



Commission for
Communications Regulation

Mobile Termination Rates

Draft Bottom Up Pure Long Run Incremental Cost Model

All responses to this consultation should be clearly marked: -
“Reference: Submission re ComReg 15/19”, and sent by post, facsimile or e-mail to arrive on or before 5p.m., 9 April 2015, to:

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Please note ComReg will publish all respondents’ submissions with the Response to this Consultation, subject to the provisions of ComReg’s guidelines on the treatment of confidential information – ComReg 05/24

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Additional Information

Approval

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Chapter 1

1 Introduction

- 1.1 This Supplementary Consultation and Draft Decision Document entitled Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model ComReg Document No 15/19 (this **Supplementary Consultation or Supplementary Consultation Document**) sets out ComReg's proposed maximum mobile termination rates (**MTRs**) for Ireland in light of modifications made to the draft bottom up pure long run incremental cost (pure LRIC) model (**the MTR Model**) set out in ComReg Consultation Document 14/29¹ (**the MTR Model Consultation and Draft Decision**).
- 1.2 Termination rates are the tariffs charged between Service Providers² for terminating phone calls (from a fixed or mobile phone) on their network. Termination rates are regulated in all EU Member States. The European Commission on 7 May 2009 issued a Termination Rate Recommendation³ (**the 2009 Termination Rate Recommendation**) to National Regulatory Authorities (**NRAs**) across Europe in light of the divergence between termination rate price control measures that prevailed across the Member States.

1.1 Background

- 1.3 ComReg considered which cost methodology would be the most appropriate cost methodology to set MTRs in Ireland and set out its preliminary views in this respect in Chapter 6 of ComReg Document No. 12/67 Voice Termination Rates in Ireland: Proposed Price Control for Fixed and Mobile Termination Rates⁴ (**the 2012 Price Control Consultation Document**). It then chose the pure LRIC cost methodology as the appropriate cost methodology to set MTRs in Ireland for the reasons given in Chapter 6 of the ComReg Decision D12/12, Document No. 12/125 Mobile and Fixed Voice Call Termination Rates in Ireland (**the 2012 Price Control Decision**)⁵.

¹ ComReg Document 14/29: Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model; published on 11 April 2014 at the following link:

http://www.comreg.ie/_fileupload/publications/ComReg1429.pdf

² Service Providers refers to fixed service providers (i.e. an undertaking providing end users with retail voice services from a fixed location) and mobile service providers (i.e. an undertaking providing end users with a land based / terrestrial publicly available mobile voice telephony services using a mobile network) collectively.

³ European Commission Recommendation: "*The Regulatory Treatment of Fixed and Mobile Termination Rates in the EU*" (2009/396/EC), dated 7 May 2009.

⁴ Published on 28 June 2012 and which can be found at the following link: http://www.comreg.ie/_fileupload/publications/ComReg1267.pdf

⁵ Published on 21 November 2012 and which can be found at the following link: http://www.comreg.ie/_fileupload/publications/ComReg12125.pdf.

- 1.4 In the 2012 Price Control Decision, ComReg chose the pure LRIC cost methodology as the most appropriate means of calculating the appropriate level of cost to be recovered when determining the termination rate to be charged by those Mobile Service Providers (**MSPs**) who have been designated with Significant Market Power (**SMP**) in mobile voice call termination (**MVCT**). ComReg also committed to building the MTR Model. The MTR Model Consultation and Draft Decision described and set out the parameters for that draft MTR Model, and set out ComReg's proposed MTRs for Ireland based on that draft MTR Model.

1.2 Vodafone Appeal

- 1.5 On 18 December 2012⁶, Vodafone appealed to the High Court against ComReg Decision D11/12, Document No. 12/124: Voice Call Termination on Individual Mobile Networks (the **2012 MVCT Decision**)⁷ as well as ComReg's 2012 Price Control Decision (the **Vodafone Appeal**). Pursuant to the Vodafone Appeal, the High Court found in part in its judgment of 14 August 2013 (the **Judgment**) against ComReg, namely, in relation to the issue of benchmarking.⁸ However, it deferred its ruling on Vodafone's challenge to the legality of ComReg's choice of pure LRIC as the relevant cost standard, pending the adoption of the model which is the subject of the MTR Model and Draft Consultation Document and this Supplementary Consultation Document. The Court's Order (the **Order**) was made on 11 October 2013 (perfected on 17 October 2013) and it included an order imposing an interim maximum MTR of 2.60 cent per minute⁹. A further statement of reasons for the Judgment was provided by the High Court on 21 November 2013. The Court also clarified that the interim maximum MTR of 2.60 cent per minute imposed in its Order applied from 1 July 2013.¹⁰

⁶ ComReg Document No 12/139: Information Notice: Appeal of ComReg's Decision on Mobile Termination Rates; published on 20 December 2012.

⁷ Published on 21 November 2012 and available at the following link:
http://www.comreg.ie/_fileupload/publications/ComReg12125.pdf

⁸ See ComReg Document No 13/80: Information Notice: High Court Judgement on Mobile Termination Rates; published on 16 August 2013. Please refer to the following link:
http://www.comreg.ie/publications/high_court_judgment_on_mobile_termination_rates.583.104434.p.html

⁹ ComReg Document No 13/97: Information Notice: High Court Order following its Judgment of 14 August 2013 on Mobile Termination Rates; published on 21 October 2013. Please refer to the following link: http://www.comreg.ie/_fileupload/publications/ComReg1397.pdf

¹⁰ ComReg Document No 13/108: Information Notice: Mobile Termination Rates Case; published on 21 November 2013. Please refer to the following link:
http://www.comreg.ie/_fileupload/publications/ComReg13108.pdf

- 1.6 The High Court has thus held over its decision on the lawfulness of ComReg's choice of pure LRIC as the relevant cost standard until such time as a specific model is completed by ComReg. This Supplementary Consultation Document is another step towards the completion of the final MTR Model and a Decision on the MTR Model is planned for later this year.
- 1.7 ComReg appealed the High Court Order and Judgment to the Supreme Court.¹¹ This appeal has recently been transferred to the newly formed Court of Appeal pursuant to a Direction issued by the Supreme Court on Wednesday 29 October 2014¹².

1.3 ComReg Process

- 1.8 ComReg's process in relation to building an MTR Model to set maximum MTRs for Ireland commenced at the beginning of 2013 and included the following key steps:
- ComReg made contact with each of the six MSPs designated with SMP in MVCT and issued a draft data request to each of them on 10 June 2013. Following engagement with the MSPs the data request was refined and finalised, taking account of feedback received, before being issued to each of the six MSPs designated with SMP in MVCT as a legally binding data request on 9 July 2013. A two month time frame for completion was provided for and this was subsequently extended by two weeks at the request of industry (from 9 September 2013 until 23 September 2013).
 - Following the submission of data in response to the said data request, ComReg issued each of the six MSPs designated with SMP with an initial draft version of a MTR Model in addition to a draft MTR Model Specification Document¹³ on 19 December 2013.
 - The six MSPs designated with SMP in MVCT were invited to attend a group workshop held by ComReg on 20 January 2014, at which each of the six MSPs designated with SMP had representatives present.

