

8.70 In that regard, ComReg has in particular addressed claims regarding the depth of its empirical analysis and supporting evidence concerning dynamic efficiency/investment impacts in:

- Paragraph 5.54, paragraphs 6.166 to 6.178 which address in detail ComReg's views, drawing on a range of qualitative and quantitative evidence, of the likely impacts of a pure LRIC approach to Termination Rates on dynamic efficiency and investment incentives. Contrary to Vodafone, O2 and TMI's claims, it is ComReg's view that pure LRIC has notably greater potential than LRAIC+ to promote competition through moderating inter-operator termination transfers, reducing the impact of tariff-mediated network externalities and facilitating greater retail pricing flexibility for (off-net) retail calls. Since a pure LRIC approach would contribute better to a more competitively neutral framework, it would be more consistent with promoting sustainable dynamic efficiency incentives over time than a LRAIC+ approach (see paragraph 6.216). ComReg also notes that a diverse range of factors are likely to influence investment levels, not just the revenues from MTRs. Competition in the retail mobile market should compel MSPs to invest efficiently so as to maintain a high level of service, and to compete effectively for customers.

- As regards the issues raised regarding timing of the proposed Termination Rate reductions on investment incentives, these are addressed in section 8.2.3.4 below.

8.2.3.2 Recovery of common costs

ComReg's Preliminary View on Common Cost Recovery in Regulated Fixed Markets

8.71 ComReg acknowledged that moving to pure LRIC Termination Rates will potentially require FSPs and MSPs to recover unavoidable common costs through other products and services. Please refer to Chapter 7 of the Consultation Document, and again to Chapter 7 of this Document, for a full analysis of the impacts surrounding the recovery of common costs.

8.72 In summary, ComReg considered that MSPs and FSPs should be free to allocate common costs across other wholesale or retail services as appropriate, insofar as those products are not subject to a regulated price (Eircom will also be free to allocate common costs as it pleases across unregulated retail and wholesale products and services).

8.73 Eircom, however, provides a number of wholesale products and services for which the prices are regulated based on a cost-oriented approach. Therefore, Eircom cannot adjust these prices independently. ComReg has considered whether these regulated prices should be amended to accommodate for the move to pure LRIC pricing for FTRs.

8.74 *Summary of Responses on Common Cost Recovery in Regulated Fixed Markets*

8.75 Vodafone raises concerns regarding the impact of spillover of the proposed pure LRIC approach to MTRs which it claims will lead to compatibility issues with pricing in other regulated markets (see paragraph 6.61).

8.76 Section 7.7 sets out all of the responses on this issue. Eircom noted that **[✂………………………………………………………………………… ………………………………………………………………………………… …………………………………………………………………………………]**. Vodafone and O2 strongly disagreed claiming a lack of substantive justification for the approach taking account of competition and investment considerations.

8.77 *ComReg's Assessment of Responses on Impacts of Common Cost Recovery in Regulated Fixed Markets*

8.78 ComReg concluded that Eircom could recover the common costs, not recovered under a pure LRIC FTR, across its remaining (voice and/or non-voice) wholesale and/or retail services as appropriate. Overall, no particular regulated service should require a significant price increase in order to recover the cost of the network. Thus, ComReg does not currently anticipate material competitive or investment impacts resulting from a reallocation of non-avoidable common costs from FTRs to any one particular wholesale service. ComReg will, review the need for common cost recovery as appropriate when conducting subsequent pricing exercises for other regulated products.

8.79 As regards common cost recovery by MSPs, ComReg has already noted in detail at various sections in this Document (see paragraph 6.195 and paragraphs 7.178 to 7.181) that MSPs are only regulated in wholesale voice call termination markets and can otherwise determine their prices (subject *inter alia* to elasticity constraints, etc.) across the range of retail and wholesale markets in which they are active. For example, paragraphs 6.98 to 6.104 and paragraphs 6.179 to 6.186 of this Document note the various forms of tariff re-balancing and price/product optimisation opportunities available to MSPs faced with a reduction in their wholesale termination revenues.

8.2.3.3 Symmetric versus asymmetric Termination Rates

ComReg's Preliminary View on Impacts of Move to Symmetric Termination Rates

8.80 Please refer to sections 4.4, 6.8 and 10.5.3 of the Consultation Document (ComReg 12/67) for ComReg's preliminary views regarding the impacts of

symmetric versus asymmetric pricing on stakeholders.[172] The Consultation Document recognised the possible retail distortions which asymmetric Termination Rates may engender through *inter alia* the risk that asymmetric Termination Rates could send the wrong signals to potential new entrants and generate uncertainty and lead to possible disputes between new entrants and existing Service Providers. Asymmetric Termination Rates were also noted as potentially providing scope for reinforcing barriers to entry/expansion associated with tariff-mediated network externalities.

8.81 Cognisant of the length of time asymmetric Termination Rates have been applied in the Irish FVCT and MVCT markets to date, and with a view to not delaying the positive competition benefits of symmetric pure LRIC Termination Rates, ComReg considered it appropriate to move to symmetric FTRs and MTRs for all Service Providers respectively.

Summary of Responses on Impacts of Move to Symmetric Termination Rates

8.82 O2 and H3GI supported a conditional allowance of temporary asymmetric Termination Rates where the conditions set out by the European Commission are met by the MSP or FSP (new entrants may be able to demonstrate a case for asymmetric Termination Rates as a means of assisting entry and expansion within a four year period of entering the mobile market).

8.83 TMI claimed that ComReg's proposed transition must reflect the obvious differences between TMI and the major MSPs. It also refers to European Commission comments that "*a delay – if very limited – in the implementation of cost-oriented rates is acceptable, taking account of the need to minimise business and regulatory uncertainty in the… markets flowing from an important decrease in MTRs*".

8.84 Other respondents (Magnet, ALTO) argued that asymmetric rates should be imposed for FSPs on the basis that smaller Service Providers are disadvantaged because their unit costs may be higher than those of larger Service Providers (and that this should be accommodated for in the Termination Rate).

8.85 Vodafone and Eircom broadly supported the proposed elimination of Termination Rate asymmetries on the basis that doing so would end competitive distortions caused by the large differences in the levels of Termination Rates between different Service Providers in Ireland.

[172] http://www.comreg.ie/_fileupload/publications/ComReg1267.pdf

8.86 As regards the proposal to maintain a time-of-day/week gradient in the regulated Termination Rates, a number of respondents disagreed with this suggestion in the Consultation Document and noted their view that both MTRs and FTRs should be set as flat rates. These responses are summarised in sections 7.3.2 and 7.6.2 of this Document above.

ComReg's Assessment of Responses on Impacts of Move to Symmetric Termination Rates

8.87 The arguments relating to ComReg's comparative assessment of how symmetric or asymmetric (pure LRIC) Termination Rates impact on competition are considered in detail in paragraphs 5.57 to 5.62, paragraphs 6.154 to 6.159, section 6.3, and sections 7.3.3 and 7.4.3 of this Document. ComReg notes that even small networks have bottleneck control over termination to their customers.

8.88 In view of the competitive distortions that asymmetric Termination Rates can engender, ComReg does not consider asymmetric Termination Rates over a prolonged period of time to be an appropriate form of entry assistance. In particular, ComReg has had regard to the fact that asymmetric Termination Rates risk facilitating the following retail distortions of competition:

- Rewarding a Service Provider for its smaller size can give inappropriate investment signals, inhibits incentives to gain customers and risks promoting inefficient entry. This risks the inappropriate recovery of inefficiently incurred costs or costs related to network elements/investments which do not affect the delivery of voice call termination services;

- Setting a higher price floor for off-net calls risks a restriction of retail pricing flexibility for off-net calls (including limiting the development of innovative tariffs involving off-net call minutes and restricting commercial opportunities for Service Providers who want to attract a more mixed user base such as users with higher outbound call volumes); and/or

- Asymmetric Termination Rates can help larger Service Providers to justify higher off-net retail tariffs reinforcing the ability of larger Service Providers to implement on-net/off-net retail tariff differentials thereby exploiting tariff-mediated network effects which may further raise switching costs for customers within calling circles (such as families or groups of friends) thereby potentially muting retail competition.

8.89 In taking the decision to move to symmetric maximum FTR and a symmetric maximum MTR for all FSPs and MSPs respectively, ComReg has in particular considered:

- the superior comparative performance of pure LRIC relative to other cost orientation approaches against ComReg's Assessment Criteria (which are in turn mapped to ComReg's statutory objectives);
- the (often significant) asymmetric Termination Rates which a number of late entrant MSPs and FSPs in Ireland have already benefited from to date (see Tables 1 to 6 in section 6 of the 2012 MVCT Decision and Figures 21 and 22 of ComReg Document 12/96);
- the scope for high asymmetric Termination Rates to contribute to other potentially enduring retail distortions associated with inefficient entry, a restriction of retail pricing flexibility, and/or tariff-mediated network externalities;
- the more direct mechanisms which ComReg has employed in addressing any remaining barriers to entry and expansion in mobile markets (such as competitive spectrum auction processes and effective number portability processes);
- the view reached by ComReg that any price restructuring, as a result of implementing pure LRIC-based Termination Rates, is unlikely to lead to a material reduction in mobile ownership in Ireland relative to the application of a LRAIC+ approach (see paragraphs 6.79 to 6.112 above);
- the absence of convincing cost-based evidence supporting persistent asymmetries for smaller/new entrant MSPs, recognising in particular that the most recent entrants in the Irish mobile market were MVNOs which, through leasing relevant network inputs from the mobile network operators, may reduce the impact of economies of scale implying that low unit costs could potentially be achieved at low levels of output;

- the absence of convincing cost-based evidence supporting persistent asymmetries for smaller/new entrant FSPs, recognising in particular the opportunity for new entrant FSPs to achieve low unit costs by focusing their networks on high-density routes in particular geographic areas and/or by renting relevant network inputs from the incumbents[173];

- ComReg's role in promoting the competitive process as a whole, taking account of the fact that termination revenue for one Service Provider is a termination expense for another Service Provider. Subsidising one group of customers via interconnection payments ultimately comes at the expense of another group of consumers, i.e. those users making off-net calls to the 'subsidised' networks; and

- ComReg's role in contributing to the internal market, since asymmetric Termination Rates can reinforce cross-country variations in Termination Rates, thereby generating regulatory uncertainty for cross-border investment decisions.

8.90 In considering further the likely impact on TMI (specifically the likely impact of the implementation date of 1 January 2013 for symmetric MTRs) ComReg has also taken account of the joint venture arrangements between TMI and its partner O2 to better understand the likely financial implications of the reductions to TMI's currently high asymmetric MTR on its overall profitability going forward.

8.91 ComReg is mindful of the need to adopt pricing proposals that promote the overall competitive environment rather than protecting or enhancing the competitive position of a single operator.

[173] See recital 17 of the 2009 Termination Rate Recommendation notes that it did not perceive there to be a need to allow new entrants in fixed markets to benefit from asymmetric Termination Rates, since such new entrants "*have the opportunity to achieve low unit costs by focusing their networks on high-density routes in particular geographic areas and/or by renting relevant network inputs from the incumbents*."

