Commission for
Communications Regulation

Universal Service Requirements

Provision of access at a fixed location (AFL).

Response to Consultation, Further Consultation and Draft Decision

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Additional Information

All responses to this consultation should be clearly marked:

"Reference: Submission re ComReg 16/31" as indicated above, and sent by post, facsimile, e-mail or online at www.comreg.ie (current consultations), to arrive on or before 5pm on June 13th 2016, 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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1. Executive Summary

1 In this consultation document the Commission for Communications Regulation ("**ComReg**") is seeking the views of stakeholders on our proposals for Universal Service Obligations ("**USO**") in relation to Access at a Fixed Location ("**AFL**").

2 The Universal Service Directive[1] requires Member States to ensure that certain services are made available at an affordable price and at the quality specified to all end users in their territory, irrespective of geographic location. Such services include (among others) the provision of AFL.

3 The Universal Service Regulations[2] transpose the Universal Service Directive into National law. They place primary responsibility on ComReg to safeguard the provision of the universal services, including AFL. They require us to ensure that end-users throughout Ireland have access to an electronic communications network and voice services at a fixed location. These must be affordable and delivered at a specified quality.

4 We have ensured that these services are being delivered by designating Eircom Ltd ("**Eir**") as the Universal Service Provider ("**USP**") to provide AFL until 30 June 2016.

5 On 7 August 2015, we published a consultation ("**Consultation 15/89**"[3]) and a report which we commissioned from our consultants, TERA (the "**First TERA Report**"[4]). In our consultation document, we sought the views of stakeholders on the future need for, and the proposed evolution of, the USO for AFL, post-December 2015.

6 We proposed that some form of AFL USO was required from 1 January 2016, in order for the requirements of the Universal Service Directive to continue to be fulfilled in Ireland and a period of 5-7 years during which specific AFL obligations would need to be in place. We also however proposed to review the specific obligations, so that they would continue to be appropriate and meet the needs of Irish end-users, having regard to the current market situation and its possible future evolution resulting from for example, the Government's National Broadband Plan (the **"NBP"**) and other developments that can be reasonably foreseen over the next 5-7 years.

7 In Consultation 15/89 we sought views on amongst other issues, the following:

[1] Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services, as amended by Directive 2009/136/EC of 25 November 2009 (the "Universal Service Directive").
[2] The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (S.I. No. 337 of 2011) (the "Universal Service Regulations").
[3] ComReg Document 15/89 "Universal Service Obligation, Provision of Access at a Fixed Location", 7 August 2015.
[4] ComReg Document 15/89a "TERA- Forward looking review of future AFL element of USO in Ireland", 7th August 2015.

- Consumer trends and any other relevant factors which we may not yet have considered.
- Supply side trends and any other relevant factors which we may not yet have considered.
- Whether or not any AFL USO continues to be required.
- Factors which should be considered in respect of EU aspects and technologies suitable for delivering AFL.
- Whether any USO designation should be for the entire State.
- The duration of any AFL USO designation.

8 Since the publication of Consultation 15/89 we have also considered the following:

i. The five industry submissions which we received in response to Consultation 15/89 and the First TERA Report.

ii. The submissions which we received in response to further data requested from industry under our statutory information gathering powers.

iii. A further report which we commissioned from our consultants, TERA (the **"Second TERA Report"**[5]).

iv. The following further issues that are relevant to our review:

- How to take account of the probable long-term replacement of current generation access networks with new networks and the possibility that investments in those current generation networks might have only a short-term benefit, while at the same time ensuring the fulfilment of end-user rights to AFL.
- Whether the reasonable access request test(s) should be modified such that a USP might not be required to fulfil a request for access AFL if suitable affordable alternative services were available at that location. Such services might include those made available by mobile operators, other fixed operators and/or an operator(s) who may be contracted to provide services under the NBP.
- What requirements should be specified in relation to functional internet access (**"FIA"**) having regard to current internet usage and needs, available technology and the state of deployment of next generation access networks on a commercial basis and/or as a result of the NBP.

[5] ComReg Document 16/31a, Report by TERA Consultants, *"Forward-looking review of the future AFL element of USO in Ireland: appropriate level and scope of the various proposed obligations of an AFL USO".*

- What affordability measures might be appropriate for vulnerable end-users, having regard to changes in networks and end-user usage patterns of the universal services.

- What quality of service ("**QoS"**) levels might be appropriate for current generation networks, having regard to the deployment of next generation access networks both commercially and as a result of the NBP.

9 Our approach to the universal service reflects a changing market, both in terms of demand and supply. Our proposals are forward looking and dynamic and take into account of anticipated NBP and commercial infrastructure roll-out over the next 5 years, approximately.

10 We are proposing changes to the assessment of reasonable requests. These will take account of market developments as they happen, so that Eir is only required to satisfy requests for new connections and Publicly Available Telephone Service ("**PATS**") where there is no suitable alternative available to the end-user. We are also proposing a quality of service regime which allows Eir the flexibility to balance investment and operating expenditure, in light of the anticipated roll-out of the NBP. This should mean that Eir would not have to unnecessarily invest in its copper network in the NBP areas.

11 In summary, our proposals are designed to be efficient, to minimise cost and unnecessary duplication of infrastructure and services. At the same time, our overarching objective must also be to fulfil our statutory mandate to ensure that basic telephony services at a fixed location are delivered to end-users throughout the State.

12 In this document we:

- Respond to and engage with the submissions of respondents to Consultation 15/89 and the First TERA Report; and

- Set out our preliminary views and options for how the delivery of USO and AFL should best be ensured, and our reasons in support of these.

Summary of our preliminary views and structure of this document

13 We summarise our preliminary views on the key issues and outline the structure of this document as follows:

- **Background:** We outline the relevant legislation under which we carry out our role and the developments that have led to the publication of this document ─ **Section 2.**

- **Introduction:** We discuss in further detail what the relevant subject matter of this consultation is ─ **Section 3**.

- **The need for AFL USO**: There is a continued need for some kind of AFL USO for Ireland post-30 June 2016 ─ **Section 4**.

- **FIA**: It is not appropriate to increase the FIA data rate in the short term (by July 2016): the current rate should be maintained for the time being, pending further review and consultation, having regard to for example, the NBP and commercial infrastructure roll-out ─ **Section 5**.

- **Reasonable Access Criteria:** We are proposing that these could be modified to have regard to affordable alternative services if they are available at that fixed location. In addition, we propose to retain a monetary threshold to determine whether or not a request for connection, where there are no suitable alternatives, is reasonable ─ **Section 6**.

- **Quality of Service ("QoS") metrics:** We are proposing that these could be introduced at a sub-national level, as well as national level. Fault occurrence targets and fault repair targets could be replaced by an availability target which combines both factors and provides flexibility to the USP to strike a balance between investment and operational costs. ComReg proposes to assess if it is appropriate to review these targets within 2 years of their coming into effect ─ **Section 7**.

- **Geographically Averaged Pricing ("GAP")**: This should be maintained for voice only connections and services ─ **Section 8**.

- **USO control of expenditure measures:** Further measures other than the phased connection policy and disconnection policy are not necessary at this time, pending the outcome of a consultation on call barring ─ **Section 9**.

- **Duration of AFL USO designation:** Any USO AFL designation should be for at least 5 years, although some of the obligations may be reviewed in the interim ─ **Section 10**.

- **The USP:** Eir should be designated as the USP to provide the proposed AFL universal service measures throughout the State (to the extent necessary) ─ **Section 10**.

- **Draft Regulatory Impact Assessment ("RIA"):** We set out a draft RIA which considers the regulatory options open to us and the proposed options for each of the AFL USOs ─ **Section 11**.

- **Draft Decision Instrument:** We formalise, as legally enforceable obligations, the draft measures which we are proposing ─ **Section 12**.

- **Submitting Comments:** We indicate the timeframe and process for submitting responses to this consultation ─ **Section 13.**

14 We are keen to receive further submissions from all interested stakeholders in relation to this consultation, in particular on our preliminary views about how the delivery of USO and AFL can best be ensured.

2. Background

15 We are responsible for the regulation of the Irish electronic communications sector, in accordance with national[6] and EU legislation. One of our functions is to determine the need for and scope of the USOs for the Irish market and to decide which undertaking(s), if any, should be designated as the USP for particular USO(s).

16 The scope of universal service is defined by the Universal Service Directive. The USO scope was designed to ensure that everyone, irrespective of location, social standing or income can access basic telecommunications services at a fixed location. These are basic services that are considered essential for everyone.

17 Our preliminary view, in Consultation 15/89, was that some kind of AFL USO would continue to be necessary in order for the requirements of the Universal Service Directive to continue to be fulfilled in Ireland. We proposed a designation period of 5 to 7 years during which certain obligations for AFL should be in place. We proposed that requirements such as the Reasonable Access Threshold (**"RAT"**) and FIA needed to be reviewed to take account of the current market and its possible evolution, the NBP, and other possible market developments.

18 Following a request, an extension was granted to the response period for Consultation 15/89 until the 30 September 2015.[7] We received submissions to Consultation 15/89 and published a further consultation on 23 November 2015[8], proposing to extend the period for which the current AFL obligations on Eir[9] would be in place. We proposed a period of up to 6 months, commencing on 1 January 2016. We considered this to be necessary in order to consider the submissions, to allow for the collection of additional data and for a further consultation and Decision regarding the future period.

19 Our decision to extend the designation by 6 months was made on 31 December 2015.[10]

20 This is a response to consultation and further consultation in respect of universal service access at a fixed location (AFL) for the future period commencing 1 July 2016.

[6] Under the Communications Regulation Act 2002, as amended.
[7] ComReg Document No 15/95 - ComReg grants an extension to the consultation period for ComReg Document No 15/89.
[8] ComReg Document No 15/124, "*Universal Service Obligation, Provision of Access at a Fixed Location."*
[9] As established in Decision D10/14 - ComReg Document 14/71 and D10/14 *"The provision of telephony services under the Universal Service Obligation, Access at a fixed location"*, 7 July 2014.
[10] ComReg Document No 15/144, D10/15, *"Universal Service Obligation – Provision of Access at a Fixed Location*".

3. Introduction

21 The Universal Service Directive, transposed in Ireland by the Universal Service Regulations, requires that we must ensure that end-users throughout Ireland have access to an electronic communications network and voice services at a fixed location and these components must be affordable and delivered at a specified quality.

22 As the European Commission is currently considering the scope of the universal service (which will include AFL), the existing universal requirements that we must ensure may be subject to change.[11] Any changes will likely be announced later this year, but that would be after our review is completed under the current legislative requirements. Further, it may be several years before any such changes are transposed into domestic laws and implemented.

23 A USP that is designated to provide AFL must:

- satisfy any reasonable request to provide at a fixed location connection to a public communications network;
- satisfy any reasonable request for the provision of a publicly available telephone service over the network which allows for originating and receiving national and international calls; and
- ensure that the connection is capable of supporting voice, facsimile and data communications at data rates that are sufficient to permit FIA, bearing in mind the technology used by the majority of subscribers and technological feasibility.[12]

24 In July 2014, we designated Eir[13] as the USP for AFL for 18 months. In December 2015 we extended this period by 6 months. We did so to maintain the provision of USO and AFL, while we prepared further preliminary views and considered additional data for the purpose of this consultation.

25 The Universal Service Regulations provide that we can, with the consent of the Minister for Communications, Energy and Natural Resources (the **"Minister"**) specify requirements to be complied with by the designated USP in relation to the reasonableness of requests for connection and access, terms and conditions, FIA[14] and affordability measures including GAP.[15]

[11] European Commission - full synopsis report of the public consultation on the evaluation and review of the regulatory framework for electronic communications, 20 March 2016 https://ec.europa.eu/digital-single-market/en/news/full-synopsis-report-public-consultation-evaluation-and-review-regulatory-framework-electronic

[12] Regulation 3 (1) - (3), Universal Service Regulations.
[13] ComReg Document 14/71 and D10/14 *"The provision of telephony services under the Universal Service Obligation, Access at a fixed location", 7 July 2014.*
[14] Regulation 3(5) (b) of the Universal Service Regulations.
[15] Regulation 8 (2) – (3) of the Universal Service Regulations.

26 In Consultation 15/89 we proposed that there would likely remain a requirement for AFL USO and hence, a need to continue to designate a USP to deliver a USO for the next 5-7 years. We also considered possible forward looking requirements for the AFL element of the USO and a roadmap for its evolution, including QoS, affordability (including GAP), reasonable access requests (including RAT) and FIA.

27 In Consultation 15/89 we also considered the Government's initiatives in respect of broadband availability, in particular the NBP which is designed to address the Government's target to increase high speed broadband access, coverage and speeds throughout Ireland, geographic availability of alternative platforms, and impacts on the continued requirement for the AFL element of the USO.

28 During 2014 and 2015 and prior to the publication of Consultation 15/89, we issued a number of information requests about AFL and its components to assist with this review. We reviewed this and other data, in coming to our preliminary view about a continued need for an AFL USO in the whole of Ireland, or in certain geographic areas.

29 We commissioned independent expert consultants, TERA, to carry out additional specific analyses and to review the evidence. This was set out in the First TERA Report, which we have also published.

30 The First TERA Report studied the latest access services market evolutions, taking into account current market trends and likely evolutions in the coming 5 years. These include, intensification of competition, deployment of Fibre to the Home (**"FTTH")** and the NBP. It considered the possible consequences if AFL USOs were to be ceased having regard to the situation in Ireland and the implementation of AFL USO in different EU Member States. The First TERA Report concluded that there was a continued need for an AFL USO in Ireland.

31 We wish to thank respondents for their submissions to Consultation 15/89 which we have also taken account of in order to arrive at our preliminary views. We received 5 responses from the following:

- ALTO.
- BT Communication Ireland Limited (**BT**).
- Eircom Limited (**Eir**).
- UPC Ireland Limited (**UPC/VM**).[16]
- Vodafone.

32 After we received these submissions we issued a number of statutory information requests, the responses to which were taken into account by both ComReg and TERA.

[16] UPC in Ireland and Virgin Media in the UK are both part of the Liberty Global Group. UPC in Ireland was re-branded as Virgin Media in 2015.

33 In this consultation we remain of the preliminary view that there is need for an AFL USO for the period post 1 July 2016. We also set out our views and seek further submissions about whether and what type of related USO obligations need to be in place in all or parts of Ireland after 1 July 2016.

34 In this consultation we examine QoS, affordability aspects (including GAP), and reasonable access requests. We also consider the most appropriate option for the specification of FIA in light of factors such as the NBP and the geographic availability of alternative platforms for the delivery of the AFL.

35 We also examine future developments that we can reasonably anticipate such as deployment of next generation access (**"NGA")**, FTTH, the NBP, increased preference for bundles, migration to Voice over Internet Protocol (**"VoIP"**) increased mobility, and end-user demand trends. Such developments may have a bearing on whether there is a need for USOs for AFL in all or parts of Ireland.

36 We also commissioned the Second TERA Report (now published with this consultation) on requirements of USOs related to AFL, e.g. criteria for reasonable requests, affordability measures, and QoS.

37 We consider that there is likely to be a continued need for an AFL USO, at least until the NBP infrastructure is fully completed and available to end-users. We do not consider that it is possible for us to say at what stage of the NBP's development that it can ensure the provision of AFL and related USOs; it could be as it progresses or at completion.

38 We have also considered the following issues:

- How to take account of the probable long-term replacement of current generation access networks with new networks and the possibility that investments in those current generation networks might have only a short-term benefit, while at the same time ensuring the fulfilment of end-user rights to AFL.

- Whether the reasonable access request test(s) should be modified such that a USP might not be required to fulfil a request for access AFL if suitable affordable alternative services were available at that location. Such services might include those made available by mobile operators, other fixed operators and/or an operator(s) who may be contracted to provide services under the NBP.

- What requirements should be specified in relation to FIA having regard to current internet usage and needs, available technology and the state of deployment of next generation access networks on a commercial basis and/or as a result of the NBP.

- What affordability measures might be appropriate for vulnerable end-users, having regard to changes in networks and end-user usage patterns of the universal services.

- What quality of service (QoS) levels might be appropriate for current generation networks, having regard to the deployment of next generation access networks both commercially and as a result of the NBP.

39 Our preliminary views (see the Executive Summary) have taken into account the responses received in relation to Consultations 14/48[17] and 15/89[18], the TERA Reports, information collected on foot of information requests, and other relevant material available to us at this time. Our draft RIA in Section 11 is intended to also reflect this.

3.1 Costing and Financing of USOs

40 We note that the provision of a universal service may result in the USP(s) providing designated services at a net cost. We also note that the Universal Service Regulations[19] stipulate that a USP can seek funding for the net costs of meeting the obligation concerned, however, funding will only be permitted if it is determined by ComReg that the net cost may represent an unfair burden on the USP. To the extent that it does represent an unfair burden, the net cost of the USO shall be apportioned among providers of electronic communications networks and services.[20]

41 The designation method(s) we adopt must ensure that the obligations are provided in a cost effective manner and may be used as a means of determining the net cost of the universal service obligation[21]. In this regard, Decision D04/11[22] illustrates how the net cost for all USOs, will be calculated and how the existence of an unfair burden will be determined. In the event a net cost is deemed to be an unfair burden, the requirement for a sharing mechanism is then triggered.

42 We have completed our assessment of Eir's application for funding for the 2009-2010 period.[23] Our determination was that there was a positive net cost of €5.1m for the 2009-2010 period and that this positive net cost did not represent an unfair burden to Eir.

43 We are currently assessing the funding applications received from Eir for the financial years 2010-2011, 2011-2012, 2012-2013 and 2013-2014, following a period of clarifications regarding the applications we will proceed to form our preliminary views on these applications and consult accordingly.

44 On 31 March 2016, we received an application for funding from Eir for the financial year 2014-2015 and we will issue an information notice regarding this application in due course.

45 The assessment of universal service funding applications is a matter that is separate from the designation of a USP and it is not addressed in this consultation.

[17] ComReg Document 14/48 *"The Provision of telephony services under the Universal Service Obligation – Access at a Fixed Location",* 16 May 2014.
[18] ComReg Document 15/89 *"Universal Service Obligation Provision of access at a fixed location",* 7 August 2015
[19] Regulation 11 of the Universal Service Regulations.
[20] Regulation 12 of the Universal Service Regulations.
[21] Regulation 7(3) of the Universal Service Regulations.
[22] ComReg Document 11/42 and D04/*11 "Report on Consultation and Decision on the Costing of universal service obligation: Principles and Methodologies",* 31 May 2011
[23] ComReg Document 14/03 D01/14 *"Assessment of Eircom's Universal Service Fund Application for 2009- 2010– Response to Consultation and Determination",* 9 January 2014.

4. The proposed need for AFL USO

46 In this Chapter, we set out our preliminary view that there is a continued need for some form of USO after 30 June 2016.

47 We are proposing changes to the assessment of reasonable requests. These are proposed to take account of market developments as they happen, so that Eir is only required to satisfy requests for new connections and PATS where there is no suitable alternative available to the end-user. We are also proposing a quality of service regime which allows Eir the flexibility to balance investment and operating expenditure, in light of the anticipated roll-out of the NBP. This should mean that Eir would not need to unnecessarily invest in its copper network in the NBP areas.

48 In summary, our proposals are designed to be efficient, to minimise cost and unnecessary duplication of infrastructure and services. At the same time, our overarching objective must also be to fulfil our statutory mandate to ensure that basic telephony services at a fixed location are delivered to end-users throughout the State.

49 This section is structured as follows:

4.1 Current AFL USO – A summary of the current obligations.

4.2 Market Developments - A summary of the relevant market developments we examined in Consultation 15/89. This Chapter also sets out:

- Respondents' submissions – A summary of respondents' submissions on Consultation 15/89 on market developments.
- ComReg's response – Our response to the respondents' submissions.

4.3 The proposed need for AFL: Our preliminary view that there is a continued need for some form of USO for AFL together with:

- Respondents' submissions – A summary of respondents' submissions on Consultation 15/89.
- ComReg's response – our response to the respondents' submissions.

4.4 ComReg's Preliminary View that there is a need to continue to have AFL USO(s) in place.

4.1 Current AFL USO

50 Eir is the current USP for AFL, until 30 June 2016. Eir must satisfy any reasonable request to provide a connection to a public communications network at a fixed location, and access to services over the connection such as voice and FIA.

51 Eir must also comply with the obligations that we have imposed to do with requests for connection and to supply a PATS and FIA requirements, under Decision D9/05.[24] This set a financial threshold for determining whether or not a request for access should be considered "reasonable." This is known as the Reasonable Access Threshold (RAT). We also set a minimum target data rate for FIA for connections (narrowband Internet only). We have also imposed QoS targets for specific elements of the AFL in Decision D02/08[25] and have agreed related performance improvement programmes ("**PIP**s"), which carry penalties for Eir when they are not met.

52 Current AFL obligations include:

- The obligation to satisfy any reasonable request to provide at a fixed location, connections to the public telephone network, capable of allowing end-users to make and receive local, national and international telephone calls, facsimile communications and data communications, at data rates that are sufficient to permit FIA:
- The obligation to satisfy any reasonable request to provide at a fixed location, access to publicly available telephone services;
- The obligation to meet QoS performance targets for the AFL USO;
- The obligation to apply measures to ensure affordability of tariffs imposed for AFL, including GAP, i.e. where telephone charges (including line rental) are the same for all end-users irrespective of their geographical location; and
- The obligation to apply certain measures to ensure that end-users are in a position to monitor and control expenditure.

53 In light of our role to ensure end-users throughout the State receive affordable AFL at an appropriate quality, we consider that the evidence to support the **complete** withdrawal of the current USOs would need to be undisputed. That is, there would need to be complete assurance that AFL services would be delivered in the future at an affordable price and appropriate quality throughout the State without any obligation in place. We remain of the view that an AFL USO continues to be required, at least until the new NBP infrastructure is fully complete and provides service availability.

54 Based on the TERA's analysis, our consideration of this and the information and evidence we have available to us, our preliminary view is that that some sort of AFL USO needs to be in place for a further period.

[24] ComReg Document 05/70 and D9/05, *"Universal Service Requirements, Provision of access at a fixed location – connections to public telephone network and provision of functional Internet access",* 7th September 2005.
[25] ComReg Document 08/37and D02/08 *"Decision Notice – Response to Consultation on Eir's Universal Service Obligation- Quality of Service Performance Targets",* 28 May 2008.

4.2 Market Developments

55 As technology and competition develops, and as end-user needs evolve, our objective is to find the most appropriate approach to ensure that AFL is available to end-users throughout Ireland. We need to ensure that the services provided continue to meet end-users' needs, particularly if they are not already met by the market.

56 In Section 3 of Consultation 15/89, on the question of whether we need to sustain an AFL USO for the whole or parts of Ireland, we examined relevant market trends, (both supply and demand side) possible competitive constraints, and the potential impact, of the Government's NBP initiative over the next 5 years.

57 In relation to demand side trends, we identified:

- The growing attractiveness and take up of bundled services leading to increased fixed voice subscriptions.
- A decline in retail voice traffic, and increased use of VoIP services.
- Declining use of narrowband internet services.

58 With respect to bundled services, user demands are shifting toward greater bundling, with the uptake of triple and quadruple play increasing. The most common product bundled with Fixed Voice Access is fixed broadband.

59 Fixed voice traffic has been in decline for a number of years. Conversely, retail mobile voice traffic increased by 6% from Q1 2014 to Q1 2015. Although in decline, the volume of fixed calls exceeds 2.5 hours per month on average. Managed voice over broadband (**"VoB"**) minutes were found to account for approximately 12.2% of total fixed voice in Q1 2014.

60 We observed that with the development and take-up of broadband, narrowband internet subscriptions have been in decline for a number of years. At the current defined FIA rate of 28.8kbps,[26] the First TERA Report found that it takes 7.5 minutes to download a standard webpage.

61 In relation to supply trends, we identified that there are potentially different circumstances emerging in relation to supply side competitive conditions. In some areas, there is infrastructure-based competition (mainly from UPC/VM but also potentially from SIRO[27] and other NGA infrastructures) as well as competition from other authorised operators relying on LLU[28] and Line Share services. There is also some service-based competition based solely on Eir's copper local loop i.e., WBA[29] and SB-WLR.[30]On the mobile side, there are a number of operators with significant 3G coverage and who are gradually deploying 4G.

[26] Kilobits per second.
[27] A Vodafone/ESB joint venture fibre broadband company.
[28] Local Loop Unbundling.
[29] WBA.
[30] SB-WLR.

62 There are a wide range of suppliers and a growing number of infrastructure networks in Ireland. There are several types of infrastructure which are in principle capable of providing AFL. Operators have been investing in infrastructure over the last number of years, and this investment looks set to continue.

63 However, as the different infrastructures have different coverage, the competitive constraints with respect to AFL vary across the country. The First TERA Report identified 3 main competitive areas[31]:

- Areas with greater market-driven infrastructure-based competition including from Vodafone/ESB/SIRO or UPC/VM, (referred to in the rest of the report "market-driven infrastructure based competition areas")
- Anticipated NBP areas where a high capacity broadband access network would be made available through Government subsidies (referred to as "NBP areas");
- Areas where Eir faces no competition from any fixed infrastructure but could face competition from mobile networks providing fixed access solutions ("Eir only" areas) especially forward looking.

64 We considered the Government's NBP in relation to whether there is a need for an AFL USO. The Department of Communications, Energy and Natural Resources (the **"DCENR"**) is co-ordinating a State-led intervention to procure the delivery of high speed broadband in areas where service providers are unlikely to provide such services commercially.

65 We took into account the possible impact of NBP infrastructure on AFL USO, once it has been rolled-out and fully deployed, possibly post-2020. It is envisaged that with the NBP rollout, all end users will be able connect to a public communications network at a fixed location. In principle, a managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL US if it is affordable. If the NBP can deliver this the need for USO for voice AFL needs to be re-examined.

66 In Consultation 15/89 we asked the following questions with respect to demand and supply side trends:

- Do you agree with ComReg and TERA's review of the relevant consumer trends? Please give reasons to support your view.
- In your opinion are there other relevant factors in relation to consumer trends which ComReg should consider? Please give reasons to support your view.

[31] It is important to note that these 3 areas defined by TERA, are done so in the specific context of USO and especially by looking at the provision of competitive constraints on the provision of voice AFL. This analysis is therefore different from the analysis aimed at defining Larger Exchange Areas ("LEAs") conducted in ComReg Document No. 11/72 and in ComReg Document No. 13/14 in relation to Eir's obligation not to unreasonably bundle imposed in the Retail Fixed Narrowband Access Markets, in order to prevent margin squeeze. - LEA have been defined on the basis of 5 criteria and the presence of LLU or NGA in a given area is an important criteria. However, in the context of AFL USO, the presence of LLU and of NGA is less relevant. This is because LLU and NGA are rarely used for the provision of standalone voice services. As a consequence, the definition of LEA has not been considered further in this analysis.

- Do you agree with ComReg and TERAs review of the relevant supply side trends? Please give reasons to support your view.
- In your opinion are there other relevant factors in relation to supply side trends which ComReg should consider? Please give reasons to support your view.

4.2.1 Respondents' submissions

67 Submissions to the consultation were varied. Respondents generally agreed with our assessment of the supply trends.

Consumer Trends

68 Vodafone agreed with the analysis of relevant consumer trends and stated that: *"Customers with a demand for low volumes of voice are moving to prepaid mobile packages where they believe they have more control over their total spend"*. BT suggested that the supply of bundles appears to be well established.

69 UPC/VM and ALTO considered that we had not adequately accounted for the migration of voice traffic from fixed to mobile networks. UPC/VM stated that: "*This is particularly relevant because consumers are by choice increasingly using mobile telephones instead of fixed line telephones. This trend was illustrated by ComReg in Figures 4 and 5 of ComReg 14/26, which showed a sharp decrease in fixed call traffic corresponding with substantial increase in mobile traffic over the same time period.*" ALTO suggested that the supply of bundled services in Ireland remains limited.

70 UPC/VM and ALTO stated that 5% of end-users do not have mobile access and that we have not examined why this is so. UPC/VM and ALTO's view is that: *"It may, for example, be the case that mobile access is available to these end-users, but that they have simply chosen not to avail of a mobile service. Therefore, it cannot be assumed that this cohort of end-users rely on a fixed line for basic electronic communications services.*"

71 ALTO and UPC/VM did not agree it is generally accepted that substitution between fixed and mobile offers for either voice and or broadband is not yet effective. UPC/VM stated that: "*the EC, and NRAs, are increasingly recognising that mobile services represent a substitute for traditional fixed voice telephone calls. Similarly, UPC Ireland considers that mobile broadband can offer a suitable substitute for functional internet access."*

72 In relation to the investment being made by operators in the market Eir stated that: "*The forthcoming years will be of particular importance for the development of Ireland's communications sector.*"

73 Eir suggested in relation to our consumer research (from three and a half years ago) that it: "*is not acceptable that this research is being used to inform forward-looking decision making in 2015, the implications of which are proposed to carry through potentially to 2023, a full decade after the research".*

74 Eir stated that: *"TERA, and ComReg, appear to approach the subject of AFL USO from the perspective that so long as someone continues to consume fixed voice then the AFL USO remains necessary."* Further, regarding the statistic that 5% of end-users in Ireland have fixed access but not mobile access, Eir stated that: *"It is not appropriate to view the fixed only figure in isolation and hold this out as some form of justification for maintaining the USO as an obligation for a fixed line network operator. It is clear that Irish households have a preference for mobile phone access as their technology of choice for basic telephony services*."

75 Eir also stated that: "*fixed line voice is in rapid decline as consumers have moved to consume voice services from alternative platforms, primarily mobile and VOIP and that this well established trend will continue*."

Supply Trends

76 ALTO and BT generally agreed with the conclusion on the three main competitive areas and with TERA's conclusion that the review and data available does not give a completely accurate view of coverage. ALTO stated that: *"supply gaps maybe substantial and a USO obligation that requires services in these gaps to be provided may be too great in terms of network build and will not serve the customer or the operator. In such instances, the ubiquitous Eircom copper network for voice and Functional Internet Access –FIA, and at the rather low 28.8kbit/s threshold will still only serve customers. It is therefore clear to us, and we submit that the definition is too general for a definition of sub-geographic AFL as the investment required for other operators, such as ALTO members (and others) to may will more than likely be too great to reach sub-areas within the defined different competitive areas.*"

77 BT stated that: *"In practice there will be supply gaps as commercial operators will only invest where there is a return and the NBP is not yet finalised and even when finalised deployment will take several years. We therefore consider the definition at this time to be too general for a definition of sub-geographic AFL."*

78 BT stated that it: *"agree*[s] *with ComReg that it's more appropriate to regulate on what currently exists whilst maintaining the flexibility to incorporate change if necessary".*

79 BT also stated that: "*Other than for eir Group the supply side costs for future AFL are not yet known and nor is the supply mechanism, although the assumption appears to be voice and FIA delivered over a high speed broadband access where such access exists. It would thus be beneficial for ComReg to understand what the market would pay for voice over high speed broadband infrastructure."*

80 UPC/VM and ALTO noted that we had redacted some information that they believed respondents needed to have sight of Consultation. It is not clear to them why this information would be regarded as being commercially sensitive. In the interest of transparency, UPC/VM considers that this information should be made available to interested parties.