¹¹ ComReg Document No 13/99: Information Notice: Supreme Court Appeal – Mobile Termination Rates Case; published on 6 November 2013. Please refer to the following link: http://www.comreg.ie/_fileupload/publications/ComReg1399.pdf

¹² The direction is available at the following link:

[http://courts.ie/Courts.ie/library3.nsf/\(WebFiles\)/9F1FFE0ADBFC27F580257D80006193F2/\\$FILE/Supreme%20Court%20-%20Article%2064.3%20of%20the%20Constitution%20Direction%20by%20the%20Chief%20Justice%202029.10.14.pdf](http://courts.ie/Courts.ie/library3.nsf/(WebFiles)/9F1FFE0ADBFC27F580257D80006193F2/$FILE/Supreme%20Court%20-%20Article%2064.3%20of%20the%20Constitution%20Direction%20by%20the%20Chief%20Justice%202029.10.14.pdf)

¹³ The Deloitte "Draft MTR Model Specification Document for Ireland – A Draft Consultation Report for ComReg" provides a description of the proposed approach to construct a MTR Model for Ireland.

- This was followed by an invitation from ComReg to hold bilateral workshops. Two of the MSPs designated with SMP availed of this opportunity on 20 January and 21 January 2014 respectively. Feedback to queries raised at both the group workshop and bilateral workshops were sent by ComReg to each of the six MSPs designated with SMP. During this process, data received from operators was treated in complete confidence and the relevant MSPs indicated that confidential data should be treated accordingly and not divulged as part of the consultation process, or otherwise.
- On 11 April 2014, ComReg published the MTR Model Consultation and Draft Decision and the Deloitte MTR Model Specification Document (the Deloitte **Specification Document**) for Ireland.¹⁴ The closing date for submissions in response to the MTR Model Consultation and Draft Decision was extended, on request from operators, from 23 May 2014 to 6 June 2014 – see ComReg Information Notice No 14/40.¹⁵
- In sharing the MTR Model with the six MSPs designated with SMP in MVCT in addition to interested parties ComReg maintained the confidentiality of operator data that was used, in certain instances, to inform this model. ComReg was also aware of the need to maximise transparency and overcame this issue by providing a non-confidential version of the MTR Model to each of the six MSPs designated with SMP for illustrative purposes on the 11 April 2014. This shared model contained anonymised figures (i.e. indicative numbers which were not reflective of any particular operator and which could not be traced to any operator) that differ in certain instances (i.e. capital costs) from ComReg's confidential MTR Model.
- In addition, as part of the 11 April 2014 correspondence, ComReg also enclosed for each of the six MSPs designated with SMP (on a bilateral and confidential basis) a financial impact assessment of moving from the current MTR of 2.6 cent per minute to the 0.57 cent per minute MTR proposed in the MTR Model Consultation and Draft Decision. As part of that bilateral correspondence, ComReg also requested updated financial information from each of the six MSPs designated with SMP in MVCT that these MSPs would like considered in ComReg's confidential financial impact assessments. No such further financial information has been submitted by any of the six MSPs to date. ComReg has now conducted an updated financial impact assessment in respect of each of the six MSPs designated with SMP with the updated figures contained in this Supplementary Consultation. The relevant updated financial impact assessment will be shared with the relevant MSPs designated with SMP on a bilateral and confidential basis.

¹⁴ <http://www.comreg.ie/fileupload/publications/ComReg1429a.pdf>

¹⁵ <http://www.comreg.ie/fileupload/publications/ComReg1440.pdf>

- The MTR Model is, where appropriate and justified, informed in material respects by data provided by the Irish operators, including data on their own actual or stated costs. As described in the MTR Consultation and Draft Decision, ComReg's own estimates were used where Irish operator data was not available.
- As described in the MTR Model Consultation and Draft Decision, while the MTR Model is a bottom-up model of a hypothetical efficient mobile operator and, therefore, is not intended to mirror the costs of a specific Irish operator, it has taken into account data provided by the Irish MSPs using a modified scorched node methodology. This allows for the modelling of efficient costs and scale, whilst at the same time enabling costs and technology assumptions to be closely aligned with those actually faced by the mobile network operators (**MNOs**) currently in the Irish market.
- As noted in the MTR Consultation and Draft Decision, in some cases operator data was not available; in others it was incomplete or insufficiently granular for the purposes of the MTR Model; and in others still reliance on such data was not deemed appropriate, justified or proportionate. Where data was absent, unavailable, incomplete or otherwise unsuitable, it has been necessary for ComReg and its advisers to exercise complex judgments as to the relevant costs and other metrics. Where appropriate, these assessments have been informed by experience in other jurisdictions. In the MTR Consultation and Draft Decision, ComReg provided a further opportunity for operators and interested parties to provide their own estimates of relevant cost inputs for the purposes of the MTR Model
- On 15, 23 and 30 May 2014, ComReg published three further Information Notices updating industry and interested parties in relation to certain queries received during the consultation period – ComReg Information Notices No 14/46,¹⁶ 14/50¹⁷ and 14/55 respectively.¹⁸
- ComReg received six responses to its MTR Model Consultation and Draft Decision namely from Eircom/Meteor, Telefónica, Vodafone, Three Ireland (Hutchison) Limited (**Three**), Verizon and Tesco Mobile Ireland. Non-confidential versions of these were published by ComReg on 15 October 2014¹⁹. As a result of consideration of the submissions made by the respondents to the MTR Model Consultation and Draft Decision, ComReg and its advisers conducted further work on the draft MTR Model to ensure that it is a better approximation of a hypothetical efficient operator in the Irish market.

¹⁶ <http://www.comreg.ie/fileupload/publications/ComReg1446.pdf>

¹⁷ <http://www.comreg.ie/fileupload/publications/ComReg1450.pdf>

¹⁸ <http://www.comreg.ie/fileupload/publications/ComReg1455.pdf>

¹⁹ <http://www.comreg.ie/fileupload/publications/ComReg1429s.pdf>

- On 6 August 2014, ComReg issued a formal information request pursuant to section 13D of the Communications Regulation Act 2002, as amended, to the six MSPs designated with SMP in MVCT. This request comprised two components. The purpose of the first component was to obtain updated operator data, principally in relation to spectrum usage in 2013 and 2014 that was required in order to modify the draft MTR Model to ensure that it was a better approximation of a hypothetical efficient operator in the Irish market. The second part of this information request related to an analysis of changes which have taken place in the mobile market in Ireland since Analysys Mason completed a ComReg-commissioned report on MTRs in 2012 (the **original Analysys Mason Report**).²⁰ This information was sought to assist Analysys Mason in ascertaining whether there were any material changes in the market in Ireland that would alter its recommendation in the original Analysys Mason Report that pure LRIC was the most appropriate methodology upon which to set MTRs in Ireland.
- On 12 August 2014, following requests from operators, ComReg extended the deadline for responding to the said 13D information request by a further two weeks to 3 September 2014.
- On 15 October 2014, ComReg issued a further Information Notice²¹ updating industry and interested parties on the next steps in the process. As noted above, on the same date, ComReg published the non-confidential submissions it received in response to the MTR Model Consultation and Draft Decision.²²
- The updates to the draft MTR Model arising from the consultation process have resulted in important changes to the MTR Model and ComReg has deemed it appropriate to issue a Supplementary Consultation on these modifications which are further specified in the updated Deloitte MTR Model Specification Document (the **updated Deloitte Specification Document**) published on the ComReg website with this Supplementary Consultation²³. The Updated MTR Model has been shared with the six MSPs with SMP and is available to any other interested parties who apply to ComReg in writing and are subsequently approved by ComReg.²⁴

²⁰ Published with the 2012 Price Control Decision on 21 November 2012 and available at the following link: http://www.comreg.ie/_fileupload/publications/ComReg12125a.pdf

²¹ http://www.comreg.ie/_fileupload/publications/ComReg14105.pdf

²² http://www.comreg.ie/_fileupload/publications/ComReg1429s.pdf

²³ ComReg Document No. 15/19a.