8.92 Contrary to TMI's views, ComReg has indeed taken into account recent European Commission comments/serious doubts letters. This was also taken into account by ComReg when extending the implementation date for pure LRIC-based MTRs until July 2013 as ComReg was mindful of its role to contribute to a consistent regulatory environment for FTRs and MTRs across the EU and not to facilitate or unnecessarily prolong possible internal market distortions. ComReg is, however, not aware of any acceptance by the European Commission of asymmetric Termination Rates in any Member State beyond the implementation date of 1 July 2013. Nor is ComReg aware of any acceptance by the European Commission of Termination Rates which are materially above pure LRIC beyond the implementation date of 1 July 2013. Hence, TMI's argument for a longer glide path, potentially up to a further two to three years in duration, is not supported by any recent EU regulatory experience or guidance.

8.93 ComReg's ultimate proposal thus draws on an inclusive assessment considering the net impact on the (fixed and mobile) sector and consumers as a whole, as well as ComReg's internal market objective. ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders (including Service Providers currently benefiting from high asymmetric Termination Rates, e.g. TMI), ComReg also has to balance this initial revenue impact against dynamic competition and equity impacts and the need to ensure its decisions protect the integrity of the competitive process and equity as a whole, rather than only protecting or furthering the interests of particular Service Providers and their individualised commercial strategies. In the absence of persuasive cost-based evidence supporting ongoing asymmetries for smaller MSPs (including MVNOs) or FSPs, ComReg has reached a decision, taking all of the above-listed factors into account, that it is not objectively justified or proportionate to allow further asymmetric FTRs or MTRs over the relevant price control period.

8.94 As regards the issue of whether or not to facilitate differentiation within the regulated Termination Rates based on a time-of-day/week gradient, ComReg has taken into account respondents' views on the Consultation Document and considers the impacts on individual stakeholders in its final Decision as follows:

8.95 **Flat rate charging versus Time-of-day differentiation – MTRs / FTRs**

8.96 As a result of this Decision, from 1 July 2013, there will be no permitted differentiation between MTRs, and FTRs, depending on the time-of-day or day-of-the-week a call is made. This is set out in paragraphs 7.66 to 7.67 of this Document with respect to MTRs and paragraph 7.157 with respect to FTRs. As MTRs and FTRs are moving to a pure LRIC cost recovery method, i.e. whereby only the incremental costs associated with providing the wholesale call termination service are considered, ComReg considers that there is little or no

reason to continue with time-of-day differentiation at the wholesale level since it becomes less relevant in that context and a flat rate approach better addresses the scope for any remaining asymmetries and associated distortions to arise via continued divergences in peak vs. off-peak rates. In addition, ComReg has assessed the impact of moving from time-of-day differentiation to flat rates for MTRs and FTRs and similarly does not believe there is a material impact to individual Service Providers, once MTRs and FTRs are set at pure LRIC.

8.97 **Two-part charging (i.e. ‘per minute and per call’) versus ‘per minute only’ charging for FTRs**

8.98 The output of the pure BU-LRIC model results in setting FTRs based on a cost-per-minute and a cost-per-call structure as set out in paragraphs 7.155 and 7.156. ComReg has decided that SMP FSPs should continue to charge FVCT on a ‘per call and per minute’ or on a simple ‘per call’ basis, whichever method they have used to date (once the criteria set out is paragraph 7.156 is adhered to). To require FSPs to change their billing systems for a simple per minute rate similar to the MVCT rate may give rise costly billing system changes which may not be proportionate given the low level of FVCT revenue being billed.

8.2.3.4 Implementation timelines

ComReg’s Preliminary View on Impacts of Implementation Timeline

8.99 ComReg assessed the options in terms of implementation of pure LRIC Termination Rates in Chapter 7 of the Consultation Document, and again in Chapter 7 of this Document. As noted in the Consultation Document, an implementation date of 1 January 2013 would be in line with the 2009 Termination Rate Recommendation. However, ComReg proposed an implementation date of 1 July 2013 for the pure LRIC approach. This was to allow additional time for FSPs and MSPs to implement the proposed price changes.

Summary of Responses on Impacts of Implementation Timeline

8.100 ComReg received responses from a number of FSPs and MSPs in relation to the impacts of the different implementation timeframes, and has assessed these responses in section 7.3.3 of this Document. In summary, of eight responses to the Consultation Document, four respondents (H3GI, Magnet, Eircom and ALTO) essentially agree with Option 2 - implementation date of 1 July 2013; while Vodafone, O2 and TMI strongly disagree with the proposed approach. These MSPs clearly remain of the view that additional time should be allowed beyond 1 July 2013 (with a continuation of the glide-path similar to that in place to date).

8.101 TMI specifically referred to the *"rapid imposition of drastic …(MTR) reductions at very short notice"*. It furthermore noted that it would likely face difficulties in implementing the proposed interim rate on 1 January **[✂…………………………………………………………………………… ……………………………………………………………………………………… ……………………………………………………………………………………… ………………………………………………………………………………]**. It sought a longer glide path over a period of two to three years. O2 expressed the view that ComReg fails to provide due and measured consideration of MTRs in a conducive and timely fashion, resulting in such unduly hasty consideration and implementation in an unfair and burdensome manner upon operators. Vodafone disagreed with both implementation options and noted that, reducing MTRs by as much as 80% within a 10-month period, would impose substantial revenue losses on operators and be inconsistent with EU law and ComReg's duties.

8.102 TMI and O2 additionally expressed concern regarding the conduct of the MVCT market review and remedies processes in parallel rather than sequentially.

8.103 H3GI, Eircom, Magnet, and ALTO all agreed with the proposed implementation timeframe of 1 July 2013.

ComReg's Assessment of Responses on Impacts of Implementation Timeline

8.104 **Claims that implementation timeline is unduly hasty and unfair/unreasonable**

8.105 ComReg has responded in detail (in paragraphs 4.24 to 4.33, 5.57 to 5.62, 6.154 to 6.159 and sections 6.3, 7.3.1 to 7.3.3 of this Document) to concerns raised regarding the proposed implementation timeframes for applying the pure LRIC approach to MTRs. ComReg has had to balance the reduction in the transfer of wholesale revenues to MSPs (predominantly from the fixed sector) with the negative asymmetric impact that continuing with the current system of Termination Rates above efficient cost may have on the profitability of FSPs as well as on smaller Service Providers. While some net recipients of termination revenues (e.g. larger MSPs or MSPs traditionally benefiting from higher asymmetric MTRs) will inevitably face a reduction in their wholesale receipts (albeit recognising some opportunities to counterbalance this with additional retail revenues or cost savings discussed further in Chapter 6 above), it is important to recall that the level of wholesale Termination Rates can have a significant influence on the structure and dynamic of retail competition. Termination Rates set above pure LRIC risk raising distorting retail competition through the direct impact of net termination payments above the efficient rate and because of relative incentive effects and competitive disadvantages

created by higher Termination Rates for such parties[174].

8.106 It is ComReg's responsibility to ensure that there is no unnecessary delay in the accrual of potential benefits to the competitive process and consumers as a whole from an effective approach to cost orientation which minimises the risk of Termination Rates contributing to retail distortions of competition. TMI, O2 and Vodafone's proposal to delay the imposition of pure LRIC-based MTRs beyond July 2013 neglects to take into account the risks that a deferral of pure LRIC cost-oriented MTRs would have for the overall competitive process (in particular between fixed and mobile markets and/or between Service Providers with asymmetric market shares and traffic flows) as well as for consumers overall (i.e. both fixed and mobile, and on-net and off-net user groups). ComReg's obligation is to promote the overall competitive environment rather than promoting or preserving the existing competitive positions/strategies of individual Service Providers supported by inefficiently high Termination Rates.

8.107 As noted in paragraph 7.60 above, the voluntary glide-path arrangement for MTRs in Ireland was never envisaged as a long term solution. ComReg considers that it has been clear to all the then designated SMP MSPs, at least since 2010, that it was ComReg's intention to revisit the price control obligation taking into account the 2009 Termination Rate Recommendation prior to the end of the glide-path period with a view to a revised regime being in place with effect from 1 January 2013. ComReg's rigorous comparative assessment framework set out in the Consultation Document and this Document (and their respective Annexes) has further demonstrated that pure LRIC performs comparatively higher against its Assessment Criteria than other cost orientation approaches considered in this Document and thus sees no reason to deviate from the 2009 Termination Rate Recommendation, the implications of which have been clear to industry for some time now. ComReg believes that the additional six-month period up to July 2013 is sufficient time for Service Providers to incorporate the new Termination Rates into their business plans, billing systems and retail pricing strategies while contributing towards a timely realisation of the superior competitive potential of a pure LRIC approach. Therefore, based on the assessment of impacts surrounding the implementation timing contained throughout this Document, ComReg has decided that the pure LRIC MTR will come into effect on 1 July 2013 with a step change reduction for all MSPs from 1 January 2013.

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[174] Paragraph 2.15 of this Document re-caps the key competitive distortions that Termination Rates set above pure LRIC risk facilitating. These include a) **raising barriers to entry and growth** by generating significant financial transfers from smaller Service Providers (or net termination payers) to their larger rivals (or net termination recipients) which have stronger incentives (and are more able) to offer on-net discounts; b) **creating a floor to retail (off-net) pricing** behaviour and curbing tariff innovation involving off-net calls; and c) **accentuating the ability of Service Providers to employ retail on-net/off-net price discrimination strategies** which reinforces the attractiveness of larger networks (network effects) and raises switching costs for customers within calling circles thereby muting retail competition.

8.108 **Parallel conduct of the MVCT market review and price control remedies processes**

8.109 Issues regarding the sequencing of the MVCT market review and price control remedies processes are thoroughly addressed in paragraphs 4.66 to 4.68 of this Document. Conducting the market analysis and remedies consultations and final decisions in parallel is fully in line with best EU practice and the need to ensure timely, effective and appropriate regulation.

8.2.3.5 Cost model versus benchmarking

ComReg's Preliminary View on Impacts of Cost Model vs. Benchmarking

8.110 ComReg does not currently have a pure BU-LRIC model, but the 2009 Termination Rate Recommendation recommends implementing MTRs based on a pure LRIC methodology in 2013. For this reason, ComReg proposed in the Consultation Document to implement a benchmark of pure LRIC prices across relevant EU Member States as an interim measure to ensure compliance with the timelines set out in the 2009 Termination Rate Recommendation. ComReg intends to commence a pure BU-LRIC cost modelling exercise in respect of MTRs in 2013.

Summary of Responses on Impacts of Cost Model vs. Benchmarking

8.111 Vodafone criticises ComReg's proposed benchmark approach, in particular regarding the limited size of the eligible countries for inclusion in the benchmark.