81 Eir suggested that although ComReg has extensive information gathering powers, the consideration of mobile coverage was based on publicly available information. Eir also stated that: *"having regard to the fact that, as ComReg accepts AFL may be delivered over wireless and mobile platforms and has been done in other EU States, ComReg's conclusion that mobile platforms are not suitable for AFL delivery "because of poor coverage of mobile services" is without any sound basis.* "

82 In relation to the three geographic areas as defined by TERA, Eir stated that: *"The fact that the definition of the three areas entirely ignores mobile … renders this analysis meaningless in the context of AFL USO. Whilst the three areas may be relevant regarding the universal provision of broadband in the State, they are irrelevant for these purposes as the subject of this review is AFL USO"*

4.2.2 ComReg's response

83 We have considered all of the submissions received in response to Consultation 15/89 and taken them into account.

84 With respect to supply trends, we note that the majority of respondents agreed with our proposals. Some submissions raised concerns about redacted information. We have evaluated this information in accordance with our guidelines on the treatment of confidential information – ComReg 05/24 and we have decided not to publish it.

85 Respondents' views on the availability of bundles vary widely, however, as reported in ComReg's **Q4 Quarterly Report**[32], over the last year there has been a decline in single play subscriptions (voice or broadband or TV only), from 43.9% in Q4 2014 to 39.5% Q4 2015, while double, triple and quadruple play's share of subscriptions continue to increase. However, the percentage of single play subscriptions (primarily voice) at 39.5% remains significant.

86 In relation to migration of voice traffic from fixed to mobile, we do acknowledge that retail fixed voice has been in decline for a number of years, while mobile voice calls have increased. However, as set out in the First TERA Report minutes originating from fixed networks still account for a significant share of the total traffic: 25% (see Figure 1). We note Eir's view that fixed line voice telephony is in decline. This is reflected in the Quarterly report referred to above. Fixed voice traffic in Q4 2015 was just over 1.09 billion minutes, a fall of 4.6% since Q4 2014. However, there was a 0.7% increase in Q3 2014 and a slight increase from Q2 to Q3 2015. Although fixed voice is in decline, it still exceeds an average of 2.5 hours per month.

[32] ComReg Document 16/17, *"ComReg Quarterly Report Q4 2015",* 10 March 2016.

87 ALTO and UPC/VM did not agree that substitution between fixed and mobile offers for either voice and or broadband is not yet effective. Our market analyses, in particular for the fixed voice access market[33] considering fixed mobile substitutability, found no strong evidence to suggest that fixed access and mobile access are currently sufficiently effective substitutes to merit inclusion in the same market. This view was based on an assessment of demand-side, as well as relevant supply-side factors. ComReg concluded that access provided by mobile telephony is outside the scope of the market mainly due to different quality, usage and pricing patterns. In respect of supply side factors, ComReg noted that the entry of mobile service providers into the FVA market reflects recognition on their part that consumers place a distinct value on mobile voice telephony as compared to fixed voice telephony and indeed, vice versa, for the fixed incumbent. This suggests a complementary relationship between FVA and mobile, rather than an effective degree of substitutability. In addition, the recent emergence of FVA and mobile being offered in bundles also suggests that end-users place a distinct complementary value on these services, rather than considering them to be substitutes. The European Commission accepted our market analyses in this regard.[34] The Market analyses were fully considered by TERA Consultants and in their view, they remain valid.

88 Eir stated that: *"TERA, and ComReg, appear to approach the subject of AFL USO from the perspective that so long as someone continues to consume fixed voice then the AFL USO remains necessary."* We strongly disagree with this. The Universal Service Regulations, require us to ensure that any reasonable request for connection at a fixed location is satisfied and is provided at an affordable price and quality. If this is not satisfied by the market then we **must** designate USP(s) to ensure that reasonable requests are satisfied.

89 We also disagree with Eir when it states that: *"…the definition of the three areas entirely ignores mobile."* In Consultation 15/89, we were clear, irrespective of fixed mobile substitutability and in respect of technological neutrality, that mobile technology could be used to provide AFL, but that it has some limitations e.g. indoor coverage, end-users' preference for fixed solutions, and, in limited cases, affordability.

[33] ComReg document 14/89 paragraph 4.21 to paragraph 4.155.

[34] European Commission in its Explanatory Note to the draft Recommendation considered:
"*Although mobile networks can, to a large extent, replicate the offers from fixed networks, providing end customers with offers which are similar to fixed networks, access via the mobile network is presently not considered in general by NRAs as substitutable with access to the public network at a fixed location. While the percentage of mobile-only households is continually increasing in the Union, a majority of customers still takes both fixed and mobile subscriptions. Further, the coverage and perceived quality of calls on the mobile networks still differ geographically and over time, also affected by the number of simultaneous users in the network. These elements would seem to indicate a greater degree of complementarity than of substitutability between these products in most Member States at the present time*."

90 Having regard to the First TERA Report, we considered the different infrastructures which have the capability to provide AFL, both fixed wired infrastructures and wireless infrastructures (including 3G and 4G mobile networks). We noted that these infrastructures have different coverage and the competitive constraints with respect to AFL are likely to differ throughout the country. The First TERA Report also noted that the significant mobile coverage is outdoor and not indoor, but that over time it is envisaged that mobile technologies will likely generate greater competitive constraints on AFL.

We have collected further information from the mobile operators regarding indoor and outdoor coverage, by technology and by population, and geographic location. Indoor and outdoor coverage levels can often vary substantially Population coverage may deteriorate indoors (compared to outdoors), depending on the technology (2G or 3G) and the network operator.

91 Other factors further impact indoor mobile performance, including handset capabilities and building materials. However, in some cases technical solutions are available that can mitigate these problems. We consider in detail the issue of mobile networks as an alternative to fixed networks AFL connections in Chapter 6.

92 We are satisfied that the demand and supply trends described and which were taken into account as part of Consultation 15/89 still reflect the current market situation, notwithstanding the further evidence we gathered from mobile operators.

4.3 The proposed need for AFL USO

93 The following section provides a summary of the proposals in Consultation 15/89.

94 We proposed that absent an AFL USO, certain groups of end-users may not have access to an electronic communications network and voice services at a fixed location, at an affordable price, delivered with a specified quality.

95 We asked if there was a need to sustain the USO for AFL in the whole or parts of Ireland. We examined market trends and their likely evolution, NBP developments, and other relevant factors, including developments in relation to USO elsewhere in Europe.

96 We examined the likely scenarios if there was no AFL USO and whether over the next 5 years, the requirements of AFL would be fulfilled. These scenarios considered the impact on reasonable access requests, QoS, affordability, FIA, and other obligations such as those in relation to the terms and conditions of service.

97 In Consultation 15/89 we observed that over the last number of years there has been a gradual decline in retail public switched telephone network ("**PSTN"**) fixed voice access subscriptions and retail voice traffic.

98 We recognised that the AFL USO needs to evolve with the changing digital environment. Technological and market developments indicate that end-users' main interests may be shifting, with broadband and mobile solutions (often in bundles) increasingly in demand. Take up of broadband is increasing, dial-up internet is used by only a very small number of end-users, and bundled voice and broadband is driving some migration to VoIP. In addition, there is some substitution of mobile for fixed voice telephony.

99 Due to technological developments, alternative access networks may become alternatives in the view of end-users and thus, fixed telephony needs may be met by the market in various ways. The general trend towards bundles suggests that many end-users value the additional features of broadband. A managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL USO, if provided at an affordable price.

100 Having considered each of the various AFL components, we were of the preliminary view that there is a risk that, left to the operation of market forces alone, access to services mandated by the Universal Services Directive may not be provided to everyone irrespective of location, at an affordable price and appropriate quality. As technology and competition develops, and as end-users' needs evolve, it is our duty to ensure that the AFL USO continues to meet their reasonable requests for basic voice telephony, if they are not already being met by the market.

101 Having considered the First TERA Report and the other information available to us, we were of the preliminary view that without any AFL USO, and at least until the NBP is and fully deployed, there is a real risk that the basic voice telephony service might not be delivered to all end-users (or may not be delivered at an affordable price or acceptable quality).

102 Therefore, we have formed the preliminary view that we may need to impose some kind of AFL USO(s), in order to fulfil our statutory mandate. Consultation 15/89 noted that demand for fixed telephony in the short to medium term continues to be significant and fixed voice subscriptions have been increasing quarter on quarter since Q1 2011. This indicates to us that it remains likely that end-users will continue to need AFL.

103 Consultation 15/89 asked the following questions regarding the need for an AFL USO:

- Having considered the TERA Report and ComReg's consultation, in your opinion are there other factors with respect impact of not having AFL USOs or in respect of the need for an AFL USO and/or the associated AFL components that ComReg should consider at this time? Please give reasons to support your view.
- Do you agree with ComReg and TERA's view of the risks to universal, affordable and quality AFL in the absence of any USO? Please give reasons to support your view.
- Do you agree with ComReg's preliminary view that having regard to each of the various AFL components that some kind of AFL USO continues to be required post 31 December 2015? Please give reasons to support your view.

4.3.1 Respondents' submissions

104 Three respondents, ALTO, BT, and Vodafone, agreed with our preliminary view that some kind of AFL USO continues to be required, and Vodafone suggested it would continue to be required up until the implementation of the NBP.

105 BT and Vodafone agreed with ComReg and TERA's views about the risks to universal, affordable, and quality AFL, without any USO.

106 BT agreed that without AFL USO, many end-users would not be served and stated that it: *"…would have a significant doubt that customers in rural areas would receive reasonable repair times for faulty services. We note the difficulty the industry has had agreeing improved SLAs with eir Group and believe this would also apply to the USO given the opportunity."*

107 ALTO disagreed with our review of the impact of not having AFL USO and stated that: *"ComReg may have overstated the risks to universal, affordable and quality AFL in the absence of any USO."* However, ALTO also noted "…*with interest Eircom's persistent reluctance to agree improved SLAs with operators and we believe this should and would also apply to the USO given the opportunity*."

108 ALTO and BT suggested that competitive infrastructure is not yet in place in many areas of Ireland and without USO obligations on Eir, no other network could fulfil the USO fully.

109 Eir did not agree that AFL USO continues to be required. Eir stated that: *"…the analysis undertaken by ComReg and TERA is inadequate and insufficient and cannot as such justify the imposition of "some kind of AFL USO" post 31 December 2015."* Eir did not agree *"with the ComReg/TERA view of the risks in the absence of any USO."* Eir also detailed its views on each element of the USO AFL.

110 UPC/VM stated that: "*ComReg has overstated the risks to universal, affordable and quality AFL in the absence of any USO. This is because ComReg has not adequately accounted for reductions in the cost of providing basic services to consumers available through the use of mobile networks*." Further UPC/VM stated its view that "*ComReg has not provided evidence demonstrating the need for the continued need for a USO…. a more robust analysis by ComReg is required."*

111 UPC/VM disagreed that, there is currently no other mechanism in place (apart from the AFL USO) to ensure that basic voice telephony is provided at a fixed location to everyone who requires it. UPC/VM suggested that AFL USO will only be required if there are end-users who would not otherwise obtain access at a fixed location. UPC/VM stated that: *"Given the continued and ongoing fixed and mobile infrastructure investment across less populated regions of Ireland, it is unlikely that the AFL USO will continue to play an important role in the future."*

112 UPC/VM disagreed with our: *"…apparent inclusion of 'less economic customers' within the USO.UPC Ireland considers that there is no basis for including 'less economic customers' within the scope of a USO. Any customer that generates a positive economic return should, by definition, be excluded from USO claims for funding."* UPC/VM suggested that information on the number of new customers that Eir would deem uneconomic (and therefore not serve) for the next 5 years should be published.

113 Other respondents commented on related issues e.g. GAP and QoS (which we mention further below).

4.3.2 ComReg's response

114 We strongly disagree with Eir's concerns that our analysis is inadequate and insufficient.

115 The First TERA report and Consultation 15/89 considered the counterfactual of there being no USO in detail. There is a sound evidentiary basis for our view that without a USO AFL end-users would either be underserved, or not served at all. The worst impact would be felt by end-users without alternative access or PATS, who would otherwise depend on a USP.

116 In relation to UPC/VM's view that the use of mobile networks may reduce the cost of providing a USO, the use of these networks is considered in our proposals, which take into account the presence of an adequate mobile service, for the purpose of a request being deemed a reasonable one or not (see Chapter 6). A USP may use mobile and other technologies to provide solutions which will satisfy reasonable requests for connections and PATS at a fixed location.

117 We consider that in the longer term the NBP and commercial investment has the potential to meet the needs of basic voice telephony, absent regulation. Nonetheless, we must emphasise that without the AFL USO, there is no other way for us to guarantee that a reasonable request for voice telephony will in all cases be fulfilled, without AFL USO and under normal market conditions.

4.4 ComReg's Preliminary View

118 There is a continued demand for standalone fixed voice telephony. Reasonable requests for this must be satisfied by at least one undertaking. We must consider whether the AFL would be delivered absent a USO and we **must ensure** that the universal right is delivered to end-users in Ireland.

119 The USO ensures the provision of basic telecommunication services in uneconomic areas of the State and contributes to social and economic inclusiveness and cohesiveness. We are still of the preliminary view that there continues to be a need for AFL USO, for at least the next 5 years. We are unpersuaded by respondents' arguments to the contrary.

120 Demand for fixed telephony in the short to medium term continues to be significant. At the end of December 2015 there were 1,475,327 fixed voice subscriptions in Ireland, a decrease of 0.7% since the last quarter and a decrease of 3.2% since Q4 2014.[35] Due to technological convergence, alternative access networks may become alternatives for end-users and thus, voice telephony at a fixed location may be met by the market in various ways. A significant cohort of end-users do not have/utilise a fixed broadband connection. For these end-users, broadband with managed VoIP is unlikely to provide an alternative to their basic fixed voice telephony service, until the NBP is fully deployed. A potential set of "vulnerable" or "captive" end-users exists in Ireland – approximately 39.5% of fixed line subscriptions are single play.

121 Our survey results also indicate that certain end-user types (the elderly, family households and businesses) remain more attached to fixed access services. They are more likely to need AFL. This suggests to us that non-price factors may be important drivers of the demand for fixed voice access ("**FVA**").

122 We have good evidence that there are fixed voice end-users that Eir would not serve if it were not required by regulation to serve.[36] The costs for uneconomic areas and uneconomic end-users may be more expensive than others. Without a USO, it is possible that no undertaking would serve these.

123 Despite our previous requests, we have also received no expressions of interest from operators who wished to be considered for designation as a USP. This in our view is good evidence of an unwillingness on the part of operators to be USPs.

124 No new evidence has been provided to us that suggests our preliminary views on the counterfactual are no longer valid. Left to the operation of market forces alone, access to services mandated by the Universal Service Directive may not be provided to everyone, irrespective of location, at an affordable price, and appropriate quality.

125 Further, some end-users may be connected only on the basis of alternative technologies which may not be able to provide FIA. Without AFL USO Eir might even choose to increase line rental prices. QoS could also deteriorate significantly.

126 A **complete** withdrawal of the existing USOs would need to be undisputed. There would need to be assurances that AFL services would be delivered in the future at an affordable price and appropriate quality throughout the State without any obligation in place. We remain of the view that an AFL USO continues to be required, at least until the new NBP infrastructure is fully completed.

127 However, we are proposing to change certain aspects of the current AFL USO(s) taking account of current market trends and likely future developments. In relation to voice, this would mean fewer obligations on Eir, with increased flexibility to facilitate investment, while ensuring the AFL USO.

[35] ComReg Quarterly Report Q4 2015, ComReg Document 16/17, 10 March 2016.
[36] Eir's USO funding applications indicate that this is the case.

Q. 1 Do you have any further submissions on our preliminary view that there is a continued need for an AFL USO for the period commencing 1 July 2016? Please give reasons to support your view.

5. Functional Internet Access

128 To date, availability of broadband has been delivered by the commercial sector, supplemented by Government schemes which include the National Broadband Scheme ("NBS") and the Rural Broadband Scheme ("RBS"). The NBS objective was, as defined by DCENR, *"to deliver broadband to certain target areas in Ireland in which broadband services were deemed to be insufficient".* The RBS scheme was designed to enable the provision of basic broadband to rural premises which were not capable of obtaining a service from a commercial operator.[37] In the light of these schemes, ComReg did not consider it necessary to specify FIA obligations related to basic broadband.

129 With current usage patterns, many end-users need faster data speeds to carry out standard internet functions. The speed they may need is likely to increase as their usage patterns become more demanding. However, the NBP and commercial deployment of NGA networks are expected to deliver such data speeds. At this time, we consider it unlikely that it will be necessary to specify FIA requirements for connections at fixed locations within the NBP intervention area, since affordable connections of appropriate speed and quality are planned to be available at all premises in the intervention area as a result of the NBP. However, we may need to specify USO FIA requirements for connections at locations *outside* the NBP intervention area if it transpires that commercial deployment cannot ensure that all reasonable requests for affordable connections of appropriate speed and quality are met by at least one undertaking at all premises outside the NBP intervention area.

130 Our preliminary view is that it is premature at this time (prior to July 2016) to consult on the need for fast broadband FIA requirements at locations outside the NBP intervention area. The completion dates for the commercial investment plans that operators provided to the Government in the NBP mapping process have not yet passed, and we are not currently in a position to evaluate whether affordable connections of appropriate speed and quality are sure to be made available at a sufficient level outside the intervention area DCENR has stated that it is monitoring the commercial rollout plans of operators on an ongoing basis to ensure that services are delivered in line with commitments made by operators. We propose to revisit the issue of fast broadband FIA requirements and whether to designate one or more USPs to deliver them in the light of any output from the DCENR monitoring process. In the meantime we are continuing to collect and analyse information about usage patterns and planned and actual commercial broadband deployments.

131 For the immediate future, our preliminary view is that FIA requirements should be maintained to ensure that basic broadband is not withdrawn from current users, pending the availability of higher speed services.

132 This section is structured as follows:

[37] For further details see http://www.dcenr.gov.ie/communications/en-ie/Broadband/Pages/Closed-Schemes.aspx

5.1 Current FIA Obligation – we summarise the current FIA obligations.

5.2 Consultation 15/89 – we discuss internet access market trends, the findings of Consultation 15/89, the First TERA Report, respondents' submissions, and our responses to them.

5.3 ComReg's response, setting out our observation that functional internet access likely requires increased speeds, and our view of the role of FIA obligations in ensuring universal availability of connections that support these speeds

5.3 Objectives and options for the short-term – we set out our preliminary view that it is premature to specify FIA requirements that require broadband at this time (by July 2016), and we propose to retain the status quo until it is appropriate to carry out and conclude a review.

5.1 Current FIA Obligation

133 Under the Universal Service Regulations a designated undertaking must ensure that a connection is capable of supporting data communications at data rates that are sufficient to permit FIA, having regard to the prevailing technologies used by the majority of subscribers and to technological feasibility.

134 Under Decision D9/05 the USP must adopt 28.8kbps as a reasonable minimum data rate. The USP must take the utmost account of ComReg's guidelines in this regard when planning network build, providing individual connections to the network, and when responding to requests to address service quality. The guidelines in Decision D9/05, specify that 94% of installed connections must be capable of this minimum data rate.

135 Under Decision D9/05, the USP must provide us with quarterly reports on its performance in relation to this target. Where an end-user has doubts about his line capability, the USP must provide a written statement stating the data carrying capability of a connection. The USP must use all reasonable endeavours to address issues with individual connections where the capability is found to be below the reasonable minimum data rate of 28.8 kbps.

5.2 Consultation 15/89

136 With the development and take-up of broadband, narrowband internet subscriptions have been in decline for a number of years. This trend continued in Q4 2015 with only 4,202 narrowband internet subscriptions, a decline of 33% (from 6,238) since Q4 2014.[38] Most fixed internet subscriptions are broadband. Narrowband end-users are not spread evenly throughout the country, but tend to be located in the remotest and smallest exchange areas.

[38] Q4 Quarterly Report.

137 Average web page sizes have increased dramatically since the 28.8kbps rate was set in 2005. With a 28.8kbps connection, it takes almost 7.5 minutes to download a standard webpage. We note the relevance of these points in the context of an AFL USO, where possible alternatives to dial-up internet access at a fixed location may be limited, non-existent or not affordable. While a requirement to support dial-up speeds might only be relevant to an ever decreasing number of end-users, it may still play an important role for those who do not have access to any alternative internet access services. Nonetheless, dial-up internet access appears to provide only very limited value for end-users.

138 We note the Government's NBP initiative to advance the rollout and availability of high speed broadband throughout Ireland. The DCENR is co-ordinating a State-led intervention to procure the delivery of high speed broadband in areas where service providers are unlikely to provide such services commercially. The implementation of the NBP is the responsibility of the Minister and the DCENR.

139 Section 6 of Consultation 15/89 described what we consider to be the relevant functionalities and characteristics of alternative technologies by which an AFL type service can in principle be supplied. The majority of connections to Eir's network are copper connections. However, alternative technologies are available which can provide voice telephony but not internet access at 28.8 kbps. For example Eir also uses Fixed Cellular Solution (**"FCS"**) which is not capable of dial-up internet access at 28.8 kbps, but is capable of voice and facsimile.

140 Consultation 15/89 considered the impact on end-users absent a USO in respect of FIA. It noted that although, absent a USO, it is possible that with Eir's current narrowband Internet access, end-users would still be able to get dial-up internet access. We were concerned that there is a chance the removal of FIA minimum data rates (and targets) may result in a number of connections (currently capable of dial-up access) being replaced, for example in the event of a fault on the line, with connections which do not have the same capability. It is also likely that for certain new end-users, other technologies (such as FCS) which are not capable of providing internet access would be rolled out, at least in the short term.

141 In areas where there is infrastructure based competition, the removal of FIA from the USO is less likely to have an impact on end-users. They are already able to get better internet speeds (subject to affordability).

142 Further, end-users in Eir only areas are likely to be most impacted without a FIA USO. These end-users may not have, or continue to have, a connection capable even of dial-up internet access.

143 The First TERA Report indicated that:

- Where Eir's narrowband Internet access platform exists, Eir is likely to maintain this platform over the next 5 years.

- Eir currently provides a data rate of 28.8 kbps to more than 94% of installed telephone lines.

- Absent any AFL USO, while Eir is likely to maintain its voice, facsimile and dial-up internet core platforms, it is also likely that Eir would not use its copper access network in some areas because the copper access network could be too expensive to maintain.

144 The First TERA Report noted that without a USO, some end-users may be able to get internet access through alternative infrastructures. However, due to limited network coverage or affordability issues for example, a certain cohort could remain without any internet access in the absence of a USO.

145 We also considered how requirements for FIA are set throughout the EU and the First TERA Report benchmarked a number of countries. A number of countries have also set minimum FIA data rates, however, the rate for some countries is up to 1Mbps, ─ substantially higher than the 28.8kbps in Ireland.

146 We have previously proposed that we should not alter the required data rate to a rate necessary to deliver broadband as a USO at the current time, because of market developments and State-led intervention.

147 In Consultations 14/48 and 15/89, we sought views from respondents on these issues. Consultation 14/48 asked stakeholders, whether, in the context of the future scope of AFL, they agreed with our preliminary view that it is not appropriate to alter the requirements specified in relation to FIA. It also asked whether in the context of the future scope of AFL, if respondents agreed with our preliminary view not to include Broadband in the scope of the AFL USO. We received 4 responses.[39]

148 In Consultation 15/89 we noted that under current regulatory obligations and until the NBP is fully deployed, some end-users are still unable to get even dial-up internet access from the USP. Where there is infrastructure based competition, the removal of FIA from the USO is less likely to have an impact on end-users. They are already able to get better internet speeds (subject to affordability).

5.2.1 Respondents' submissions

149 Some respondents agreed it is not appropriate to change the FIA requirements. Others suggested that FIA should be set at a higher speed. In some instances, respondents' views changed between 2014 and 2015.

150 In response to Consultation 14/48 Eir suggested that FIA should exclude broadband because of the NBP and the decline in the narrowband internet connections. Eir questioned: *"…why ComReg is seeking to maintain a narrowband internet access USO when other Government initiatives...should guarantee basic broadband internet access for all.*" Eir suggested that the continuance of FIA as the specified target has implications in terms of investment.

151 Eir also stated that: *"It is unlikely that eircom would rationally install an alternative technology solely for the provision of out of date narrowband services for premises already connected to the network. Even if it did do so with a technology that did not support FIA then the requirements of the USD as defined in Ireland would be met."*

[39] http://www.comreg.ie/_fileupload/publications/ComReg1448s.pdf

152 However, in its response to Consultation 15/89 Eir stated that: "*There would appear to be an objective basis for FIA to be set at a speed of at least 2Mbps (as enjoyed by the vast majority of subscribers) and if there is an affordability issue then targeted tariff interventions could be considered. However such initiatives are not without cost and associated benefits. No attempt has been made by TERA or ComReg to quantify the socio economic costs and benefits."*

153 Further, Eir stated that it undertook some analysis which: *"…demonstrates that over 80% of dial-up usage is by businesses and is of a short duration (less than 2 minutes) suggesting that dial-up internet is primarily being used for legacy business processes such as electronic payment systems....This calls into question the proportionality of mandating a USP to maintain a national network for a service that is in terminal decline and already statistically insignificant*."

154 In response to Consultation 14/48, UPC/VM agreed that if AFL USO is maintained, FIA should not be altered, because: *"…there are a number of initiatives already underway by both the public and private sectors which will dramatically improve universal access to broadband services in Ireland in the near future.*" Further UPC/VM agreed that broadband should not be included, either now or in the near future, noting that: *"Further to the Government's investment in the National Broadband Plan, speeds of up to 30Mbps will be universally available in Ireland in the very near future. This combined with existing and planned investments by the private sector, negates the need to consider the inclusion of broadband in the AFL USO designation."*

155 In its response to Consultation 15/89, UPC/VM stated that: *"…the NBP will ensure universal access to internet services going forward, thereby superseding the requirement for a Functional Internet Access ('FIA') USO obligation. UPC Ireland notes that attempting to address FIA within the USO, concurrent to the implementation of the NBP, would be unwieldy and could lead to inefficiency and duplicative funding of broadband networks."*

156 In its response to Consultation 14/48 Magnet did not agree that it is appropriate to maintain the FIA because dial up access is redundant, and that: *"…functions that people want to do on the internet require a minimum of 2MB."* Magnet was concerned that alternative technologies developed by USP will in time be overbuilt by the broadband plan and this, in the short to medium term, would be a waste of money. Magnet stated that *"…the USP should be designated to provide functional broadband at a rate of any new access request should not only get a voice service but also broadband connectivity that is a minimum of 2MB without the RAT threshold being increased. Magnet believes that 2mb broadband can be supplied within the RAT Threshold."* Magnet does not agree with the non-inclusion of broadband within the AFL USO scope.

157 In its response to Consultation 15/89 BT stated that: "*Whilst the stated aim of the NBP is much higher than the achievable FIA, the State has not yet finalised their project coverage and development could take many years. We therefore believe it is difficult to factor this into the USO at this time other than to monitor developments.*"

158 In its response to Consultation 14/48, ALTO did not agree that it is appropriate to maintain the current FIA regime and did not agree with the non-inclusion of broadband. ALTO is of the view that: *"…any USP should be designated to provide functional broadband at a rate of any new access request should not only get a voice service but also broadband connectivity that is a minimum of 2MB without the RAT threshold being increased."*

159 In its response to Consultation 15/89, ALTO stated that: *"Increasing the 28.8kbit/s is a significant challenge. ALTO has remarked to ComReg and stated publically that the requirement to have Internet and broadband considered services within the USO is highly questionable and that it may require a re-build of the local access network (this appears to run contrary to some of both ComReg's and TERA's assumptions). In many areas this has already happened in the form of Broadband and high speed broadband and this is also a requirement of the NBP programme 30 Mbits to all. Given the stated aim of the NBP much higher FIA should be achievable in the coming years but it could not be met today."*

5.2.2 ComReg's response

160 We note the respondents' varying views as set out above and that in some cases the views have changed since 2014. We have taken respondents' submissions into account in our preliminary views.

161 We consider it useful to consider two issues separately:

- What data speeds may be required to support FIA?
- What role could USO requirements specified in relation to FIA play in ensuring universal availability of connections support the required data rates?

What data speeds may be required to support functional internet access?

162 As set out above the current obligation is that connections should support data communications at a minimum data rate of 28.8kbps. The First TERA Report noted that when we set the minimum data rate in 2005, the average size of a web page was circa 180 kilo bytes (KB). With a 28.8 kbps connection, it was taking 50 seconds to download a web page. In July 2014, the average size of a web page is circa 1,600 KB. With a 28.8 kbps connection, it takes 7 minutes and 24 seconds to download a webpage (assuming 28.8 kbps is fully available during the whole download period of time).

163 Since 2005 there have been substantial changes in how end-users use and access the internet, and the speeds available.

164 To date, availability of broadband has been delivered by the commercial sector, supplemented by Government schemes which include the National Broadband Scheme ("NBS") and the Rural Broadband Scheme ("RBS"). The NBS objective was, as defined by DCENR, *"to deliver broadband to certain target areas in Ireland in which broadband services were deemed to be insufficient".* The RBS scheme was designed to enable the provision of basic broadband to rural premises which were not capable of obtaining a service from a commercial operator.[40]

165 According to ComReg's Q4 2015 quarterly Report[41], there were 1,708,787 broadband subscriptions in Ireland. Using fixed residential broadband subscriptions only, 1,138,688 (i.e. excluding business subscriptions and mobile broadband subscriptions), the estimated fixed broadband household penetration rate as of Q4 2015 was 66.8%. This shows that fixed line services continue to be chosen by a significant majority of households in the State. It also outlines Ireland's household broadband (both fixed and mobile are included) penetration rate, at 83%, is higher than the EU28 average of 80%.

166 According to the Q4 2015 Report, there was an increase in total fixed broadband subscriptions in Q4 2015 (up by 1.2%), but mobile broadband subscriptions fell again in Q4 2015 (down by 18,758 subscriptions).[42]

167 The same report indicated that average fixed broadband speeds offered continue to increase. In Q4 2015, approximately 68.7% of all fixed broadband subscriptions were equal to or greater than 10Mbps up from 63.8% in Q4 2014. 56.1% of all fixed broadband subscriptions were equal to or greater than 30Mbps, up from 45.4% in Q4 2014.