²⁴ Please note that in light of the submissions from MSPs, in particular Vodafone Ireland Limited, ComReg wrote to the six MSPs on 16 October 2014 requesting their approval to share with the relevant interested parties what had previously been called the confidential version of the BU Pure LRIC Model. ComReg has received agreement from the six MSPs that what had previously been called the

- ComReg has also taken this opportunity to share the Analysys Mason report entitled “*Final Report for ComReg: Changes in the mobile market in Ireland and the implications for our MTR recommendation*” (the **2014 Analysys Mason Report**).
- This Supplementary Consultation Document is the next stage in ComReg’s consultation process for arriving at appropriate MTRs for the Irish market.

confidential version of the BU Pure LRIC Model could now be shared with the relevant interested parties.

Chapter 2

2 MTR Model

2.1 Proposed modifications to the MTR Model

- 2.1 In light of the submissions received in response to the MTR Model Consultation and Draft Decision and ComReg's ongoing internal assessment and further work, ComReg has updated certain parameters of the draft MTR Model. The principal purpose of this Supplementary Consultation is to set out the changes proposed by ComReg and/or to supplement reasoning where appropriate and justified. The relevant changes are outlined in this Supplementary Consultation Document as well as in the updated Deloitte Specification Document (published on ComReg's website with this Supplementary Consultation Document).
- 2.2 While this Supplementary Consultation document provides an overview of the proposed modifications to the draft MTR Model, the full extent of these modifications is detailed in the MTR Model Specification Document. Appendix F in the MTR Specification Document specifies the modifications to the model that are 'driving' the updated Draft MTR. It shows that, for example, the inclusion of UMTS900 in the model results in subsequent other necessary modifications to the model. However, it is beyond the scope of this Supplementary Consultation Document to detail every single modification that has been implemented in the updated MTR Model. Rather, the MTR Model Specification Document has detailed every individual update of the model.
- 2.3 The Specification Document provides details of every modification that has been implemented in the updated MTR Model. For example, the finalised WACC of 8.63% resulting from ComReg Document D15/14, which was previously set at 8.66% (ComReg Document 14/28) in the MTR Model that was consulted upon in April 2014. Thus, for a complete list of modifications to the updated MTR Model please refer to the accompanying MTR Model Specification Document.
- 2.4 The following table sets out a summary of the modifications made to the draft MTR Model since the MTR Model Consultation and Draft Decision published in April 2014. These modifications have been implemented following operator comments on the MTR Model Consultation and Draft Decision submitted to ComReg – ComReg Document No 14/29s²⁵.

²⁵ <http://www.comreg.ie/fileupload/publications/ComReg1429s.pdf>

Modification	Updated Deloitte Specification Document Ref.
	(Supplementary Consultation Paragraph Ref.)
Adjustment of the assumed market share to 25% during 2003-2014 and 33% from 2015. This is to reflect the Three Ireland Hutchison Limited (Three) / Telefónica Ireland Limited (O2) merger.	Section 2.2 and 4.1.1.3
	(2.8-2.10)
Historic per subscriber voice traffic has been aligned with ComReg's Quarterly Key Data (QKD) Reports as opposed to being solely based on operator data submitted pursuant to ComReg's MTR Section 13D Information Request of 6 August 2014. This change affects mobile-to-fixed minutes and fixed-to-mobile minutes per subscriber.	Section 4.1.1.2 and Section 4.1.2
	(2.11-2.15)
<p>The historic average per subscriber usage of data services has also been revised to ensure greater alignment with the ComReg QKD reports. A base case scenario (Scenario A) has been included in the model provided to interested parties for review. The historic figures are based on the ComReg QKD reports while excluding a significant volume of dongle data traffic not deemed to be representative of the traffic carried by a hypothetical efficient mobile operator with 25% market share until end-2014. The forecasts (based on 33% market share from 2015) used in this scenario continue to be informed by the Irish mobile operator data obtained in response to the MTR Section 13D Information Request.</p> <p>An additional data scenario has also been modelled by ComReg (Scenario B). This is based on an historical average per subscriber usage of data services that includes all dongle traffic (reconciling with ComReg QKD reports) combined with revised forecasts that project a significantly higher level of data growth across the time horizon of the model. The revised forecasts are based on ComReg analysis informed by recent international projections of mobile data growth.²⁶</p>	Section 4.1.2
	(2.16-2.28)

²⁶ The precise figures have been shared with the six MSPs with SMP at the time of providing the updated Draft MTR Model.

Modification	Updated Deloitte Specification Document Ref.
	(Supplementary Consultation Paragraph Ref.)
The Irish market for off-net calls is now treated as a closed system containing N operators with equal market share. Consequently the total volume of off-net minutes originated to other operators is now modelled to equal the total volume of off-net minutes terminated from other operators. This change affects off-net minutes to mobile (incoming/outgoing), international to mobile minutes (incoming) and inbound roaming minutes (incoming) per subscriber	Section 4.1.2
	(2.29)
Addition of UMTS900 Spectrum i.e. the hypothetical operator is now assumed to hold UMTS900 spectrum from 2013.	Section 2.3.2, 5.1.1.7, 5.3.1
	(2.30)
The proportion of traffic carried across 2G and 3G networks in rural areas has been adjusted such that it no longer has the same profile as that observed in denser geo-types. It is also assumed that all 2G services will remain active throughout the modelled time horizon. The adjustment is made so that the 2013 value resembles the weighted average of the operators' data responses by using the number of subscribers (market share) as weights. In 2020 the migration is capped so that 5% of traffic remains on 2G until the end of the modelled time horizon.	Section 4.1.3
	(2.31)
Minimum value of TRX and 3G radios per site and 3G radio utilisation. The average number of TRX / 3G radios per site, by geo-type is now set to 1 in such instances where the calculated value for these network elements previously fell below 1.	Section 5.3.1.2 and Section 5.3.1.4
	(2.32)
Adjustment of cell collocation. This adjustment results in a higher proportion of cells collocated within both GSM 1800 and GSM900 sites in addition to the overall number of 2G and 3G cell collocations.	Section 5.1.1.6 and Section 5.3.1.1
	(2.33)

Modification	Updated Deloitte Specification Document Ref.
	(Supplementary Consultation Paragraph Ref.)
In line with actual holdings by network operators and the spectrum available in the Irish market, the hypothetical existing operator's assumed spectrum holding is based on an average of operator holdings and aligns with the assumed market share (1/N approach) of the hypothetical existing operator.	Section 2.3.2 and Section 5.1.1.7
	(2.34-2.36)
Network management centre (NMC) asset life is reduced from 15 years to 10 years. The related capital costs have also been reduced in proportion to the change in asset lives.	Section 5.1.4 and 6.1.1 Table 22
	(2.37)
The GMSC (gateway mobile switch centre) element unit CAPEX cost has now been set to €1,200 (previously it had been zero).	Section 6.1.1, Tables 26 and 27.
	(2.38)
The land area classification used in the model has been revised in line with up to date CSO figures. This results in a larger proportion of the country being classified as rural.	Section 5.1.1.2 Tables 10 and 11.
	(2.39)
The forecast of SMS per-subscriber traffic has been revised to decline from 2014, as opposed to remaining constant. A logarithmic decay is assumed throughout 2014-2032, in which the decrease is steepest in early years and in such a manner that SMS services remain active throughout the modelled time horizon (2003-2032).	Section 4.1.3
	NA

2.5 As set out in Chapter 2 of the Consultation Document, ComReg was of the preliminary view that the price control period should be set for three years (i.e. 2015-2017) and that the maximum MTR would be based on a weighted average over these three years. Furthermore, ComReg was of the preliminary view that this averaged rate should be the maximum MTR for Ireland over the period of the price control and until such time as the next review is in place (as noted in the draft Decision Instrument in Annex 1 of the Consultation Document). Since publication of the Consultation Document we have reconsidered the duration of the price control period of three years. Instead we provide the rates for 2015-2019.²⁷

²⁷ The price control period will last for at least three years from the date of the decision but in any event it will remain in place until further notice by ComReg. The maximum MTR rates will be determined by the MTR Model.