8.112 In relation to the use of a benchmark for setting MTRs, Vodafone is of the view that it would only work if the benchmark is against a sufficiently large number of jurisdictions where a cost-oriented price control has been implemented and properly adjusted to reflect the specific cost conditions in Ireland. If such a "robust adjusted benchmark" cannot be implemented, it is Vodafone's view that a bottom-up ('BU') pure LRIC cost model would be superior.

8.113 O2 also indicated that it would not support a benchmark based only on those countries where pure LRIC is in place and noted differences in the characteristics of other pure LRIC countries relative to Ireland.

ComReg's Assessment of Responses on Impacts of Cost Model vs. Benchmarking

8.114 Vodafone and O2's arguments regarding the viability of the proposed pure LRIC benchmarking approach, as well as Vodafone's proposal to await the completion of a cost model, are addressed in detail in paragraphs 4.49 to 4.55 and in Chapter 7 (see sections 7.2.3 and 7.3.3) of this Document. In particular, paragraph 4.55 notes the risks that a deferral of pure LRIC MTRs beyond July 2013 would have for the overall competitive process, as well as for the development of the internal market.

8.115 Having revised the proposed benchmarking approach to include all pure LRIC MTRs notified by way of BU-LRIC model to the European Commission to date, and subsequently adopted by way of a final decision, ComReg considers its benchmarking approach generates a sufficiently robust result for the Irish market, and does not consider it proportionate to defer implementation of pure LRIC MTRs until completion of a pure BU-LRIC cost model in 2014. As noted above, Vodafone's proposal to delay the imposition of pure LRIC MTRs until the completion of a model neglects to take into account the significant risks that a deferral of pure LRIC cost-oriented MTRs would have for the overall competitive process and for consumers.

8.116 The Analysys Mason Benchmarking Report furthermore examined whether the underlying MTR cost drivers might differ materially between countries such that Ireland might potentially fall outside of the benchmarked range. Taking this into account, ComReg concludes that Ireland has broadly similar characteristics to other Member States such that setting maximum MTRs in Ireland according to a simple average of those countries with pure LRIC-based MTRs (specified by way of final decision) is appropriate in the first instance and that this approach would sufficiently represent the prevailing incremental mobile termination cost conditions in Ireland until a pure BU-LRIC cost model can be completed in 2014.

8.117 In addition, ComReg has committed to a six-month review of the benchmark, taking into account any additional countries that have notified pure-LRIC based MTRs to the Commission. In this way, the sample will include the maximum number of countries, to make it as robust and up-to-date as possible.

8.2.3.6 Impacts on individual stakeholders

8.118 ComReg has estimated the (static) financial impacts on each Service Provider of this pricing measure, although this information is confidential and cannot be published. It is evident that the impact on some Service Providers will be material. In general the fixed sector will, on a static view, benefit while MSPs will face initally reduced wholesale revenues arising from the reduced fixed-mobile cross subsidy, although the distribution of these static wholesale revenue impacts will vary across MSP depending on their respective Termination Rates and historic (on-net/off-net) traffic flows. However, opportunities to counterbalance any wholesale revenue impacts with additional retail revenues or cost savings discussed further in Chapter 6 above, as well as the countervailing dynamic and competitive impacts of pure LRIC Termination Rates for individual Service Providers, e.g. in terms of enabling Service Providers to offer more innovative (off-net) calling prices and the potentially reduced impact of switching costs associated with on-net discounts, also need to be factored into the overall impact assessment. It can further be noted that, taking the (fixed and mobile) sector as a whole the impact is zero since any reduction in wholesale revenues and profits for a specific Service Provider do not disappear but rather represent a transfer between Service Providers (of different size and/or different networks).

8.119 ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders (including Service Providers which are currently net recipients of such termination revenues), ComReg also has to balance this initial wholesale revenue impact against the dynamic competition and equity impacts for *all* Service Providers (including net termination payers) and the need to ensure its decisions protect the integrity and sustainability of the competitive process as a whole. ComReg has come to the view for the reasons set out in *inter alia* in paragraphs 5.57 to 5.62, Chapter 6 as a whole including paragraphs 6.152 to 6.161, 6.202 to 6.221 and section 6.3, that subsidies inherent in cost recovery above pure LRIC for *all* or *specific* Service Providers is sub optimal and significantly risks engendering a range of other retail competitive distortions that could lead to important barriers to entry and growth in retail voice markets.

8.3 Step 4: Determine the likely impacts on competition

8.3.1 ComReg's Preliminary View on Likely Impacts on Competition

8.120 Section 4 of the First Analysys Mason Report discusses in detail the competitive issues associated with two-sided markets and how this explains the impact of wholesale termination on the level of competition in fixed and mobile telecoms markets. It recognises that, as originating and terminating Service Providers are also in competition with each other for subscribers, the level of Termination Rates can have important strategic and competitive implications at the retail level as it could potentially be used as a soft source of revenue to fund competition for retail customers to the disbenefit of those calling into the recipient's network. Please refer to subsection 4.3 of the First Analysys Mason Report for further analysis.

8.121 In this subsection ComReg summarises the likely impacts on competition between the option of setting Termination Rates based on a pure LRIC approach, as opposed to setting Termination Rates based on a LRAIC+ approach, the latter being a representative scenario for cost orientation approaches that more generally result in the inclusion of some additional common costs (or costs jointly shared between wholesale call termination and other services). The points set out below in relation to competition are supported by the work of Analysys Mason, as referred to in Section 6 (subsection 6.3) of the First Analysys Mason Report, as well as by the comparative assessment framework set out in the Consultation Document and this Document (including their respective Annexes).

8.122 A key insight for the purposes of the comparative assessment framework (set out in Chapter 6 of this Document) is that, since a pure LRIC approach in the current context only includes the incremental costs of wholesale voice call termination, a pure LRIC approach will result in a cost for FVCT and MVCT which is lower than that yielded by a LRAIC+ approach. As noted in paragraph 6.217 of this Document, pure LRIC has a significant comparative advantage under the Competition (and related dynamic efficiency) Assessment Criterion vis-à-vis any costing method which includes a broader increment and/or a mark-up for additional common costs. Its key source of comparative advantage arises with respect to its better potential to facilitate a competitively neutral framework. For example, in terms of mobile-to-mobile and fixed-to-mobile competition pure LRIC MTRs:

- **further reduce the financial transfers from net termination payers to net termination receivers** (e.g. from FSPs to MSPs thereby contributing to a level playing field across all networks, or from smaller MSPs to larger MSPs), thereby going further than LRAIC+ in easing any financial barriers to entry and growth associated with these inter-operator transfers. Pure LRIC MTRs would reduce cross subsidies between networks and allow Service Providers to retain a higher proportion of their retail revenues, rather than incurring higher MTR expenses.

- **lower the floor (further than LRAIC+) for retail pricing of off-net calls** which should strengthen the ability of smaller MSPs to construct competitive packages, with bundles of off-net calls. Adopting pure LRIC MTRs should also better enable both FSPs and MSPs to offer packages that include bundled off-net mobile minutes and to have greater flexibility to pursue more diverse retail pricing strategies to potentially attract a more mixed user base[175].

- **have better potential than LRAIC+ MTRs to reduce the impact of tariff-mediated network externalities** and enable smaller MSPs, such as H3GI and Meteor, to compete more easily with larger MSPs. LRAIC+ MTRs can lead to more pronounced on-net/off-net tariff differentials than would arise under a pure LRIC approach, which can encourage on-net calling circles which may raise customer switching costs and cause inertia in the retail market, consequently making it more difficult for smaller MSPs to win customers from larger MSPs.

8.123 ComReg considers that these combined impacts would create a more competitively neutral environment than under a LRAIC+ approach and would thereby facilitate increased competition in mobile and fixed retail voice markets over time.

8.124 In terms of fixed–fixed competition, pure LRIC-based FTRs:

- **further reduce the financial transfers from net termination payers to net termination receivers** (e.g. from smaller FSPs to larger FSPs), thereby going further than LRAIC+ in easing any financial barriers to entry and growth associated with these inter-operator transfers. Pure LRIC FTRs would reduce cross subsidies between networks and allow Service Providers to retain a higher proportion of their retail revenues, rather than incurring higher FTR expenses.

[175] For example, pure LRIC MTRs would also be conducive to a more equitable development of converged fixed and mobile products with inclusive ‘any network’ voice bundles.

- **lower the floor (further than LRAIC+) for retail pricing of off-net calls** thereby facilitating development of more innovative fixed calls packages, such as products that include more (off-net) bundled call minutes to fixed numbers. Adopting pure LRIC-based FTRs should also better enable FSPs to offer packages that include larger inclusive bundles of (off-net) fixed minutes and to have greater flexibility to pursue more diverse retail pricing strategies to potentially attract a more mixed user base

8.125 While on-net/off-net price discrimination is not currently a widely observed retail pricing practice in respect of fixed voice services, the potential for on-net/off-net retail price discrimination and associated tariff-mediated network externalities nonetheless remains, absent regulation. Hence, whilst much less of a risk in fixed voice markets, pure LRIC arguably further minimises the scope for such tariff-mediated externalities to materialise in fixed voice retail packages.

8.126 Since pure LRIC contributes better to a more competitively neutral framework, this implies that a pure LRIC approach would also be more consistent with promoting sustainable and balanced dynamic efficiency and investment incentives than a LRAIC+ approach.

8.127 Pure LRIC-based Termination Rates may also impact the way in which MSPs and FSPs compete for retail customers. Furthermore, the competitive effects of pure LRIC, compared with LRAIC+, may differ across customer groups. This will depend on how Service Providers re-optimise their tariff offerings following the proposed reduction in Termination Rates. As discussed in detail in Chapter 6, MSPs and FSPs (subject to Eircom's other regulatory obligations in related markets) have a complex myriad of tariff re-balancing/price optimisation strategies available to them to recover these costs in various ways, such as from changes in access prices, retail calls (across the range of call types), handset subsidies (for mobile customers), shortening of expiry periods for inactive credit, fewer bonus credits or promotions, and/or a reduction in customer acquisition costs, etc.

8.128 Since the termination revenue per customer will be lower under pure LRIC, FSPs and MSPs will rely more on the direct spend of customers to cover unavoidable common costs. For this reason, FSPs and MSPs have the ability to manage a greater proportion of cost recovery through their practice of segmenting different user groups using indicators such as affordability and willingness to pay. However, as noted in Chapter 6 above, ComReg considers that Service Providers will still compete for low-spend customers due *inter alia* to the economies of scale associated with fixed and mobile networks, and network effects (externalities), both of which attribute value to amassing scale, as well as factors such as the low cost of maintaining existing customers on the network, the current profitability of lower users in Ireland, the growing relevance of SIM-only offers, etc. Since pricing incentives are driven by the behaviour of marginal customers (i.e. those most ready to switch networks) Service Providers will likely face incentives to re-optimise their retail tariff packages in such a way as to minimise the switching of marginal customers away from their networks.

8.129 Thus, while ComReg acknowledges that some re-allocation of unavoidable (common) costs by Service Providers to other retail and/or wholesale service prices (or a reduction in customer acquisition costs) may be necessary under a pure LRIC approach (relative to a LRAIC+ approach), it is ComReg's view that this will not come materially at the expense of attracting and maintaining customers on fixed and mobile networks (see paragraph 6.79 to 6.119 and 6.179 to 6.186).