168 Figure 1 shows Fixed Broadband Subscriptions by Advertised (Headline) Download Speeds and Subscription Type.

[40] For further details see http://www.dcenr.gov.ie/communications/en-ie/Broadband/Pages/Closed-Schemes.aspx

[41] ComReg Document 16/17 FULL REF IN ITALICS, X MONTH YEAR

[42] ComReg reports active dedicated mobile broadband subscriptions and does not include internet access over mobile handsets (such as smartphones) in these numbers.

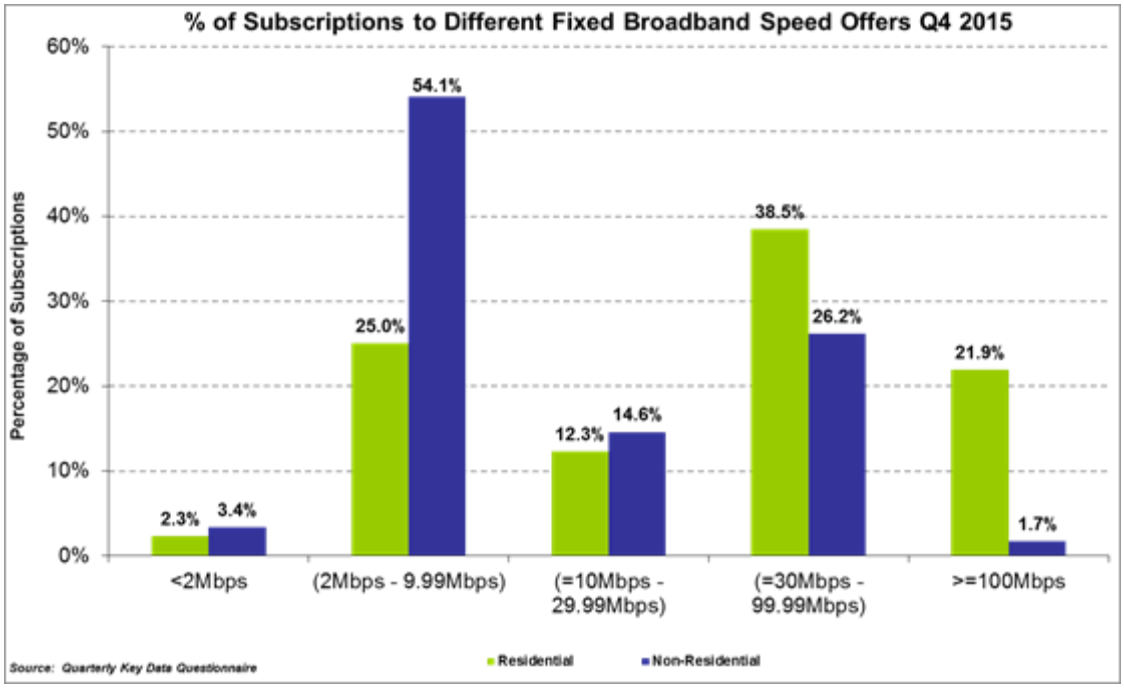


Figure 1 – Q4 2015- % of Subscriptions- Fixed Broadband Speed Offers

169 This illustrates the breakdown of broadband subscriptions by advertised (headline) speed across all fixed broadband platforms (mobile broadband is excluded). In total, approximately 56.1% of broadband subscriptions were >=30Mbps (with 19.3% >=100Mbps). This equates to approximately 60.4% (21.9% >=100Mbps) of residential subscriptions and 27.9% (1.7% >=100Mbps) of business subscriptions.

170 The data suggests that most business users subscribe to broadband services with advertised download speeds of between 2Mbps - 10Mbps, while most residential users subscribe to broadband services with speeds of between 30Mbps - 100Mbps. This may be due in part to UPC/VM primarily serving the residential market, rather than the business market. Many larger business users access their broadband services over dedicated leased lines. Leased lines are not included in these charts. Leased line speeds can range up to speeds in excess of 1 gigabyte per second.

171 However, consumer experience suggests that the headline or advertised speeds for broadband services may not be the actual speeds that they experience. There are many factors that can affect broadband speed, some of which have to do with the conditions inside the house (the internal environment at the end-user's home). Some factors are dependent on the technology used to deliver your connection, while others affect all types of broadband connections.

172 What FIA should be depends on what data speeds are necessary for commonly used applications to function correctly. Commonly used applications today include e-mail, web browsing, phone calls, watching videos, gaming, working from home, uploading content to social media, and online shopping. It is also necessary to take account of the possible presence of more than one simultaneous internet user at a fixed location.

173 Netflix[43] recommend the following Internet download speed per stream for playing movies and TV shows through Netflix.

- 0.5 Megabits per second - Required broadband connection speed.
- 1.5 Megabits per second - Recommended broadband connection speed.
- 3.0 Megabits per second - Recommended for SD quality.
- 5.0 Megabits per second - Recommended for HD quality.
- 25 Megabits per second - Recommended for Ultra HD quality.

174 The bandwidth required by Skype[44] depends on the type of calls you want to make. The table below, provided by Skype, sets out the minimum download and upload speeds required, as well as the recommended speeds for best performance.

Call type	Minimum download / upload speed	Recommended download / upload speed
Calling	30kbps / 30kbps	100kbps / 100kbps
Video calling / Screen sharing	128kbps / 128kbps	300kbps / 300kbps
Video calling (high-quality)	400kbps / 400kbps	500kbps / 500kbps
Video calling (HD)	1.2Mbps / 1.2Mbps	1.5Mbps / 1.5Mbps
Group video (3 people)	512kbps / 128kbps	2Mbps / 512kbps
Group video (5 people)	2Mbps / 128kbps	4Mbps / 512kbps
Group video (7+ people)	4Mbps / 128kbps	8Mbps / 512kbps

175 In general, the speed required by end-users is highly dependent on the use and the number of devices in use at any one time - high usage with a number of devices in use would require much higher speeds.

176 Taking account of the above use cases, we are of the view that access at dial-up speeds cannot be regarded as functional and that many users have needs that could be met only by speeds considerably faster than basic broadband. We are not yet in a position to propose a specific speed that might be included in a possible future FIA obligation. However we note that more than half residential end-users currently have speeds greater than 30 Mbps (and that this proportion is growing), that over two-thirds of residential users have speeds greater than 10 Mbps, that demand for narrowband Internet is very low, and that many private operators have announced over the last few years (and again, more recently) that they will provide speeds greater than 30 Mbps to a significant proportion of the population.

[43] https://help.netflix.com/en/node/306
[44] https://support.skype.com/en/faq/FA1417/how-much-bandwidth-does-skype-need

177 We are very keen to receive submissions views from all interested parties on the minimum data speed that should be regarded in future as necessary to support reasonable requirements for FIA.

What role could USO requirements specified in relation to FIA play in ensuring universal availability of connections support the required data rates?

178 In considering what requirements it may be proportionate to specify in relation to FIA, we take into account the services and technologies currently available, as well as planned State interventions and commercial investments.

179 In the NBP area, the planned State intervention is intended deliver access to broadband at minimum download speeds of at least 30 Mbps at all premises in the intervention area. We take the preliminary view that once the NBP has been fully deployed in an area, then reasonable requests for FIA in that area will be met as a result of the NBP and it would not be necessary for us to specify FIA requirements in that area under the USO AFL regime.

180 Outside the NBP intervention area, the industry is investing in high speed services. For example, Eir has announced it has passed 1.3 million premises with broadband with speeds of up to 100Mb, as part of its planned rollout to reach 70% of the country by the end of 2016. UPC/VM, who operate mainly in large urban areas has the largest cable TV network in Ireland and 504,000 end-users. SIRO is investing €450 million in building Ireland's first 100% fibre-to-the building broadband network. Mobile operators are also upgrading their networks and rolling out enhanced product offerings. As a result, end-users are beginning to benefit from significantly faster broadband speeds.

181 Although commercial operators have indicated to the Government that they will roll out NGA networks outside the NBP intervention areas, we may need to specify USO FIA requirements for connections at locations *outside* the NBP intervention area if it transpires that commercial deployment cannot ensure that all reasonable requests for affordable connections of appropriate speed and quality are met by at least one undertaking at all premises outside the NBP intervention area

182 Our preliminary view is that it is premature at this time (prior to July 2016) to consult on the need for fast broadband FIA requirements at locations outside the NBP intervention area. The completion dates for the commercial investment plans that operators provided to the Government in the NBP mapping process have not yet passed, and we are not currently in a position to evaluate whether affordable connections of appropriate speed and quality are sure to be made available at a sufficient level outside the intervention area DCENR has stated that it is monitoring the commercial rollout plans of operators on an ongoing basis to ensure that services are delivered in line with commitments made by operators. We propose to revisit the issue of fast broadband FIA requirements and whether to designate one or more USPs to deliver them in the light of any outputs from the DCENR monitoring process and in light of market developments generally. In the meantime, we are continuing to collect and analyse information about usage patterns and planned and actual commercial broadband deployments.

183 The following section sets out the regulatory options available to us in the short term (by July 2016) and our preliminary views in this respect.

5.3 Objectives and options for the short term

184 Although, we are of the preliminary view that, it would not be appropriate at this time to specify FIA requirements with the objective of ensuring availability of fast broadband connections either inside or outside the NBP intervention area, we nevertheless take the preliminary view that some sort of FIA requirement should continue to be specified in the near-term.

185 While dial-up services are no longer functional for the majority of end-users, we are concerned that users who currently use basic broadband, should not have the service withdrawn pending the availability of higher speed services.

186 In this context, we consider two options for the near-term FIA requirements commencing July 2016:

- Maintaining the existing requirement that 94% of lines should support speeds of 28.8 kbps, and
- Replacing the existing requirement with a requirement that premises currently served with connections that are capable of basic broadband should continue to be served with connections that support basic broadband or higher speeds.

5.3.1. Option 1 – to maintain the current minimum FIA data rate and target

187 One option is to maintain the current minimum data speed and target. This would limit the USP's ability to replace copper connections with FCS with the result that end-users who currently have and use either dial-up or basic broadband over copper would lose their ability to access the internet.

188 However, this approach would not absolutely ensure that all end-users receiving basic broadband on copper connections would continue to enjoy this service, as the USP might have flexibility within the targets to replace some copper lines with FCS.

189 If we were to maintain the current minimum data rate, we do not see any advantage in changing the target percentage of lines that are served with this rate. Any increase might only increase coverage of dial-up access, which is of very limited value. A decrease would lead to greater risk of end-users losing basic broadband as a result of replacement of copper connections with FCS.

190 However, if we were to maintain the current minimum data rate, we are of the view that we should set separate targets for existing connections and new connections, with a lower target for new connections. This would give the USP more flexibility in deciding how to provide new connections, and it would also prevent the USP from using good quality connections to new buildings to offset replacement of existing copper connections with FCS.

191 This option also has the (minor) advantage of protecting the small number of users who are still using dial-up services.

5.3.2. Option 2 – Require the continuance of basic broadband connections targets.

192 This option would require the USP to continue to provide connections capable of basic broadband (i.e. at speeds of 1 Mb/s or higher) to premises where it had once been available, except with ComReg's consent.

193 This option would require the USP to repair any faults necessary to restore broadband access that meant that basic broadband was no longer provided, but it would not require the USP to ensure there was no degradation in speed at all. In our preliminary view, it would be too difficult to establish whether a degradation in speed had occurred, but it would be relatively straightforward to determine whether basic broadband had previously been available and was not now available.

194 The provision for seeking ComReg's consent to derogate from the requirement could be used in cases where restoring basic broadband capability was excessively costly, and/or where the end-user had affordable alternative way of accessing basic broadband (e.g. from a wireless internet service provider or from a mobile network.)

195 Despite the attractions of this approach, there are disadvantages in seeking to implement it from 1 July 2016, including that it might require the USP to make changes to its business processes and network maintenance approach, for which it had little time to prepare. On balance, therefore we propose not to implement this obligation at this time but to re-consider it within the next 18 months or so.

5.4 ComReg's Preliminary View

196 We do not propose by July 2016 to use USO FIA requirements as a mechanism to guarantee access to broadband connections. However, we foresee that USO requirements might play a role in ensuring universal availability of affordable higher-speed broadband outside the NBP intervention area in the future. We propose to revisit the issue of designating a USP(s) for higher speed broadband when NBP contractual arrangements and the extent of commercial deployment have become clearer. In the meantime we will continue to gather and analyse information about usage patterns and planned and actual commercial broadband deployments.

197 From July 2016, FIA requirements may be needed to ensure existing basic broadband end-users can continue to receive this service. While Option 2 would be the most direct way of achieving this, we consider that, on balance, it would be better to continue the current FIA requirement for the time being.

Q. 2 Do you agree or disagree with our preliminary view that it is unlikely to be necessary to specify fast broadband FIA requirements inside the NBP intervention area but that it may be necessary in future to specify such obligations at locations outside the intervention area? Please give reasons to support your view.

Q. 3 Do you agree it is not appropriate at this time, for July 2016, to decide whether or not to specify fast broadband FIA requirements at locations outside the intervention area? Please give reasons to support your view.

Q. 4 In your opinion, when FIA is reviewed in the future how should the minimum data speed be determined? Do you have a view about what the speed should be? Please give reasons to support your view.

Q. 5 When do you think that we should revisit this issue? Please give reasons to support your view.

Q. 6 Do you agree that we should maintain the current FIA requirements for the time being? Please give reasons to support your view.

6. Reasonable Requests

198 In this Chapter, we set out our preliminary view that the presence of alternative networks should be a consideration when assessing whether a new connection request is reasonable or not, such that the designated USP is the provider of last resort. In assessing the reasonableness of a request, the cost of the connection is also a relevant factor and therefore, a monetary threshold should be maintained.

199 These proposals are forward looking and dynamic and take account of the existence of other infrastructures and services at the time a request for a connection is made.

200 This Chapter is structured as follows:

6.1 Current Obligation – we summarise the obligations which are currently placed on the USP with respect to requests for connection.

6.2 Consultation 15/89 - we summarise the issues raised by us in Consultation 15/89 and also Consultation 14/48. It summarises the main points raised in response to these consultations and outlines our position on these matters.

6.3 Connection trends – we summarise market trends which may affect the level of connections in the coming years, including demand trends such as housing completions and supply trends including alternative technologies.

6.4 Options for defining a Reasonable Request – we examine the range of options available to us, including alternative infrastructures and the level of the proposed threshold. It sets out our preliminary views on the relevant criteria.

6.1 Current Obligation

201 The Universal Service Regulations provide that a designated undertaking shall satisfy any reasonable request to provide a connection to the public telephone network and access to PATS at a fixed location within the State. It is a requirement that the connection provided is capable of allowing telephone calls, facsimile, and data communications at data rates sufficient to permit FIA.

202 The Regulations also provide that we may, with the consent of the Minister, specify requirements to be complied with by the designated USP in relation to the reasonableness of requests for connection and access.[45]

[45] Regulation 3 (5) (b) of the Regulations.

203 Under the current USO designation (in accordance with Decision D9/05), Eir must consider all requests for connections if the expenditure involved in meeting the request is less than €7,000 and in which case the cost to the applicant is the standard connection charge. That is, at present requests for connections which involve expenditure by Eir in excess of €7,000 are considered reasonable if the applicant agrees to pay the standard connection charge, plus incremental costs above €7,000.

6.2 Consultation 15/89

204 Over time, the number of end-users impacted by the monetary threshold will change as inflation and other factors alter the amount of infrastructure that can be provided for a given amount of money.

205 If the AFL USO is removed the decision to provide a connection would be at Eir's sole discretion. If Eir chooses to connect end-users, it is difficult to determine what the cost to end-users of the connection would be. It is likely that those end-users who would be most affected are those located in more remote rural areas. It is also likely that mobile networks may not have coverage, or sufficient indoor coverage in these areas and the impact on these end-users is likely to be substantial. It is also possible that some end-users in urban areas may also not be addressed (Eir's net cost funding applications indicate the existence of uneconomic end-users in economic areas).

206 The First TERA Report, suggested that Eir, absent a USO and acting as a profit-maximising operator, is likely to try to maximise profits by comparing the cost of connecting an end-user to its estimated future revenues before deciding whether or not to connect the end-user.

207 The First TERA Report considered the possible lifetime or period over which Eir can expect future revenues. Section 4.3 of the First TERA Report found the period over which Eir could expect future revenues depended on the competitive pressure in the areas, namely:

- In **market-driven infrastructure-based competition areas**, end-users are more accustomed to move from one supplier to another and the expected customer lifetime is **circa 4 years.**[46]

- In **NBP areas**, this period of time over which Eir can expect future revenues depends on when the NBP network will be deployed and when end-users will migrate to the NBP. This could be estimated at minimum **4 years**.

- **In "Eir only" areas where Eir faces no competition** from any fixed infrastructure networks, a maximum **20 years** period can be considered.

[46] 110610_USO_Eir_Response - 13D request.pdf

208 The First TERA Report found that the profitability threshold is likely to be between €700 (market-driven infrastructure-based competition areas and NBP areas) and approximately €2,000 (areas where Eir faces no infrastructure-based competition from a wired network), the difference being due to the duration of the cost recovery period. That is, in the NBP and market-driven infrastructure-based competition areas, Eir would be unlikely to choose to connect end-users if the connection cost was above €700 (€2,000 for Eir only areas). However a decision to connect or not might be mitigated by the lost opportunity to sell further products to the end-user, such as broadband and calls.

209 As a consequence, the First TERA Report found some new end-users might not be connected by Eir in the next 5 years. Existing end-users who are considered by Eir as uneconomic may also be at risk of being disconnected. This is also considered in Chapter 8 below on GAP and affordability.

210 Conversely, absent the USO, Eir would potentially benefit from reduced costs, due to a reduction in higher cost connections. This in turn would remove any possible net cost.

211 In Consultation 15/89, we reviewed the existing scope of the AFL USO in terms of the infrastructure over which it is provided, and in light of the changes that have and continue to take place in the market. The specific obligation of "access at fixed location" is intended to refer to the end-user's primary location or residence and not to a requirement for providers of electronic communications services (**"ECS"**) to use fixed technology. We considered that the obligation to provide AFL does not have to be provided using a specific technology. In general, there are no constraints on the technical means, whether wired or wireless, by which the connection is provided as long as the obligation is fully provided.

212 In this respect, we set out alternative access technologies by which an AFL type service can in principle be supplied, and the details of what we considered to be the relevant functionalities and characteristics of these technologies together with their perceived ability to fulfil a request for AFL. The alternative access technologies were grouped as follows:

- Narrowband.
- Mobile.
- Broadband.

213 In relation to the RAT, we considered in Consultation 14/48 that the €7,000 threshold continued to provide a good balance between the interests of the majority of end-users by keeping the costs payable by them down and ensuring the needs of end-users in remote areas are met and maintaining an incentive for the USP to ensure that the most cost efficient solution is delivered. Therefore, our view (see Decision 10/14) was that the RAT was still appropriate. We were also of the view that it may be appropriate to consider imposing additional obligations in relation to new connections, for example those listed below:

- Conduct a cost evaluation of the alternative technologies available to meet the USO AFL requirements;

- Conduct an evaluation of the suitability of the technologies being considered in light of QoS targets of connection, fault occurrence and repairs;
- Maintain a record of the cost evaluation, detailed cost breakdown and suitability in respect of the QoS targets of the technologies considered; and
- Maintain a record of the solution chosen and appropriate reasons as to why it was chosen.

214 In Consultation 14/48 we asked interested parties whether in the context of the future scope of AFL if they agreed with our preliminary view in respect of the RAT[47] obligations on the USP(s). In addition, Consultation 15/89 elicited views on the reasonableness of requests. The responses received to both consultations are set out below after which each of the possible reasonable access criteria are then assessed.

215 Consultation 15/89 asked for respondents views on the following:

- Do you agree with ComReg's preliminary summary of the technologies by which an AFL type service can in principle be supplied? Please give reasons to support your view.
- In your opinion are there other factors that ComReg should consider at this time? Please give reasons to support your view

6.2.1. Respondents' submissions

216 In their responses to Consultation 15/89, ALTO, BT and Vodafone agreed with our summary of the technologies.

217 BT stated that: *"Given there is no enforced line power obligation in Ireland we would support the view that managed VoIP services over a high speed quality access network could satisfy the requirements of a voice AFL USO. However what is not clear is what would be the price of a Voice only service over a high speed delivery."*

218 UPC/VM did not agree with our preliminary summary of the technologies by which AFL can be supplied. UPC/VM did not agree that mobile services accessed by a mobile handset exclusively do not meet the requirements for AFL. UPC/VM stated that: *"a mobile network, and a mobile device, can be used to provide a basic electronic communication services at a fixed location, and there is no requirement that the delivery device must be 'fixed to the wall' of the premises.*"

219 UPC/VM stated that: *"excluding mobile services from the USO would be unjustified, antiquated and nonsensical, particularly in light of the EC's recent acknowledgement that mobile calls offer a viable substitute for fixed calls"*, and stated that *"ComReg appears to assign preference to fixed narrowband networks based on irrelevant product features."*

[47] Question 7 of Document 14/48 asked *"In the context of the future scope of AFL for the three to five years after the interim period, do you agree with ComReg's preliminary view in respect of the current Reasonable Access Threshold ("RAT") on the USP(s)?Please give reasons to support your point of view.*"

220 Eir noted that copper, fibre, mobile, and wireless based technologies are all capable of delivering an AFL type service. Eir stated that: *"…if there is to be a designation process for the period beyond 31st December 2015 then it should be open to all operators and all technologies. That is consistent with ComReg's obligations as regards technology neutrality stemming from the regulatory framework."*

221 The majority of respondents to Consultation 14/48 were in broad agreement that we must ensure the needs of end-users are met and that there must be an incentive for the USP to ensure the most cost effective solution is maintained. A number of respondents to Consultation 15/89 were supportive of a reduction in the RAT.

222 Magnet stated that: *"…keeping accurate cost evaluation and cost breakdown records is very important. It is also important that the reason one technology is chosen over another is recorded. It is necessary to record what the decision making process is in relation to access. It is even more imperative that the reasons for believing the access request exceeds the RAT is recorded."*

223 Although UPC/VM did not agree there is a need for an AFL USO, it welcomed our view that the provision of the AFL USO should be technology neutral and therefore, new, or perhaps more cost effective or efficient technologies could in principle be used to fulfil a request for AFL. However, UPC/VM stated that it: *"…remains concerned that ComReg maintains an implicit assumption that USO can be provided by fixed networks only and that this implicit technology choice adversely impacts on considerations in respect of the Reasonable Access Threshold (RAT)".*

224 In response to Consultation 14/48 Eir was of the view that since the RAT was set: *"…regulation and competition have driven down wholesale and retail prices"*. It also stated that *"ComReg has provided no evidence to show that the access threshold remains reasonable, i.e. will wholesale / retail revenues be sufficient for Eir to recover the RAT investment within a reasonable period of time*?"

225 Eir also stated that: *"The current consultation is seeking to continue obligations on Eir to invest in rural areas. Such investments are long term in nature…The outcome of the NBP will likely be known during the proposed interim designation period and it seems to be ComReg's position that once the NBP is established the implications for USO AFL will be assessed. However given the highly likely outcome that the NBP infrastructure will meet the needs for basic telephony and broadband services together, ComReg must exercise extreme caution to ensure it does not leave the current AFL USP in a situation of stranded investment. These considerations cannot be left to wait for a number of years."*

226 In response to Consultation 15/89 Eir stated that it: *"…did not reject any requests for connection despite difficulties eircom experiences in obtaining the requisite wayleaves and access to property and there is no reason to suggest that this would change absent the AFL USO.*"

227 ALTO and BT expressed the view in response to Consultation 15/89 that they would be supportive of reducing the RAT, but noted that: *"…a new level must still strike a reasonable balance between uneconomic supply and reasonableness."*

6.2.2. ComReg's response

228 We have noted respondents' views and we remain of the view that the technologies we set out by which an AFL type service could be provided were accurate.

229 We consider that mobile and wireless are suitable technologies to be used to develop solutions to deliver AFL. However, in some cases, the indoor quality of mobile services can be poor. That said, as set out in Section 6.4 below, mobile technology could potentially be used to provide an AFL solution.

230 We remain of the view that a mobile solution with a mobile handset is not AFL in accordance with the Universal Service Regulations, however, we consider that where there is a mobile network at a location with sufficient QoS and at an affordable price, the USP may not be obliged to provide a connection.

231 We have taken into account also respondent's views about the level of RAT.

6.3 Connection trends

232 Section 3 of Consultation 15/89 examined demand and supply trends, how they have changed in recent years, how they are expected to change in the future, possible competitive constraints and the potential impact, if any, of the NBP initiative during the next 5 years. Here we consider market trends regarding connections.

233 We consider that this is an important factor because it indicates the continued demand for AFL and how this demand may be satisfied by the market. Given continued demand for AFL, we must ensure that end-users' reasonable requests for AFL are met, if not by the market, by USP(s).

Demand Side

234 According to ComReg's Q2 2015 quarterly report, despite a decline in PSTN access paths (4.9% in the last year), the number of ISDN access paths has increased by 0.7% since Q2 2014. At the same time, the number of VoB subscriptions has increased by 0.6% since Q1 2015 and by 7.7% since Q2 2014. At the end of Q2 2015 there were 1,497,735 fixed voice subscriptions (a decrease of 0.4% on Q1 2015 and a decrease of 1.9% on Q2 2014). As of Q2 2015 Eir had 44% of all fixed voice subscriptions followed by UPC/VM (24%), Vodafone (15%) and Sky (8%).

235 Most connections to the network are copper connections, however, Eir also uses other technologies for example FCS (a solution which uses GSM). FCS is capable of voice, but not of FIA as currently defined i.e. 28.8kbps.

236 ✂

237 We understand that applications involving substantial excess charges have rarely been progressed. One possible reasons for this is that in some cases the cost of the connection may be significantly above the RAT and therefore, the end-users do not proceed with the connection. In other cases, it appears that end-users did not proceed to connect to the network, as the solution they were offered by Eir was FCS which is not capable of achieving FIA. The costs are estimated based on the least cost technology, this technology may not satisfy the end-users' needs.

238 Since the current threshold was set in 2005, there have been many changes in the Irish economy; shortly after the threshold was set the country entered into recession which it has since exited. Construction of residential units plummeted during the intervening period as is shown in Figure 2 below. The decrease in housing completions, is likely to have had an impact on the number of new connections over that period.

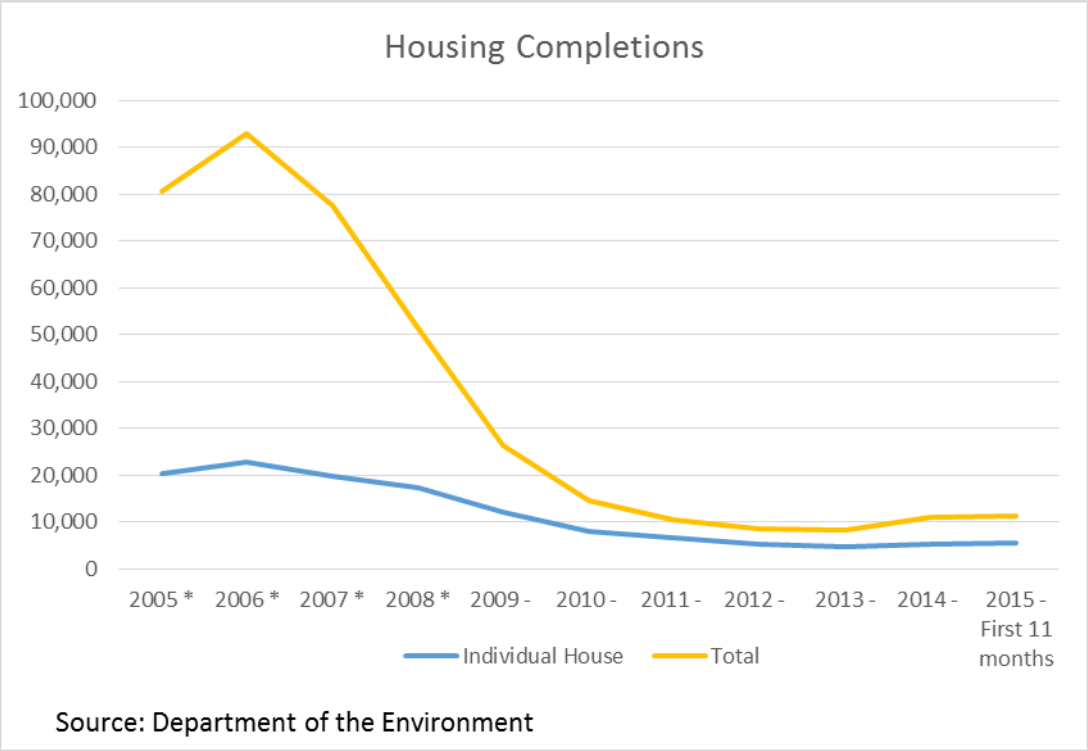


Figure 2 Housing Completions 2005 to 2015

239 According to the Society of Chartered Surveyors Ireland (SCSI) in 2014 *"…the number of residential units completed in 2013 declined marginally from 8,488 units to 8,301 units which is down 91% from 89,000 in 2006, substantially below the numbers required according to the ESRI. They estimate that between 10,000 and 12,000 new houses are needed in the years between now and 2015 and that after that the need will double to between 20,000 and 25,000 homes if on-going demographic change is to be accommodated. The projected increase in residential output from circa 8,500 in 2013 to about 10,000 in 2014 and 12,000 in 2015 is based on current levels of growth and actions that can be taken to reduce the barriers to the construction of new homes."*[48]

[48] http://www.scsi.ie/construction_sector_outlook_2014

240 However, the SCSI document *"Irish Construction Prospects to 2016"* states that: *"There is considerable pent up demand in the market with projections from the Housing Agency suggesting that the housing supply requirement in the Dublin region is equivalent to 37,700 units in the period 2014-2018 or almost 80,000 across all urban settlements. Across the country as a whole, the ESRI has projected a need for between 19,000 and 33,000 additional dwellings per annum - an average of 26,000 - which would amount to around 104,000 dwellings in the four years 2015-2018".*This trend is also predicted in an Economic and Social Research Institute (ESRI) report[49] published in August 2014, which estimated that some 54,000 extra housing units will be needed in Dublin between then and 2021, with upwards of 90,000 homes needed overall within seven years. It noted that *"in total for those counties, which would without additional construction experience a housing shortage, just under 90,000 housing (or approximately 12,500 per year) units will need to be completed to meet demand, which is considerably smaller than the 180,000 implied by the increase in the number of households, reflecting the impact of the significant oversupply, and the fact that some construction has taken place. Over 60 per cent of these (90,000) are required in Dublin and another 26 per cent are accounted for by counties Louth, Meath, Kildare and Wicklow – in effect the commuter belt around Dublin……Thus, the analysis here shows that housing supply issues are almost exclusively concentrated in the Greater Dublin region."*

241 In its winter 2015 Quarterly Economic Commentary,[50] the ERSI also notes that the supply of housing is expected to increase in the coming years.