- 2.6 ComReg is proposing in this Supplementary Consultation Document that the maximum MTR will be set annually rather than as a fixed maximum MTR for the duration of the Price Control Period. Having taking into account the modifications listed in the table above, the proposed maximum MTRs for the price control period are set out in the table below as well as in the draft decision instrument which can be found in Annex 1 of this Supplementary Consultation Document.

Price control period	Annual MTR in updated MTR Model and proposed in this Supplementary Consultation (Mobile Data Traffic Scenario A)	Annual MTR in updated MTR Model and proposed in this Supplementary Consultation (Mobile Data Traffic Scenario B)	Average (2014-2017) MTR proposed in the MTR Model Consultation Draft Decision (April 2014)
From date of Decision to 31 December 2015	€0.0071	€0.0067	€0.0057
1 January 2016 to 31 December 2016	€0.0068	€0.0064	€0.0057
1 January 2017 to 31 December 2017	€0.0065	€0.0061	€0.0057
1 January 2018 to 31 December 2018	€0.0062	€0.0058	
1 January 2019 to 31 December 2019	€0.0059	€0.0055	

- 2.7 ComReg has included the LRAIC + calculation in this version of the MTR Model for calibration purposes. LRAIC+ allows for the recovery of the costs incurred due to provision of the services in the increment as well as proportional common costs or overheads. The LRAIC+ MTR is listed in the table below.²⁸

Price control period	MTR calculated using LRAIC+ under Mobile Data Traffic Scenario A	MTR calculated using LRAIC+ under Mobile Data Traffic Scenario B
From date of Decision to 31 December 2015	€0.0098	€0.0087
1 January 2016 to 31 December 2016	€0.0088	€0.0077
1 January 2017 to 31 December 2017	€0.0078	€0.0067
1 January 2018 to 31 December 2018	€0.0069	€0.0058
1 January 2019 to 31 December 2019	€0.0060	€0.0049

²⁸ In general, pure LRIC refers to a smaller proportion of network costs than LRAIC+, as the latter also incorporates a proportionate share of common costs. However, due to the difference in the two costing methodologies, there is no mathematical relationship that would require LRAIC+ to be greater than or equal to pure LRIC. In certain, less common cases, LRAIC+ may result in lower calculated costs than pure LRIC for the same set of traffic services. LRAIC+ incorporates an averaging algorithm that proportions the costs per service via route-factors. In some scenarios where the set of services considered represent a very small proportion of total network traffic volumes, pure LRIC may indeed exceed LRAIC+. Thus, the result in such cases can be attributed to the difference in the costing methodologies, rather than a modelling inconsistency.

2.2 MTR Model Modifications to the MTR Model²⁹

2.2.1 Market share

- 2.8 In the MTR Model Consultation and Draft Decision ComReg set out its preliminary view that it was reasonable to set the assumed market share at 25% for the purposes of the MTR Model Draft Decision, given the information available at that time on the basis of the four existing MNOs in the Irish market. This calculation of market share was based on the “1/N”³⁰ approach used in the draft MTR model, where N is the number of operators actually operating in the market. However, in the MTR Model Consultation and Draft Decision ComReg also modelled a hypothetical efficient operator with a 33% market share from 2014, to incorporate a scenario whereby the proposed Three/O2 merger proceeded (which at the time was pending merger notification/approval). The submissions received in response to ComReg’s MTR Model Consultation and Draft Decision favour an MTR based on a long-run efficient operator in a market comprising three MNOs³¹ – see paragraph 4.12 and Table 16 of the Consultation Document 14/29.
- 2.9 Based on the current Irish market, this “1/N” approach implies a 25% market share up to and including 2014 and a 33% market share from 2015 onwards. This increase in assumed market share (from 25% to 33%) is to align with the decrease in the number of network operators in Ireland from four to three in 2015 (which decrease was noted in the European Commission’s (EC’s) decision to approve the merger³²). See also ComReg Document Notice No 14/53³³ where ComReg sets out its views in relation to the merger of Three and O2.

²⁹ For a complete list of modifications to the updated MTR Model please refer to the accompanying MTR Model Specification Document.

³⁰ Please refer to section 2.2 of the Deloitte Specification Document published in April 2014

³¹ This Supplementary Consultation is based on a hypothetical efficient mobile operator with 33% Market Share from 2015, as opposed to 2014, to reflect the first full year that the merger will be in effect.

³² http://europa.eu/rapid/press-release_IP-14-607_en.htm

³³ <http://www.comreg.ie/fileupload/publications/ComReg1453.pdf>

- 2.10 In light of the greater clarity that now pertains with regard to the merger between Three and O2, and having considered the submissions received from operators in response to ComReg’s MTR Model Consultation and Draft Decision, the hypothetical operator is assumed to have a market share that reflects the change in market participants, similar to the third market share scenario presented at Table 16 of the MTR Model Consultation and Draft Decision Document. In addition, the modelled operator is also assumed to have established the market share associated with efficient scale on a “1/N” basis across every year of the modelled time horizon. The modified market share assumptions in the model are presented in the table below:

Table 1: Market share assumptions³⁴

	2003	2004	...	2014	2015	2016	...	2032
Market share	25%	25%	...	25%	33%	33%	...	33%

2.2.2 Service demand volumes and forecasts

Mobile Voice Traffic

- 2.11 Operators' responses to the MTR Model Consultation and Draft Decision April 2014 consultation suggested that the historic voice data used in the MTR model should be reconciled to actual quarterly reported data submitted to ComReg. After considering these responses, ComReg has revised the per subscriber usage volume calculations for voice to ensure that they have been derived in the first instance from aggregate market volume information as presented in the ComReg’s Key Quarterly Data (KQD) reports for historic years rather than from estimates derived from data supplied by operators (pursuant to the MTR Section 13D Information Request) on a per subscriber basis.
- 2.12 Consequently, the aggregate voice traffic levels are now first derived with reference to the ComReg KQD figures and then the estimate of the number of subscribers in the Irish market is applied to those aggregate figures to derive the average per subscriber usage figures. The operator-supplied data is then used to profile the average subscriber usage figures by technology and geotype for modelling purposes. This revised approach is intended to address the concerns that operators raised that the voice service data did not align with ComReg KQD reports.
- 2.13 The market share assumptions are then applied to the aggregate market volume information derived for voice and SMS to ensure that the “1/N” approach

³⁴ See Table 1 in the updated Deloitte Specification Document.

is consistently applied across the related service demand parameters in the MTR Model.

- 2.14 As noted in the April 2014 consultation, the MTR model dimensions the hypothetical efficient mobile operator's network on the basis that 3G is expected to account for the vast majority of subscriber data usage with 2G accounting for a much smaller proportion. LTE data usage is included in the service set but is not used to dimension any network elements.
- 2.15 Consequently, mobile data traffic load assumptions can impact the MTR. In determining the level of data traffic that would be appropriate for a hypothetical efficient mobile operator in the Irish market, ComReg is aware that (based on confidential information received as part of the Quarterly Report) the data profile of operators can be heavily influenced by the data traffic carried on dongles.