8.130 Indeed, in respect of the equity assessment a key source of comparative advantage for pure LRIC arises from the fact that fixed consumers or consumers wishing to make high volumes of off-net calls ultimately fare better from lower Termination Rates under a pure LRIC approach. ComReg expects that the market will be better positioned under pure LRIC to see more diverse consumer choice overall due to the establishment of a more level playing field between both FSPs and MSPs, and between Service Providers with different sized networks (see paragraphs 6.26 and 6.35, 6.196 to 6.201 and paragraph 6.218 of this Document, as well as section 5.4 and paragraph 6.82 of the Consultation Document and the accompanying Analysys Mason Reports).

8.131 As to <u>the likely impacts on competition between the option of setting Termination Rates based on a symmetric approach, as opposed to Termination Rates based on asymmetric approach,</u> ComReg considers that symmetric Termination Rates set at a pure LRIC level should also perform better than asymmetric Termination Rates in reducing the risk of a number of potential impediments to retail competition. For example, symmetric pure LRIC-based MTRs significantly reduce the risk of inappropriate investment signals and/or rewarding inefficient entry. Symmetry at the level of pure LRIC also reduces the price floor for off-net calls and better facilitates commercial flexibility for all Service Providers to pursue a range of different pricing strategies. Setting *all* FTRs and MTRs based on pure LRIC further alleviates the extent to which tariff-mediated network externalities can be implemented, therefore potentially reducing switching costs faced by retail customers arising from on-net discounts and further facilitating the competitive process across all networks.

8.132 ComReg also notes that, in terms of net gains and losses, and focusing solely on the effect on wholesale revenues across the fixed and mobile sector combined, it is important to recall that termination receipts and expenditures effectively net out to zero. This means that any reduction in wholesale revenues and profits for a specific Service Provider resulting from symmetric pure LRIC Termination Rates does not disappear but rather represents a transfer between Service Providers (of different size and/or different networks). Thus, while the level of Termination Rates is neutral on the overall net wholesale profits generated by the fixed and mobile sector combined, it can have a significant influence on the relative competitive positions of individual FSPs and MSPs depending on their respective Termination Rates and historic traffic flows and thus can materially influence overall competitive intensity. ComReg's ultimate proposal thus draws on an inclusive assessment considering the net impact on the (fixed and mobile) sector and consumers as a whole. ComReg notes that, while it has assessed the (static) financial impacts of its proposal on all relevant stakeholders, ComReg also has to balance this against dynamic competition, efficiency and equity impacts and the need to ensure its decisions protect the integrity of the competitive process and equity as a whole, rather than protecting or furthering the interests of particular Service Providers only.

8.3.2 Summary of Responses on Likely Impacts on Competition

8.133 ComReg received submissions from a number of Service Providers in relation to its comparative assessment of the impacts of symmetric pure LRIC-based Termination Rates and the impacts of Termination Rates set according to a (possibly asymmetric) LRAIC+ approach. The main arguments submitted in response to ComReg's views on the competition impacts of its proposed symmetric pure LRIC pricing approach are set out under paragraph 8.54 above.

8.3.3 ComReg's Assessment of Responses on Likely Impacts on Competition

8.134 All of the arguments raised by respondents regarding the likely comparative impacts of pure LRIC and LRAIC+ approaches to setting Termination Rates on competition and investment have already been analysed in detail throughout the Consultation Document and this Document (in particular in Chapter 6 which contains the main comparative framework for the assessment of the available regulatory options). ComReg's position on the issues raised by respondents regarding the competition and investment impacts has furthermore been summarised again at paragraphs 8.59 to 8.70 above, and, in particular, in paragraphs 8.65 to 8.70 above.

8.135 Pursuant to the comparative assessment framework detailed in Chapter 6 (and as summarised in particular in paragraphs 6.202 to 6.222 of this Document), ComReg considers that, on balance, pure LRIC performs better than LRAIC+ in respect of the Assessment Criteria related to dynamic efficiency, competition, equity and internal market considerations. ComReg notes, in particular, that pure LRIC has a significant comparative advantage under the competition (and related dynamic efficiency) assessment relative to any costing method which includes a broader increment and/or a mark-up for additional costs. ComReg's structured and balanced options analysis (based on Assessment Criteria mapped back to ComReg's statutory objectives) has revealed that pure LRIC Termination Rates have a significantly stronger potential than the other cost orientation approaches considered in this Document to facilitate a more competitively neutral framework between Service Providers. Pure LRIC performs better than the other costing approaches considered in this Document through reducing inter-operator termination transfers, lowering the retail price floor for off-net calls facilitating more flexible commercial strategies at retail level, reducing the scope for tariff-mediated network externalities, and lowering associated incentives for on-net calling circles which can otherwise engender significant switching costs between Service Providers. These comparative competition benefits of pure LRIC relative to the other cost orientation approaches considered in this Document should better support an environment enabling all FSPs and MSPs to increasingly compete on the basis of their retail offers rather than according to their historic traffic flows and Termination Rates.

8.4 Step 5: Choose the best option

8.4.1 Pure LRIC vs LRAIC+

8.136 The notable difference between pure LRIC and LRAIC+ (the latter being representative of cost orientation approaches above pure LRIC generally) is that, under the pure LRIC approach, operators can only recover incremental/additional costs through their Termination Rate which are specifically related to the provision of the wholesale voice call termination service. In contrast, LRAIC+ is representative of a range of different cost orientation approaches (e.g. LRAIC, LRIC+ and LRAIC+) which facilitate a broader recovery of fixed and common costs which may not be solely attributable to the just the wholesale call termination service in question.

8.137 On the basis of the detailed comparative assessment of the pure LRIC and LRAIC+ options and impacts set out in Chapter 6 of this Document, and summarised again in the relevant RIA sections above (see in particular paragraphs 8.53 to 8.67 and section 8.3 above), ComReg considers that, on balance, pure LRIC performs comparatively better against ComReg's Assessment Criteria, in particular in relation to competition considerations which also influence *inter alia* the efficiency and equity impacts, and is thus the preferred regulatory approach to setting FTRs and MTRs in Ireland.

8.4.2 Recovery of Common Costs

8.138 It has been explained above (see paragraphs 8.71 to 8.79) that MSPs and FSPs have general discretion over how they choose to allocate common costs across other wholesale and/or retail services as appropriate, insofar as those products are not subject to a regulated price (e.g. Eircom's flexibility is somewhat constrained in terms of certain regulated retail and wholesale products and services).

8.139 In the specific case of Eircom's products that are subject to regulated price constraints in other retail/wholesale markets, ComReg does not believe that it is necessary, at this stage, to adjust other regulated wholesale and/or retail prices to accommodate for the reduction in the FTR to pure LRIC. ComReg will, however, review the need for common cost recovery when conducting subsequent pricing exercises for other regulated voice/non-voice products as appropriate.

8.4.3 Use of a Benchmark

8.140 In relation to MTRs, ComReg does not currently have a pure BU-LRIC model. Therefore, an alternative approach is required in the short-to-medium term so as not to unnecessarily delay the implementation of MTRs based on a pure LRIC methodology beyond mid 2013. This has been identified (see paragraphs 8.104 to 8.107 above) as the implementation timeline which best balances ComReg's statutory objectives (with regard to the *promotion of competition*, *contribution to the development of the internal market* and *promotion of the interests of users within the Community*). ComReg intends to commence a pure BU-LRIC cost modelling exercise in respect of MTRs in 2013. As part of this exercise, ComReg will gather data from MSPs and build a pure BU-LRIC model for MTRs in Ireland.

8.4.4 Symmetric MTRs and FTRs

8.141 For the reasons discussed in Chapter 7 and summarised in the RIA section above, and, in particular, taking all of the above-listed factors in paragraphs 8.80 to 8.93 into account, ComReg has reached the reasoned decision that it is not objectively justified or proportionate to allow further asymmetric MTRs for any SMP MSP beyond January 2013 or to allow further asymmetric FTRs for any SMP FSP beyond July 2013 over the relevant price control period.

8.4.5 Implementation timeline

8.142 On the basis of the analysis above, ComReg has decided to implement a symmetric pure FTR derived from a BU-LRIC model, and a benchmarked symmetric pure LRIC MTR as of 1 July 2013. Final rates will be implemented for the interim period as of 1 January 2013 as per the timeline provided in Chapter 7 of this Document. As set out previously, ComReg will review the MTR benchmark every six months to ensure the benchmarking sample remains robust and updated (post the 1 July 2013 change). The reasons for the proposed implementation timeframe are set out in detail in Chapter 7 of this Document and summarised in the RIA section (see section 8.2.3.4) above.

Annex: 1 Decision Instrument: Fixed Voice Call Termination

DECISION INSTRUMENT

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Direction and Decision Instrument (hereinafter "Decision Instrument") is made by the Commission for Communications Regulation ("ComReg") and relates to the market for wholesale call termination services used to provide retail calls to end users on each public telephone network provided at a fixed location as identified by the European Commission in its Recommendation of 11 February 2003 on Relevant Product and Service markets within the electronic communications sector susceptible to ex ante regulation[176] ("the Recommendation") and as defined by ComReg in the Response to Consultation and Decision Document entitled "Market Analysis – Interconnection Market Review Wholesale Call Termination Services", (Decision No. D06/07), (Document No. 07/109).

1.2. This Decision Instrument is made:

i. Having had regard to sections 10 and 12 of the Communications Regulation Acts 2002 to 2011[177] and Regulation 16 of the Framework Regulations and Regulation 6(1) of the Access Regulations;

ii. Having, where appropriate, pursuant to section 13 of the Communications Regulation Acts 2002 to 2011 complied with policy directions made by the Minister for Communications, Marine and Natural Resources[178];

iii. Having taken the utmost account of the 2009 Termination Rate Recommendation;

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[176] European Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 114, 08.05.2003, p. 45).

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

[178] Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February 2003 and 26 March 2004.

iv. Having had regard to the market definition, market analysis and reasoning conducted by ComReg in the Response to Consultation and Decision Document entitled “Market Analysis – Interconnection Market Review Wholesale Call Termination Services”, (Decision No. D06/07), (Document No. 07/109);

v. Having regard to the analysis and reasoning set out in the consultation and draft measure on the detailed price control obligation entitled “Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates” (ComReg Document No. 12/67);

vi. Having taken account of the submissions received from interested parties in relation to “Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates” (ComReg Document No. 12/67) following a public consultation pursuant to Regulation 12 of the Framework Regulations;

vii. Having regard to the analysis and reasoning set out in the response to consultation and Final Decision entitled “Mobile and Fixed Voice Call Termination Rates in Ireland” (Decision No. D12/12, Document No. 12/125);

viii. Having made the draft measure and the reasoning on which the measure is based accessible to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Regulation 13 and Regulation 14 of the Framework Regulations and having taken account of any comments made by these parties; and

ix. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations and Regulations 8, 13 and 18 of the Access Regulations.