242 These show that in the coming years construction of new residential units is expected to increase substantially, which can be expected to lead to an increase in demand for connections to the network. The majority of these new builds will be in urban areas and therefore, these connections are less likely to be high cost connections.

Supply Side

243 The requirement in the Universal Service Directive and Universal Service Regulations is to provide AFL. How this is to be achieved is not prescribed by law and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service. The requirement is for all elements of the USO, i.e. capability for voice, fax, and data services, to be provided subject to the certain specified targets.

244 The Universal Service Directive in general prohibits Member States from imposing constraints on the technical means by which AFL is provided, in particular, means that allow for the use of wired or wireless technologies. Nor should they impose any constraints on which operator(s) provide AFL.[51] Further, the Universal Service Regulations require that no undertaking is in principle excluded from being designated. [52]

[49] https://www.esri.ie/pubs/RN20140203.pdf
[50] https://www.esri.ie/pubs/QEC2015WIN.pdf
[51] Recital 8 to the Universal Service Directive.
[52] Regulation 7(3) of the Universal Service Regulations.

245 Accordingly, the obligation to provide AFL is technologically neutral. There are alternative access technologies by which a fixed telephony type service can in principle be made available including, broadband and mobile network services with additional end-user premises equipment, etc. Nevertheless, it is a matter for ComReg to determine what technologies are, in fact, capable or not capable of delivering AFL.

246 In different geographic areas there are potentially different circumstances emerging in relation to supply side competitive conditions. In some there is infrastructure based competition and competition from other authorised operators relying on LLU and Line Share services.

247 The First TERA Report addressed infrastructure/supply side trends at Section 3.2. It examined alternative infrastructure access networks[53] which could change the competitive environment as regards the AFL supply. The First TERA Report also noted that most, if not all, of these infrastructures and platforms provide managed voice on the basis of IP technology, while fixed voice has until now mainly been provided on the basis of the legacy PSTN technology. Managed VoIP technology is currently replacing the PSTN technology and has the potential to secure the provision of voice AFL USOs on newly deployed networks.

248 In Consultation 15/89, we found that there are a wide range of suppliers and a growing number of infrastructure networks in Ireland. Operators have been investing in infrastructure over the last number of years, and this investment looks set to continue.

249 There are several types of infrastructure which are in principle capable of providing AFL (a detailed analysis of the most appropriate AFL technologies was set out in Section 6 of Consultation 15/89). However, as the different infrastructures have different coverage, the competitive constraints with respect to AFL vary across the country.

6.4 Options for defining a Reasonable Request

250 At present, requests for connections which involve expenditure by Eir in excess of €7,000 are considered reasonable if the applicant agrees to pay the standard connection charge plus incremental costs above €7,000.

251 The scope of the USO is to provide access at a fixed location. The manner in which this is achieved is not prescribed and the principle of technological neutrality allows Eir as the USP to choose the optimum method of providing access and service. The requirement is for all elements of the USO i.e. capability for voice, fax, and data services to be provided.

252 New technologies are emerging, in the future, Eir is likely to use Next Generation Access (NGA) technologies as the primary technology to provide AFL, ✂

[53] Namely Market-driven next generation fixed access networks, NBP, and next generation mobile/wireless technologies.

253 When we set the RAT in 2005, we were of the view that the cost of provision, while an important consideration, is not the sole factor and other issues such as general consumer interest should also be accorded a high degree of importance. The RAT was set such that the number of cases where payment of a higher connection charge may arise would be relatively limited.[54]

254 Although the number of end-users affected by any given threshold may be low, the impact of the threshold on these end-users may be significant, i.e. the incremental costs which they may be required to pay may be so high as to prevent the applicant from proceeding with the connection, and therefore potentially leaving the end-user with no access to a PATS.

255 However, a monetary threshold is not the only way in which a reasonable request could be defined, and other factors such as the distance from the existing fixed network and coverage in the location from mobile networks could also be considered.

256 A detailed benchmark, contained in Section 7 of the First TERA Report, found that various approaches have been taken throughout Europe in respect of defining a reasonable request with respect to AFL. While in some Member States 'reasonable' is determined by cost, other parameters are also considered. Many countries, such as the UK, adopt a policy similar to that adopted in Ireland that is, setting a monetary threshold above which the user has to pay an extra charge compared to what he would have to pay for a standard connection. In the UK, the threshold is set at £3,400.[55]

257 In Austria, the threshold is geographically defined (location up to 500 meters from the nearest exchange cabinet), whereas in Greece, the USP should satisfy each request for access to the network in the following cases: a) distance up to 200m for fixed network, or b) within the coverage for wireless network, or c) new connection with implementation cost up to €1,900 with any additional cost covered by the applicant.

258 The following figure gives an overview of the different ways in which the reasonableness of a connection could be determined. A combination of these ways may also be utilised. These criteria are assessed in the sections below and our preliminary views are set out.

[54] In Decision D9/05, we estimated that this threshold would result in approximately 0.13% of the total number of applications for connection exceeding the threshold.

[55] Guidelines on reasonable request published in Match 2006 (see Annex 6) http://stakeholders.ofcom.org.uk/binaries/consultations/uso/statement/statement.pdf

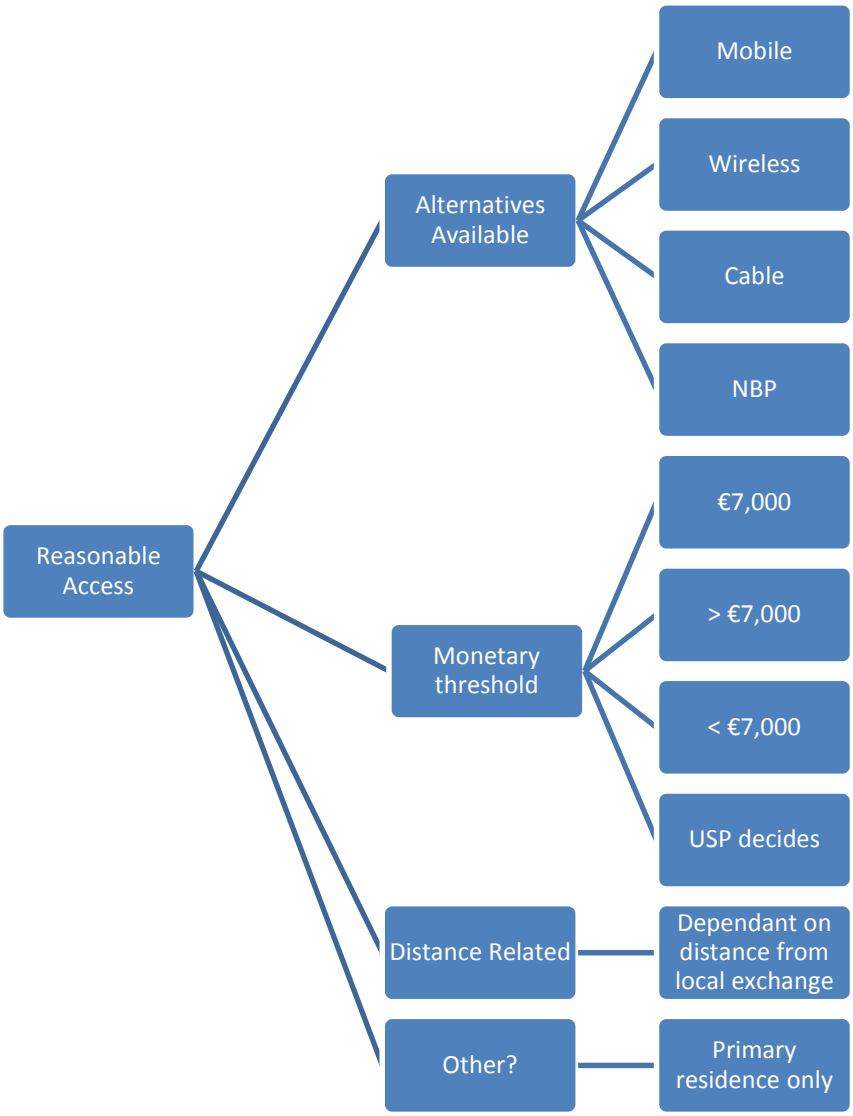


Figure 3 - Options for determining the reasonableness of requests

259 Eir, as the current USP is also subject to certain performance targets as set out in Decision D02/08 which set binding targets in order to protect end-users from excessive and unnecessary delays in being connected. These targets depend on whether the connection is a first time connection or an in-situ connection. These quality of service targets are considered in Section 7 below.

6.4.1. Distance from the Exchange and other factors

260 The definition of reasonableness could include a measurement of the distance of the location where the connection was required from the exchange. This approach has been taken in some Member States.

261 Due to the dispersed population in Ireland in some cases connections are provided by means of overhead wires, whereas in other cases underground cables are used.

262 Although the distance from the existing fixed network may be an appropriate consideration in some instances, we are of the view that the terrain may also have a large impact on a connection. Further, due to new emerging technologies, the distance from the fixed network may not have as much of an impact on the reasonableness of a connection as it might have previously.

263 We are therefore of the preliminary view the distance from the exchange is not an appropriate criterion for determining the reasonableness of a request for connection in Ireland, given our dispersed population.

264 We are aware that the premises to which the connection is required (for example primary location/residence) may be restricted by Member States. However we note that this is not further specified by the Regulations in Ireland.

265 Further, we are of the view that other criteria in relation to the reasonableness of requests should ensure that any cost to the USP would be limited.

6.4.2. Availability of Alternatives

266 We may consider the presence of alternative infrastructure when assessing the reasonableness of requests and we note respondents' agreement with the concept of technological neutrality.

267 When assessing whether a request for connection is reasonable or not, it could be claimed that the presence of alternative networks might render a request for connection unreasonable, as the provision of a new connection at the location may lead to infrastructure duplication. Where there is an alternative network at a location, which is of sufficient quality and provided at an affordable price, we consider that the requirement for the USP to provide a connection could be relaxed.

268 For example, if there is a mobile network available at that location (residence or business), which is affordable, of sufficient quality and provides the services which are required to be provided by a USP, then this network may be a sufficient alternative to the USP network and the request may be considered not to be reasonable.

269 Section 3.1 of the Second TERA Report noted that without an AFL USO, some end-users would not be connected. Section 3.2 of the same report presented four options with respect to the relevant AFL USOs to be imposed in the presence of alternative infrastructures. The first option, to maintain the status quo (i.e. the presence of alternative infrastructures is not relevant), the remaining three options allowing the reasonable request for connection AFL USOs to be partially relaxed in the presence of alternative infrastructure.

270 Having considered the pros and cons of each of the four options, the Second TERA Report recommended that the obligation to provide a new connection could be maintained with exemptions in certain specific cases such as in specific cases where the AFL service is met by a broadly comparable service already provided by the market. In this case TERA was of the view that :

- The USP has no obligation to meet the request for connection if it demonstrates that another infrastructure is present and is capable of providing voice services and Internet access with sufficient level of QoS and at affordable prices as

described in section 1. It could be a private fixed infrastructure or a fixed wireless access provided by 3G or 4G networks. In the case of the mobile solution, the USP has to have evidence that that the indoor coverage is guaranteed to an equivalent standard as a fixed connection or that the customer is agreeable to the solution.

- Another exception could be the presence and availability of a 2G mobile network or FCS technology which could be used to connect an end-user; however, it would not be able to provide functional internet access. Therefore, this technology could be used for the USO connection only under the condition that the end-user confirmed it did not need the Internet connection. It would be subject to the same RAT, as set in the sections 3.3 and 3.4.

271 We have considered the Second TERA Report and the pros and cons of the regulatory options available. In particular, the potential advantage of a relaxation of the requirement to provide a connection in the presence of suitable alternative infrastructure and services, is that there is no inefficient duplication of certain types of infrastructure, depending on the type of alternative considered.

272 On the other hand, if alternative infrastructures are not taken into consideration, end-users are guaranteed to be treated equally, and all requests for connection would have to be provided by the USP, subject to any monetary threshold as discussed below.

273 However, we are of the view, the existence of alternative infrastructure would be an appropriate, but not a sufficient pre-condition in itself. Depending on the alternative technology, there is a risk that the price (connection, equipment and services) may not be affordable, or that the QoS may be inadequate. This risk, particularly in relation to quality may be heightened, where a mobile infrastructure is present, but where mobile services are not equivalent to fixed services; for example, if there is no or limited indoor coverage.

274 We are of the view that relaxing the obligation so that the USP only has to provide a new connection in cases where there are no suitable alternative infrastructures and services present may be appropriate at this time. This would prevent inefficient infrastructure duplication, and therefore result in lower costs to provide AFL USO.

275 However, in trying to determine whether there are alternatives at a given location, there could be a considerable administrative burden on the USP and on ComReg if the end-user does not agree that the alternative as suggested by the USP is of sufficient quality and is provided at an affordable price (including connection, equipment and services). We are of the preliminary view that the USP would have to implement simple and transparent processes, whereby the end-user who has requested a connection agrees that there is in fact a suitable alternative and hence, the connection request may be considered not to be reasonable. This agreement may be difficult to acquire. There may be situations where we would need to intervene to solve any disagreements under our dispute resolution powers.

276 The following decision tree, from the Second TERA Report, sets out the approach which would need to be taken in determining whether or not the USP would be required to provide a connection at a given location. This demonstrates that where there is no alternative infrastructure (either wired or wireless offering indoor

coverage), the USP would be required to provide a connection subject to a monetary threshold (as reviewed below) and FIA targets (see Section 5 above).

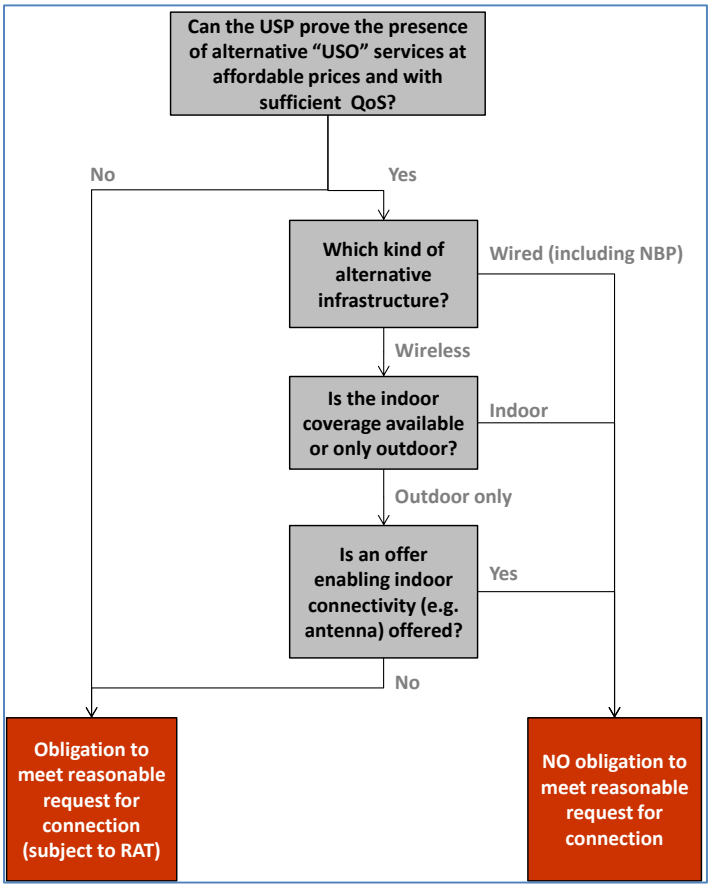


Figure 4 - Decision Tree: Presence of Alternative Infrastructures

277 Having considered the Second TERA Report, submissions to consultations and all other information available to us, we are of the preliminary view, at this time that, having regard to the Second TERA Report proposal, the presence of alternative networks would appear to be a reasonable and proportionate, criterion to assess whether or not a request for connection is reasonable. Crucially however, the alternative network, need to be affordable and with sufficient QoS. For example, if and where the NBP network has been built and it offers voice only packages at an affordable price with a sufficient QoS, there could be no need for the USP to satisfy a reasonable request for connection in that area. In addition, in areas where the NBP is not at all deployed ,or yet fully deployed, but the USP can prove the presence of alternative services either fixed or mobile, with sufficient QoS and an affordable price, it may not have to satisfy the request for connection (subject to certain conditions).

278 For end-users, this would mean that although not guaranteed an AFL connection from the designated USP, they would be guaranteed that they had an alternative access to a connection and PATS – one that ensures to provide them with the same AFL capabilities as those provided by the designated USP and one that is of sufficient quality and affordable.

279 In order for the alternative to be considered affordable, we are of the view that the alternative network must offer a package or packages which are broadly in line with those prices offered by the USP in terms of connection, line rental, calls, and the terminal equipment.

280 If the presence of alternative infrastructure is considered as one criterion for determining whether or not a request is reasonable, we are of the view that it would be the responsibility of the designated USP to ensure and to verify that there were alternatives available at the location, which were affordable and able to meet the minimum standards required of AFL, that is, that the alternative could for example allow for voice calls and FIA as defined.

281 The USP should also be required to record the details of the alternative network present and the end-users agreement that the alternative is sufficient for the purposes of AFL. In respect of mobile networks, indoor coverage equivalent to a fixed service is required in order for it to be considered a feasible alternative. Such records would be required to be provided to us on a quarterly basis.

282 In the case of a 2G mobile service, we are of the preliminary view, that because it does not support the minimum data rate for FIA, then it can only be considered if the USP is within the 94% threshold for FIA connections. This would be in addition to the tests for affordability and QoS (including indoor coverage) applied to alternative technologies.

283 This would mean the USP would not have to invest in a connection, where suitable alternatives were already available. This in turn could result in decreased costs for the USP.

6.4.3. Monetary Threshold

284 Where a request for a new connection is made and there is no suitable alternative infrastructure in the area, we need to consider whether the cost of the connection is also a relevant factor when determining whether the request is reasonable or not i.e. whether or not the criteria also include a threshold.

285 We are of the preliminary view that if a monetary threshold is maintained, the level at which it should be set at could be altered from its current level. In considering any change to the threshold (RAT), we must consider the impact on end-users, the USP and on industry as a whole, so as to ensure that a fair balance is struck between the needs of all interested parties. In setting a monetary threshold, we would seek to ensure that end-users would only in exceptional cases have to pay charges over and above the standard connection charge.

286 Since the monetary threshold was set in 2005, there have been many changes in the Irish economy. Shortly after this threshold was set, the country had entered into a deep recession. The following figure[56] shows how inflation has moved since the RAT was set in 2005. It shows that comparing February 2016 to January 2005, all items prices decreased by approximately 1%, while Telecoms prices decreased by 1%.

[56] The graph was created based on the selected Base Dec 2011=100.

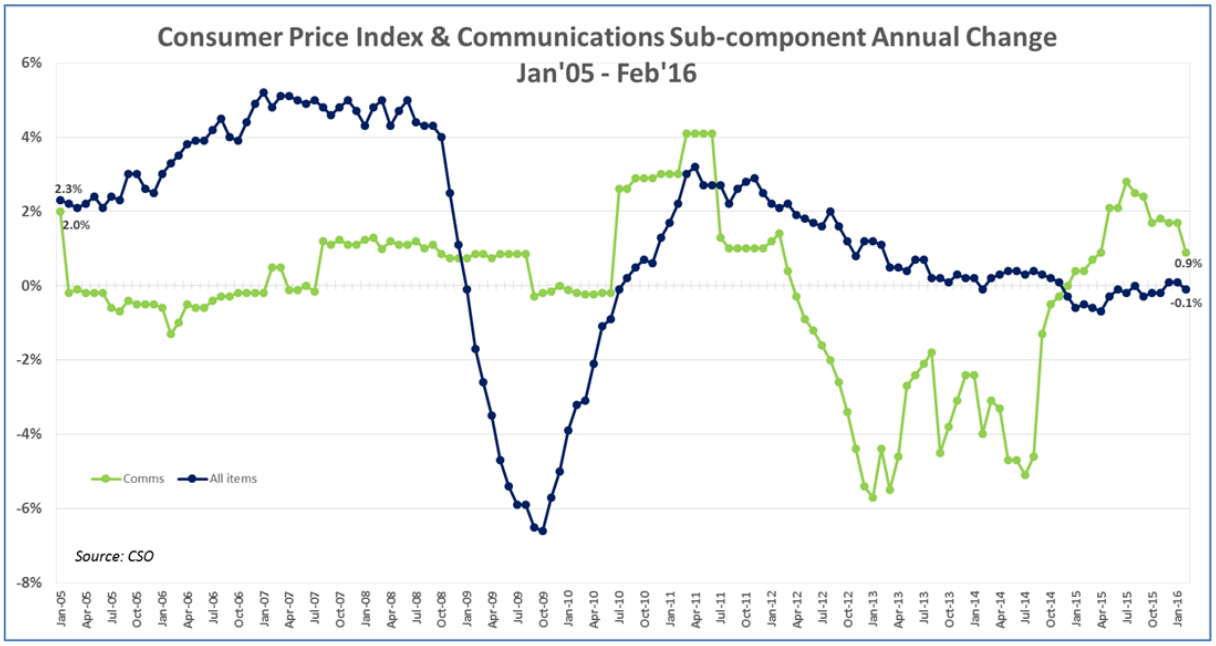


Figure 5 - Inflation over time

287 As illustrated below, where a monetary threshold is deemed necessary, we could decide to amend the current RAT, i.e. increase or decrease the amount above which end-users would have to pay the incremental costs for connection, or maintain it at the current rate of €7,000.

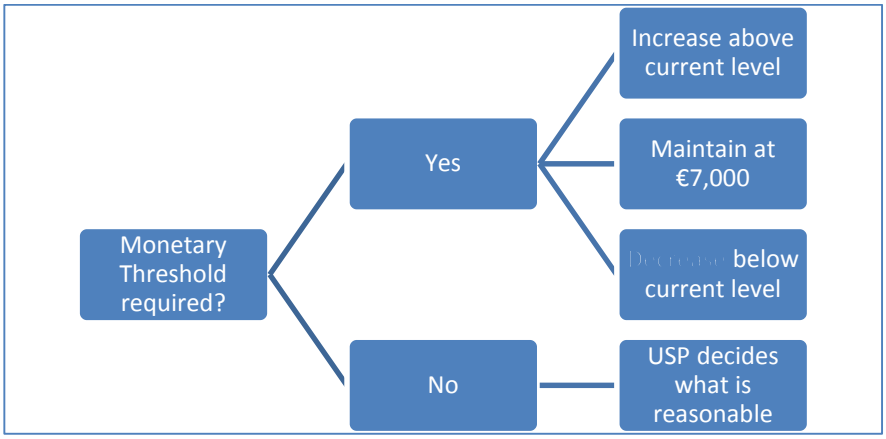


Figure 6 - Options for defining a Monetary Threshold

288 If a RAT is not maintained, the USP could decide whether or not to meet any new request for connection. If there is no alternative infrastructure in the area, we are of the view that leaving the decision to connect an end-user or not with the USP would not be appropriate. For these end-users, there is no alternatives. Even where the USP decides to connect the end-user, there would be no guarantee as to at what cost the connection might be and whether it would be reasonable.

289 Where a RAT is maintained, end-users would be guaranteed a connection, where the connection is below the threshold set, or where the cost is above the connection, the connection would be guaranteed where the end-user agrees to pay only the incremental costs.

290 The Second TERA Report described the options for setting the RAT. These options reflect those demonstrated in the figure above and we have taken these into consideration in arriving at our preliminary views.

6.4.3.1 No Monetary Threshold: USP decides whether requests Reasonable

291 Rather than setting a threshold below which all requests for connection are considered reasonable, we could allow the USP to assess individual requests and allow it to decide whether or not the request is reasonable. It is likely that the USP would consider the reasonableness of the request by considering the cost of the connection and expected future revenues.

292 The Second TERA Report found the period over which Eir can expect future revenues from a connection depends on the competitive pressure of the different areas, namely:

- In **market-driven infrastructure-based competition areas**, the expected customer lifetime is **about 4 years.**[57] However, a number of the churners from Eir retail would subscribe with a traditional supplier (see Table 6 and Table 7 of the First TERA Report) the latter often relying on Eir's SB-WLR input services. Consequently, while Eir may lose retail revenues, it will continue generating wholesale revenues. The average lifetime for Eir is thus slightly greater than 4 years;

- In **NBP areas**, Eir can expect future revenues from a new connection as long as customers do not migrate away from the PSTN network to the NBP network. We understand that the NBP network rollout could be completed in about **5 years (by 2020) and should be available even earlier in some areas.** This could mean that if the USP connects a new end-user (for example in 2019) to the copper network, it will have less time to cover the connection cost if the NBP network is available in 2020. The lifetime also depends on the time that end-users will take to migrate to the new technology. We consider therefore that 4 years is a reasonable assumption, that takes into account both the time to build the NBP and end-users' churn time; and

- **In "Eir only" areas where Eir faces no competition** from any fixed infrastructure networks but only from mobile operators **and where there will be no NBP**, the connection cost can be depreciated over the whole lifetime of the equipment, approximately **20 years.**

293 The Second TERA Report found that the profitability threshold is likely to be between €700 (market-driven infrastructure-based competition areas, NBP areas) and approximately €2,000 (areas where Eir faces no infrastructure-based competition from a wired network), the difference is due to the duration of the cost recovery period. That is, in the NBP and market-driven infrastructure-based competition areas, Eir would be unlikely to choose to connect end-users if the connection cost was above €700 (€2,000 for Eir only areas).

[57] 110610_USO_eircom_Response - 13D request.pdf

294 As a consequence, having assessed data provided by Eir, TERA found that where a RAT is not set, some new end-users might not be connected by Eir over a 5 year period. However, it also noted that in principle, a proportion of these end-users could be connected at a fixed location through 3G or 4G.

295 The Second TERA Report considered the option of not defining a precise threshold and instead to leave the USP decide on every connection request (Option 6). However, it found there is a risk that the USP will not satisfy all reasonable connections from end-users (section 2.1). In addition, the same report noted this option does not give any visibility to the USP or other interested parties who would prefer to understand the USO rules with more legal certainty as we would have to settle any dispute that would arise.

296 Without a threshold, if Eir chooses to connect end-users, it is difficult to determine what the cost to end-users of the connection would be. It is likely that those end-users who would be most affected are those located in more remote rural areas. It is also likely that mobile networks may not have coverage, or sufficient indoor coverage in these areas, and hence, the impact on these end-users is likely to be substantial. It is also possible that some end-users in urban areas may not be served, as is demonstrated by the existence of uneconomic end-users in economic areas, in Eir's net cost funding applications.

297 For the reasons set out above, we are of the preliminary view that where the presence of alternative networks is considered as a relevant criterion for determining whether or not a request is reasonable, then it would not be appropriate to allow the USP to determine whether or not to connection end-users where there was no alternative infrastructure. The end-users who would be impacted are those who have no alternative, and the USP's connection is the only one available. Therefore, we are of the preliminary view that a Reasonable Access Threshold should be maintained, however, the level at which it is set could be reviewed.

6.4.3.2 Reasonableness of Requests determined by the cost of the connection

298 We propose that a Reasonable Access threshold should be maintained. However, the level could be increased, decreased, or maintained at the current €7,000 level.

299 If it is maintained (either increasing/decreasing/maintaining at the current level) we have considered the possibility of linking the threshold level with inflation. As inflation and other factors alter the amount of infrastructure that can be provided for a given amount of money, the number of end-users impacted by a threshold which is set in monetary terms, will change over time.

300 We consider that if a monetary threshold is maintained it would be desirable to take account of these factors, so that over time the proportion of end-users impacted by the threshold would not increase. However, we are of the view that the number of connections which will be affected by any change to the threshold is small. We suggest that linking the level to inflation would likely result in the threshold increasing over time, rather than decreasing.

301 Nevertheless, we do not consider that linking the threshold to inflation would materially impact on either end-users or the industry, and therefore, at this time, we do not consider that there would be benefits of taking inflation into account.

302 The following sections therefore assess the impact of possible changes to the RAT. The Second TERA Report presented 5 options on the specific level at which the RAT could be set. These options from the Second TERA Report are summarised below.

Option (a): Increase the Threshold

303 The RAT could be increased above the current level to level which would allow the vast majority of connections to be made without end-users incurring any incremental costs. In this situation, those connections which are unfeasible due to their location and the high costs involved, may still be required to contribute to the costs.

304 The effect of a large increase in the threshold below which a connection is considered reasonable would be similar to requiring all requests for connection to be met at the standard charge, irrespective of the actual costs involved. This would ensure that all end-users, regardless of their geographic location would be able to access the network for the standard connection charge. Increasing the threshold could potentially benefit end-users in two ways. First, some end-users may no longer need to pay incremental costs as the cost of their connection now falls below the threshold, second, those who are required to pay contribute a lower amount to the cost of their connection. Although beneficial to end-users, we must also consider the needs of the USP and industry.

305 Although any increase above the current level would benefit end-users, particularly those in extreme rural locations, it may make the threshold ineffective. In fact, it may be more appropriate to remove the threshold completely, and consider all requests as reasonable subject to the existence of alternative infrastructures, rather than increase it above €15,000 due to the low number of connections which are a higher cost.

306 However, although in recent years there have not been requests for connection where the cost is excessively high, we are concerned it may be the case that end-users who previously applied for connection but did not proceed with the connection due to the high costs involved, would re-apply if the threshold was removed or increased. A large increase in the threshold may result in the USP incurring additional costs in providing connections, which may in turn affect the net cost of any USO funding application.

307 Increasing the threshold may also fail to properly balance the interests of the majority of end-users who are requesting new connections to the network in keeping costs down, and the needs of applicants in remote areas. This is because the removal may result in a price increase for all new connections to the network.

308 However, other regulatory obligations such as geographic average pricing (“GAP”) and the retail price cap (“RPC”) would limit the potential impact.

309 Although end-users should be able to access the network, we are also of the view that in a very limited number of cases the cost of the connection is so high as to warrant the application for connection unreasonable, even in the absence of alternative infrastructure. Further, we are of the view it would not be reasonable to expect the USP to incur all the costs of particularly high cost connections.

310 If, as proposed above, the presence of alternative infrastructures is also considered a relevant factor, the end-users whose connection is subject to the RAT are those who have no alternative, and therefore, the USP is the only provider who will connect them.

311 We are of the view therefore, that if the threshold was increased, although those end-users who require a connection which involves significant costs would benefit significantly, the majority of end-users may not be protected from large increases in connection fees as the USP may increase prices to offset the additional costs incurred due to the threshold increase. Further, there is a risk end-users who previously did not connect to the network due to the high incremental costs involved, might then re-apply for a connection. This could result in an increase in the net costs of uneconomic service provision by the USP.