Mobile Data Traffic

- 2.16 In comparing actual mobile data traffic experienced in the Irish market against the forecasted projections from the Irish MSPs (in their respective responses to ComReg's Section 13(D) 1 MTR Information Request), ComReg observes that the level of growth in mobile data usage in the Irish mobile market has thus far been significantly ahead of the operator expectations.
- 2.17 In the April 2014 consultation, the data traffic volumes beyond 2013 in the MTR model were informed by the forecasts provided by Irish MSPs (in their respective responses to ComReg's Section 13(D) 1 MTR Information Request). The traffic volume forecasts contained in the Draft MTR Model published in April 2014 were presented in Figure 12 of the Deloitte Specification Document [ComReg Document 14/29a]. While ComReg did not receive any feedback from respondents on these forecasts they are significantly below the actual mobile data growth experienced in the Irish Market where growth rates of circa 40% to 70% have been observed in this time period.³⁵ Furthermore, ComReg observes that the recent actual mobile data traffic growth rates experienced in Ireland are on a comparable level to the mobile data growth rates being projected by a considerable body of international opinion.³⁶

³⁵ The Year on Year aggregate mobile data growth rate per quarter experienced in Ireland has been 38% (Q1'13), 43% (Q2'13), 40% (Q3'13), 44% (Q4'13), 48% (Q1'14), 54% (Q2'14), and 76% (Q3'14).

³⁶ For example, see

- [Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2014–2019](#)
- [Real Wireless, Techniques for increasing the capacity of wireless broadband networks: UK 2012-2030;](#)
- [Analysys Mason, Assessment of the benefits of a change of use to the 700 MHz band to Mobile,](#)

- 2.18 Given these observations, ComReg has modelled two data load profiles as discussed in turn below, and ComReg seeks feedback on the appropriateness of these scenarios for inclusion in the MTR model.

Scenario A

- 2.19 Irish mobile data traffic in **Scenario A** is based on data from ComReg's KQD Report up to 2014³⁷ and excludes a significant level of dongle data traffic that is not deemed to be representative of the data traffic that would likely be carried by a hypothetical efficient Irish mobile operator with 25% market share which subsequently increases its market share to 33% from 2015.³⁸
- 2.20 If outliers of dongle traffic were not removed, ComReg considers that the data load of the modelled hypothetical efficient mobile operator would not be representative of a typical Irish MNO. Equally, if such dongle traffic was not removed, estimating the mobile data traffic on the basis of a 1/N approach would result in a derived average subscriber data load for the hypothetical efficient mobile operator that is not representative of a hypothetical efficient mobile operator with 25% market share to 2014 and 33% market share from 2015.
- 2.21 As the market share of the hypothetical efficient operator is likely to differ from the market shares of the existing operators, the data traffic profile can also be expected to differ. For example, an operator with a lower level of mobile subscribers may choose to promote a dongle service (in an effort to attract customers and win market share) which results in a significantly higher dongle usage per subscriber when compared to the hypothetical efficient mobile operator on the basis of the 1/N approach.
- 2.22 The main consequence of excluding a significant element of dongle traffic is that the average per subscriber data load for the hypothetically efficient mobile operator is comparable to the average per subscriber data load experienced by the majority of Irish MSPs. ComReg notes that, due to the exclusion of dongle traffic deemed to be an outlier, the overall level of data traffic is understated in this modelled scenario compared to actual data reported in ComReg's KQD Report.
- 2.23 Forecasts contained in the draft MTR model over the period 2015-2032 in Scenario A continue to be informed by Irish MNO forecasts contained in the responses to ComReg's Section 13(D) MTR Information Request. The Irish MNOs have provided forecasts out to 2020 and the growth rate has been held

³⁷ The latest available ComReg KQD Report is Q3 2014 and the full year for 2014 has been extrapolated from data in Quarter 3.

³⁸ As the Draft MTR Model is designed on a bottom up basis, it is necessary to ascertain mobile data usage for the hypothetical efficient mobile operator on a per subscriber basis. Both Scenario A and Scenario B are based on total mobile subscribers in the Irish market.

constant on a per subscriber basis in the model from 2020 with the aggregate data traffic increasing in line with population projections. ComReg received the Irish MNOs projections in September 2013.

Scenario B

2.24 **Scenario B** is similar to Scenario A, insofar as the historic Irish mobile data traffic in Scenario B is based on data from ComReg's KQD Report up to 2014.³⁹ However, Scenario B differs to Scenario A in the following:

- Scenario B includes all mobile data traffic reported in ComReg's KQD Report including all data traffic carried over dongles i.e., no adjustment has been made to exclude outliers; and
- Scenario B uses mobile data projections for the period 2015-2032 which are based upon analysis of the actual historic mobile data trends in Ireland and analysts' projections of mobile data growth internationally.⁴⁰

2.25 This scenario results in a significantly higher data load over the period of the model due to the inclusion of all historical mobile data traffic as per ComReg's KQD Report and the higher projections of total mobile data traffic usage associated with ComReg's analysis.

Comparison of Scenario A and Scenario B

2.26 Chart 2 illustrates that growth in mobile data usage for a hypothetical efficient mobile operator's network (with 25% market share until end-2014 and 33% thereafter) is significantly higher in Scenario B when compared to Scenario A (Chart 1) and continues to increase beyond 2020 from which point Scenario A is held constant.⁴¹

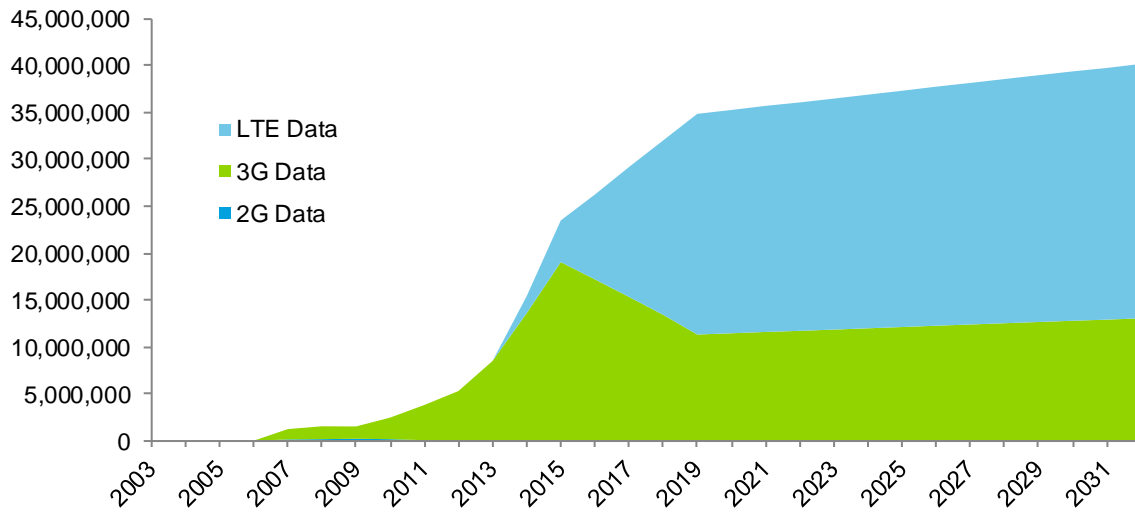
³⁹ The latest available Quarterly Report is Q3 2014 and the full year for 2014 has been extrapolated from data in Quarter 3.