1.3. The provisions of the response to consultation and final decision document entitled “Market Analysis – Interconnection Market Review Wholesale Call Termination Services” (Document No. 07/109, Decision No. D06/07), the consultation and draft decision entitled “Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates”, (ComReg Document No. 12/67) and the final decision entitled ““Mobile and Fixed Voice Call Termination Rates in Ireland” (Decision No. D12/12, Document No. 12/125) shall, where appropriate, be construed with this Decision Instrument.

PART I – GENERAL PROVISIONS (SECTIONS 2 AND 3 OF THE DECISION INSTRUMENT)

2. Definitions

2.1. In this Decision Instrument, unless the context otherwise suggests:

"**2009 Termination Rate Recommendation**" means the recommendation published by the European Commission on 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC) (OJ L124/67 20.5.2009);

"**Access Regulations**" means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), as may be amended from time to time;

"Associated Facilities" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"Authorisation Regulations" means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011), as may be amended from time to time;

"**BEREC**" means the Body of European Regulators for Electronic Communications, as established pursuant to Regulation (EC) No. 1211/2009 of the European Parliament and of the Council of 25 November 2009;

"**BU Pure LRIC Model**" means a bottom-up model based on the Pure LRIC of an efficient operator and in the context of this Decision Instrument is the bottom up economic/engineering model of an efficient network used to determine the Pure LRIC associated with the supply of Fixed Voice Call Termination which is more particularly described at Chapter 7 of the final decision entitled ""Mobile and Fixed Voice Call Termination Rates in Ireland" (Decision No. D12/12, Document No. 12/125);

"**BT Communications**" means BT Communications Ireland Limited, as referred to in section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07, and includes its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns. For the avoidance of doubt, BT Communications includes British Telecommunications plc which is the Undertaking authorised in Ireland in accordance with Regulation 4 of the Authorisation Regulations;

"**Colt Technology Services**" means Colt Technology Services Limited as referred to in section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07;

and includes its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns;

"**ComReg**" means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Acts 2002 to 2011;

"**ComReg Decision No. D06/07**" means ComReg Document No. 07/109 entitled "Market Analysis – Interconnection Market Review Wholesale Call Termination Services" dated 21 December 2007;

"**Effective Date**" means the date set out in section 8 of this Decision Instrument;

"**Eircom**" means Eircom Limited and its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns;

"**End-User(s)**" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"**Fixed Number**" means a number from the Irish national numbering scheme which, for the purpose of this Decision Instrument, is terminated at a fixed location and means a Geographic Number, or an IP based number commencing with a network code of 076;

"**Fixed Termination Rate(s)**" or "**FTR(s)**" means the wholesale charge(s) levied by a Fixed Service Provider for the supply of Fixed Voice Call Termination;

"**Fixed Service Provider(s)**" or "**FSP(s)**" means an Undertaking providing End Users with retail voice services from a fixed location;

"**Fixed Voice Call Termination**" or "**FVCT**" means the provision by a Fixed Service Provider of a wholesale call termination service to other Undertakings for the purpose of terminating incoming calls to a Fixed Number in respect of which that Fixed Service Provider is able to set the Fixed Termination Rate. For the avoidance of doubt, the provision of Fixed Voice Call Termination involves the provision of an Interconnection service but excludes the provision of Associated Facilities;

"**Forward Looking-Long Run Incremental Costs**" or "**FL-LRIC**" means the cost of providing a defined increment of output, on the basis of forward looking costs incurred by an efficient operator;

"**Framework Regulations**" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), as may be amended from time to time;

"**Geographic Number**" shall have the same meaning as set out in the National Numbering Conventions, as may be amended from time to time. The current

meaning of a Geographic Number is a number from the Irish national numbering scheme where part of its digit structure contains geographic significance used for routing calls to the physical location where the call is terminated on the network;

"**Interconnection**" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time;

"**Magnet Networks**" means Magnet Networks Limited, as referred to in section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07 and includes its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns;

"(the) Market" means the market for wholesale call termination services used to provide retail calls to End-Users on each public telephone network provided at a fixed location as described in section 2 of the Decision Instrument annexed to ComReg Decision No. D06/07;

"**National Numbering Conventions**" means the set of rules under which the Irish national numbering scheme is managed and administered as set out in the document entitled National Numbering Conventions, Version 7.0, ComReg Document No. 11/17, as may be amended by ComReg from time to time;

"**Other Significant Market Power (SMP) Fixed Service Provider(s)**" means a Fixed Service Provider designated with SMP in section 3 of the Decision Instrument annexed to Decision No. 06/07 and comprises BT Communications, Colt Technology Services, Magnet Networks, Smart Telecom, UPC Communications and Verizon Ireland but does not include Eircom;

"**Pure Long Run Incremental Costs**" or "**Pure LRIC**" means those costs and only those costs which would be avoided in the long run if a SMP Fixed Service Provider were to cease to provide FVCT. For the avoidance of doubt, it excludes all costs which are common to the provision of FVCT and to other services;

"**Significant Market Power (SMP) obligations**" are those obligations set out in Regulation 9 to 14 of the Access Regulations, as may be amended from time to time;

"**Significant Market Power (SMP) Fixed Service Provider(s)**" means a Fixed Service Provider designated with SMP in section 3 of the Decision Instrument annexed to Decision No. 06/07 and comprises BT Communications, Colt Technology Services, Eircom, Magnet Networks, Smart Telecom, UPC Communications and Verizon Ireland;

"**Smart Telecom**" means Smart Telecom Holdings Limited and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns. For the avoidance of doubt Smart Telecom includes Smart

Telecom as referred to in section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07;

"**Undertaking**" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"**UPC Communications**" means UPC Communications Ireland Limited, and its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls it and its successors and assigns. For the avoidance of doubt UPC Communications includes NTL Communications (Ireland) Limited and Chorus Communications Limited as referred to in Section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07 and their successors and assigns;

"**Verizon Ireland**" means Verizon Ireland Limited as referred to in section 3.1 of the Decision Instrument annexed to ComReg Decision No. D06/07 and includes its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns.

3. SCOPE AND APPLICATION

3.1. This Decision Instrument applies to BT Communications, Colt Technology Services, Eircom, Magnet Networks, Smart Telecom, UPC Communications and Verizon Ireland in respect of activities falling within the scope of the Market.

3.2. This Decision Instrument is binding upon BT Communications, Colt Technology Services, Eircom, Magnet Networks, Smart Telecom, UPC Communications and Verizon Ireland and each of the SMP Fixed Service Providers shall comply with it in all respects.

3.3. This Decision Instrument relates to the imposition, amendment and withdrawal, pursuant to Regulation 8 of the Access Regulations, of certain obligations contained in Section 10 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07 as it relates to Fixed Voice Call Termination. This Decision Instrument also relates to the further specification, pursuant to Regulation 18 of the Access Regulations, of certain obligations contained in Section 10 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07.

PART II – SMP OBLIGATIONS IN RELATION TO SMP FIXED SERVICE PROVIDERS (SECTION 4 OF THE DECISION INSTRUMENT)

4. OBLIGATIONS RELATING TO PRICE CONTROL AND COST ACCOUNTING

4.1. Pursuant to Regulation 8 and Regulation 13(1) of the Access Regulations, Section 10.1 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07 is hereby withdrawn and replaced with the following:

"10.1 Pursuant to Regulation 13(1) of the Access Regulations, Eircom shall be subject to a cost orientation obligation as regards the prices charged by it to any undertaking for those products and services described in Section 5. The cost orientation obligation referred to in this Section 10.1 shall be subject to the requirements further specified by ComReg in the Decision Instrument contained in Annex 1 of the final decision entitled "Mobile and Fixed Voice Call Termination Rates in Ireland" (Decision No. D12/12, Document No. 12/125)".

4.2. For the avoidance of doubt, pursuant to Regulation 13(1) of the Access Regulations and in accordance with Section 10.2 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07, Eircom is subject to a cost accounting obligation in respect of the provision by it of Fixed Voice Call Termination to other Undertakings.

4.3. Pursuant to Regulation 8 and Regulation 13(1) of the Access Regulations, Section 10.3. Section 10.4 and Section 10.5 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07 are hereby withdrawn and replaced with the following:

"10.3 Pursuant to Regulation 13(1) of the Access Regulations, each OAO shall be subject to a cost orientation obligation as regards the prices charged by it to any undertaking for those products and services described in Section 5. The cost orientation obligation referred to in this Section 10.3 shall be subject to the requirements further specified by ComReg in the Decision Instrument contained in Annex 1 of the final decision entitled "Mobile and Fixed Voice Call Termination Rates in Ireland" (Decision No. D12/12, Document No. 12/125)".

4.4. Pursuant to Regulation 13(1) of the Access Regulations and in accordance with Section 10.1 and Section 10.3 of the Decision Instrument contained in Appendix A of ComReg Decision No D06/07 (as amended by this Decision Instrument), each SMP Fixed Service Provider is subject to a cost orientation

obligation as regards FTRs and prices charged by it to any other Undertaking for access to or use of those products and services described in Section 5 of the Decision Instrument contained in Appendix A of ComReg Decision No D06/07.

4.5. For the purpose of further specifying requirements to be complied with relating to the cost orientation obligations set out in Section 10.1 and 10.3 of the Decision Instrument contained in Appendix A of ComReg Decision No D06/07 (as amended by this Decision Instrument), and pursuant to Regulation 18 of the Access Regulations, with effect from 1 July 2013, each SMP Fixed Service Provider is hereby directed to ensure that its Fixed Termination Rate(s) are set in accordance with a Pure LRIC costing methodology.

4.6. Without prejudice to the generality of Section 4.5 of this Decision Instrument, pursuant to Regulation 18 of the Access Regulations and in accordance with Regulation 13(3) of the Access Regulations, with effect from 1 July 2013, insofar as a SMP Fixed Service Provider charges other Undertakings for FVCT on both a “cost per minute” and a “cost per call” basis, it shall ensure that its “cost per minute” and “cost per call” Fixed Termination Rates are no more than the relevant BU Pure LRIC Fixed Termination Rates, based on the BU Pure LRIC Model, which are set out in the table below.

	Maximum “cost per minute” FTR (€cent per minute)	**Maximum “cost per call” FTR (€cent per call)**
From 1 July 2013 to 30 June 2014	**0.070**	**0.075**
From 1 July 2014 to 30 June 2015	**0.060**	**0.068**
From 1 July 2015 onwards	**0.049**	**0.060**

4.7. Without prejudice to the generality of Section 4.5 of this Decision Instrument, pursuant to Regulation 18 of the Access Regulations and in accordance with Regulation 13(3) of the Access Regulations, with effect from 1 July 2013, insofar as a SMP Fixed Service Provider charges other Undertakings for FVCT only on a “cost per minute” basis, it shall ensure that its “cost per minute” Fixed Termination Rate is no more than the relevant BU Pure LRIC Fixed Termination Rate, based on the BU Pure LRIC Model, which is set out in the table below.