Option (b): Decrease the Threshold

312 Option (b) (1): Reduce the threshold below the current level would result in some end-users paying more for a connection, however it could potentially reduce the net cost to the USP. A number of respondents to the consultations were in agreement with a deduction in the RAT. The Second TERA Report considered the options for reducing the threshold.

313 Option (b) (2): Set the RAT at the level of expected net revenues, which guarantees cost recovery. This allows less distortion in the market (since this is a profit-maximising operator approach). Only reasonable requests have to be satisfied, and the level of cost is currently a criterion defining whether a request is reasonable and can continue in principle as a relevant consideration. In such a scenario, the net cost of this AFL USO component is equal to zero, the price would be set to fully recover costs.

314 Option (b) (3): Define the RAT level from the European benchmark. However, TERA found that this approach is not straightforward. In countries where a RAT is specified, it depends on the country's specific national circumstances.

315 Option (b) (4): Determine a reasonable proportion of connection requests to be met (for example 99% of connections) using historical data to determine the corresponding level of cost threshold. However, TERA found, the problem of such an approach is the difficulty in establishing the reasonable proportion of demands; whether the request is reasonable should be determined from the cost and not from the proportion of end-users to be served.

316 Option (b) (5): Calculate the RAT from the value that users attach to the service. However, a survey would reflect the valuation of a given individual and would not take into account the external positive effect from one caller to another, essentially the broader benefit to society which is envisaged by universal service.

317 If the threshold is reduced, it may negatively affect end-users who wish to connect to the telephone network. The impact of a decrease in the threshold for end-users is twofold. First, a larger number of connections would potentially have to pay the incremental costs, and second, for those who are required to pay the incremental

costs, the cost would increase. That is, some end-users whose connection costs may have been above the €7,000 threshold would have to pay a larger balance in order to have their connection, while some end-users whose connection cost may have been below the current RAT may now be above it and therefore be liable to pay additional costs towards their connection. It is likely that those end-users who would be most affected are those located in more remote rural areas.

318 Based on figures supplied by Eir, the number of end-users affected by a reduction in the RAT would vary significantly, depending on the amount by which the RAT decreased. For example if the RAT was reduced to €3,000, much less than 0.5% of would have had to contribute to their installation in 2012/13 or 2013/14. Whereas if it decreased to €1,000 less than 2% would have to contribute.

319 If the threshold was reduced the USP would potentially benefit from reduced costs, due to end-users with higher cost connections contributing a greater amount to the cost of the provision of their line. This might then benefit the industry, due to the reduction in any possible net cost claim if such a net cost is deemed an unfair burden on the USP.

320 On the other hand, due to the national presence of the USO, the addition of new end-users to the network may result in additional ubiquity benefits, which derive from the basis that a proportion of end-users who move from uneconomic to economic areas are likely to remain end-users of the USP — despite moving into an area which has alternative providers.

321 Further, each additional end-user added to the network increases the value of the service to other users of the network. Although the actual benefit of this network externality may be difficult to determine, these benefits may result in a decrease in the net cost.

322 The saving to the USP from reducing the RAT is likely to be insignificant compared to the negative impact on those end-users who would be required to pay incremental costs.

Option (c): Maintain the Current Threshold

323 The final option available is to leave the threshold at its current level. In this case end-users are aware of the threshold, as it has been in place for a number of years. Maintaining the current threshold would not be expected to result in many additional high cost connections to the network, therefore, not leading to significant detriment to either industry or end-users.

324 However end-users in higher cost locations, where there is no alternative infrastructure, may still remain unable to connect to a network.

325 Option 1 of the Second TERA Report considered maintaining the current RAT level, i.e. €7,000. It notes that in practice in Ireland, there are almost no connections that cost more than ✂. Although this cost level is unlikely to be recovered by any reasonable future revenues generated from the end-user in view of the small number of connections currently at issue it may not be burdensome on the USP to meet such requests. The average retail connection cost to the end-user is only €✂. With the existing RAT level of €7,000, only ✂% of end-users (✂ end-users per

year) had a connection cost exceeding €7,000 in FY2012/13 and FY2013/14. As discussed in Figure 1, the sum of discounted revenues over the customer lifetime is likely to be within the €700-€2,000 range. With these assumptions, the corresponding potential net cost of having a €700 RAT for the USP is between ✂ and ✂[58] per year. It is to be noted that this estimate is a cap that is probably somewhat overstated, as this does not take into account the exemption mechanism presented above.

326 The Second TERA Report was of the view that maintaining the €7,000 threshold appeared most appropriate taking a balanced approach to a USP and end-user right of AFL. It also noted that the impact on the USP of any associated costs with the obligation to provide reasonable access should be highly mitigated by the exemption mechanism proposed. It also noted that this option also provides visibility to interested parties as it sets a clear rule to accept/deny connections requests.

327 The level of the RAT in Ireland is higher than in other EU jurisdictions, however, as the majority of connections cost under €3,000, the benefit to the USP of a reduction in the RAT in terms of connection revenue is likely to be very small due to the small number of connections involved.

328 Where the presence of alternative networks is considered as a first step in assessing whether or not a connection request is reasonable, this should result in reduced costs for the USP. The Second TERA Report noted that a proportion of connection requests may be fulfilled by alternative networks. Therefore, even without a reduction in the RAT, the USP should benefit from reduced net costs. Further, for end-users who do not have alternatives infrastructures, acquiring a connection from the USP is even more crucial.

329 Having assessed the options, consider that although a reduction in the threshold would benefit the USP, the detriment to consumers would be significant We are therefore proposing to maintain the RAT at its current level in order to protect end-users. The majority of connections fall below this level, and only in a limited number of cases would end-users be required to pay the incremental costs.

6.4.3.3 Measurement of Costs of Providing a Connection

330 If the RAT is maintained, the USP will need to determine the cost of individual requests for connection where the RAT applies. The USP may also have to keep a record of the cost evaluation and a record of the solution.

331 When assessing any application for connection to the network, we expect that the least cost technology available would be utilised,[59] providing that the connection is capable of allowing access to all elements of telephony services- voice, fax and data. In that regard, we are of the view that new, and perhaps more cost-effective technologies may be used.

[58] If the sum of discounted revenues is €700 (resp. €2,000), the net cost is the difference between the sum of connection costs of lines with connection costs over €700 (resp. €2,000) and the €700 (resp. €2,000) revenues multiplied by the number of lines considered.
[59] Decision D9/05.

332 If we set a monetary threshold, the estimated cost of connecting an end-user should also be based on the least cost technology to provide the required service, irrespective of the technology Eir chooses to utilise in practice –provided that the connection is capable of allowing access to all elements of telephony services – voice, fax, and data.

333 If the end-user is not satisfied with the solution proposed by the USP, (and assuming the solution is in keeping with the regulatory obligations in place) the end-user should be able to request an alternative technology. If this is a technology more expensive than that proposed by the USP, any such request should be considered by the USP. However, the end-user must be willing to pay the costs above the technology proposed by the USP.

334 We also suggest that the USP would have to conduct a cost evaluation of alternative technologies available to meet the USO AFL requirements and the suitability of the technologies being considered in light of QoS targets for connection, fault occurrence, and repairs (service availability).

335 In assessing the cost of a connection, we suggest that it is only those costs that can be attributed to the individual end-user which should be measured.[60] Thus, infrastructure that is used currently, or will be used in the future, for the provision of a service to other end-users should be excluded from the calculation of connection cost.

336 When measuring the cost of the connection, the cost to a point inside the premises should be included. The costs which should be incurred by the USP in bringing the connection from the roadside to inside the premises would relate to overhead drop wires, where such a solution is possible. However, where overhead wires can be used and the end-user requires underground cables, then it appears reasonable to us that the end-user should incur the additional costs of digging trenches and laying ducting for example.

337 If we set a monetary threshold and an applicant believes the cost estimate for providing access is excessive, this can be subject to Eir's complaint handling process. We are of the view the end-user should be entitled to a detailed breakdown of the estimated costs of the connection. If the applicant remains dissatisfied, the matter may then be referred to us for review.

6.4.3.4 Communications with End-users

338 All applicants will need to be provided with adequate and regular information regarding progress in addressing their request for service. Such information could include the proposed technical solution, costs, and expected connection times. This is particularly appropriate in the minority of cases where additional surveys may need to be undertaken before a connection can be provided. Where a survey is conducted, the applicant must be able to make an informed decision on whether they wish to proceed with connection or not, having regard to any costs and the technology proposed by the USP. If we maintain the RAT is maintained, the applicant must be told any costs if the USP considers that satisfying the request would exceed the

[60] Decision D9/05.

threshold.

339 We are proposing that the USP should be required to maintain a record of the cost evaluation and a record of the solution. Adequate information on proposed works and their costs must be provided to end-users. We also consider that it is reasonable that communications with applicants should be in writing. The USP would also have to inform all applicants of its Code of Practice for Complaint Handling in relation to disputes on matters relevant to their connection requests.

340 If were to remove the RAT, we consider that the USP must still provide the applicant with adequate and regular information on costs, technologies proposed, and progress updates. Also if we were to remove the RAT, the USP will still have QoS targets and cannot therefore unreasonably delay the connection of high cost connections – to induce the applicant to cancel their connection request.

6.5 ComReg's Preliminary View

341 We propose that any new request for connection should be assessed by the USP using a two-step approach. The first step would determine whether the USP could be granted an exemption from providing the connection where it can prove the presence of an affordable, alternative infrastructure, with sufficient QoS (including indoor coverage). Agreement from the individual requesting the connection would need to be recorded, failing which ComReg's consent would be required before the USP could deem the request unreasonable.

342 In order to assess the affordability of the alternative solution, details such as cost of terminal equipment, connection fees, and monthly subscriptions and call/package prices must be compared with the service requested from the USP. We are of the preliminary view that if they are broadly the same price then the alternative solution could be acceptable.

343 If the presence of an appropriate alternative infrastructure cannot be proven, the request for connection must be considered in line with the Reasonable Access Threshold. We are of the preliminary view that the RAT should remain at €7,000.

344 A record of all the request for connection from end-users and the cost evaluation and of the solution proposed must be kept, and USP must use the least cost technology, providing it is capable of allowing access to all the elements of telephony services-voice, fax and data.

345 Only costs attributable to the individual end-user should be measured, and we are of the view the costs should include the connection to a point inside the premises.

Q. 7 Do you agree or disagree with the regulatory options for reasonable access requests as set above? Are there other options that we should consider? Please give reasons to support your view.

Q. 8 What do you believe is the most appropriate factor(s) to define a reasonable request? Are there other factors which you believe we should consider when assessing what defines a reasonable request? Please give reasons to support your view.

Q. 9 What is your view regarding how to assess if the alternative infrastructure is affordable? Please provide reasons to support your view.

Q. 10 Do you agree that indoor coverage is an important factor in assessing alternative connections and PATS? Please provide reasons to support your view.

Q. 11 Do you agree that where a threshold is set, only costs that can be attributed to the individual end-user should be measured and that the estimated cost of connecting an end-user should also be based on the least cost technology to provide the required service, irrespective of the technology the USP choose to utilise in practice? Please provide reasons to support your view.

Q. 12 Do you agree that end-users should be entitled to adequate and regular information regarding their request for connection? Please provide reasons to support your view.

7. Quality of Service

346 In this Chapter, we set out our preliminary view that there is a continued need for AFL USO QoS Targets. We have considered the analysis put forward in TERA's First Report, Consultation 15/89 and respondents' views, and the second TERA report and, our preliminary view is that there is a need for QoS targets to continue to be in place. However, we are of the preliminary view that the targets should be modified to allow the USP to have the flexibility to balance investment costs against operational costs, in light of the NBP and the rollout of next generation networks on a commercial basis.

347 Our proposals are forward looking and dynamic and give appropriate flexibility to the USP, while safeguarding the interests of consumers.

348 We are proposing targets that would replace those set out in Decision D02/08 in which event Decision D02/08 would be revoked.

349 We propose to retain connection targets, to combine the fault occurrence and fault repair metrics, and to create an availability target in its place. We also propose that the availability target should be set at both national and sub-national levels.

350 To minimise changes to the existing reporting and publication regime, we propose to keep this unchanged, except for the addition of the availability target aspects, which we propose should follow the same approach in terms of publication.

351 We also propose that the USP must continue to have the QoS data audited before publishing or submitting to us.

352 This Chapter is structured as follows:

7.1 Current AFL USObligations - an overview of the current obligations.

7.2 Consultation 15/89 - a summary of our preliminary views on QoS set out in Consultation 15/89 and the related questions posed in that consultation. We also outline:

- Respondents' submissions – a summary of the key submissions to Consultation 15/89 in respect of QoS.
- ComReg's response – a summary of our response to respondents' views in respect of QoS.

7.2 QoS for the Future - options and ComReg's preliminary view:

- Further Analysis of QoS – our further detailed consideration of Quality of Service and our preliminary views in respect of the QoS targets that should be put in place from July 2016.

7.1 Current QoS Obligations

353 Eir as the AFL USP for connections must comply with the performance targets in relation to AFL as set out in Decision D02/08.[61] In accordance with the obligations in respect of QoS, established in Decision D02/08, the AFL connection must satisfy certain quality targets defined in terms of supply time for initial connection, maximum fault rate per access line (fault occurrence) and fault repair times. Previously, we also established PIP programmes (PIP, PIP2, and PIP3) for QOS.

7.2 Consultation 15/89

354 Consultation 15/89 and the First TERA Report analysed Eir's compliance record with specified QoS performance targets and also considered Eir's possible future behaviour if it had no USO and QoS targets; assuming it would act as a profit maximising operator.

355 The First TERA Report found that, Eir's incentives to maintain an adequate level of QoS are different across the country:

- In market-driven infrastructure-based competition areas, Eir is likely to need to maintain / improve its QoS to be able to compete.
- In NBP areas, two situations can be envisaged:
  - If Eir wins the NBP bid, Eir may not want to improve QoS in these areas to facilitate migration from copper to the NGA infrastructure; and
  - If Eir loses, it will be forced to maintain / improve QoS in order to compete and generate revenues from the retail line rental for as long as possible.
- In "Eir only" areas, Eir may have lower incentives to invest to maintain QoS. Competition from mobile and wireless technologies may mitigate this risk.

356 The First TERA Report also looked at whether Eir has financial incentives to invest in its network to reduce the number of faults. In doing this, TERA examined the costs of removing and repairing faults together with planned investment in the coming years. TERA found that "acting as a profit-maximising operator", Eir would have incentives to reduce investment in the network absent any QoS USO. However, this remains true in the short to medium term: in the long run the costs of repairing faults may exceed "no investment savings."

357 The First TERA Report also noted that deterioration in the level of QoS would likely be significant and that this deterioration also affects OAOs relying on Eir's copper network (with SB-WLR or with ULMP).

[61] ComReg also established a Performance Improvement Programme ("PIP"). The PIP imposed financial penalties if certain performance targets were not achieved. The most recent PIP (PIP3) is for the period July 2014 – December 2015.

358 The First TERA Report assessed the likely impact on the different geographic areas of the removal of the USO. TERA found that the level of line fault varies substantially throughout the country:

- The line fault index ("LFI")[62] in market-driven infrastructure-based competition areas is ✂(1 fault every ✂ years) in 2014;
- The LFI in Eircom only areas is ✂(1 fault every ✂ years) in 2014; and
- The LFI in NBP areas is ✂ (1 fault every ✂ years) in 2014.

359 However, the TERA Report also noted that: *"disparities in terms of QoS is largely explained by the fact that a significant amount of infrastructure is underground in market-driven infrastructure-based competition areas (and therefore cables are less prone to faults) while a significant share of infrastructure is overhead in other areas."*

360 In this respect, the First TERA Report concludes that: *"Eircom would not necessarily in the future let the number of faults raise significantly in areas with less competitive pressure. However, given existing and future competitive constraints, such a scenario cannot be excluded."*

361 Other QoS aspects such as fault repair times and investment were analysed in the First TERA Report. Shorter repair times were observed in market-driven infrastructure based competition areas. However, this appeared to be explained by the way staff are distributed. This is contrary to the view that there are *no technical reasons* to believe that repair times should be higher in different areas.

362 TERA considered also that USO QoS Targets and PIP Targets are set on a national basis and Eir could achieve its national targets, while having large variations in performance in different areas by compensating for areas of underperformance with areas of over performance.

363 In Consultation 15/89, we formed the preliminary view that without a USO for QoS Eir may tend to favour areas with infrastructure-based competition even more than at present and ensure shorter repair times in these areas as end-users are more likely to switch supplier where they experience long faults.

364 In relation to access network investment, the First TERA Report suggested that: *"Despite a higher level of fault occurrence in areas with limited competition, Eircom tends to invest rather in areas with market-driven infrastructure-based competition compared to the level of faults. This trend is likely to be reinforced if QoS USOs are ceased."*

365 The First TERA Report found:

- *"The level of fault is much greater in NBP areas and Eircom only areas. However, this can be explained by the fact that the significant presence of overhead infrastructure which is more prone to faults;*

[62] Ratio between the number of access network faults for FY1314 and the number of active lines.

- *Time to repair faults is longer in NBP and Eircom only areas;*

- *The distribution of staff per line or per fault shows that the amount of staff is proportionally lower in NBP and Eircom only areas;*

- *Finally the amount of investment per fault is lower in NBP and Eircom only areas."*

366 In summary, having carefully considered the First TERA Report, we anticipated that without any AFL with QoS performance targets, Eir would be unlikely to have financial incentives to invest significantly in its network in the short to medium term in order to reduce the number of faults. This is supported by an analysis of Eir's QoS performance over the past few years.

367 The Regulations provide that performance targets may be set for designated undertakings. In accordance with the obligations in respect of QoS, established in Decision D02/08, the AFL connection must comply with certain targets defined in terms of supply time for initial connection, fault rate occurrence per access line, and fault repair times.

368 QoS is currently maintained through a number of different performance targets, including those for:

- In-situ and new connections.

- Fault rate occurrence.

- Fault repair times.

369 These performance targets are important measures of consumer welfare and ensure that performance, particularly in remote areas does not adversely affect consumers. Performance in relation to these targets is published quarterly by ComReg. Further, non-compliance with these targets results in our exercising our enforcement procedures.

370 For example, from the perspective of end-users, these targets could ensure that they do not experience considerable delays in getting a telephone line connected, or ensuring that a line is not out of order for an unreasonable time. Faults on connections can be a source of considerable inconvenience and upset, in particular for those who live alone, and those who are elderly or vulnerable. Some services such as monitored alarms and fixed-line broadband also depend on the continuous availability of the telephone service.

371 If these targets are lessened or removed, it may negatively affect end-users, particularly those in rural areas who may experience detriment e.g. the quality of their line or connection. It is likely that those who would be most affected are those located in more rural areas.

372 In Consultation 14/48 we stated that: "*it is appropriate to maintain current standards with respect to quality of service measures."* The QoS targets imposed on a USP is a minimum standard. As the current USP, Eir has demonstrated, in the main, that these targets are achievable. Should the market fail to meet end-user demand for basic services, without a USO, there is no guarantee that such standards will be in place to protect end-users.

373 We propose that additional proposed QoS targets may be necessary after for the period commencing 1 July 2016 in order to address or remedy problems in respect of service availability, call quality, and the national and annual nature of the targets.

7.2.1. Respondents' submissions

374 In relation to In Consultation 15/89, we asked for general views on our proposal to retain QoS targets.

375 Eir considered our analysis and the First TERA Report to be incorrect.

376 Eir disagreed with the focus on Eir's network. It pointed to updated information in PIP3 on investment and submitted that this should be factored into the 'stable LFI' scenario. Eir submitted that same LFI trends in performance are consistent across each of the three areas identified. It submitted that:

> *"TERA is mistaken in believing that eircom has substantial control over the level of fault occurrence on a geographic basis." It submitted that there are a number of other factors that will impact on the LFI on a regional and national basis, including severe weather events.*

377 Eir did not agree with the investment scenarios:

> *"If eircom wins the NBP bid it will likely roll-out FTTH in the NBP area. This will not be a separate network but an upgrade to the existing network. In a relatively short period of time we would expect the network to migrate from copper to fibre. Post migration many of the existing assets such as telegraph poles will continue to support the network. It is not possible for eircom to deliberately degrade the QoS of its copper network in this scenario…*

378 Should it not win the NBP Eir stated that:

> *"This would leave the eircom network with a dwindling customer base of voice only customers and insufficient revenue streams to justify capital investment on its network items with a pay-back period longer than a few years."*

379 Eir submitted that the analysis shows that it has consistently invested more per line in rural areas relative to urban areas and that the number of working lines will dramatically decrease over the proposed designation period of 7 years.

380 Eir disagreed that we should consider the worst case scenario absent the USO for QoS.

381 Eir did not agree that it can make strategic choices to treat fault repairs in different areas differently and submitted that the fault trends are consistent across the geographic areas and that lines per staff member lower in NBP and Eir only areas.

382 ALTO said that its members: *"…remain increasingly concerned about the rising levels of Eircom's claims for running the USO and agree ComReg should bench mark service quality."*

383 ALTO also stated that: *"…with interest Eircom's persistent reluctance to agree improved SLAs with operators and we believe this should and would also apply to the USO given the opportunity*" and also stated that "*customer service is important and we consider the USO QOS figures mandated in regulation through the ComReg Decision 02/08 and 14/129 should continue."*

384 ALTO also stated that it found it difficult to compare QoS figures without the precise definitions.

385 BT suggested that we should benchmark service quality and fault repair against other countries. BT indicated that it had concerns, which are heightened because of *"eir Group's recent history of meeting the USO requirements in Ireland and the need for three Performance Improvement Plans over recent years."*

386 BT also submitted that: *"…if eir Group decides to underinvest in the access networks, the industry should not be penalised through higher charges."*

387 BT agreed that that absent the AFL USO many people would not be served and it has a significant doubt that end-users in rural areas would receive reasonable repair times for faulty services.

388 Vodafone agreed that: …*"for the reasons discussed in the report, we agree that there is a risk to universal, affordable and quality AFL at this time".*

389 UPC/VM was of the view that the risk to universal service was overstated.

7.2.2. ComReg's response

390 The majority of respondents agree that QoS measures need to be retained.

391 Regarding ALTO's point about being able to compare the figures without precise definitions, we have decided to publish the applicable definitions and methodologies used to calculate the QoS performance measures. These are contained in Annex 3.

392 We note ALTOs submission regarding benchmarking. While benchmarking is useful to a certain extent, we recognise the particular circumstances prevalent in the national context, including the demographics, topology, weather influences, network infrastructure (e.g. overhead percentage and line lengths) and current market plans for new networks as well as the NBP (see Section 7.3).

393 We have taken into account the points made by Eir in relation to updated investment figures, information on the future evolution of working lines, the influence of weather on performance, etc. In particular, we note that TERA's assumptions in its second report have been updated accordingly and they are set out in Appendix B of that report.

394 The investment scenarios have been reviewed in the Second TERA Report and we have considered these further (see Section 7.3).

395 In respect of Eir's claim that it cannot influence fault occurrence, we consider that investment in the network to prevent faults could be targeted. For example, it might be reasonable to assume that Eir would target investment in areas with a higher propensity to have faults. However, we note TERA's analysis that Eir has a higher increased level of investment in per access line in market-driven infrastructure based competition areas, while investment in NBP areas has decreased a lot and investment in Eir only areas has only slightly increased (see Section 7.3).

396 In relation to Eir's comments on fault repairs, we have considered the further analysis and agree with TERA's view that (irrespective of the factors that may impact fault repair times) if Eir wished to achieve a similar level of fault repair performance across the country, it could allocate more staff to the areas with a higher fault incidence. We disagree with Eir that it cannot or would not make strategic choices that affect fault repair performance and we note that Eir ✂.

397 In relation to Eir's claim that investment in the copper network may lead to stranded assets, we have proposed an availability target which allows Eir to balance its level of investment with operating expenditure, whilst ensuring that Eir's end-users' services are available for use (in working order) at an appropriate level which is consistent across the country.

7.3 Quality of Service for the future – options and ComReg's preliminary views

398 We have considered appropriate QoS levels for current generation networks, having regard to the deployment of next generation access networks both commercially and as a result of the NBP.

399 We have considered The Second TERA Report which has reviewed some underlying assumptions, based on input from Eir. TERA has also considered the impact of weather conditions and the percentage of underground and overhead infrastructure on fault occurrence. We have taken this into consideration in our proposals.

400 We remain of the preliminary view that a QoS regime remains appropriate, and that such a regime will ensure that the quality delivered by Eir will remain at an appropriate standard, while giving Eir the flexibility to achieve this standard by different means in different geographic areas.

401 In light of our preliminary view that to completely remove the QoS targets is not appropriate, our further analysis and preliminary views on the appropriate options for a QoS regime for the future, commencing 1 July 2016, is set out below.

Option 1 - Keep the existing targets

402 The current targets in Decision D02/08 are a reasonable benchmark in the Irish context. Although set in 2008 the targets included a glide path for performance on fault occurrence to from 15.5 faults per 100 lines in 2009 to 12.5 faults per 100 lines in 2012. Since then, a number of performance improvement programmes i.e. the PIPs, have been agreed with Eir, which calibrate penalties against year on year developments. Decision D02/08 and the most recent PIP3 targets are contained in Annex 4.

403 Unless we modify or replace Decision D02/08, these targets will continue to apply to a designated USP.

404 We are of the view that these targets can be reasonably achieved. We understand that Eir's performance for fault occurrence in 2015 was 13.4 (between Decision D02/08 and PIP3) however, its repair performance is significantly below both Decision D02/08 and PIP3 and connections were also slightly below PIP3.[63] In respect of both repairs and connections, these are in within Eir's own ability to improve.

405 However, although Eir is performance is within the PIP3 fault occurrence target, it has submitted that it may no longer be appropriate for it to continue investing in certain areas where new infrastructure is envisaged to be fully deployed, in particular as a result of the NBP.

406 We will have therefore considered changes to the current regime which are designed to accommodate this factor.

Option 2 - Modify existing targets

407 We have considered how the QoS targets could be adjusted to address the concerns raised by Eir, while continuing to protect end-users in all parts of the country. Our preliminary view is that the same targets should apply across the State and therefore we have considered how best to achieve the objectives with this in mind.

7.3.1. Sub-National Targets

408 In relation to the current, national regime, we remain concerned about the extent of the ability for Eir to differentiate investment levels and fault repair rates in different geographic areas and we note that this can create a disparity in performance across the country in the context of the current regime which is constructed with national targets in mind. This is illustrated by the fact that some MDFs have very high fault occurrence and repair times compared to others and there is typically a difference between large towns and very remote areas.

409 We also consider that in order to allow flexibility in terms of investment for Eir, it may be beneficial to introduce an availability target (discussed in section 7.3.3), but we are of the preliminary view that this should be at sub-national level.

[63] Audited figures for the full year have been submitted and will be published in due course.

410 The Second TERA Report (at section 5.2.1) considered sub-national targets and it finds that the addition of sub-national targets provides greater certainty and that more end-users will have a consistent experience of QoS.

Level of sub-national targets.

411 The Second TERA Report considers the level at which the sub-national targets should be set. We have considered this and we are of the preliminary view that targets, set by line or by MDF, while more beneficial to individual end-users, would be too granular. This level would not allow for any flexibility for Eir in terms of investment decisions, this level would be too sensitive in terms of variations to performance (in particular, for once off events) and would be more difficult to monitor.

412 We are also of the preliminary view that the most pragmatic solution to balance end-users' interests and the legitimate considerations for Eir is by grouping MDFs into sub-national areas.

413 In this regard, there are two options we have considered; either grouping MDFs by 'technical' factors, such as the average line length, average % of overhead infrastructure, and weather or by grouping MDFs by the 3 areas, as identified by TERA.

414 We agree with TERA that while the technical factors do drive fault occurrence, they are unlikely to impact Eir's investment decisions. However, the competitive environment is more likely to impact investment decisions but is not a driver of faults (Figure 7, Second TERA Report).

415 We propose therefore to set sub-national targets based on the areas proposed by TERA, namely: **Market Driven, Eir only, and NBP**.

7.3.2. Fault Occurrence

416 TERA has analysed the fault data for the past 5 years (2009 – 2014) provided by Eir and other technical data, such as average line lengths and percentage of overhead cable by MDF and it has derived the average fault occurrence rate per area and per km of line within each area. Table 11 from TERA's Second Report is shown below. It illustrates that there is higher line fault occurrence in the areas where the lines are longer and where there is a higher percentage of overhead infrastructure, in particular the NBP area.

✂

TERA Report - Table 1 – groups of MDF based on the type of competition Confidential

Figure 7 - 5 year average QoS measurements

417 In ascertaining what would be a reasonable fault occurrence in each of these three competitive areas for the next period, TERA has considered the use of a formula which recognises the factors that affect fault occurrence and predicts an LFI based on these. The factors being weather conditions, line length and percentage of overhead infrastructure. We agree with this approach and this is in line with Eir's submissions in respect of factors affecting fault occurrence.

418 In respect of technical factors, TERA identified a direct correlation between the level of LFI per kilometre (km) and the percentage of overhead infrastructure (Figure 8 of the Second TERA Report). We have considered this and it demonstrates a higher fault occurrence the longer the lines and the greater the percentage of overhead infrastructure.

419 In considering the weather, we asked Eir to provide any information it had in respect of weather conditions affecting QoS for MDFs. Eir stated that it did not have weather impact data that could be provided at MDF level.

420 TERA has considered the weather data made available by Met Éireann[64], on www.met.ie for the period 2012-2015.

421 This data is collated from 23 measurement stations around the country. The data includes the following for each measurement station

- Number of days with rainfall greater than 10mm.
- Number of days with a maximum 10 min mean wind speed > or = 15 meters per second.

422 We agree that such conditions may impact fault occurrence due to humidity effects with copper cables and wind effects on overhead infrastructure.

423 Having mapped each MDF to a weather measurement station based on the same county or an adjacent county (where there is no measurement station in that county), it is possible to identify three geographic areas with similar weather conditions - Second TERA Report (Figure 9).

424 The analysis shows that the west of the country experiences more wind and rain than the other areas, while some areas on the east have more wind but less rain. The south-east, midlands and north midlands experience the most favourable weather conditions.

[64] The Irish National Meteorological Service.

425 TERA has overlaid these groupings by weather statistics onto the infrastructure attributes (line length and overhead percentage) so that all factors could be considered together when predicting the appropriate fault occurrence rate (LFI – Line Faults per 100 lines) based on these factors.

426 We note that this analysis set out in Tables 12 and 13 in the Second TERA Report demonstrates that based on infrastructure, weather data and fault data, Eir's fault occurrence in NBP areas should be less (better) than it is currently. This is illustrated using both data over 5 years and for the financial year 2013-2014, with similar results.