⁴⁰ For example, see

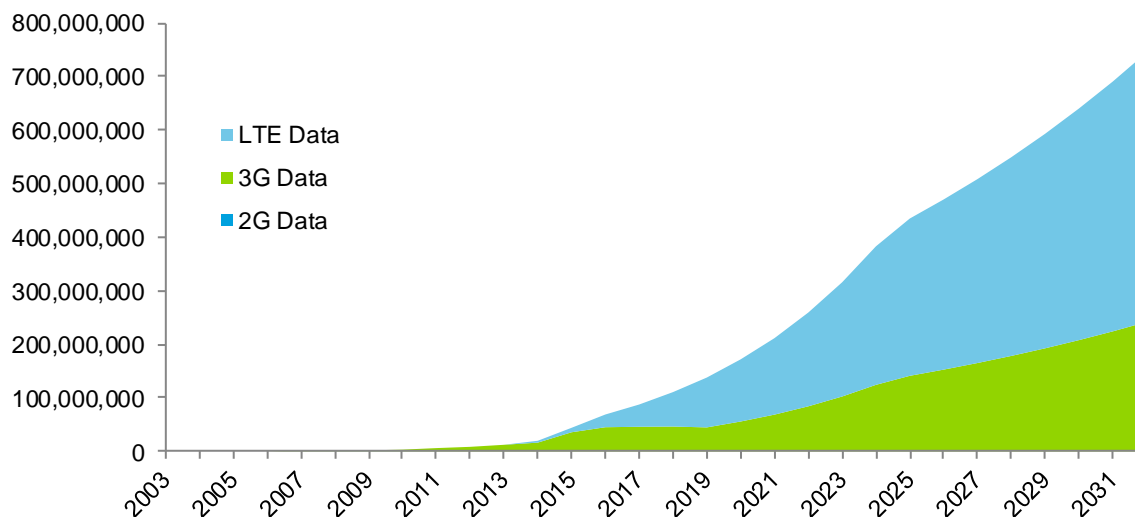
- [Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2014–2019](#)
- [Real Wireless, Techniques for increasing the capacity of wireless broadband networks: UK 2012-2030;](#)
- [Analysys Mason, Assessment of the benefits of a change of use to the 700 MHz band to Mobile,](#)

⁴¹ Please note that the charts below detailing Scenario A and Scenario B of mobile data traffic have not been scaled equally.

Scenario A: Total Annual Network Data Traffic by Technology (GB)



Scenario B: Total Annual Network Data Traffic by Technology (GB)



2.27 An increase in data traffic can generally be expected to lead to a reduction in the costs associated with MTRs. Given the significantly higher data load that is assumed under Scenario B (compared to Scenario A), by modelling both scenarios ComReg is able to assess the possible impact of increased data loads on MTRs. The resulting outputs associated with each scenario are presented below.

Scenario A: Outputs

Table 1: Pure LRIC and LRAIC+ results under Scenario A for the period 2015-2019

		2015	2016	2017	2018	2019
Pure LRIC	Nominal	€ 0.0071	€ 0.0068	€ 0.0065	€ 0.0062	€ 0.0059
	Real	€ 0.0068	€ 0.0064	€ 0.0060	€ 0.0057	€ 0.0053
LRAIC+	Nominal	€ 0.0098	€ 0.0088	€ 0.0078	€ 0.0069	€ 0.0060
	Real	€ 0.0095	€ 0.0084	€ 0.0073	€ 0.0063	€ 0.0054

Scenario B: Outputs

Table 2: Pure LRIC and LRAIC+ results under Scenario B for the period 2015-2019

		2015	2016	2017	2018	2019
Pure LRIC	Nominal	€ 0.0067	€ 0.0064	€ 0.0061	€ 0.0058	€ 0.0055
	Real	€ 0.0065	€ 0.0061	€ 0.0057	€ 0.0053	€ 0.0050
LRAIC+	Nominal	€ 0.0087	€ 0.0077	€ 0.0067	€ 0.0058	€ 0.0049
	Real	€ 0.0084	€ 0.0073	€ 0.0062	€ 0.0053	€ 0.0044

2.28 Having observed that the operator expectations of mobile data usage has been significantly lower than the recent actual growth in the Irish mobile market and noting projected mobile data growth being predicted internationally, ComReg is interested in obtaining the views of interested parties as to which data scenario would be considered to be the most appropriate basis for calculating cost-based MTRs in the Irish market.⁴²

Treatment of Irish market as a closed system

2.29 In relation to off-net mobile to mobile calls, the Irish market is now treated as a closed system. As a consequence the total volume of off-net minutes originated to another Irish network is now modelled to equal the total volume of minutes terminated by Irish networks from another Irish mobile network.

⁴² Scenario A is contained in the version of the Draft MTR Model provided to interested parties for review as part of this Supplementary Consultation. Interested parties will have the option to model Scenario B.

2.2.3 UMTS900 spectrum addition; and 2G traffic migration adjustment

- 2.30 The GSM900 spectrum holding for the hypothetical operator has been adjusted to 8.6MHz for the period 2003-2012 to align with the amount of 900MHz spectrum that was available to each of the MNOs in that period. The assumed spectrum holding in the MTR Model has also been modified to reflect the deployment of UMTS900 in the RAN by reallocating 5MHz of paired 900MHz spectrum from 2G (GSM) to 3G (UMTS) in 2013 until the end of the modelled time horizon. This includes higher coverage in rural areas in line with the information in operators' data responses. With the roll-out of UMTS900, the assumption for rural area coverage increases from 30% to 60% from 2015 until the end of the modelled time horizon.
- 2.31 The proportion of traffic carried across 2G and 3G networks in rural areas has been adjusted, in recognition of the operators' comments that the proportion of traffic carried by 2G and 3G varies in rural areas in comparison with the denser suburban and urban areas. As a result, the urban and suburban technology mix is more aligned with operators' data.

2.2.4 TRX and 3G radio dimensioning amendment

- 2.32 The MTR Model now incorporates a utilisation factor into the calculations of the average number of TRX and 3G radios per site, by geo-type. This is to ensure that the required number of TRXs and 3G radios is set to 1 in those cases where the calculation would otherwise result in a value less than 1. This is to guarantee that the average number of TRX / 3G radios does not fall below the minimum requirement for these network elements of 1 per site.

2.2.5 Cell collocation amendment

- 2.33 The proportion of cells collocated at physical sites have been updated in line with data provided by operator data returns as part of the UMTS900 dimensioning process.

2.2.6 "1/N" approach application to spectrum allocation

- 2.34 The spectrum allocation has been amended to more explicitly reflect the "1/N" methodology in the updated MTR Model.

- 2.35 The revised MTR Model makes use of the publicly available information on the existing spectrum assignments⁴³ and future spectrum allocation (ComReg 12/123) in the 900MHz, 1800MHz, and 2100MHz spectrum bands.
- 2.36 The updated MTR Model now accounts for Limited Usage Licence information contained in ComReg document No. 12/123.

2.2.7 Other changes

NMC Asset Life

- 2.37 Having considered responses to the April 2014 consultation, ComReg has reduced the asset life of the NMC from 15 years to 10 years and it is now more in line with other core network equipment categories and international benchmarks. In addition, its unit capex and opex have been proportionately decreased, so as to maintain the same unit cost per year of asset life, in line with data returns provided by operators. These changes have no impact on the pure LRIC MTRs.
- 2.38 An element cost of €1,200 has been assigned to the GMSC network element to reflect the cost of interconnection ports. This change is included to facilitate the calculation of the LRAIC+ costs of the network. It does not impact the pure LRIC MTRs as the assumption remains from the previous MTR Model Consultation and Draft Decision that the boundary of the MVCT services is defined at, but does not include, the GMSC port.

Land Area Classification

- 2.39 The land area classification used in the Draft MTR Model continues to be based on the CSO's land area classification. However, the corresponding geotype land areas (km²) are no longer informed by or based on operator submissions. ComReg has implemented the model on the basis of the latest figures received from the CSO.⁴⁴ This has the effect of increasing the land area classified as being rural (from 90.2% to 97.6%) in the Draft MTR Model while the land area classified as Urban has reduced from 1.6% to 1.2% and the land area classified as Suburban has reduced from 8.2% to 1.2%.