	Maximum "cost per minute" FTR (€cent per minute)
From 1 July 2013 to 30 June 2014	0.098
From 1 July 2014 to 30 June 2015	0.085
From 1 July 2015 onwards	0.072

4.8. With effect from 1 July 2013, each SMP Fixed Service Provider shall apply Section 4.6 or Section 4.7 (as appropriate) to all invoices and credit notes issued by it to any Undertaking in respect of the FVCT.

4.9. Notwithstanding and without prejudice to the obligations imposed on the SMP Fixed Service Providers in Section 8 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07, each SMP Fixed Service Provider shall pre-notify ComReg of its intention to amend its published Fixed Termination Rates, not less than 2 months in advance of the date on which any such amendment come into effect, unless otherwise agreed by ComReg. Each SMP Fixed Service Provider shall also furnish to ComReg, at the same time as such pre-notification, a statement confirming that the relevant amendment complies with Section 4.6 or Section 4.7 (as appropriate).

PART III – OBLIGATIONS AND EFFECTIVE DATE (SECTIONS 5 TO 8 OF THE DECISION INSTRUMENT)

5. STATUTORY POWERS NOT AFFECTED

5.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument).

6. MAINTENANCE OF OBLIGATIONS

6.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to the SMP Fixed Service Providers and in force immediately prior to the Effective Date of this Decision Instrument, are continued in force by this Decision Instrument and the SMP Fixed Service Providers shall comply with same.

6.2. If any section, clause or provision or portion thereof contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that section, clause or provision or portion thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining section(s), clause(s) or provision(s) or portion thereof of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument.

7. AMENDMENT AND WITHDRAWAL OF EXISTING SMP OBLIGATIONS

7.1. As regards Eircom, pursuant to Regulation 8 of the Access Regulations and in accordance with Regulation 13 of the Access Regulations, Section 10.1 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07 is hereby withdrawn and replaced in the manner provided for by Section 4.1 of this Decision Instrument

7.2. As regards the Other SMP Fixed Service Providers, pursuant to Regulation 8 of the Access Regulations and in accordance with Regulation 13 of the Access Regulations, Sections 10.3, 10.4 and 10.5 of the Decision Instrument contained in Appendix A of ComReg Decision No. D06/07 are hereby withdrawn and replaced in the manner provided for by Section 4.3 of this Decision Instrument.

8. EFFECTIVE DATE

8.1. The Effective Date of this Decision Instrument shall be, unless otherwise stated in this Decision Instrument, the date of its notification to the SMP Fixed Service Providers and it shall remain in force until further notice by ComReg.

8.2. Notwithstanding Section 8.1, Section 4.1 to Section 4.8 and Section 7 of this Decision Instrument shall apply to each SMP Fixed Service Provider with effect from 1 July 2013.

KEVIN O'BRIEN

COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE 21st DAY OF NOVEMBER 2012

Annex: 2 Decision Instrument: Mobile Voice Call Termination

DECISION INSTRUMENT

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Direction and Decision Instrument (hereinafter “Decision Instrument”) relates to a further specification of the cost orientation obligation imposed by the Commission for Communications Regulation (“ComReg”) under Section 12.1 of the Decision Instrument annexed to ComReg Decision D11/12.

1.2. This Decision Instrument is made:

i. Pursuant to Regulations 8, 13 and 18 of the Access Regulations;

ii. Pursuant to and having regard to the Significant Market Power (SMP) designations on H3GI, Meteor, Lycamobile, Telefónica, Tesco Mobile and Vodafone in the Relevant Markets as provided for in Section 5.1 of the Decision Instrument annexed to ComReg Decision D11/12;

iii. Pursuant to and having regard to the cost orientation obligation imposed on each of H3GI, Meteor, Lycamobile, Telefónica, Tesco Mobile and Vodafone by Section 12.1 of the Decision Instrument annexed to ComReg Decision D11/12;

iv. Having had regard to the functions and objectives of ComReg as set out in sections 10 and 12 of the Communications Regulation Acts 2002 to 2011 and Regulation 16 of the Framework Regulations and Regulation 6 of the Access Regulations;

v. Having, where appropriate, pursuant to section 13 of the Communications Regulation Acts 2002 to 2011[179] complied with policy directions made by the Minister for Communications, Marine and Natural Resources;

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

vi. Having taken the utmost account of the 2009 Termination Rate Recommendation;

vii. Having had regard to the market definition, market analysis and reasoning in the consultation entitled "Market Review – Voice Call Termination on Individual Mobile Networks" (ComReg Document No. 12/46) and in the Response to Consultation and Decision Document entitled "Market Review: Voice Call Termination on Individual Mobile Networks" (ComReg Decision D11/12, Document No 12/124);

viii. Having regard to the analysis and reasoning set out in the consultation and draft decisions document entitled ""Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates" (ComReg Document No 12/67);

ix. Having taken account of the submissions received from interested parties in relation to "Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates" (ComReg Document No. 12/67) following a public consultation pursuant to Regulation 12 of the Framework Regulations;

x. Having regard to the analysis and reasoning set out in the response to consultation and final decisions document entitled "Mobile and Fixed Voice Call Termination Rates in Ireland" (ComReg Decision D12/12, Document No 12/125); and

xi. Having made the draft measure and the reasoning on which the measure is based accessible to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Regulation 13 and Regulation 14 of the Framework Regulations and having taken account of any comments made by these parties.

1.3. The provisions of the Response to Consultation and Final Decision document entitled "Mobile and Fixed Voice Call Termination Rates in Ireland" (ComReg Decision D12/12, Document No 12/125), the Consultation and Draft Decision document entitled: "Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates" (ComReg Document No 12/67) and the Response to Consultation and Final Decision document entitled "Market Review: Voice Call Termination on Individual Mobile Networks" (ComReg Decision D11/12, ComReg Document No 12/124) shall, where appropriate, be construed with this Decision Instrument.

2. DEFINITIONS

2.1. In this Decision Instrument, unless the context otherwise suggests:

"**2009 Termination Rate Recommendation**" means the recommendation published by the European Commission on 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC) (OJ L124/67 20.5.2009);

"**Access**" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time; for the purposes of this Decision Instrument Access shall include access to Mobile Voice Call Termination;

"**Access Regulations**" means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), as may be amended from time to time;

"**Authorisation Regulations**" means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011), as may be amended from time to time;

"**Benchmark of BU Pure LRIC Mobile Termination Rates**" means the simple average of the BU Pure LRIC MTRs adopted by NRAs in other EU Member States where the following conditions are satisfied (i) the relevant NRA has notified BU Pure LRIC MTRs (i.e. calculated on the basis of a pure BU-LRIC model developed by that NRA) to the European Commission pursuant to Article 7 of the Framework Directive; (ii) that modelling approach has been accepted by the European Commission as being consistent with the 2009 Termination Rate Recommendation; and (iii) the relevant NRA has adopted a final decision setting a BU Pure LRIC MTR (irrespective of whether that decision is currently under appeal). The relevant MTR for each Member State for the purposes of the Benchmark of BU Pure LRIC Mobile Termination Rates is the BU Pure LRIC MTR adopted in the NRA's final decision;

"**BEREC**" means the Body of European Regulators for Electronic Communications, as established pursuant to Regulation (EC) No. 1211/2009 of the European Parliament and of the Council of 25 November 2009;

"**Bottom Up Pure Long Run Incremental Costs**" or "**BU Pure LRIC**" means the methodology used to estimate the Pure LRIC of an efficient operator which is derived from an economic/engineering model of an efficient network;

"**ComReg**" means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Acts 2002 to 2011, as may be amended from time to time;

"**ComReg Decision D11/12**" means ComReg Document No 12/124 entitled "Market Review: Voice Call Termination on Individual Mobile Networks" dated 21 November 2012;

"**ComReg Decision D12/12**" means ComReg Document No 12/125 entitled "Mobile and Fixed Voice Call Termination Rates in Ireland" dated 21 November 2012;

"**Effective Date**" means the date set out in Section 7.1 of this Decision Instrument;

"**Eircom**" means Eircom Limited and its subsidiaries, and any undertaking which it owns or controls, and any undertaking which owns or controls Eircom Limited and its successors and assigns;

"**End-User(s)**" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"**Framework Directive**" means Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009;

"**Framework Regulations**" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), as may be amended from time to time;

"**H3GI**" means Hutchison 3G Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Interconnection**" shall have the same meaning as under Regulation 2 of the Access Regulations, as may be amended from time to time;

"**Liffey Telecom**" means Liffey Telecom and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Lycamobile**" means Lycamobile Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Meteor**" means Meteor Mobile Communications Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Mobile Network**" means a digital wireless cellular network using radio frequency spectrum in any of the 900 MHz, 1800 MHz and/or 2100 MHz Bands or other radio

frequency spectrum bands as assigned by ComReg to an Undertaking from time to time;

"**Mobile Number(s)**" shall have the same meaning as set out in the National Numbering Conventions, as may be amended from time to time. The current meaning of a Mobile Number is a number from the Irish national numbering scheme commencing with the network code 08X, where X can represent any digital character 0-9, except 1. For the avoidance of doubt, Mobile Number shall include both a Mobile Number which is the subject of a Primary Allocation/Reservation and a Mobile Number which is the subject of a Secondary Allocation/Reservation;

"**Mobile Service Provider**" or "**MSP**" means an Undertaking providing End-Users with land based/terrestrial publicly available mobile voice telephony services using a Mobile Network;

"**Mobile Termination Rate(s) (MTR(s))**" means the wholesale charge(s) levied by a Mobile Service Provider for the supply of MVCT;

"**Mobile Voice Call Termination (MVCT)**" means the provision by a Mobile Service Provider of a wholesale service to other Undertakings for the purpose of terminating incoming voice calls to Mobile Numbers in respect of which that Mobile Service Provider is able to set the MTR. For the avoidance of doubt, the provision of MVCT involves the provision of an Interconnection service;

"**National Numbering Conventions**" means the set of rules under which the Irish national numbering scheme is managed and administered as set out in the document entitled National Numbering Conventions, Version 7.0, ComReg Document No. 11/17, as may be amended by ComReg from time to time;

"**National Regulatory Authority**" or "**NRA**" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"**Off Peak Mobile Termination Rate**" or "**Off Peak MTR**" means the MTR charged by the MSP to another Undertaking (or other Undertakings) in respect of the provision of MVCT by the MSP to the other Undertaking(s) typically outside of normal working hours (or as such period may be stipulated more specifically in the contract between the MSP and the relevant Undertaking(s) in respect of Access to MVCT);

"**Peak Mobile Termination Rate**" or "**Peak MTR**" means the MTR charged by the MSP to another Undertaking (or other Undertakings) in respect of the provision of MVCT by the MSP to the other Undertaking(s) typically during normal working hours (or as such period may be stipulated more specifically in the contract between the MSP and the relevant Undertaking(s) in respect of Access to MVCT);