427 We also note that in the other two areas the fault occurrence is in line with or better than the expected performance. We agree with TERA that this indicates that the most important area for addressing fault occurrence and for related targets is the NBP area and that sub-national fault occurrence targets are less important for the market driven infrastructure based competition areas. However, in the Eir only area due to lack of competitive constraints on Eir, it may also be necessary to continue to have regard to a fault occurrence target.

✂

Source: ***TERA Report - Table 12 – Comparison of the current LFI and the predicted LFI in each area and costs of removing the faults to achieve the predicted LFI – 5 years average***

Figure 8 - Comparison of current and predicted LFI by area

428 TERA's analysis indicates that it may require additional investment in that area to meet the expected fault occurrence target in the NBP area would require ✂ (based on 5 year averages). We note that this would not be new or additional investment but could be funds (including those allowed in pricing models for maintenance and repair) diverted from other areas where fault occurrence is already below the expected (predicted) rate.

429 However, we have also considered that additional investment in the NBP area may not be appropriate due to the fact that the NBP infrastructure will be available in the coming years in these areas. That is, it may not be appropriate at this time to set targets in NBP area which are stronger than those currently in place and we are also of the preliminary view that sub-national targets should not be different for different areas.

430 Our preliminary view is that it may not be appropriate have different fault occurrence targets for different areas. We therefore agree with TERA that it may be appropriate to set the targets at national level and sub national level for each areas based on the NBP area's expected performance, having regard to appropriate investment levels.

7.3.3. Service availability target

431 We note TERA's analysis that repair times could be more consistent across the State if Eir were to design its operating expenditure to achieve this. The analysis shows that the percentage of faults repaired in 2 working days is ✂% lower in NBP areas than in market driven infrastructure based competition areas.

432 We also note that it may be appropriate to accommodate different fault occurrence rates in different areas due to the different characteristics of these areas together with considerations regarding investments in the NBP area in light of the rollout of the NBP in the coming years.

433 We agree with TERA's analysis that a service availability target may be an appropriate mechanism to ensure that the amount of time services are not working, (unavailable) either because of a fault or a delayed repair, is more consistent across all areas of the State.

434 We agree that a service availability target gives Eir the flexibility to make efficient decisions in terms of investments for preventative maintenance or operational expenditure (Opex) to ensure that faults are repaired in a timely manner.

435 Based on a national target of fault occurrence per 100 lines of 14.5 and a national average repair rate of 1.6 days[65] the service availability target would be 99.94% nationally, calculated as follows:

$$\boldsymbol{Service\ Availability} = \mathbf{1} - \frac{\mathbf{14.5\%} \times \mathbf{1.6}}{\mathbf{365}} = \mathbf{99.94\%}$$

436 However, on a sub-national basis, looking at both the 5 year average and predicted fault occurrence and repair times an availability target of 99.86% for the three sub-national areas would be more appropriate. This is illustrated by Figure 14 of TERA's second report inserted below.

✂

Source: TERA Report Figure 14 – % of availability calculations

Figure 9 Service Availability Calculations

437 We have considered TERA's analysis of the fault occurrence and fault repair trends together with its analysis of factors such as the weather conditions and line length and overhead infrastructure.

438 We are of the preliminary view that an availability target, measured by combining fault occurrence and fault repair performance[66] should be put in place to allow of greater flexibility for Eir to choose how best to balance preventative maintenance(investment) with operating expenditure (Opex) necessary for timely repairs in different areas, including the NBP area.

439 However, to protect end-users and to ensure that the QoS they receive is appropriate, particularly in non-competitive areas, we are of the preliminary view, that targets should be set at sub-national or area level as well as nationally.

[65] Based in the PIP3 repair %ages (82% in 2 working days, 95% within 4 days, 96% within 5 days, and 99% within 10 days = 1.6 days on average, Assessed using the average (midpoint) of each range: 82% within 2 days (1 day in average), 13% between 2 and 4 days (3 days in average), 1% between 4 and 5 days (4.5 days in average), 3% between 5 and 10 days (7.5 days in average), 1% above 10 days (10 days considered): 82%x1 + 13%x3 + 1%x4.5% + 3%x7.5 + 1%x10 = 1.6 days. This calculation also works out at 99.4% if D0208 Fault Occurrence and repair targets are used.

[66] Calculation Methodologies for the metrics are set out in Annex 3.

440 We are of the preliminary view that the areas should be defined in accordance with TERA's analysis and that there should be three areas; Eir only, NBP and market driven infrastructure based competition. The MDFs in each of these areas are as set out in Annex 5.

441 In addition, to protect individual end-users, we are of the preliminary view that end-users should not be charged for any billing period where their service was not available for more than 10 days, for whatever reason.

442 Given the planned commencement of the NBP rollout we are of the preliminary view that the necessity for a review of the targets should be examined within 2 years.

443 In summary, we propose to set an availability target at 99.94% nationally and 99.86% for each of the three sub national areas.

7.3.4. Connection Targets

444 TERA has analysed connection times (in situ and other) by each of the identified sub-national areas. It found that there is no apparent discrepancy between connection times across these areas, except for agreed date connections, whose speed of connection is lower in NBP only areas.

445 We agree that the current targets under Decision D02/08 remain appropriate and in light of the proposals on reasonable access requests connection targets would be easier to achieve, but it is also more important that they are achieved.

446 We have considered TERA's recommendations and we are of the preliminary view that on-balance sub-national targets are appropriate to guard against large variation of experiences regarding connection time across the three areas of the country. We also note that as the proposal is that service availability (which is impacted by repairs) is proposed to be sub-national, then connections should also be sub-national, so that the incentives are balanced.

447 Regarding the actual targets themselves, we consider that the current targets continue to be appropriate. We have received no submissions on connection targets.

448 We propose to retain existing connection targets, measured on a sub-national basis.

7.3.5. Performance Measurement, publishing and audit

449 We propose no change to the current calculation, reporting and audit regime, save for the addition of the new service availability target at sub-national and national level and the sub-national connection targets: these will be derived from the fault occurrence and fault repairs metrics, as they are currently calculated.

450 We propose that Eir continues to report audited data on a quarterly basis, 2 months after the quarter end. The data is to be audited, submitted in written and electronic form (spreadsheet) and accompanied by an auditor's letter.

451 In addition, additional data and metrics are also calculated and supplied and we are proposing that this continue.

Q. 13 Do you agree with the approach taken to estimate the predicted fault occurrence based on weather, line length and overhead percentage? Please provide reasons and evidence to support your view.

Q. 14 Do you agree with the preliminary view that any sub-national targets should be in accordance with the 3 areas defined in the TERA reports? Please provide reasons and evidence to support your view.

Q. 15 Do you agree with the preliminary view that fault occurrence targets and repair targets should be combined to provide a service availability target? Please provide reasons and evidence to support your view.

Q. 16 Do you agree with the preliminary view that a service availability target should be set nationally and sub nationally by area? Please provide reasons and evidence to support your view.

Q. 17 Do you agree with the preliminary view that the national service availability target should be 99.94% and the target for each sub-national area should be 99.86%? Please provide reasons and evidence to support your view. If not, what alternative availability targets do you believe are justified and why?

Q. 18 Do you agree with the preliminary view that end-users that have service availability for >10 days should be automatically refunded? Please provide reasons and evidence to support your view.

Q. 19 Do you agree with the preliminary view that the connection targets levels that are in place are appropriate for sub national targets? Please provide reasons and evidence to support your view.

Q. 20 Do you agree with the preliminary view that the measurement of connection targets at sub-national level is appropriate? Please provide reasons and evidence to support your view.

Q. 21 Do you agree with the preliminary view in respect of the measurement, publishing and auditing of the performance figures? Please provide reasons and evidence to support your view.

Q. 22 Do you agree with the preliminary view that the performance targets should be commence from 1 July 2016? Please provide reasons and evidence to support your view.

Q. 23 Do you agree with the preliminary view that the necessity for a review of the performance targets should be examined in 2 years? Please provide reasons and evidence to support your view.

8. Affordability

452 In this Chapter we outline our preliminary view that the obligation to provide GAP should be maintained. We do not propose to introduce social tariffs at this time.

453 AFL must be provided to all end-users at an affordable price, in particular, for vulnerable user groups, e.g. the elderly, those on low incomes, and for consumers with disabilities.

454 This section is structured as follows:

8.1 Consultation 15/89- outlines issues raised in Consultation 15/89.

8.2 Retail Price Cap – gives an overview of the Retail Price Cap.

8.3 GAP - gives an overview of the obligation, a summary of respondents' submissions to our Consultations, and our preliminary views.

8.4 Social Tariffs - gives an overview of the obligation, a summary of respondents' submissions to our Consultations and our preliminary views.

8.5 ComReg's Preliminary View – summarises our preliminary views on affordability measures.

8.1 Consultation 15/89

455 In Consultation 14/48[67] and Consultation 15/89,[68] we set out that, pursuant to the Universal Service Regulations, the USP can be required to adhere to the principle of maintaining affordability for universal services. In this respect, the Regulations provide that we may oblige a designated USP to offer special tariff options or packages which depart from those provided under normal commercial conditions, in particular, to ensure that those on low incomes or with special social needs are not prevented from accessing the network. The Universal Service Regulations also provide that we may require USP to apply common tariffs, including geographical averaging throughout the State.

456 We were of the view that from the perspective of social inclusion, Irish communication costs should not exclude the most vulnerable in the community from making a minimum use of telephony services. While communication services are a basic necessity for all end-users, we considered that protections for more vulnerable end-users should remain in place. These should protect vulnerable end-users from a rapid increase in their overall bills.

[67] Section 5.3.4.1, p41.
[68] Section 5.3.

457 In Consultation 15/89, we set out our preliminary view that there was a continued need for some kind of AFL USO in Ireland post-2015. On that basis, we envisaged that we would further consult on the specification of any obligations to be placed on the USP(s) for the provision of an AFL USO. Therefore, considering possible forward looking requirements for the AFL element of USO, we reviewed affordability, including GAP.

458 At present, affordability is maintained through a number of different schemes:

a. Within the existing RPC:[69] this provides a safeguard on consumer's line rental and connection fees (but excludes calls).

b. Eir's "Talktime Control Scheme" in respect of existing end-users.

c. Eir's low usage scheme or Vulnerable Users Scheme (**"VUS"**).

d. GAP obligation: ensures universal services provided by the USP are available at a uniform price, irrespective of geographical location in Ireland.

459 As set out in consultation 15/89, Eir, as the operator with significant market power (SMP), is subject to a retail price cap on its line rental and connection prices.[70] The price cap restricts the amount by which Eir can increase these prices in any given year. Given this safeguard price cap on consumer's line rental and connection fees is retained, this will mean inflationary increases in basic line rental (PSTN) services only (i.e. CPI-0).

460 In respect of assessing any impact of ceasing the RPC obligation, it was noted that as the RPC obligation is imposed on Eir as the SMP operator in the FVA market and not because it is the USP. The removal of the USO designation would not directly affect this safeguard on consumer line rental prices which, discussed further below, is complementary to the GAP obligation. A GAP obligation in respect of AFL has been place on the USP since 2003.[71] GAP means that charges for USO services are the same for all end-users throughout the State irrespective of their geographic location. GAP for AFL is a mechanism to ensure that basic telephone connection and services provided by the USP are available at an affordable price, irrespective of geographical location in Ireland.

461 The Department of Social Protection Telephone Allowance, which historically provided consumers who qualified for the scheme with a payment towards their telephone bill[72] (either landline or mobile) was removed by the Government, effective from 1st January 2014. However, we noted that Eir voluntarily provides the VUS special tariff plans as well as the Talktime Control Scheme. However, we note that Talktime Control is no longer available to new end-users, and when

[69] Document No. 14/89 "Market Review: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers", 28th August 2014.
[70] In 2014, ComReg decided pursuant to the review of the FVA that continuing to implement a RPC for basic line rental (PSTN) services with a view to safeguarding 'captive' voice customers was appropriate.
[71] In addition to AFL services, Eir as the USP is required to apply geographically average prices throughout the State for Public Payphones (ComReg document 14/69, 07/07/14) and Directory Services (ComReg document 14/68, 07/07/14).
[72] DSP allowance was €9.50 per month in 2013.

offered was only available to consumers who previously availed of the DSP Telephone Allowance.

462 Considering whether a change or otherwise might be required in respect of affordability measures, ComReg and its consultants TERA benchmarked approaches taken to affordability elsewhere in the EU (First TERA Report).[73] This benchmark analysis found that all of the 12 countries studied imposed measures for affordable access, through the introduction of one or a combination of measures: GAP, social tariffs and/or price control.

463 Having regard to respondent views to consultation 14/48 as well as the benchmark analysis, in Consultation 15/89, we were of the preliminary view that no change was required with respect to the affordability measures. The following sections further consider the risk to affordable universal voice access for all, were the GAP obligation removed as well as no change in respect of social tariffs.

8.2 Retail Price Cap

464 With respect to assessing the balance of risk absent an AFL USO, ComReg and TERA[74] recognise certain constraints on Eir's pricing flexibility. However, the strength of competition in the standalone voice market at this time does not represent and effective competitive constraint on Eir which has close to a 70% market share.[75] Further as the SB-WLR prices are currently set on the basis of retail-minus, absent regulation, Eir would have the ability and incentive to increase its retail standalone prices and also the charges for SB-WLR (hence, limiting the impact of its competitors at the retail level).[76] However, ComReg has consulted[77] (and has recently notified the European Commission of its draft measure[78]) that regulation of SB-WLR be changed from retail minus to cost-orientation. The RPC is imposed in order to address Eir's ability to raise line rental and connection prices above the competitive level in light of its SMP in the market. The RPC ensures that end users are protected against any risk of line rental and connection price increases in respect of the fixed voice service.

[73] Document No. 14/89 "Market Review: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers", 28th August 2014.
[74] The First TERA Report: p69-74 and updated in the Second TERA Report; p39-46.
[75] Decision D12/14 (Document No. 14/89).
[76] See ComReg's Decision in respect of the wholesale voice access market http://www.comreg.ie/_fileupload/publications/ComReg1582.pdf .
[77] See ComReg document 15/67: http://www.comreg.ie/_fileupload/publications/ComReg1567.pdf
[78] See https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp

465 Depending on the outcome of our current review of wholesale network pricing, alternative operators may have greater room in the future to compete with Eir in respect of the voice service (e.g., OAOs purchasing cost-oriented SB-WLR may be in a position to launch retail offers below the current GAP level). This should ensure that voice access prices are broadly affordable for the majority of end users. ComReg's quarterly report[79] compares tariffs advertised by standalone fixed voice service providers for residential end-users based on a basket of 60 calls (190 minutes).[80] Pure Telecom offers the cheapest tariff for this particular basket at €32.38, followed by Digiweb (€38.69) and Sky (€43.25).

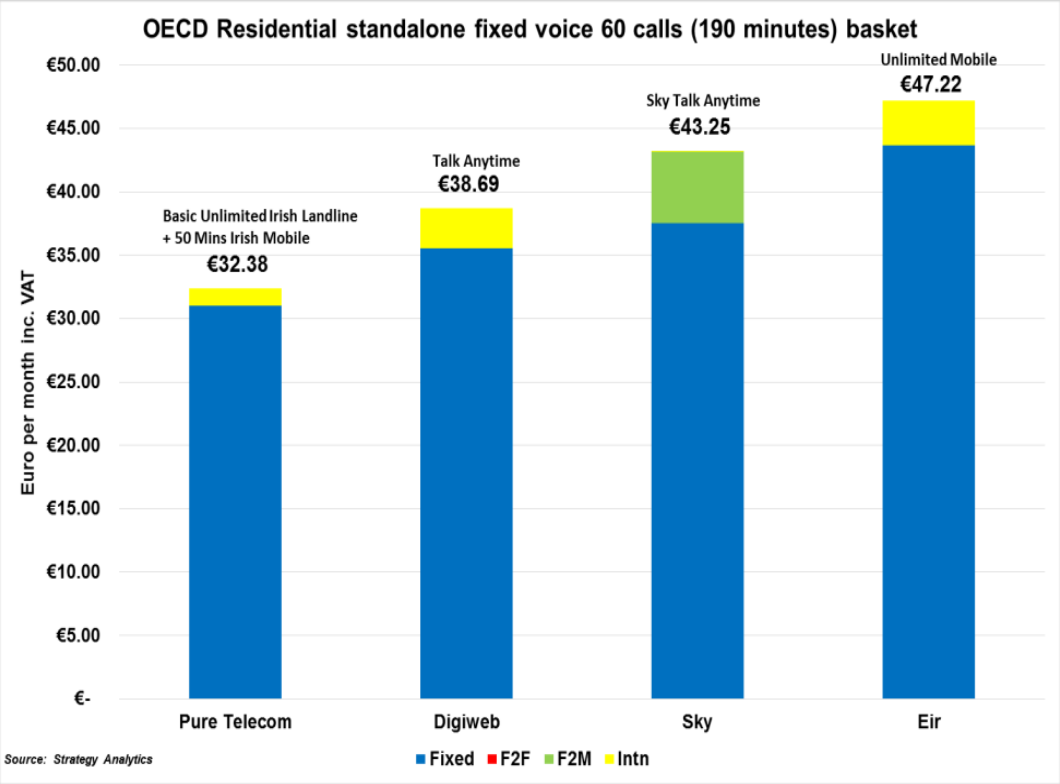


Figure 10 - Price of a residential standalone fixed voice basket

466 Moreover, we envisage that competition between operators based on bundle offerings can be expected to continue to intensify. Bundled offers can bring end-user benefits including in terms of lower prices which can constrain indirectly Eir's prices for standalone voice services.

467 TERA's benchmark analysis[81] highlighted that France, Portugal, Latvia, Belgium, Poland, and Sweden impose price cap obligations. This obligation was imposed under the USO legal basis in France, Portugal and Latvia.

[79] see page 28: http://www.comreg.ie/_fileupload/publications/ComReg1617.pdf
[80] Basket assumes the usage of 150 fixed to fixed minutes, 25 fixed to mobile minutes and 15 international minutes.
[81] The First TERA Report, Annex B, page 94.

468 As set out above, Eir is subject to the existing obligation of a safeguard RPC, though this obligation is not a USO rather it was imposed on Eir having been designated with SMP on the retail FVA market. Consequently, the AFL USO consultation process does not consider the potential consequences of ceasing with the existing RPC obligation, any withdrawal of that measure would necessarily be subject to a separate market review. Notwithstanding this, when assessing the potential impact of ceasing affordability measures, including GAP, as detailed below, we take into account the likely interaction of such measures with parallel price controls, notably the SB-WLR and RPC obligations.

8.3 Geographically Averaged Pricing

469 Consultation 14/48 noted that the cost of providing services, especially access can in principle vary considerably between remote rural and high density urban end-users. Where prices (especially line rental) are averaged, there is a possibility that rural end-users may create a net cost for the USP. Essentially, these would be considered high cost end-users who do not make sufficient use of the telephone to provide Eir with enough revenue to cover the associated costs. Such end-users then may be subsidised by end-users that Eir earns high profits from, usually low cost urban end-users. However, even if the provision of access is on average profitable some level of net cost may therefore arise. In respect of any net cost, an application for funding can be made in accordance with Regulation 11 of the Universal Service Regulations. Our preliminary view in consultation 14/48 was that objectives in respect of GAP remain relevant and it proposed no change to this position in respect of the services included under AFL USO in the short to medium term.

470 Having regard to responses to Consultation 14/48, ComReg and TERA consultants assessed the potential consequences of ceasing with the GAP obligation.[82] The analysis had, amongst other things, regard to Eir's response to consultation 14/48 set out in summary above, notably, that potential different circumstances may emerge in various geographic locations. The First TERA Report highlighted that, absent a GAP USO, Eir could behave differently in the different areas depending on the relative level of competition and whether Eir's pricing behaviour was likely to be sufficiently price constrained by other innovative services. Therefore, in the context of affordability, TERA's view was that any impact on end-users is likely to vary depending on the area within which they are located and the pricing strategy pursued by operators.

[82] Consultation15/89: p44-46 and the First TERA Report, section 4.5 (and updated in the Second TERA Report pages 39-46).

471 Thus, for example, absent a GAP obligation it is possible that end-users in market-driven infrastructure-based competition areas may benefit from decreases in access prices (Eir may wish or be forced to decrease its line rental charge). In contrast, if the obligation to provide GAP for AFL is removed, it may negatively affect other end-users, particularly those in Eir only areas who may experience increases or no decreases in telephony access prices. These end-users are unlikely to have an alternative to easily switch to should Eir increase the retail line rental price or fixed telephony prices in general. We were of the preliminary view that it was likely that those who would be most (negatively) affected are those located in more rural areas. A similar situation could possibly arise for those end-users in NBP areas, at least during the roll out phase of the new infrastructure over the next (circa) 5 years.

472 Despite some price constraint on Eir's retail connection price, TERA were of the view that it could not be excluded that Eir may wish to increase prices in specific areas where constraints are not yet sufficient or relatively less. This could preclude some consumers (TERA estimated this could be at least circa 100,000 consumers) from receiving an affordable AFL service. Our approach to affordability *inter alia* a proposal to maintain a GAP obligation on the USP is consistent with developments elsewhere in the EU. Consultation 15/89 and the benchmark analysis (First TERA Report, Annex B) set out that GAP is imposed in the majority of countries analysed. However TERA's analysis shows this is not always the case for densely populated countries.

473 We sought views of the potential risk to universal affordable AFL in the absence of USOs, that is, cessation of the GAP obligation.

8.3.1. Respondents' submissions

474 In response to Consultation 14/48, respondents generally agreed with our preliminary views in respect of affordability measures. ALTO, Magnet and UPC/VM agree with our preliminary views as set out in Consultation 14/48 with respect to GAP. These respondents broadly agreed that the designated undertaking should apply common tariffs including geographical averaging throughout the State. Eir called for a review of the GAP obligation, given the current levels of competition and the potential emergence of differential competitive conditions across geographical areas.

475 In response to Consultation 14/48, Eir was of the view that:

> *"ComReg has failed to demonstrate that the USO AFL for geographic averaging of retail pricing in combination with eircom's various SMP obligations does not unduly hamper eircom's ability to compete in the retail market*. It also was of the view that *"If the key concern is to ensure USO AFL at affordable prices, then ComReg must consider alternative approaches, including:*
>
> - *Maintaining a Retail Price Cap but allowing lower prices in some geographic areas, for example the LEA;*
> - *Introducing appropriate Affordability measures with appropriate controls to minimize market distortion;*

- *Setting up an industry Affordability fund to subsidise vulnerable users, especially those formerly supported by the DSP scheme and eircom's Social Benefit scheme;*

- *Some combination of these approaches*."

476 In response to Consultation 15/89, BT and ALTO again agreed with TERA that there is a real risk that USO AFL prices will not be geographically averaged and rural end-users will pay a significantly higher premium absent access infrastructure competition. In addition these two respondents *"support ComReg's initiative for national cost orientated prices for SB-WLR but note absent other regulatory obligations Eircom could still set its own variable USO retail pricing."*

477 UPC/VM, however in response to Consultation 15/89 disagreed with the assertion that Eir faces an incentive to increase prices in localised geographic areas. UPC/VM is of the opinion that Eir is likely to face a national pricing constraint for two reasons, firstly due to its a ubiquitous product offering, it benefits from being able to run national marketing campaigns and secondly de-averaged retail pricing would generate negative publicity for Eir. UPC/VM is also of the view that: *"Given the small volumes of end-users likely to fall under the USO, any additional revenue available to Eircom from increasing the price of services for these customers would be minimal, and would be outweighed by the logistical, marketing, and public relations costs associated with retail price de-averaging. As such, it is not feasible to assume that, absent a USO, Eircom would benefit from charging particular customers on its network a higher price (particularly where the customers are already connected to the network, and therefore the marginal cost of supplying the cost is very low).*"

478 Eir acknowledged that *"It is possible if eircom had greater retail pricing flexibility that some degree of geographic differentiation may take place. It is acknowledged by ComReg that eircom faces different levels of retail price competition in different geographic areas as evidenced by the incorporation of the concept of Larger Exchange Areas in NGA SMP pricing regulation.*" However, it queried whether the ability of Eir to exercise retail pricing flexibility would be a negative outcome. Eir was of the view that *"TERA or ComReg must undertake further analysis to substantiate whether the GAP USO generates a net benefit for the citizens of Ireland."* Eir was also of the view that: *"Regulatory policy in respect of GAP turns on the balance between the interests of two categories of customers, those in urban areas and those in rural areas. ComReg or TERA must quantify the impact on each group of customers in order to determine the correct regulatory policy in respect of GAP."*

8.3.2. ComReg's response

479 Whether a GAP obligation is necessary and justified requires a careful assessment of the likely risks of maintaining a GAP USO compared to ceasing with such an obligation.

480 In respect of constraints on Eir's ability to increase retail connection prices, TERA's reports take into account that Eir is subject to wholesale price controls (SB WLR), a RPC on line rental and connection as well as a requirement for nationally uniform charges (GAP). Additionally, end-users' price sensitivity and competition combine to somewhat constrain Eir's ability to increase the line rental and connection prices particularly for end-users who take up bundled voice – increasing demand and supply of bundled offers nationally.

481 Eir queried whether its ability to exercise retail pricing flexibility would result in a negative outcome. Given the general market circumstances, we have considered whether absent regulation Eir would have the ability and incentive to introduce line rental and connection (and calls) price increases for at least some end users. Second, if the GAP obligation were to be maintained we need to consider if this would this create market distortions. In considering whether or not the balance of these risks requires that the GAP obligation be maintained it is necessary to consider both:

- what is the likelihood of each risk arising; and
- what would the harm be to consumer welfare if the risk arises.

482 If the GAP obligation in respect of AFL is removed, all end users would not be protected against a risk voice telephony price increases, despite the existing RPC control on voice line rental and connection prices. Whereas at the retail level, the RPC and GAP obligations are complementary obligations to maintaining affordability, either measure operating on its own may not achieve the objective of affordable voice access for everyone. On the one hand, the RPC is a safeguard against excessive prices in respect of standalone voice connection services (excluding calls). The GAP obligation ensures that the price for AFL services (including voice) are uniform across the country. If the GAP obligation is removed, however, as noted at above, this would allow the USP (Eir currently) greater pricing flexibility and the ability to differentiate between end-users and areas. Thus, for example, absent GAP, the USP would have ability and incentive to set lower prices in more competitive (primarily urban) areas to meet competition from alternative operators. In contrast, it may also increase prices (subject to complying with the limits set by the existing RPC) in those (rural) areas where there is relatively little or no competition, notably Eir only areas or potentially the NBP area(s).

483 If the GAP obligation is ceased there is a risk that this would cause an adverse effect. Essentially, rural areas may have to pay higher voice access prices than their counterparts from densely populated areas (though there is no guarantee that any cost advantages in denser areas would be passed on to standalone voice end-users which are distributed nationally). Moreover, telecommunications services are seen as a means for the elimination of regional disparities and social exclusion. From this point of view affordable, averaged retail voice access prices are essential. Our view is that while the proposals to move to cost orientated SB-WLR prices combined with a margin squeeze test should increase competition, these regulatory tools that would support competition may not be sufficient to support USO objectives. Absent GAP, Eir would have greater pricing flexibility and the ability to discriminate between end-users and areas for the basic fixed telephone services at a fixed location and in particular with respect to standalone voice end users.

484 By maintaining GAP, end-users will be ensured equal treatment with respect to prices of fixed voice telephony services. It should ensure that end-users throughout the country get access to voice services at the same price, regardless of the different cost of provision in their area. GAP ensures that end users are protected against a risk of fixed voice access price increases, consistent with the existing RPC control. In addition, GAP would assist to ensure social inclusion and minimise a risk of digital divide. Further, a single national price has the advantage of simplicity and transparency. We note UPC/VM's comments above in this regard.

485 On the other hand, when prices are not related to costs, it is arguable that potential market distortions may be created. As noted in consultation 14/48, the cost of providing voice access can in principle vary considerably between remote rural and high density urban end-users. However, there is no evidence to suggest that the combination of the (safeguard) RPC on standalone voice services and GAP obligation in respect of universal services unduly hampers Eir competing, considering the broader context. At the retail level, we note that GAP is mandated in respect of universal services including AFL and hence the GAP constrains the price of the voice access service. Eir has pricing flexibility regarding its retail bundle offers. Additionally, Eir has some pricing flexibility in relation to its wholesale access input charges including SB-WLR and can, subject to the requirements of wholesale price controls in place and ComReg's approval, offer de-averaged prices or price discriminate on a geographical basis.[83] We are of the view that our proposals to set the SB-WLR price on a national cost basis ensures Eir's full cost recovery and sets the most appropriate build or buy decisions inside and outside LEA.[84]

486 Furthermore, TERA recommends[85] keeping the GAP obligation and that it is not burdensome on the USP. According to TERA, the GAP obligation will act as a constraint to the USP only in competitive areas, where standalone voice offers are not predominantly used and where competition mainly focuses on bundles. Moreover, TERA considers that if SB-WLR becomes cost-oriented (as a result of our current access pricing consultation) the GAP obligation will not create significant additional constraints on the USP if Eir is designated.

487 The following provides a cost benefit analysis of uniform rates from the perspective of the end-user:

[83] For example, Eir in 2013 applied a discount on its SB-WLR product but only on a promotional basis when it is bundled with Line Share and bitstream within the LEA.
[84] See ComReg document 15/67, section 6.6.
[85] The second TERA Report, Section 4 pages 39-46.

Analysis of a uniform rate	
Advantages & Disadvantages	
The cost of voice access is covered by wholesale access charges (ULL, SB-WLR etc.) and the retail line rental and voice prices. **It is noted that retail voice access and SB-WLR prices are calculated on an averaged basis, hence it is optional whether or not these geographic averaged access prices are lowered in more dense areas (and increased in rural areas accordingly if the GAP were removed).** **The availability of affordable, high quality voice service is absolutely essential in particular for more vulnerable users and to rural life.** **Maintaining affordable universal voice access ensures social inclusion and safeguards against digital divide.** **Geographical de-averaging of voice access prices could threaten the availability of affordable voice service for end-users who wish to purchase that service on a standalone basis, for end-users in rural areas.** **The introduction of de-averaged prices could cause significant rate shock for some residential end-users, which would be inconsistent with the objectives of the safeguard retail price cap obligation as well as the principle of universal service.**	
In rural areas (less competitive areas) • **lower price (compared to de-averaged rates i.e. a scenario where GAP was ceased): if cost disparities are reflected in the end-end-user prices, end-users in low density areas will have to pay a lower charge where GAP obligation is maintained** • **more competition and therefore an increased product range (more choice)**	**In urban (more competitive areas)** • more expensive services (compared to de-averaged rates): if cost disparities are reflected in the end-end-user prices, end-users in high density areas would benefit (assuming cost advantages were passed through where GAP was ceased; • therefore potentially less competition which may means less choice

Figure 11 – End-user Perspective of Uniform Rates

488 Maintaining the GAP obligation will protect end-user welfare in rural areas and areas where competition for voice access is not fully effective while ensuring workable competition is sustained in rural as well as urban areas. On the basis of the above analysis, we consider that maintaining GAP will result in an overall net welfare benefit, benefiting both competition and end-users. Having regard to the analysis set out above and in the TERA reports, we are of the preliminary view that the GAP obligation should be maintained for AFL services.