2.2.8 Impact on updated MTR

- 2.40 As the MTR Model update modifications are interrelated, their combined impact on the pure LRIC is reflected in the updated MTR since the MTR Model Consultation and Draft Decision. A specific calculation of the impact on the pure LRIC from each modification is however not possible, due to the interrelatedness of the modifications. Thus, the size of the change in pure LRIC

⁴³ www.comreg.ie/radio_spectrum/search.541.874.10003.0.rslicensing.html

⁴⁴ Up to January 2015, the CSO had been reporting on varying land area classifications.

depends also on the existing values of model parameters other than the ones being modified. The sequence of the modifications being carried out will thus affect the way pure LRIC changes to arrive at the updated value.

- 2.41 ComReg is in a position to confirm that the cumulative effect of the modifications to the MTR Model since the MTR Model Consultation and Draft Decision is an increase in the pure LRIC MTR for 2015 of €0.0011 (from €0.0060 to €0.0071) under Mobile Data Traffic Scenario A or an increase in the pure LRIC MTR for 2015 of €0.0007 (from 0.0060 to €0.0067) under Mobile Data Traffic Scenario B in the revised MTR Model⁴⁵.

2.3 Analysys Mason Report

- 2.42 As noted in Chapter 1 of this Supplementary Consultation Document, ComReg published a Price Control Decision in December 2012 in which ComReg chose the pure LRIC approach as the most appropriate and proportionate cost methodology for determining the regulated MTRs to be charged by all relevant Service Providers. Reflecting the time that has passed since the 2012 Price Control Decision, ComReg commissioned Analysys Mason to provide an updated report to assess whether there have been any material changes since the 2012 Price Control Decision that would alter or materially affect the choice of a pure LRIC cost standard made then. This 2014 Analysys Mason Report is published on ComReg's website as ComReg Document No 15/19b.
- 2.43 In the 2014 Analysys Mason Report, Analysys Mason concludes that there have been no material changes since the 2012 Price Control Decision that would alter its 2012 recommendation to ComReg to apply a pure LRIC cost standard for the assessment of regulated MTRs in Ireland. Please refer to the summary in Section 0.2 and the Conclusions in Section 4 of the 2014 Analysys Mason Report.
- 2.44 ComReg remains of the opinion that there are no reasons to alter its choice of pure LRIC as the relevant cost standard for MTRs in Ireland. This cost standard remains an appropriate and proportionate basis for estimating the efficient cost of wholesale termination services and the resulting MTRs. It also serves to minimise the scope for competitive distortions in the marketplace, thereby supporting ComReg's statutory objectives to promote competition and investment and to promote the interests of end users.

⁴⁵ The equivalent increase for 2014 is €0.0009 under Mobile Data Traffic Scenario A from €0.0064 to €0.0073 or €0.0005 Mobile Data Traffic Scenario B from €0.0064 to €0.0069 in the revised model.

- Q. 1 Following the submissions received in response to the MTR Model Consultation and Draft Decision (Document No 14/29s), ComReg has updated the draft MTR Model to make it a closer representation of a hypothetical efficient operator in the Irish market. Do you agree with the modifications made to the MTR Model by ComReg, as detailed above and in the updated MTR Specification Document? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.
- Q. 2 Which forecast scenario: Scenario A (i.e. operator led forecasts of mobile data traffic excluding a significant element of dongle traffic); or, Scenario B (i.e. forecasts based on international expert analysis and including all dongle traffic), do you consider to be more appropriate in the context of determining a MTR based on a hypothetical efficient mobile operator in the context of the Irish market. Please provide appropriate reasoning and any relevant evidence to support your views. In the case where you do not agree with either scenario, you are requested to submit future mobile data usage per subscriber to support your views.
- Q. 3 Do you have any comments or observations on the 2014 Analysys Mason Report?
- Q. 4 Do you have any comments or observations on the revised Decision Instrument at Annex 1 of this Supplementary Consultation Document?

Chapter 3

3 Submitting comments

- 3.1 All comments are welcome to this Supplementary Consultation. The consultation period will run from 26 February 2015 to 9 April 2015 during which ComReg welcomes written comments on any of the issues raised in this Supplementary Consultation Document.
- 3.2 All responses to this consultation should be clearly marked: Reference: Submission re ComReg 15/19”, and sent by post, facsimile or e-mail to arrive on or before 5p.m., 9 April 2015, to: Ms. Claire Kelly, Commission for Communications Regulation, Irish Life Centre, Abbey Street, Dublin 1, Ireland
- 3.3 Having analysed and considered the comments received, ComReg will review the main proposals set out in this Supplementary Consultation, amend if necessary in light of representations received and will then notify the draft measure to the European Commission, the NRAs and BEREC, pursuant to Regulation 13 of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011. ComReg will take utmost account of any comments received from the European Commission and will then adopt and publish the final decision.
- 3.4 In order to promote further openness and transparency ComReg will publish all respondents’ submissions to this Supplementary Consultation, subject to the provisions of ComReg’s guidelines on the treatment of confidential information as set out in ComReg Document No. 05/24. We would request that electronic submissions be submitted in an-unprotected format so that they can be appended into the ComReg submissions document for publishing electronically.

Please note:

- 3.5 ComReg appreciates that many of the issues raised in this paper may require respondents to provide confidential information if their comments are to be meaningful.
- 3.6 As it is ComReg’s policy to make all responses available on its website and for inspection generally, respondents to consultations are requested to **clearly identify confidential material and place confidential material in a separate annex to their response.**
- 3.7 Such information will be treated in accordance with the provisions of ComReg’s guidelines on the treatment of confidential information as set out in ComReg Document No. 05/24.

Annex 1: Draft 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 at Appendix I.
- 1.2 This Decision Instrument is made:
- i. Pursuant to Regulations 13 and 18 of the Access Regulations;
 - ii. Pursuant to and having regard to the Significant Market Power (SMP) designations on Three, 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 Three, 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 Act 2002, as amended 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 Act 2002, as amended, complied with policy directions made by the Minister for Communications, Marine and Natural Resources;
 - vi. Having regard to the requirements of Regulation 13 of the Access Regulations;
 - vii. Having taken the utmost account of the 2009 Termination Rate Recommendation;
 - viii. 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);

- ix. 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);
- x. 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;
- xi. Having regard to the analysis and reasoning set out in ComReg Decision D12/12, and in particular having regard to the choice of Pure LRIC made in that Decision;
- xii. Having regard to the analysis and reasoning set out in the consultation and draft decision entitled “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model” (ComReg Document No. 14/29);
- xiii. Having taken account of the submissions received from interested parties in relation to “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model” (ComReg Document No. 14/29) following a public consultation pursuant to Regulation 12 of the Framework Regulations;
- xiv. Having regard to the analysis and reasoning set out in the consultation and draft decision entitled “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model; Supplementary Consultation” (ComReg Document No. 15/19);
- xv. Having taken account of the submissions received from interested parties in relation to “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model; Supplementary Consultation” (ComReg Document No. 15/19) following a public consultation pursuant to Regulation 12 of the Framework Regulations; and
- xvi. 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:

- a. 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);
- b. 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);
- c. the Consultation and Draft Decision document (ComReg Document No.14/29);
- d. the Supplementary Consultation and Draft Decision document (ComReg Document No.15/19); and
- e. the Response to Consultation and Final Decision Document entitled [X] (ComReg Decision D14/X, ComReg Document No. 14/X) [**The Decision**]

shall, where appropriate, be construed consistently with this Decision Instrument. For the avoidance of doubt, however, to the extent that there is any conflict between a decision instrument dated prior to the Effective Date and this Decision Instrument, this Decision Instrument shall prevail.