"**Primary Allocation/Reservation**" shall have the same meaning as under the National Numbering Conventions, as may be amended from time to time. The current meaning of Primary Allocation/Reservation is the direct allocation or reservation of numbers by the Numbering Plan Management to individual network operators, service providers or users;

"**Pure Long Run Incremental Costs**" or "**Pure LRIC**" means those costs and only those costs which would be avoided in the long run if a SMP Mobile Service Provider were to cease to provide MVCT. For the avoidance of doubt, it excludes all costs which are common to the provision of MVCT and to other services;

"**Relevant Markets**" means all of the markets defined in Section 4.2 of the Decision Instrument annexed to ComReg Decision D11/12;

"**Secondary Allocation/Reservation**" shall have the same meaning as under the National Numbering Conventions, as may be amended from time to time. The current meaning of Secondary Allocation/Reservation is the allocation or reservation of numbers to a downstream Undertaking or to an End-User, by an Undertaking to whom a Primary Allocation/Reservation has already been made. For the avoidance of doubt, a downstream Undertaking in this context includes any Undertaking other than the Undertaking to whom the Primary Allocation/Reservation was made;

"**Significant Market Power (SMP) Mobile Service Provider**" means a Mobile Service Provider designated with SMP in Section 5 of the Decision Instrument annexed to ComReg Decision D11/12, namely H3GI, Lycamobile, Meteor, Telefonica, Tesco Mobile and Vodafone;

"**Telefonica**" means Telefonica Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns, including Liffey Telecom, but excluding, for the purposes of this Decision Instrument, Tesco Mobile;

"**Tesco Mobile**" means Tesco Mobile Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns, but excluding for, the purposes of this Decision Instrument, Telefonica;

"**Undertaking**" shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

"**Vodafone**" means Vodafone Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

"**Weekend Mobile Termination Rate**" or "**Weekend MTR**" means the MTR charged by the MSP to another Undertaking (or other Undertakings) in respect of the

provision of MVCT by the MSP to the other Undertaking(s) typically during weekends and bank holidays (or as such period may be stipulated more specifically in the contract between the MSP and the relevant Undertaking(s) in respect of Access to MVCT);

"**Weighted Average Mobile Termination Rate**" shall mean the sum of the relevant MSP's Peak MTR, Off-Peak MTR and Weekend MTR whereby each such MTR has been weighted to take account of the relevant percentage volume of minutes of MVCT provided by the MSP during the most recent six month period for which that MSP has the relevant data available. Please refer to Figure 7.4 at Chapter 7 of ComReg Decision D12/12 for further details in relation to the method of calculation of the Weighted Average Mobile Termination Rate;

"**900 MHz Band**" means the 880 to 915 MHz band of radio frequency spectrum paired with the 925 to 960 MHz band of radio frequency spectrum;

"**1800 MHz Band**" means the 1710 to 1785 MHz band of radio frequency spectrum paired with the 1805 to 1880 MHz band of radio frequency spectrum; and

"**2100 MHz Band**" means the 1900 to 1920 MHz band of radio frequency spectrum, and the 1920 to 1980 MHz band of radio frequency spectrum paired with the 2110 to 2170 MHz band of radio frequency spectrum.

3. SCOPE AND APPLICATION

3.1. This Decision Instrument applies to H3GI, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone.

3.2. This Decision Instrument is binding upon H3GI, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone and each such SMP Mobile Service Provider shall comply with it in all respects.

3.3. This Decision Instrument relates to a further specification of the cost orientation obligation imposed by ComReg under Section 12.1 of the Decision Instrument annexed to ComReg Decision D11/12 in relation to the Relevant Markets.

4. FURTHER SPECIFICATION OF THE OBLIGATIONS RELATING TO PRICE CONTROL

4.1. Pursuant to Regulation 13(1) of the Access Regulations and in accordance with Section 12.1 of the Decision Instrument annexed to ComReg Decision D11/12, each SMP Mobile Service Provider is subject to a cost orientation obligation as

regards MTRs and prices charged by the SMP Mobile Service Provider to any other Undertaking for Access to or use of those products, services or facilities referred to in Section 8 of the Decision Instrument annexed to ComReg Decision D11/12.

4.2. For the purpose of further specifying requirements to be complied with relating to the cost orientation obligation set out in Section 12.1 of the Decision Instrument annexed to ComReg Decision D11/12, and pursuant to Regulation 18 of the Access Regulations, each SMP Mobile Service Provider is hereby directed to ensure that its Mobile Termination Rate(s) are set in accordance with a Pure LRIC costing methodology.

4.3. Without prejudice to the generality of Section 4.2, pursuant to Regulation 18 of the Access Regulations and in accordance with Regulation 13(3) of the Access Regulations, each SMP Mobile Service Provider shall ensure that its Mobile Termination Rate is no more than the Benchmark of BU Pure LRIC Mobile Termination Rates set out in the table below, which may be amended by ComReg from time to time. For the avoidance of doubt, each SMP Mobile Service Provider shall be deemed to have complied with Section 4.2 above, by complying with Section 4.3 of this Decision Instrument (as may be amended by ComReg from time to time).

From 1 July 2013 onwards	Benchmark of BU Pure LRIC Mobile Termination Rates (€cent per minute)
	1.04

4.4. With effect from 1 July 2013, each SMP Mobile Service Provider shall apply Section 4.3 to all invoices/credit notes issued by it to any Undertaking in respect of MVCT.

4.5. Notwithstanding and without prejudice to the obligations imposed on each SMP Mobile Service Provider in Section 11.5 of the Decision Instrument annexed to ComReg Decision D11/12, each SMP Mobile Service Provider shall pre-notify ComReg of its intention to amend its published MTR not less than 2 months in advance of the date on which any such proposed amendment is expected to come into effect, unless otherwise agreed by ComReg. Each SMP Mobile Service Provider shall furnish to ComReg - at the date of the pre-notification provided for in this Section 4.5 - a statement confirming that its proposed amended Mobile Termination Rate complies with Section 4.3 of this Decision Instrument. For the avoidance of doubt, the obligations set out in this Section

4.5 shall apply to (i) any amendment to MTRs intended to take effect on 1 July 2013, and (ii) any amendment to MTRs intended to take effect on any date thereafter.

4.6. Without prejudice to Section 11.5.2 of the Decision Instrument annexed to ComReg Decision D11/12, and for the avoidance of doubt, each SMP Mobile Service Provider shall notify Eircom (and every other Undertaking with which that SMP Mobile Service Provider has entered into a contract in respect of Access to MVCT) not less than 30 calendar days in advance of the date on which any amendment to its published MTR is expected to come into effect. For the avoidance of doubt, this obligation shall apply to (i) any amendment to MTRs intended to take effect on 1 July 2013, and (ii) any amendment to MTRs intended to take effect on any date thereafter.

5. SETTING OF MOBILE TERMINATION RATES PENDING ENTRY INTO FORCE OF SECTION 4 OF THIS DECISION INSTRUMENT

5.1. With effect from 1 January 2013 and pending the entry into force of Section 4 of this Decision Instrument, pursuant to Regulation 18 of the Access Regulations and in accordance with Regulation 13(3) of the Access Regulations, each SMP Mobile Service Provider shall ensure that its Weighted Average Mobile Termination Rate is no more than the figure set out in the table below:

From 1 January 2013 to 30 June 2013	Weighted Average Mobile Termination Rate (€cent per minute)
	2.60

5.2. With effect from 1 January 2013, each SMP Mobile Service Provider shall apply Section 5.1 to all invoices/credit notes issued by it to any Undertaking in respect of MVCT.

5.3. No later than 20 December 2012, each SMP Mobile Service Provider shall furnish ComReg with its proposed Peak Mobile Termination Rate, Off Peak Mobile Termination Rate and Weekend Mobile Termination Rate in respect of the period from 1 January 2013 to 30 June 2013, together with a statement confirming that its Weighted Average Mobile Termination Rate complies with Section 5.1 of this Decision Instrument.

5.4. No later than 21 December 2012, each SMP Mobile Service Provider shall notify Eircom (and every other Undertaking with which that SMP Mobile Service Provider has entered into a contract in respect of Access to MVCT) of its Peak Mobile Termination Rate, Off Peak Mobile Termination Rate and Weekend Mobile Termination Rate in respect of the period from 1 January 2013 to 30 June 2013. For the avoidance of doubt, the obligations set out in Sections 11.5.1 and 11.5.2 of the Decision Instrument annexed to ComReg Decision D11/12 shall not apply insofar as the amendment of Mobile Termination Rates to take effect on 1 January 2013 is concerned.

6. STATUTORY POWERS NOT AFFECTED

6.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument).

7. MAINTENANCE OF OBLIGATIONS

7.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to the SMP Mobile Service Providers and in force immediately prior to the Effective Date of this Decision Instrument, are continued in force by this Decision Instrument and the SMP Mobile Service Providers shall comply with same.

7.2. If any section, clause or provision or portion thereof contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that section, clause or provision or portion thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining section(s), clause(s) or provision(s) or portion thereof of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument.

8. EFFECTIVE DATE

8.1. The Effective Date of this Decision Instrument shall be, unless otherwise expressly stated in this Decision Instrument, the date of its notification to the SMP Mobile Service Providers and it shall remain in force until further notice by ComReg.

KEVIN O'BRIEN

COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE 21st DAY OF NOVEMBER 2012

Annex: 3 Legal Basis

Obligations relating to the markets for call termination on individual public telephone networks provided at a fixed location

A 3.1 By ComReg Decision D06/07[180], and pursuant to Regulations 25 to 27 of the 2003 Framework Regulations[181] ComReg designated BT Communications Ireland Limited, Colt Technology Services Limited, Eircom Limited, Magnet Networks Limited, Smart Telecom Holdings Limited, Ntl Communications (Ireland) Limited/Chorus Communications Limited (now UPC Communications Ireland Limited) and Verizon Ireland Limited (the "SMP Fixed Service Providers") as having significant market power ("SMP") on the markets for call termination on individual public telephone networks provided at a fixed location (the "Fixed Termination markets").

A 3.2 The effect of the transitional provisions contained in Regulation 40 of the 2011 Framework Regulations[182] and Regulation 24 of the 2011 Access Regulations[183] is that Decision D06/07 is deemed to continue in force as if it was made pursuant to the 2011 Framework Regulations and the 2011 Access Regulations.

A 3.3 Under Section 10 of the Decision Instrument annexed to Decision D06/07, and pursuant to Regulation 14 of the 2003 Access Regulations[184] ComReg imposed obligations relating to price control and cost accounting on the SMP Fixed Service Providers.

A 3.4 Pursuant to Regulation 8 and Regulation 13(1) of the 2011 Access Regulations, ComReg in this Document withdraws and replaces the price control obligations imposed on Eircom, and also withdraws and replaces the price control obligations imposed on the other SMP Fixed Service Providers, under Section 10 of the Decision Instrument annexed to Decision D06/07.

A 3.5 Pursuant to Regulation 18 of the 2011 Access Regulations, ComReg in this Document further specifies the obligations relating to price control contained in Section 10 of Decision D06/07 (as amended).