8.4 Social Tariffs

489 In Consultation 14/48 we highlighted the existence of alternatives for end-users including voluntarily provided low usage and special tariff plans, pay as you go mobiles and the trend towards increased take up of bundles. We also noted the overall decline in communication prices relative to the general consumer price index. Primarily for these reasons we were of the preliminary view that there was no need to further exercise its universal services powers and introduce specific tariff schemes.

8.4.1. Respondents submissions

490 ALTO, Magnet and UPC/VM broadly agreed with our preliminary views as set out in Consultation 14/48 with respect to social tariffs and in respect of affordability measures more generally, notably control of expenditure measures and terms and conditions to be provided by a USP.

491 In response to Consultation 14/48, Eir noted the withdrawal of the Department of Social Protection's Telephone Allowance Scheme and submitted *"Given the scale of this change, which was targeted at the elderly, and at disabled pensioners, i.e. the very vulnerable members of society ComReg purports to protect with Affordability measures, it is surprising that ComReg does not consider a full review should be undertaken now……Since the withdrawal of the TA we have seen increasing churn and bad debt in this segment, strongly suggesting that Affordability is a growing concern."*

492 In its response to Consultation 15/89 Eir set out its view that *"affordability should be viewed through the lens of whether vulnerable segments of society can afford the market price for fixed voice services" a*nd was of the view that neither TERA nor ComReg consider affordability from the perspective of vulnerable members of society.

8.4.2. ComReg's response

493 Regarding special tariffs, TERA's benchmark analysis showed that many countries require the USP to offer tariff options or social tariffs which generally fall within two broad categories:

- In the form of discounts and reductions for the end-users who are entitled to claim the social tariffs, such as the case in Belgium, the Czech Republic, France, Portugal and Spain, or
- In the form of a special package such as BT Basic or the Light User Scheme in the UK.

494 Additionally, as set out in the benchmark analysis, the recipients of social tariffs in general consist of two groups: people on low income, and people with special social needs: i.e. the elderly, the disabled and war veterans.

495 We have considered, in light of national circumstances, the potential impact on those most vulnerable in society of any potential change to affordability measures including the possibility to introduce an obligation in relation to special tariffs. On the basis of the information available to date, our view is that that there are currently other mechanisms that ensure that basic voice services are broadly affordable for end-users. TERA's phase 2 Report notes mandating a social tariff(s), could perhaps be somewhat inconsistent with the recent Government policy choice to remove the telephone allowance. We do not consider it necessary, in the presence of a safeguard price cap on the basic telephone line rental and connections combined with the GAP as well as other price options, to impose an obligation on the USP to provide special tariffs.

496 Consumers have the option of keeping their fixed line under Eir's vulnerable user scheme or 'control' phone plans,[86] which have characteristics more similar to pre-paid mobile offers and many do so. In respect of the potentially more vulnerable consumers, at present there are low usage plans or plans for particular needs:

- Eir currently offers on a voluntary basis a VUS price plan to consumers which is aimed at vulnerable or low usage end-users.[87] For a charge of €25.22 including VAT per month consumers get their line rental and a call allowance of up to €8.07 (€6.56 ex. vat) on eligible VUS calls. Above that threshold, calls can be billed up to double standard rate.[88]

- Eir's Talktime 'Control' which is a package for low income users (available for sale from 1st February 2013 to 30th June 2015).[89] From 1 January 2014 Talktime Control was only available to existing Eir end-users who were in receipt of the Department of Social Protection's "Telephone Allowance" at 31st December 2013 via their Eir phone bill[90].

- Eir and other undertakings must offer specific measures[91] for disabled end-users: Text Relay Service and rebate scheme.[92] Thus for example, Eir offers the "eir NAD Programme"[93] which gives discounts of 70% on calls (not line rental or equipment rental), to qualify for the eir/N.A.D programme an application has to be made to the National Association for the Deaf. Eir also offer a text relay service (TRS) for disabled end users.

[86] The Second TERA report note that Considering the fact that the incremental cost of a given user on the network is very low, the provision of a low user package like the VUS or targeted package such as 'Talktime Control' is economically rational for an operator like Eir since it generates small revenues but greater than incremental costs.
[87] http://www.eircom.ie/bveircom/pdf/Part2.3.3.pdf
[88] http://www.eircom.ie/bveircom/pdf/Part2.3.3.pdf
[89] http://www.eircom.ie/bveircom/pdf/Pt2.3.7.pdf
[90] For Eir customers who were in receipt of the Department of Social Protection's "Telephone Allowance" at 31st December 2013 Eircom Talktime Control carries a subscription charge of €22.50 including VAT (€18.29 ex. VAT) per month to include Line Rental and a Call Allowance of up to €5.00 including VAT (€4.07 ex. VAT) on Eligible eircom Talktime Control Calls.
[91] https://www.eir.ie/accessibility/
[9292] This service allows for the translation of text into voice and voice into text to facilitate a person with a hearing disability in making and receiving calls from a landline.
[93] https://www.eir.ie/opencms/export/sites/default/.content/pdf/pricing/pt2.2.7.pdf

497 We note that in addition to their standard call charges Eir offer a range of tariff plans, including plans which offer discounts on calls only, and those which offer discounts on call and line rental bundles. For example the “eir Talk” suite of discount plans range in price from €37 to €50 per month including VAT and include line rental and unlimited local, national and Eir Mobile calls at various times of day, depending on the package. Similarly other networks including mobile already commercially offer plans for low usage customers. We are satisfied that due to the wide variety of plans including discount plans which Eir and other operators offer, which allow end-users in particular the more vulnerable consumer to benefit from discounts, regardless of their varied usage patterns suggest that there is no need for ComReg to further exercise its universal services powers and introduce specific tariff schemes.

498 Further, as noted above the range of tariffs advertised by standalone fixed voice service providers and mobile operators should ensure that voice access prices are broadly affordable for the majority of end users.

8.5 ComReg’s Preliminary View

499 We consider that maintaining GAP will result in an overall net welfare benefit, benefiting both competition and end-users. Having regard to the analysis set out above and in the TERA reports, we are of the view that the GAP obligation should be maintained for AFL services.

500 Having regard to respondents’ views and on the basis of the analysis set out above, we are of the preliminary view that at this time it would not be appropriate to mandate a social tariff. We are of the view that packages offered commercially are sufficient to ensure all end-users, including more vulnerable consumers can access voice services at an affordable price.

Q. 24 Do you agree with our preliminary view that the obligation to maintain geographically averaged prices should be maintained? Please provide reasons to support your view.

Q. 25 Do you agree or disagree with our preliminary view that at this time a requirement to offer Social Tariffs should not be introduced? Please give reasons and/or evidence to support your view.

9. Control of Expenditure

501 In addition to affordability of tariffs, the Regulations also provide for several measures with respect to control of expenditure, including in relation to terms and conditions for the provision of facilities and services. We are of the preliminary view that obligations in respect of disconnections and phased payment of connection fees should be maintained.

502 This Chapter sets out our preliminary views on measures related to control of expenditure such as phased payment for connection fees. This Chapter is structured as follows:

9.1 Regulatory Measures Available – gives a brief overview of the regulatory options available

9.2 Disconnection policy and non-payment of bills –set outs the reasoning for our preliminary view that there is no requirement to amend the Disconnection policy at this time

9.3 Phased Payment for connection fees – sets out why our preliminary view is that not changes are required to this facility at this time

9.4 Terms and Conditions of Contract – sets out our preliminary view that obligations in this respect should be imposed on all providers and not just the USP

9.1 Regulatory Measures Available

503 Universal service is not only about enabling people to be connected to a fixed telephone network,it is also important that all end-users who wish to remain connected to the fixed network can do so.

504 We consider that it is imperative that end-users are able to monitor and control their expenditure to ensure that they do not find themselves unable to pay their bill and face disconnection from the network. In accordance with the relevant legislation, we can take measures to ensure that end-users are in a position to monitor and control expenditure, including:

- *Itemised Billing*: a minimum level of itemised billing to be provided free-of-charge to end-users;
- *Selective Call Barring:* the ability of the end-user to bar outgoing calls of defined types;
- *Introducing a spend threshold*: the ability to set a limit on the charges on your bill;
- *Phased Payment of Connection Fees*: the facility whereby end-users can pay for their connection fees on a phased basis and
- *Non-Payment of Bills*: ensure the availability of a Disconnection Policy.

505 However, we have already imposed obligations on all undertakings in respect of Itemised Billing and Billing Mediums[94] and we are currently consulting on Selective Call Barring[95] measures which may be applicable to all undertakings. As these obligations would no longer be on the USP alone they do not fall within the scope of this consultation, and will not be considered as part of this work stream.

506 The First TERA Report, considered what would happen if USO's related to control of expenditure were ceased and found that absent a USO in this respect it was possible that Eir would not maintain these services.

507 In the following sections we examine regulatory options available to us and sets out preliminary views.

9.2 Disconnections policy and Non-Payment of bills

508 As part of their Code of Practice for Complaint Handling there is an obligation on all operators to publish their Disconnection Policy. We previously considered whether the USP should have a more detailed Disconnection Policy[96]. However, no requirement was imposed as we decided that a balance had to be struck between protecting end-users from unwarranted disconnections and commercial interests.

509 In the context of universal service, Eir's Disconnection Policy, and the associated number of disconnections, has an impact on the number of people connected to the fixed network. The level of disconnections may indicate the effectiveness of the existing measures. Universal service is not truly universal if many people are left without access to a telephone. We recognise however, that some disconnections may also result for other reasons, such as fraud or the deliberate non-payment of bills.

510 In addition to the measures outlined below, the Eir Disconnection Policy[97] includes notification measures for end-users who fall into payment arrears. This policy appears to continue to have a positive effect by reducing the number of end-users that may have been otherwise disconnected from the network.

511 The Disconnection Policy should provide that, if an end-user does not pay a bill by the account due date, the USP may restrict an end-user's ability to make and receive calls except to emergency services and that the USP will endeavour to contact an end-user to remind them that a bill is overdue.

[94] ComReg Document No 13/52 and D08/13, "Consumer Bills and Billing Mediums", 6th June 2013
[95] ComReg Document No 15/125 "Selective Call Barring: Response to Preliminary Consultation 15/31 and Further Consultation", 27th November 2015
[96] ComReg (2012), "The provision of telephony services under Universal Service Obligations" http://www.comreg.ie/_fileupload/publications/ComReg_1271.pdf
[97] http://support.eir.ie/article/codeofpractice

512 The Second TERA Report found that it cannot be excluded that the current Disconnection Policy would not be maintained by Eir in the absence of an AFL USO. It also found that maintaining the existing obligation would prevent social exclusion and should be maintained given its importance for end-users and low implementation costs for the USP.

513 Our preliminary view is that no amendment to the requirements for a USP to provide a Disconnection Policy is necessary at this time.

9.3 Phased Payment for Connection Fees

514 Under the Universal Service Regulations the USP may also be required to allow for phased payment of connections. A phased payment for connection fees is currently mandated.

515 The core aim of the USO is to ensure that as many people as possible can get access to telephony services and the phasing of connection fees ensures that end-users are not prohibited from early connection because of an inability to pay the total connection charge in one payment. In recent years Eir has maintained a connection promotion whereby connection charges were set to €0. Therefore no end-user needed to rely on the phased payment plan. However it is not clear whether Eir will continue this promotion and if not, the phased payment plan will be of use to end-users.

516 The First TERA Report concluded that in the absence of the AFL USO there is a risk that services such as Eir's disconnection policy, would not be maintained by Eir. In addition the Second TERA Report recommended the existing obligation should be maintained given its importance for end-users and low implementation costs for the USP.

517 Eir, as well as other operators, currently provide this facility. In respect of this designation, due to the benefit to end-users of the service and the low implementation costs for the USP, it is our preliminary view that no changes to this facility are warranted.

9.4 Terms and Conditions of Contract

518 We are considering if it is necessary, in accordance with Regulation 3(5) (c) of the Universal Service Regulations to prescribe any terms and conditions which should be offered or should not be permitted by the USP. For example, Eir and other operators have introduced a mandatory Direct Debit payment method for the majority of their voice services. However, a mandatory direct debit may prevent certain consumers who do not have a bank account, from accessing these universal services.

519 It is our preliminary view that any terms and conditions which may limit access end-users' access to universal service should be addressed and in this context we may consider specification in respect of the USP's terms and conditions upon which connection and service are provided.

520 In the past, we noted that Eir has introduced payment policies that may exclude certain end-users, i.e. direct debit only payment would excluded those without access to a bank account. However, we also note that Eir is accommodating such end-users and as such we are of the preliminary view that there is no need to intervene at this time.

521 We also note TERA's considerations in Section 6.2.2 of its second report regarding measures to prevent bill shock resulting from abnormal consumption. However, we are considering such measures in relation to all undertakings, not just the USP.

522 Apart from the automatic refunds for service issues contemplated in section 7 we have not identified any specific terms and conditions that should be specified on the USP, however it will keep this aspect under review.

523 Our preliminary view is therefore, not to introduce any special contract terms and conditions applicable to contracts between end-users and the USP(s).

Q. 26 Do you agree or disagree with our preliminary view that the USP should be required to continue to provide its Disconnections Policy? Please give reasons to support your view.

Q. 27 Do you agree or disagree with our preliminary view that the USP should be required to continue to provide a Phase Payment Plan for connection fees? Please give reasons to support your view

Q. 28 Do you agree or disagree with our preliminary view in respect of the terms and conditions of contract? Please provide reasons to support your view.

10. Designation of Universal Service Provider(s)

524 We have formed the preliminary view that there is a continued need for some kind of AFL USO in the whole or parts of Ireland post-2015. Accordingly, we are required to designate one, or more, operators to guarantee the provision of the universal services so that the whole of the State is covered.[98]

525 In this Chapter we re-state our preliminary views in Consultation 15/89 about the duration and geographical scope of the USP designation. We then summarise the respondents' submission on this issue. Finally, we set out our preliminary proposals on the issue.

10.1 Duration of Designation

526 We sought views on the potential designation of a USP for a period of at least 5 years (possibly 7).[99]

527 In light of the NBP and technological developments, we proposed in Consultation 15/89 that if AFL USOs continue to be needed in all or parts of Ireland, it would be appropriate to designate a USP(s) for at least 5 (possibly 7) years. We also proposed, if necessary, to review this, once NBP infrastructure and services rollout is fully completed (possibly post-2020). We explained that this would allow us to take into account the full impact of the NBP (and relevant technological developments) and if necessary, to review the requirements for individual elements of the USO.

10.1.1. Respondents' submissions

528 UPC/VM suggested that our proposed timeframe was too long given the dynamic nature of the market.

529 Vodafone agreed with our proposal, noting that: *"the time period should be co-ordinated with the completion of the National Broadband Plan".*

530 BT agreed with our proposal that a 5 year review period would ensure market and technology developments are reviewed, whilst maintaining a level of market stability.

[98] Regulation 7(1) of the Universal Service Regulations.
[99] Section 7 of Consultation 15/89.

531 Eir stated that it did not believe further designation could be objectively justified. Eir suggested that any designation should be no longer than 12-18 months. Eir stated that: *"Even if a further designation could be justified (and, for the avoidance of doubt, eircom does not believe it can), eircom does not agree that it could reasonably be specified for a period of at least 5 years or possibly even 7 years. As highlighted earlier in this response issues pertaining to the interaction of AFL USO and the NBP and the current consultations on the European Regulatory Framework must be addressed upfront. They cannot be addressed retrospectively in 5 to 7 years after significant irreparable damage has been done. The outcome of the EC review and changes to the regime will be known in the next year and any national policy implications should be addressed immediately thereafter."*

10.1.2. ComReg's response and preliminary conclusion

532 We have carefully considered the First TERA Report and The Second TERA Report and we agree with their recommendation that a further designation of a USP for the provision of AFL is appropriate, proportionate and objectively justified. We also agree with TERA's view that a designation could reasonably be specified for a period of 5 years from 1 July 2016, with a provision for review once the NBP infrastructure roll out is fully completed or, possibly sooner, depending on developments.

533 Notwithstanding this, we recognise and take account of the possibility that the NBP and other infrastructures may be in the process of being and fully deployed during the proposed designation period. Therefore, we wish to address the current circumstances and also give flexibility to take account of these developments as they happen. For example, we are proposing that a request for a connection is not considered reasonable and need not be satisfied by a Designated USP, if there are alternative and adequate services. This would therefore allow USP(s) obligations to dynamically *decrease* as the market evolves during the designation period.

534 There may be continued requests for access at a fixed location and we have noted that demand for fixed connections and voice services in the short to medium term continues to be significant. Because of the continued demand for standalone, fixed telephony (a basic entitlement of end-users) we and our consultants TERA considered if the AFL rights would be delivered absent a USO.

535 On the basis of our counterfactual analysis, we consider that market forces alone would not ensure end-user rights, for example, access to a public communications network at a fixed location and a PATS over that connection. We are required to ensure that all end users (in particular, end-users in rural or sparsely populated areas, or less economic end-users distributed nationally) have access to an efficient and reliable universal connection and a PATS at an affordable price.

536 There is currently no programme or mechanism which ensures that AFL (voice telephony at a fixed location) is provided to those that need it, other than by a regulatory decision by ComReg. However, because of the NBP, it may well be that AFL can and will be provided using infrastructure and associated services which have been and fully deployed under the NBP as discussed below.

537 We consider that proposed obligations should not force infrastructure rollout where suitable alternatives exist. Our proposals recognise this possible scenario such that the USP would not have to provide connections or PATS at a fixed location if already being delivered, at an affordable price, as a result of the rollout of the NBP, during the proposed 5 year period.

538 However, crucially, the proposed obligations mean that without adequate alternatives, an end-users' right to a reasonable request for a connection and a phone service at a fixed location will be ensured by the USP. In effect, any Designated USP(s) is the provider of last resort.

539 In relation to QoS, our proposals also allow the USP to balance investment (necessary to maintain or reduce fault occurrence) with operating costs (necessary for timely repairs) such that the focus is now on a measurement of whether or not the end-user's service is actually working, annually, measured in comparison to 100% (all the time).

540 While we think it is prudent to have flexibility going forward, there are very significant uncertainties. It is unclear, what the final outcome of the NBP procurement process will be and its impact on the future of the AFL USO cannot yet be known. In addition, it is uncertain when the European Commission's review of the universal service framework will be completed and if, how and when this may affect Ireland. We will need to carefully consider all relevant national and EU developments in this regard.

541 Our preliminary conclusion having regard to the above and having taken account of Respondents' submissions and TERA's recommendations, is that a 5 year USO designation period, with a flexibility for review, if necessary, is appropriate. This approach should balance the current and future needs for the provision of AFL.[100] In addition, we are proposing that individual elements of the USO (such as QoS targets and FIA) could be reviewed within the 5 year period.

10.2 Designation for the entire State

542 We have considered the geographical scope of AFL USO, in particular, whether or not it will be necessary to designate an AFL USO to cover the entire State.

543 Currently, AFL USOs are defined nationally and the USP is designated accordingly. Nevertheless, the First TERA Report highlighted geographic differences in terms of competitive constraints, network availabilities, network costs, etc. TERA found that some areas are unlikely to be affected absent an AFL USO, while others would be significantly affected. TERA considered it could be possible to have sub-national USOs for example, in Eir only or NBP areas, leaving other areas without AFL USO.

544 However, having considered TERA's reports, we proposed that it is likely to be difficult to identify individual geographical pockets/ areas which should or should not be subject to an AFL USO. Although in theory, the removal of an AFL USO would likely have less of an impact on end-users in competitive areas, there is a risk that in practice some end-users in those areas may not be served. For example, there could be uneconomic end-users within economic areas.

[100] We note BT's general agreement with this proposal. BT' view was that a 5 year review period would ensure market and technology developments are reviewed whilst maintaining a level of market stability.

545 On the basis of the analysis presented and other inputs, we proposed that any subsequent designation of a USP(s) to provide the AFL USO should be for the entire State, allowing for flexibility for its individual components. Further, a national approach to AFL USOs and designation of a USP could allow greater flexibility in the design of any AFL USOs and in the management of the obligations.

10.2.1. Respondents' submissions

546 UPC/VM was of the view that if an AFL USO was required it was likely to be for a small number of households, in which case they are best served by a single provider which has access to fixed and mobile technology.

547 ALTO and BT agreed that the USO is required after 2015. They believe the only operator with the ubiquity to provide the USO is Eir.

548 Vodafone agree that the USO should apply to the whole country, because of the difficulty in tracking changes in the availability of mobile services and implementation phases of the NBP.

549 Eir did not agree, because it claimed that to the extent there are discrete groups of vulnerable citizens that require protection, then such measures should be targeted. Eir questioned whether it is proportionate to mandate a USP to maintain a national narrowband network, and was of the view that ComReg needs to consider designating any successful NBP bidders.

10.2.2. ComReg's response and preliminary conclusion

550 We note Vodafone's view that a national designation is appropriate given difficulties in tracking specific locations where a USP is necessary.

551 We agree with Eir's view that the US should be targeted to those that require it. Our proposals do this: they require the Designed USP(s) to only deliver a connection and a phone service at a fixed location to those who have no suitable alternative. There are end-users who would not be served in the absence of a USO and due to the difficulty in identifying individual end-users for target intervention, we have constructed the proposed obligations to have exactly the same effect.

552 Eir suggested that any successful NBP bidder should be designated and we intend to carefully examine this once the NBP tender award process is completed. However, we have considered the likely scenarios arising during the next 5 years and this does not alter our preliminary view that a 5 year designation period is prudent and appropriate.

553 We are of the view that a designation for the entire State does not create any additional burden on the Designated USP(s), compared to the designation being only for precise geographical areas or end-user locations where a provider of last resort is required. The net effect of the obligations is exactly the same, but our proposal provides greater certainty for all interested parties.

554 Our preliminary conclusion, having regard to the above and having taken account of Respondents' submissions and TERA's recommendations, is that we should continue to apply the USO designation for AFL to the entire State, whilst recognising that end-users who require the USO are not uniformly spread and may also change during the designation period.

10.3 Universal Service Provider(s)

555 No undertaking should be excluded from being designated to provide all or part of the universal service, in all or part of the State.

556 The existing USO does not specify the technology to be used in providing connections or a PATS, nor does it preclude any USP from meeting end-user requests for connections, by sourcing a connection from a third-party.

557 In principle, we believe it possible that a designated USP could, in the future, choose to meet requests for a connection and PATS by providing (or sourcing) a connection to the NBP network (and/or other enhanced networks) and providing a managed VoIP service over that connection. It may be possible too for any USP to meet some of its obligations by using other technologies, such as using wireless connections.

558 In most EU Member States, the incumbent operator provides universal services. However, in principle, operators other than the designated USP (currently Eir) may be able and willing to provide all or part of the universal service, in all or part of the State. Consultation 14/48 gave operators the opportunity to express an interest in doing so but such expressions of interest were not received at that stage.

559 This consultation is again providing undertakings an opportunity to express an interest in being designated as a USP. Any expression of interest should clearly demonstrate the undertaking's ability and willingness to provide the AFL USO.[101]

560 We are aware that market forces may be sufficient to ensure that the required AFL services are provided to everyone at an appropriate quality and at an affordable price. Further, in time, USO objectives could be effectively fulfilled in NBP areas under the NBP contract and no further intervention may be needed in those areas.

561 We are considering options about which undertaking(s) should be designated as USP(s) to provide connections and a PATS over those connections, having received no expressions of interest to provide the USO to date, and if none are received.

562 We consider that the following are important factors in deciding who is an appropriate USP(s) for the proposed 5 year period.

[101] Section 6.2 of Document 14/48 provides details of the minimum information requirements which should accompany an expression of interest http://www.comreg.ie/_fileupload/publications/ComReg1448.pdf

- **Meeting the AFL requirements.** It is not yet known whether the NBP contract(s) will result in the market delivering US AFL requirements, in particular, the universal provision of an adequate voice service at an affordable price. An affordable managed VoIP service might be provided commercially over the New Network, but that depends on the wholesale product set, pricing structure and other conditions put in place for the NBP networks.

- **Continuity of service to end users.** Homes and businesses inside the NBP intervention area should be able to continue to avail of services consistent with USO requirements (primarily a standalone voice service which is affordable and has at least the same degree of quality as voice over the copper network). It would be desirable to avoid imposing cost and inconvenience on them as a result of having to change provider.

- **Migration.** It is important that circumstances enable an economically efficient investment, innovation and transition by end users to the new high speed broadband connections and voice services where available and suitable.

- **Most cost effective way of providing connections for a standalone voice service.** We note that the designation method(s) we adopt must ensure that any AFL USOs are provided in a cost effective manner. It is not possible for us to predict whether the provision of a managed VoIP service over the NBP Network would be more cost-effective than providing it via the copper network. That would be determined by what solution the USP can develop. In the context of Eir's existing PSTN network and the requirement for access to be at a fixed location in many cases use of the NBP network this may be the most efficient solution.

- **Least burdensome regulatory approach: that allows planning for delivering connections and voice services.** It is important that any consideration of USP(s) recognises the foreseen developments and ensures any Designated UPS(s) is the most appropriate and efficient given the likely circumstances.

563 In light of these factors, we have considered two options:

- **Option 1:** Designate Eir as the AFL USO provider for all fixed locations in the State for a period of 5 years, except at locations where a successful NBP bidder is accepting orders for wholesale connections to the NBP network..

- **Option 2:** Designate Eir as the USO provider for the entire State for a period of 5 years.

564 These options are discussed in turn.

Option 1: Designate Eir as the AFL USO provider for all fixed locations in the State for a period of 5 years, except at locations where a successful NBP bidder is accepting orders for wholesale connections to the NBP.

565 We are of the preliminary view that Eir is the most appropriate USP at this time given its national reach both in terms of a fixed networks(s) and mobile and other technology alternatives available to it.

566 Eir is a retail provider and has the capability to deal with end-users requests and to provide retail AFL services over its own networks.

567 The obligations we have proposed are dynamic such that if an end-user has a suitable alternative then the designated USP(s) do not have to act as the provider of last resort and satisfy a request for connection and PATS service.

568 However, within the next 5 years it is envisaged that the NBP will be in the process of being rolled out.

569 Eir questioned whether it was proportionate to mandate a USP to maintain a national narrowband network, and suggested that we needed to consider designating any successful NBP bidders.

570 The Government envisages that post-NBP rollout, end users will have the ability to connect to a public communications network at a fixed location. A managed VoIP service over the NBP or another high speed broadband network could satisfy end-users' universal service connection and PATS needs if they can be provided at an affordable price.

571 However, our proposals regarding reasonable access requests are such that that if there are alternative suppliers for connections and a PATs service at a fixed location with an appropriate quality, that are affordable, then the USP does not have to satisfy an end-users request.

572 If the NBP has been and fully deployed, partially or entirely, and affordable connections and PATS services are not available in NBP locations, then we must consider the appropriate USP(s) to fulfil the right in NBP areas.

573 As there are multiple NBP lots in the Government's tender process, there may be more than one successful NBP bidder. It could then be feasible to impose a USO either on a successful NBP bidder or another undertaking(s) for AFL in a particular area or areas. Under the Universal Service Directive, there are in principle, no constraints on which undertakings may be required to provide all or part of the USO, in all or part of the Member State. We have the flexibility to impose USOs in relation one or more operators, and in more than one geographical area. Further, because of our legal mandate to ensure the provision of the AFL USO, we have sufficient flexibility to impose USOs as either wholesale or retail obligation(s), or both.

574 We consider the consequences if Eir were not the winning NBP bidder in a geographical area and there were no commercial offers of affordable standalone voice service and we were to designate the winning bidder as the USP (new USP) to provide connections and voice service in that area.

575 In this scenario, existing Eir USO voice end-users would not automatically transfer to the new USP. They would remain Eir end-users and Eir would be free to increase prices, degrade quality of service or withdraw voice service altogether. In order to ensure continuity of quality, affordable services, these end-users might need to investigate alternatives and switch to the new USP. This has the potential to impose cost and inconvenience on them.

576 The new USP might primarily be a wholesale provider of broadband service. Requiring them to offer voice services on a wholesale or retail basis could inappropriate at a time when they will be undertaking the challenging task of quick rolling out the NBP network. Thus designating them as the USP could add risk to the provision of universal service or to the NBP programme, or both.

577 The new USP will not have the option of choosing to migrate voice-only end-users from use the copper network to the New Network at the economically optimum time. Instead, the rate of migration is likely to be determined by Eir's strategy in respect of its legacy voice-only customer base.

578 In conclusion, we are of the view that it is not appropriate to choose an NBP successful bidder instead of Eir, in the next 5 years, to act at the provider as last resort for end-users reasonable requests given the likely construction of the NBP contract. We are of the view that within the next 5 years, Eir will remain the most appropriate USP to satisfy reasonable requests not met by the market (including as a result of the NBP). These could be satisfied by PSTN, NBP infrastructure or FCS. We observe, however, that many of the considerations that lead us to this conclusion would not apply once the NBP rollout is complete and that it is far from inevitable that we would conclude that Eir should continue to be designated throughout the State if a further designation were considered necessary in 5 years.

Option 2: Designate Eir as the USO provider for the entire State for a period of 5 years from 1 July 2016

579 There are a many suppliers and a growing number of networks fixed and mobile in Ireland. However, several fixed-line operators offering competing services, do so via Eir's ubiquitous network (competing service providers require access to Eir's infrastructure in order to provide connections and voice services). In some cases, fixed operators offer competing services over their own networks, for example, UPC/VM offers voice as part of a bundle with either broadband or TV, however, this is not on a nationwide basis and not as a standalone service.

580 TERA's analysis compares networks available in Ireland and their ability to provide AFL USO.[102] It shows that Eir's copper network has significant advantages over other technologies and networks for the provision of AFL USO in Ireland at the national level. In particular, its coverage and the fact that it supports Internet access are advantages that are not met by any other network in Ireland.

[102] First TERA report, section 3.2 and section 5.3, Table 13.

581 We consider that the current mobile services, without enhancement and equipment to cater for access at a fixed location, would not currently deliver access at a fixed location. Whereas several wireless technologies are available, some of them (such as 3G) already have a wide coverage and growing deployment of 4G and/or advanced LTE is envisaged, indoor quality of service of mobile networks can be sometimes very poor.[103] As a consequence, while a mobile operator may indicate that it covers a given area, end-users may not always be able have access to mobile services inside and throughout their home or business.

582 However, mobile services can in principle be considered as alternative ways to meeting the functional requirements of AFL and we have incorporated this in our proposed reasonable request criteria, as set out in Section 6.