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**” 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 and Associated Facilities;

“**Access Regulations**” means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), as may be amended from time to time;

“**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;

“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;

“Bottom Up Pure Long Run Incremental Costs Model” or **“BU Pure LRIC Model”** means the model, as may be amended from time to time, used by ComReg to set MTRs in Ireland and as will be furnished electronically by ComReg to each SMP Mobile Service Provider together and contemporaneous with this Decision Instrument. The operation and details of the BU Pure LRIC Model are more particularly described in Chapter XX of ComReg Decision 15/XX [**The Decision**];

“Communications Regulation Act 2002, as amended” means the Communications Regulation Act 2002 (No. 20 of 2002), as amended;

“ComReg” means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Act 2002, as amended,;

“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;

“ComReg Document No. 14/29” means ComReg Document Number 14/29 entitled “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model” dated 11 April 2014;

“ComReg Document No. 15/19” means ComReg Document Number 15/19 entitled “Mobile Termination Rates: Draft Bottom Up Pure Long Run Incremental Cost Model, Supplementary Consultation” dated 26 February 2015;

“ComReg Decision D15/XX” means ComReg Document No. 15/XX entitled X dated Y [**The Decision**];

“Effective Date” means the date set out in Section 8.1 of this Decision Instrument;

“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 Hutchinson 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;

“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 Three, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone;

“Telefónica” means Three Ireland Services (Hutchinson) Limited, previously named Telefónica Ireland Limited, and its subsidiaries, and any undertaking which it owns or

controls and any undertaking which owns or controls it, and its successors, affiliates and assigns, including Liffey Telecom, but excluding, for the purposes of this Decision Instrument, Tesco Mobile;

“Tesco Mobile” means Tesco Mobile Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns, but excluding for, the purposes of this Decision Instrument, Telefónica;

“Three” means Three Ireland (Hutchison) 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, previously named H3GI;

“Undertaking” shall have the same meaning as under Regulation 2 of the Framework Regulations, as may be amended from time to time;

“Vodafone” means Vodafone Ireland Limited and its subsidiaries, and any undertaking which it owns or controls and any undertaking which owns or controls it, and its successors, affiliates and assigns;

“900 MHz Band” means the 880 to 915 MHz band of radio frequency spectrum paired with the 925 to 960 MHz band of radio frequency spectrum;

“1800 MHz Band” means the 1710 to 1785 MHz band of radio frequency spectrum paired with the 1805 to 1880 MHz band of radio frequency spectrum; 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 Three, Lycamobile, Meteor, Telefónica, Tesco Mobile and Vodafone.
- 3.2 This Decision Instrument is binding upon Three, 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.

PART 2 – FURTHER SPECIFICATION OF THE PRICE CONTROL OBLIGATION (SECTION 4 OF THE DECISION INSTRUMENT)

4. FURTHER SPECIFICATION OF THE OBLIGATIONS RELATING TO PRICE CONTROL

- 4.1 Pursuant to Regulation 13 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 that Decision Instrument.
- 4.2 Pursuant to Regulations 13 and 18 of the Access Regulations each SMP Mobile Service Provider shall ensure that its MTR is no more than the annual rate determined in accordance with the [Draft] BU Pure LRIC Model. For the years 2015 to 2019, the maximum MTRs are set out in the table below⁴⁶.

	BU Pure LRIC MTRs (€ cent per minute)
From [insert Effective Date of Decision Instrument] to 31 December 2015	[€0.0071 Scenario A] or [€0.0067 Scenario B]

⁴⁶ The price control period will last for at least three years from the date of the decision but in any event it will remain in place until further notice by ComReg. The maximum MTR will be determined by the MTR Model.

From 1 January 2016 to 31 December 2016	[€0.0068 Scenario A] or [€0.0064 Scenario B]
From 1 January 2017 to 31 December 2017	[€0.0065 Scenario A] or [€0.0061 Scenario B]
From 1 January 2018 to 31 December 2018	[€0.0062 Scenario A] or [€0.0058 Scenario B]
From 1 January 2019 to 31 December 2019	[€0.0059 Scenario A] or [€0.0055 Scenario B]

- 4.3 With effect from [date to be inserted] [this date to be the start of the first month which begins one month from the effective date] each SMP Mobile Service Provider shall apply Section 4.2 to all invoices/credit notes issued by it to any Undertaking in respect of MVCT.
- 4.4 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, unless otherwise agreed with ComReg, each SMP Mobile Service Provider shall pre-notify ComReg of its intention to amend its published MTR either (i) not less than 2 months in advance of the date on which any such proposed amendment is expected to come into effect; or (ii) on [date to be inserted][this date to be one month from the effective date of the decision]; whichever date is later.
- 4.5 Each SMP Mobile Service Provider shall furnish to ComReg - at the date of the pre-notification provided for in Section 4.4 - a statement confirming that its proposed amended Mobile Termination Rate complies with Section 4.2 of this Decision Instrument.
- 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 every Undertaking with which that SMP Mobile Service Provider has entered into a contract in respect of Access to MVCT either (i) 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; or (ii) on [date to be inserted] [this date to be one month from the effective date of the decision]; whichever date is later.

- 4.7 Without prejudice to section 4.2, ComReg may review and if necessary, amend the maximum MTRs referred to in section 4.2, having regard to circumstances that it considers exceptional.

PART III - OPERATION 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 Mobile Service Providers and in force immediately prior to the Effective Date of this Decision Instrument continue in force and the SMP Mobile Service Providers shall comply with same.
- 6.2 If any section, clause, provision or portion of 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, provision or portion 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), provision(s) or portion(s) of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument.

7. WITHDRAWAL OF SMP OBLIGATIONS

- 7.1 Pursuant to Regulations 8, 13 and 18 of the Access Regulations, Section 12.2 of the Decision Instrument annexed to ComReg Decision D11/12 and the Decision Instrument contained at Annex 2 to ComReg Decision D12/12 are hereby withdrawn.

8. EFFECTIVE DATE

- 8.1 The Effective Date of this Decision Instrument shall be the date of this Decision Instrument which is 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

CHAIRPERSON

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE ___ DAY OF _____ 2015

Annex 2: Legal Basis

Obligations relating to the markets for voice call termination on individual mobile networks

- 1.1 By ComReg Decision D11/12, and pursuant to Regulations 25 to 27 of the Framework Regulations, ComReg designated Hutchison 3G Ireland Limited (now Three Ireland (Hutchison) 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”).
- 1.2 Under Section 12 of the Decision Instrument annexed to ComReg Decision 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.
- 1.3 Pursuant to Regulations 13 and 18 of the 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 D11/12.

Consultation Requirements

- 1.4 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.

- 1.5 Regulation 13(3) of the 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 Framework Regulations implements Article 7 of the Framework Directive.

Questions

Section

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- Q. 1 Following the submissions received in response to the MTR Model Consultation and Draft Decision (Document No 14/29s), ComReg has updated the draft MTR Model to make it a closer representation of a hypothetical efficient operator in the Irish market. Do you agree with the modifications made to the MTR Model by ComReg, as detailed above and in the updated MTR Specification Document? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views..... 28
- Q. 2 Which forecast scenario: Scenario A (i.e. operator led forecasts of mobile data traffic excluding a significant element of dongle traffic); or, Scenario B (i.e. forecasts based on international expert analysis and including all dongle traffic), do you consider to be more appropriate in the context of determining a MTR based on a hypothetical efficient mobile operator in the context of the Irish market. Please provide appropriate reasoning and any relevant evidence to support your views. In the case where you do not agree with either scenario, you are requested to submit future mobile data usage per subscriber to support your views. 28
- Q. 3 Do you have any comments or observations on the 2014 Analysys Mason Report? 28
- Q. 4 Do you have any comments or observations on the revised Decision Instrument at Annex 1 of this Supplementary Consultation Document? 28