[180] ComReg Document No. 07/109 entitled "Market Analysis – Interconnection Market Review Wholesale Call Termination Services" dated 21 December 2007.
[181] European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2007 (S.I. No. 271 of 2007), as amended (the "2003 Framework Regulations").
[182] European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011).
[183] European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011).
[184] European Communities (Electronic Communications Networks and Services) (Access) Regulations 2007 (S.I. No. 373 of 2007), as amended (the "2003 Access Regulations").

Obligations relating to the markets for voice call termination on individual mobile networks

A 3.6 By ComReg Decision No. D11/12, and pursuant to Regulations 25 to 27 of the 2011 Framework Regulations, ComReg designated Hutchison 3G Ireland Limited, Lycamobile Ireland Limited, Meteor Mobile Communications Limited, Telefónica Ireland Limited, Tesco Mobile Ireland Limited and Vodafone Ireland Limited (the "SMP Mobile Service Providers") as having significant market power ("SMP") on the markets for voice call termination on individual mobile networks (the "Mobile Termination markets").

A 3.7 Under Section 12 of the Decision Instrument annexed to ComReg Decision No. D11/12, and pursuant to Regulation 13 of the 2011 Access Regulations, ComReg imposed obligations relating to price control on the SMP Mobile Service Providers.

A 3.8 Pursuant to Regulation 18 of the 2011 Access Regulations, in this Document ComReg further specifies the obligations relating to price control contained in Section 12 of the Decision Instrument annexed to ComReg Decision No D11/12.

Consultation Requirements

A 3.9 Regulation 12(3) of the 2011 Framework Regulations provides that, except in cases falling within Regulation 13(8) (i.e. exceptional cases involving urgency), before taking a measure which has a significant impact on a relevant market, ComReg must publish the text of the proposed measure, give the reasons for it, including information as to which of ComReg's statutory powers gives rise to the measure, and specify the period within which submissions relating to the proposal may be made by interested parties. Regulation 12(4) states that ComReg, having considered any representations received under Regulation 12(3), may take the measure with or without amendment. Regulation 12 of the 2011 Framework Regulations implements Article 6 of the Framework Directive.[185]

[185] Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive), as amended by Directive 2009/140/EC.

A 3.10 Regulation 13(3) of the 2011 Framework Regulations provides that, upon completion of the consultation provided for in Regulation 12, where ComReg intends to take a measure which falls within the scope of Regulation 26 or 27 of the Framework Regulations, or Regulation 6 or 8 of the Access Regulations, and which would affect trade between Member States, it shall make the draft measure accessible to the European Commission, BEREC and the NRAs in other Member States at the same time, together with the reasoning on which the measure is based. Regulation 13 of the 2011 Framework Regulations implements Article 7 of the Framework Directive.

Annex: 4 The European Context

The European Context: Other NRAs

A 4.1 Paragraphs 3.36 – 3.50 of the Consultation Document summarises the situation in other European countries, specifically those countries where the NRAs have issued decisions in relation to both FTRs and MTRs.

A 4.2 Paragraph 3.38 of the Consultation Document sets out the procedure adopted by the European Commission in circumstances where there are concerns of compatibility of draft NRA decisions with Community law. Specifically the European Commission opens a three-month "Phase II" investigation by issuing a "serious doubts letter" to the NRA.

A 4.3 Paragraphs 3.40 – 3.48 of the Consultation Document summarises the concerns of the European Commission (set out in its comments/serious doubts letters) relating to proposed procedures regarding the timeframe for implementation, the methodology, the recovery of common costs and the application of asymmetric rates in several European countries. As set out in Paragraph 3.39 of the Consultation Document, all European Commission comments / serious doubts letters can be viewed on its website[186].

A 4.4 Paragraphs 3.45 – 3.47 of the Consultation Document set out the concerns of the European Commission specifically with regard to the French NRA ARCEP's[187] proposal to maintain asymmetric MTRs for new mobile entrants. Since the publication of the Consultation Document, the European Commission, on 20 July 2012, withdrew its serious doubts letter with respect to ARCEP's MTR notification for various mobile virtual network operators ('MVNOs')[188]. In so doing, the European Commission has accepted that ARCEP's glide path for MVNO MTR reductions extends to June 2013 (was December 2013). Symmetry is to apply from this date (i.e. the period of asymmetry being shortened until 30 June 2013 – previously proposed 31 December 2013) and, on a forward-looking basis, all new MVNOs will have symmetric rates. The European Commission justified its decision by stating:

[186] Please refer to the following websites: http://circa.europa.eu/Public/irc/infso/ecctf/library; https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp; and http://www.cullen-international.com/cullen/telecom/europe/states/markanalv2/manintro.htm

[187] Autorité de Régulation des Communications Électroniques et des Postes

[188] European Commission Decision concerning Case FR/2012/1304: Voice call termination on individual mobile networks of Free Mobile, Lycamobile and Oméa Télécom in France – Decision to lift reservations pursuant to Article 7a of Directive 2002/21/EC as amended by Directive 2009/140/EC; Ref C92012) 5302 final; dated 20 July 2012

"….that the proposed shorter glide path could mitigate the negative effect that an immediate removal of any price asymmetries and the associated loss in revenues could have on the viability of new entrants' business cases".

A 4.5 In addition to France, and since the publication of the Consultation Document, there have been further developments in other European countries, most notably in Sweden, Denmark, Estonia, Greece,Latvia and Poland

A 4.6 On 5 July 2012, the European Commission issued a 'Comments' letter to the Swedish NRA, Post och telestyrelsen ('PTS'). While PTS indicated that the results of the new 'pure LRIC' costing model will be implemented by July 2013 at the latest, the European Commission noted that PTS has not yet notified to the Commission any such model and has not determined the precise timing of the model's introduction. The Commission reminded PTS that the deadline for the implementation of the 2009 Termination Rate Recommendation is 1 January 2013 which includes MTRs being set at a cost efficient, symmetric level.

A 4.7 On 9 July 2012, the Commission issued a 'No Comments' letter to the Danish NRA, the Danish Business Authority ('DBA') regarding its notification (dated 7 June 2012) concerning the market for voice call termination on individual mobile networks in Denmark. Using the pure LRIC methodology (given it was identified as best suited to address the competition problems), DBA proposed a price cap of 1.07c€/min for the period from 1 January to 31 December 2013.

A 4.8 The European Commission on 19 July 2012 issued a request for information to the Estonian NRA, the Estonian Competition Authority ('ECA'). A response to which was received by the European Commission on the 24 July 2012. Subsequent to this on 10 August 2012, the Commission issued a 'Comments' letter to the ECA in which it asked ECA to:

> *"(i) benchmark against all pure BU LRIC MTRs currently implemented across the EU, taking account of the target rates of the respective glide paths,*
>
> *(ii) verify whether the benchmark rates actually correspond to the pure BU-LRIC rates adopted by the NRAs by way of final decisions,*
>
> *(iii) in case deviations are identified, correct the benchmark rates and adopt in its final decision an amended benchmarking methodology as described above*
>
> *and*
>
> *(iv) modify its glide-path in order to set the MTRs at the level of the pure BU-LRIC rate already as of 1 January 2013, as foreseen in the Termination Rates Recommendation."*

A 4.9 Following a request for information from the European Commission to the Greek NRA (the Hellenic Telecommunications & Post Commission ('EETT')), a 'Comments' letter was issued on 13 July 2012. The European Commission sought verification from EETT as to:

> *"... whether the proposed benchmark rates actually correspond to the pure BU-LRIC rates set by the NRAs by way of* ***final decisions*** *in the respective Member States, and in case deviations are identified, to correct the benchmark rates as appropriate." [our emphasis]*

> and requested that EETT:

> *"....modify its glide-path in such a way that it would lead already as of 1 January 2013, the implementation deadline foreseen in the Termination Rates Recommendation, to MTRs corresponding to pure BU LRIC rates. In any case, the Commission invites EETT to finalise its own pure BU-LRIC model as soon as possible in 2012, so that it can be applied already as of 1 January 2013."*

A 4.10 Following a notification to the European Commission on 13 July 2012, from the Latvian NRA, Sabiedrisko Pakalpojumu Regulēšanas Komisija ('SPRK') concerning the markets for voice call termination on individual mobile networks, the European Commission issued a 'Comments' letter on 13 August 2012, in which it urged SPRK to:

> *" (i) benchmark against all pure BU LRIC MTRs currently implemented across the EU and remove the adjustment stemming from the audited top-down model of Latvias Mobilas Telefons,*

> *(ii) verify whether the proposed benchmark rates actually correspond to the pure BU- LRIC rates adopted by the NRAs by way of final decisions,*

> *(iii) in case deviations are identified, correct the benchmark rates and adopt in its final decision an amended benchmarking methodology as described above,*

> and

> *(iv) modify its glide-path in order to set the MTRs at the level of the pure BU-LRIC rate already as of 1 January 2013, as foreseen in the* Termination Rates Recommendation."

A 4.11 The European Commission also reminded SPRK that the above should be temporary in nature and ought to be replaced as soon as possible by the pure BU-LRIC (by 1 July 2014). The European Commission also included the following table in its response which identified the EU countries which "have notified" it of a pure BU-LRIC methodology for MTRs.

Table of Member States which have notified a pure BU-LRIC methodology for MTRs to the European Commission under Article 7 (as of 31 July 2012)

Country	Target Rate (€ct/min)	Deadline
BE	1.08	01/01/2013
FR	0.8	01/01/2013
PT	1.27	01/01/2013
IT	0.98	01/07/2013
ES	1.09	01/07/2013
DK	1.07	01/01/2013
UK	0.86*	01/04/2013

*Adjusted rate by Ofcom following the Competition Appeal Tribunal's judgement according to which the MTRs glide-path would target 0.67ppm (2008/09 prices) on 1 April 2013. This would equal approx. 0.859 €ct/min using exchange rate of 24 July 2012 (1 GBP = 1.28240

A 4.12 Following a notification to the European Commission on 2 October 2012, from the the Polish national regulatory authority, Prezes Urzędu Komunikacji Elektronicznej ("UKE"), regarding voice call termination on individual mobile networks in Poland.UKE proposed to set MTRs on the basis of a pure bottom-up long run incremental cost model (BU LRIC,) which amounts to €1.04 cent per minute with an implementation date of 1 July 2013. In the interim, it is proposed that the rate applicable be calculated as an arithmetical average between the current rate and the final modelled rate.

[189] ComReg used the same set of countries in its benchmark, but made one adjustment to reflect a nominal rate for the UK (See Sections 7.70 to 7.71).

A 4.13 The European Commission on 31 October 2012 issued a comments letter in which it notes that the proposed glide-path for the introduction of fully cost-oriented MTRs in Poland will result in reaching the LRIC target level only by 1 July 2013, which is not in line with the Commission's Termination Rates Recommendation, according to which NRAs should ensure that termination rates are implemented at a cost-efficient (LRIC) level by the end of 2012. The Commission therefore urged UKE to implement pure BU LRIC rates as of 1 January 2013.