583 We note that ALTO and BT agreed that the USO is required after 2015, and that they believe that Eir is the only operator with the ubiquity to provide the USO.

584 UPC/VM was of the view that if an AFL USO was required it was likely to be best served by a single provider which has access to fixed and mobile technology.

10.4 ComReg's Response to Respondent's Submissions and Preliminary Conclusion

585 Eir continues to be the largest provider of connections and voice services at a fixed location in Ireland. Eir has already an extensive and ubiquitous access infrastructure in place to deliver the necessary access to all universal service end-users across the State which is not easily replicated by its competitors. Eir benefits from its large network coverage, end-user base size and product portfolio, thereby giving it the ability to exploit greater economies of scale and scope in the provision of voice access and voice services than would otherwise be achievable by potential competitors.

586 Eir, by virtue of its high degree of control and ownership of the public switched telephone network (PSTN), as well as ownership of an NGA network, is capable of meeting the reasonable requests of end-users on a nationwide basis.

587 Eir also remains the major fixed line provider in the market, with a current estimated market share of 42.4% of fixed voice subscriptions (either standalone or as part of a bundle) and 45.5% of fixed line revenues at the end of 2015. During the proposed 5 year period it is likely that the AFL USO connections and PATS at fixed location will primarily be delivered using the Eir PSTN network until the NBP network has been substantially rolled out, for at least those end-users who have a preference (and a right) to purchase standalone FVA.

[103] See for Mobile operators' website which show indoor and outdoor coverages and the difference between the two types of coverage is sometimes significant.

588 As noted above, Eir does not have to maintain a national narrowband network to deliver AFL USO, it can use or purchase wholesale access to alternative infrastructures (its own or others, including the NBP) and associated services necessary to deliver its obligations. In any case, our proposals would mean that it would only be necessary for Eir to satisfy reasonable requests for connection and PATS at a fixed location in cases where there are no other adequate or suitable alternatives.

589 As the Designed USP, Eir would be the provider of 'last resort' for connections and PATS throughout the State.

590 It is our preliminary view that Eir is still best placed to fulfil meet the AFL universal service obligations in respect of end-users and we propose to designate Eir as the USP for the next 5 years.

591 We are seeking views from interested parties on the following:

A. To designate a USP to deliver AFL USO for a period of 5 years, with a review to take place after 5 years or sooner if circumstances justify it.

B. That the USO designation to provide connections and PATS over the connections should be applied to the geographic area of the entire State.

C. That Eir should continue to be the USP for the whole of Ireland for the AFL USOs for a 5 year period from 1 July 2016.

Q. 29 Do you agree with our proposal to designate a USP to deliver AFL USO for a period of 5 years, with a review to take place after 5 years or sooner if circumstances justify it? Please give evidence and reasons to support your view.

Q. 30 Do you agree with our proposal that the USO designation should be applied to the geographic area of the entire State? Are there other factors which should be considered by us in this regard? Please give evidence and reasons to support your view.

Q. 31 Do you agree with our preliminary view that the most appropriate approach is to designate Eir as the USP from 1 July 2016? Please give evidence and reasons to support your view.

Q. 32 Are there other factors or options which should be considered by ComReg in making a designation in respect of a USP? Please give evidence and reasons to support your view.

11. Draft Regulatory Impact Assessment (RIA)

592 This section sets out our RIA of the options available to ComReg in respect of the AFL USO. It summaries the main points raised by respondents in relation to Consultation 15/89 and our view in this respect. It also sets out a further RIA which aims to identify the effect of the various regulatory obligations on all interested parties. This Chapter is structured as follows:

11.1 Consultation 15/89 – gives an overview of the Draft RIA as set out in Consultation 15/89 considers the submissions received on, or relevant to, ComReg's draft RIA as described in Consultation 15/89, and sets out our position on these.

11.2 Revised Draft RIA - a further RIA which identifies preferred options relevant to the various aspects of the USO

11.1 Consultation 15/89

593 In Section 8 of Consultation 15/89, we carried out a RIA in accordance with the RIA framework, in order to identify a preferred option on the need to designate an undertaking as USP for the provision of AFL following the end of the current designation.

594 With respect to the need to designate an undertaking as USP for the provision of AFL Consultation 15/89 considered the regulatory options available, namely to maintain an obligation (Option 1), or to remove the obligation (Option 2). In maintaining an obligation, we were of the view that we had two options: to maintain an obligation for the entire State (Option 1(a)) or maintain an obligation not covering the entire State (Option 1(b)).

595 We considered, on balance, that maintaining an obligation for the entire State (Option 1(a)) was the most proportionate option. Consultation 15/89 sought stakeholder's views on our draft RIA and asked the following question:

- Do you agree or disagree with ComReg's draft high level assessment of the impact of the proposed regulatory options? Are there any other factors that you consider to be relevant? Please set out reasons for your answer.

11.1.1. Respondents' submissions

596 All submissions to the consultation responded to this question and responses were varied. Vodafone agreed with our draft high level assessment of the impact of the proposed regulatory options.

597 ALTO and BT considered that the USO will need to be re-designated post December 2015 and that more work needs to be carried out if we were to introduce multiple USPs.

598 UPC/VM disagreed with our assessment of the impact of the proposed regulatory options and was of the view *"that ComReg has overestimated the cost of delivering basic electronic communications services to end-users. This has resulted in part from ComReg adopting an unjustified bias towards fixed networks in its assessment"*. UPC/VM was also of the view that *"ComReg also appears to rely heavily on Eircom's views as expressed in its Universal Service Net funding application in relation to the net cost of supplying services".*

599 UPC/VM was of the view that the externality that allegedly arises from additional s added to the network is not supported by evidence, and stated "*If Eircom itself does not account for any network externality benefit associated with adding customers to its network, then it would be inconsistent to expect that other operators would somehow benefit from the additional customers served by means of the ..".*

600 UPC/VM set out its opinion that "*ComReg has failed to independently and transparently assess the commercial viability of providing services to end-users. UPC Ireland considers that ComReg should provide a full cost analysis of uneconomic customers, and in particular the apparently 'uneconomic urban customers' (since the existence of this cohort seems even less plausible)."*

601 Eir also disagreed with our draft RIA, as it was of the view "*ComReg is setting out to compare maintaining the AFL USO for a period of 5 to 7 years with the option of removing the AFL USO. The RIA is entirely qualitative and subjective in its narrative. It is also based on the flawed analysis and conclusions of the highly superficial TERA Report."*

602 Eir was of the view that the duration of the designation period, must be taken into account in the cost benefit assessment. In addition Eir was of the opinion that we reached preliminary *views "without attempting to derive any financial estimates of the potential benefits and costs of its proposed actions"*

603 Further Eir was of the opinion *"The costs / benefits of AFL USO cannot be properly assessed without evaluating the individual obligations.... As is recognised by TERA a dial-up service at 28.8Kps is practically useless to access the modern internet and a higher FIA would likely create consumer benefit. ComReg should move away from seeking to justify a significant regulatory intervention on the basis of a brief qualitative discussion and instead conduct a rigorous assessment of the socio-economic, direct and indirect benefits and costs of maintaining the AFL USO. Such an assessment would be expected as part of a properly framed review of regulatory policy. This also requires the AFL USO to be properly defined in advance of any decision regarding USP designation or designation periods*."

11.1.2. ComReg's response

604 We note the varying views of respondents, in particular in relation to the costs of the USO. As set out in Section 8 of Consultation 15/89 that if we decide that there is a continued need for any AFL USOs in the whole or parts of the State, we would consult further on which undertaking(s) should be designated with the AFL USO and the scope of each of the various obligations to be placed on the USP(s) for the provision of the AFL USO.

605 Therefore in the RIA contained in Consultation 15/89 the specifics in terms of the potential impact on the USP(s) of providing the AFL USO could not be quantified as the impact would be determined by the specific obligations which may be imposed on the USP(s) should an AFL USO be deemed to be required. It also noted that the imposition of an AFL USO and the designation of a USP in this regard, in itself will not necessarily have a large impact on industry or end-users in the absence of ComReg specifying the various conditions to be attached to any designation. The individual obligations which sit alongside any such designation will determine what the impact of designation might be. Hence the RIA contained in Consultation 15/89 outlined, at a high level, how the two options ((a) to impose and AFL USO and (b) not to impose an AFL USO) would impact on interested parties and chose the most appropriate means of achieving its aims.

606 The following sets out our draft RIA in relation to the need for an AFL USO and the specific obligations which may be imposed. It expands on the RIA contained in Consultation 15/89 and aims to identify preferred options relevant to the various aspects of the USO following the end of the current designation.

11.2 Revised Draft RIA

607 A RIA is an analysis of the likely effect of a proposed new regulation or regulatory change. It helps identify regulatory options, and should indicate whether or not a proposed regulation is likely to have the desired impact. The RIA should also in certain cases suggest whether regulation is or is not appropriate. The RIA is a structured approach to the development of policy, and analyses the probable impact of regulatory options on different interested parties.

608 Our approach to RIA is set out in the Guidelines published in August 2007, in ComReg Document No. 07/56 & 07/56a. In conducting this RIA, we take account of the RIA Guidelines,[104] adopted under the Government's *Better Regulation* programme.

609 A RIA should enable us to determine the impact of any regulatory change or new regulation, and should assess the alternatives to regulation- such as no intervention, self-regulation or performance based regulation amongst others. RIA's aim to identify areas where regulation can be reduced.

610 A RIA should identify the impact of the various options on stakeholders, on competition and on end-users and also the key risks associated with each option. RIA's therefore increase transparency of decision making and ensures the best possible outcome for stakeholders, end-users and competition.

Step 1: Describe the Policy Issue and identify the Objectives

104 http://www.taoiseach.gov.ie/eng/Publications/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf

611 We are reviewing the current scope of AFL USO in particular on the need to maintain and AFL USO. In lights of our role to ensure that end-users throughout the State receive affordable AFL at an acceptable quality, the evidence supporting a complete withdrawal of the existing AFL USOs would need to be undisputed.

612 Where designating an undertaking as USP for the provision of AFL is considered necessary, the various regulatory options available to us such as in relation to RAT, FIA, affordability and QoS are then considered.

613 Eir has been designated as the USP for AFL to 30 June 2016 and we are of the view that there will be a continued need for an AFL USO for a period of 5 years.

614 New connections to the network have declined in recent years. However, we are of the view that that we must ensure that the universal service for AFL is implemented appropriately and that any future provision of AFL under USO continues to evolve appropriately and aligns with end-users changing needs and market developments.

615 We are of the view that an AFL USO may be necessary to protect end-users. We remain concerned that some end-users who require access at a fixed location would not be provided with, or would not continue to be provided with such a service absent a USO. In this respect we also want to ensure all end-users who require a connection can get one at a reasonable price and with sufficient quality.

616 We are concerned that, although the number of narrowband end-users has decreased, as the NBP has not yet been and fully deployed, there may be unacceptable short term implications for some end-users if FIA targets are withdrawn.

Step 2: Identify and Describe the Regulatory Options

617 We have identified the following regulatory options which may be adopted in order to meet the objectives set out above.

618 There are a wide range of options available to us with respect to each individual aspect of the USO. However, before assessing the various aspects of any AFL USO obligation, the need to require an undertaking(s) to provide AFL must first be determined. These regulatory options are detailed below.

Requirement for an AFL USO

619 As set out above, Consultation 15/89 considered whether or not there is a need for an AFL USO, and Section 8 of that consultation contained a draft RIA.

620 We have identified the following regulatory options which may be adopted in order to meet the objectives set out above. These regulatory options are detailed below.

Option 1: Maintain an AFL USO Obligation for the entire State

621 We may decide to maintain an AFL USO throughout the State post 30 June 2016. If an AFL USO is maintained for the entire State, it would ensure that all end-users, regardless of their geographic location would be reasonably entitled to a connection at a fixed location.

622 Apart from the AFL USO, there is currently no other mechanism, programme or scheme in place to ensure that the basic telephony at a fixed location, set out in the Universal Service Regulations, is provided to everyone that requires it and cannot obtain it under normal market conditions.

623 We may decide to designate a single USP for the entire State. Alternatively, different operators, or sets of operators, can be designated to provide different elements of the universal service, and/or to cover different parts of the State.

624 Therefore, if requiring an AFL USO, we may decide to designate USP(s) for the entire State (Option 1a) or for different geographic areas (Option 1b).

625 Where it is determined that an AFL USO is required, the various aspects of the USO which are currently prescribed also need to be considered, namely:

- Functional Internet Access
- The reasonableness of requests
- Quality of Service
- Affordability including GAP
- Control of expenditure.

626 The obligations which are currently imposed on the USP with respect to each of these aspects could also be maintained, removed or amended. A detailed description of the options with respect to the various USO aspects is set out below.

Option 2: Remove the AFL USO Obligation

627 We may decide not to impose any obligation to provide AFL. If this approach is adopted, no operator would be obliged to provide AFL including connections to a public communications network and related components that ensure affordability and quality. Therefore there is a risk that more remote end-users may not be adequately served.

628 Absent any AFL USO, there may be a risk that the market would not deliver basic AFL services to some areas of the State (such as rural or sparsely populated areas) and / or to less economic end-users distributed nationally.

629 The current AFL obligations with respect to the reasonableness of connection requests, FIA, affordability and QoS would no longer apply. Therefore there is a risk that the level of service currently enjoyed by end-users would no longer be guaranteed. That is, there is a risk that left to the operation of market forces alone, some or even all services and related components may not be provided to certain end-users.

Functional Internet Access

630 With respect to FIA, we may decide to amend or maintain the current data rates and targets for installed lines.

Option 1: Maintain Existing Data Rate and Target

631 We may maintain the minimum data rate at the current level of 28.8kbps. This would mean the majority of connections which currently are capable of FIA, continue to be capable,

632 However this approach would not absolutely ensure that all end-users receiving basic broadband on copper connections would continue to enjoy this service, as the USP might have flexibility within the targets to replace some copper lines with FCS.

Option 2: Require the continuance of basic broadband connections

633 This option would require the USP to continue to provide connections capable of basic broadband (i.e. at speeds of 1 Mb/s or higher) to premises where it had once been available, except with our consent. It would require the USP to repair any faults that meant that basic broadband was no longer provided, but it would not require the USP to ensure there was no degradation in speed at all.

Reasonable Access Requests

634 The scope of the USO is to provide access at a fixed location. The manner in which this is achieved is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and services. Previously a monetary threshold has been used in Ireland to define what requests are considered reasonable, however there are a wide range of alternative or complementary ways in which the reasonableness of a connection could be determined, for example the availability of alternative infrastructures, or dependant on the distance from the exchange.

635 The factors identified are now assessed by us in order to determine what the most appropriate approach is.

a) Presence of Alternative Infrastructure

636 We are of the view the presence of alternative infrastructures as one possible factor which could be considered when assessing whether a request for connection is reasonable or not.

Option 1: Consider the presence of alternative infrastructures

637 As set out in Section 6 of this consultation document and the Second TERA Report In this instance, if the USP could prove the existence of an alternative network which is affordable and of sufficient quality, then a request for connection may not be considered reasonable.

638 Where an alternative network is not present in the area (or is present but is not affordable or of sufficient quality) then the USP may still be required to connect the end-user. Such requests could also be considered using factors such as the distance of the connection from the exchange, the costs involved or other factors such as whether the premises is a primary residence or a holiday home.

Option 2: Do not consider the presence of alternative infrastructures.

639 In this instance the presence of alternative infrastructures is not a relevant factor when assessing whether a request for connection is reasonable or not. Other factors such as those set out below would be used to assess the reasonableness of a request.

b) Monetary Threshold

640 A monetary threshold may be considered as a relevant factor in determining whether a request for connection is reasonable or not. If a threshold is deemed necessary, then it could be increased, decreased or maintained at the current €7,000 level, details of these options are set out below:

Option 1: No monetary threshold

641 Rather than setting a threshold, below which all requests for connection are considered reasonable, we could allow the USP to assess individual requests and decide whether the request is reasonable. It is likely the USP would consider the reasonableness of the request by considering the cost of the connection and expected future revenues. Whether a request for connection is completed is at the discretion of the USP

Option 2: Monetary threshold

642 Under this option, the reasonableness of a request for connection is determined by the cost of connection. The level of the threshold could be maintained at the current level of €7,000 or it could increase or decrease. In all cases the threshold could be linked to inflation, however at this time we are of the view that linking a threshold to inflation would not be appropriate. The options are outlined below.

Option 2 (a): Increase the Threshold

643 The RAT could be increased above the current level to a level which would allow the vast majority of connections to be made without end-users incurring any incremental costs. In this situation, those connections which are unfeasible due to their location and the high costs involved, may still be required to contribute to the costs.

644 The threshold could be set to ensure that only a small percentage of end-users would be liable to pay costs over the threshold thus ensuring that the majority of end-users, regardless of their geographic location would be able to access the network for the standard connection charge.

645 End-users who need access at a fixed location are guaranteed a connection, once they are willing to pay any costs over the threshold. However, the manner in which the access is provided is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service.

Option 2(b): Decrease the Threshold

646 Reducing the threshold below the current level would result in some end-users paying more for a connection, however it could potentially reduce the net cost to the USP.

647 The threshold could be set so as to ensure a certain percentage of end-users would be liable to pay costs over the threshold. End-users who need access at a fixed location are guaranteed a connection, once they are willing to pay any costs over the threshold. However, the manner in which the access is provided is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service.

Option 2(c): Maintain Existing Threshold

648 In this situation, the USP would be required to consider any requests for connection which involve expenditure in excess of €7,000 as reasonable, if the applicant agrees to pay the standard connection charge plus incremental costs above €7,000. End-users are aware of the threshold, as it has been in place for a number of years. Maintaining the current threshold would not be expected to result in many additional high cost connections to the network, therefore not leading to significant detriment to either industry or end-users.

649 In this situation, end-users who need to access at a fixed location are guaranteed a connection, once they are willing to pay any costs over the threshold. However, the manner in which the access is provided is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service.

650 End-users in higher cost locations, where there is no alternative infrastructure, may still remain unable to connect to a network.

c) Distance Related

651 The definition of reasonableness could include a measurement of the distance of the location where the connection was required from the exchange. Therefore we have identified the following regulatory options which may be adopted

Option 1: Consider distance in determining the reasonableness of a request

652 The distance from the existing fixed network may be an appropriate consideration in some instances. Under this option the USP would have to consider a request for connection as reasonable once it was within a certain distance of the exchange.

Option 2: Do not consider distance in determining the reasonableness of a request

653 Under this option the distance from the exchange is not a relevant factor in considering the reasonableness of a request. Although the distance from the existing fixed network may be an appropriate consideration in some instances, the terrain may also have a large impact on a connection. Further, due to new emerging technologies, the distance from the fixed network may not have as much an impact on the reasonableness of a connection as it might have previously.

Quality of Service

654 Quality of service targets may be imposed on the USP which would guarantee end-users a certain quality of service. Quality of service is maintained through a number of different performance targets including in relation to connection times, fault rate occurrence and fault repair times. We have two options available to us as set out below.

Option 1: To Keep Existing Targets

655 Under this option the current targets set by Decision D02/08 would be maintained. This would ensure that the quality delivered by Eir will be maintained, resulting in an appropriate standard. We are of the view these targets can be reasonably maintained. This would require Eir to continue to invest in certain areas where new infrastructure is envisaged to be and fully deployed, in particular as a result of the NBP.

Option 2: To modify Existing Targets

656 Under this option QoS targets could be adjusted to address the concerns raised by Eir in relation to investment, while continuing to protect end-users in all parts of the country. Sub-national and or Service Availability targets could be introduced.

Affordability

657 We can require that the USP adheres to the principle of affordability for universal services. We may specify special tariff options and/or may require the USP to apply geographical averaging throughout the State. A GAP obligation has been in place on the USP since 2004.

a) Geographic Average Pricing

658 With respect to GAP, we may maintain or remove the obligation to provide GAP. These options are set out below.

Option 1: Maintain GAP obligation

659 Maintaining GAP as set out in Section 8 of this consultation document and the Second TERA Report ensures end-users are treated equally with respect to prices, however it may lead to competitive distortion.

Option 2: Remove GAP obligation

660 As set out in Section 8 of this consultation document and the Second TERA Report, if the GAP obligation is removed, this would allow the USP greater pricing flexibility and the ability to differentiate between end-users and areas in respect of its basic voice telephony services prices. Absent a GAP obligation it is likely that those who would be most (negatively) affected are those located in more rural areas. A similar situation could possibly arise for those end-users in NBP areas, at least during the roll out phase of the new infrastructure over the next (circa) 5 years. Removal of the GAP would not achieve the objective of social inclusiveness.

b) Special Tariff Packages

661 The Universal Service Regulations provide that we may specify special tariff options or packages which depart from those provided under normal commercial conditions, in particular to ensure that those on low incomes or with special social needs are not prevented from accessing the network. Therefore we have the two following options available:

Option 1: Impose an obligation to provide special tariff plans

662 To date we have not mandated the provision of social tariffs, however Eir currently offers vulnerable consumers a number of tariff plans. We may however impose an obligation to provide tariff options in order to protect those most vulnerable consumers.

Option 2: Do not impose an obligation to provide special tariff plans

663 We may decide not to impose additional obligations in respect of special tariff plans. The presence of a safeguard price cap on the basic telephone line rental and other price options may be sufficient to ensure affordability.

Control of Expenditure

664 In addition to affordability measures, the Universal Service Regulations also provide for several measures with respect to control of expenditure. We may decide to impose obligations in this respect

Option 1: Impose Obligations

665 We may impose obligations on the USP in respect of a Disconnection Policy and Phased Payment for connection fees and Terms and Conditions of contract. Therefore we can amend or maintain these obligations at this time.

Option 2: Do not impose Obligations

666 We may decide not to impose obligations for some or all of these measures.

Steps 3 & 4: Determine the impacts on stakeholders and competition

667 In order to determine the impact of each of the proposed measures, the measures are assessed by comparing their impact against what would happen if the measure was not implemented. These are set out in the tables below.

Requirement for an AFL USO

Measure Proposed	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1(a) **Maintain an AFL USO for a 5 year period for the entire State**	USP may incur costs for the provision of the USO. These costs will be dependent on the specific obligations which are imposed as set out below. Regardless of who the USP(s) is/are, where a net cost is claimed and an unfair burden is determined, providers of electronic communications networks may be required to contribute to a fund. The duration of the obligation will impact on the costs, with a shorter duration potentially resulting in lower costs.	Designated operator benefits from being USP, by virtue of benefits such as enhanced brand recognition, life cycle benefit, ubiquity and marketing. Additional end-users added to the network potentially benefits all operators. Longer designation period provides regulatory certainty, for industry in respect of length of current regime and possible implications for fund issues		End-users regardless of their geographic location would be reasonably entitled to a connection and service at a fixed location. Further, each additional end-user added to the network increases the value of the service to other users of the network. This ensures continuity of provision of the universal services and certainty at this point in time. End-users may benefit in terms of QoS, connection charges, availability of connections capable of FIA etc., depending on the specific obligations imposed.

Measure Proposed	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1(b) **Maintain an AFL USO in place for a period of 5 years but not covering all geographic areas of the state.**	USP may incur costs for the provision of the USO. These costs will be dependent on the specific obligations which are imposed as set out below. Net cost may be slightly lower where entire State is not covered. Regardless of who the USP(s) is/are, where a net cost is claimed and an unfair burden is determined, providers of electronic communications networks may be required to contribute to a fund. The duration of the obligation will impact on the costs, with a shorter duration potentially resulting in lower costs.	Additional end-users added to the network potentially benefit all operators The period of designation provides certainty for industry in respect of length of current regime and possible implications for fund issues. Longer designation period provides regulatory certainty, for industry in respect of length of current regime and possible implications for fund issues	Some areas may not be adequately served depending on the geographic area in which they are located.	Some end-users depending on their geographic location would be reasonably entitled to a connection and services at a fixed location This ensures continuity of provision of the universal services and certainty at this point in time for some end-users. Some end-users may benefit in terms of QoS, connection charges, availability of connections capable of FIA etc., depending on the specific obligations imposed.

Measure Proposed	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 2 **Remove the AFL USO**	Operators using the current USP's network may not be able to guarantee connections to end-users USP no longer benefits from brand recognition and over time the life cycle benefits would disappear. Reduction in the number of new end-users added to the network	No costs incurred due to the provision of the USO and hence no net cost claim.	Basic telephony service may not be delivered to all end-users by any undertaking or may not be delivered and an affordable price or acceptable quality It is likely that those end-users who would be most affected are those located in more remote rural areas, however certain urban end-users may also be impacted. End-users may suffer, for example, through less favourable terms and conditions and/or service levels, due to the absence of a universal service obligation and competition. Some end-users may not be able to get a connection to the network and some existing connections and services may be discontinued.	Competition in urban areas may intensify, perhaps leading to lower prices for end-users in these areas.

Measure Proposed	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
			End-users may have connections which are not be capable of FIA. Quality of Service may deteriorate to an unacceptable standard in certain geographic areas.	

FIA Data Rates

Option	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1 **Maintain current rate**	USP may not always be able to deploy the least cost technology due to FIA targets. There may be a net cost for the provision of uneconomic connections.	Large investment in broadband is not required, therefore net cost claimed should not increase. No costly duplication of networks.	Some end-users who require broadband will not have access. Some end-users will not have a line capable of FIA.	Majority of end-users guaranteed FIA connections, commercial rollout together with NBP should ensure in the coming years all consumers will have a line capable of high speed broadband End-users who currently have and use a line capable of FIA continue to have it.

Option	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
	Operators using the USP's network may not be able to purchase connections capable of broadband in certain areas		Current FIA rates not suitable for current internet usage. At 28.8kbps speed not appropriate to allow end-users to open webpages.	
Option 2 **Require the continuance of basic broadband connections**	Significant network upgrades required in some instances, where alternative investments enabling an achievement of higher speeds are planned in the short term on a commercial basis or by way of the NBP.	Potential for maintaining revenues due to end-users continuing to purchase broadband.	Potential increase in charges due to the increase in costs incurred by the USP Some end-users will not have a line capable of broadband.	End-users who currently have broadband access will be able to avail of it. Current household broadband penetration rate (fixed & mobile) is 83%

Reasonable Request for Connection

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
Alternative Infrastructures	Option 1 Consider Alternative Infrastructures	Obligation on USP to provide connections, though potentially to a reduced number of end-users USP may still incur some costs Burden of proof on USP to prove existence of alternatives, therefore potential for administrative burden on USP	Potential for reduced net cost for USP If sharing mechanism necessary where unfair burden determined less impact on other operators No inefficient infrastructure duplication	In some instances the end-user may not get the connection from the USP with their preferred technology Risk that the alternative infrastructure does not remain affordable or of sufficient quality over time	End-users still guaranteed a connection which has the same capabilities as AFL. Those connections where there is no alternative infrastructure would still be guaranteed a connection, possibly subject to a cost threshold
	Option 2 Do not consider Alternative infrastructures	USP required to provide all connections subject to the RAT Risk of inefficient network duplication and costs where an alternative operator is present USP may incur costs in providing end-users with connections	USP does not have administrative burden of proving existence of alternative networks.	Connection may still be subject to a threshold therefore end-users may pay the incremental costs.	All End-users guaranteed to get a connection from the USP subject to other criteria such as RAT. Connection will be affordable and have sufficient QoS Consistent with current approach

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
		If unfair burden determined all undertakings would be required to contribute to fund			
Monetary Threshold	Option 1 No monetary Threshold	No clear rules and no way for other undertakings to determine whether a request for connection would be met	USP decides whether a request is reasonable, likely taking into consideration the costs and future revenues. Simple for the USP	Risk that a number of connections would be refused. No clear rules and no way for other end-users to determine whether a request for connection would be met Difficult to determine connection cost and those most impacted are likely to be those in remote rural areas where there is no alternative available.	
	Option 2(a) Maintain a threshold but increase threshold above current €7,000 level	Net cost may be claimed, this would be expected to be higher than if the threshold remained at the current level. This may lead to increased costs for the USP.	Industry benefits from externalities- each additional end-user added to the network increases the value of the service to other users.	Some end-users in remote rural areas may still not be able to afford access to the network.	Vast majority of end-users, regardless of their geographic location would be able to access network at standard connection charges i.e. without incurring incremental costs.

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
		Depending on the increase, very high cost connections which previously were not completed due to the incremental costs payable by the applicant may be re-applied for.	Clear rule as to when the USP can accept or deny connection requests.	USP may increase access charges to compensate for reduced connection revenue (subject to other regulatory constraints) Some end-users may still have to pay incremental costs, depending on the threshold level. Price of a standard connection may increase, however GAP and RPC obligations would limit the potential impact. This increase would only effect new end-users to the USP's network.	Some end-users may no longer be required to pay incremental costs as the cost of their connection now falls below the threshold. Those end-users who are required to pay the incremental costs now pay a lower amount. End-users who previously did not connect to the network due to high incremental costs may now proceed with the connection, depending on the threshold level. Larger network of end-users
	Option 2(b) Maintain a threshold but decrease threshold below current level	USP required to connect end-users, subject to the cost of the connection being lower than a reduced threshold	Potentially reduced net cost however may result in unfair burden, sharing mechanism will impact on industry	Detriment to end-users likely to be substantial. Some End-users may have to contribute more to their connection that under the previous RAT.	End-users still guaranteed a connection, subject to a lower RAT Majority of end-users can access network at standard connection charges.

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
		USP may still incur some costs, however net cost may be claimed which may potentially be lower than if the threshold was not decreased. Reduction in net cost unlikely to be significant due to the low number of connections affected. Industry required to contribute to a fund if net cost found to be an unfair burden	Clear rule as to when the USP can accept or deny connection requests. Ubiquity benefits arise for the USP due to the national presence USP benefits from additional revenue by virtue of end-users paying incremental costs, however this is likely to be low.	End-users who previously did not have to pay incremental costs may now need to, in additional the incremental costs will increase for some end-users Some end-users in remote rural areas may not be able to afford access to the network. The number of end-users impacted depends on the RAT level. If the RAT decreased to €3,000 We expects ✂ end-users per year would have to contribute up to €4,000 extra for a connection.	
	Option 2(c) Maintain current threshold	USP required to connect end-users where the cost of the connection is below €7,000	The USP continues to get a contribution from the end-user for high cost connections End-users can connect to the network leading to positive network externalities	Some end-users in remote rural areas may not be able to afford access to the network	Majority of end-users can access network at standard connection charges. This leads to a larger network of end-users than might otherwise be

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
		Net Cost may be claimed, however costs should reduce of the exemption from providing a connection where there is an alternative infrastructure is implemented.	Clear rule as to when the USP can accept or deny connection requests.		
Distance Related	Option 1 Consider distance when assessing whether request is reasonable	Depending on the distance, the costs to the USP may increase	Possibly simpler approach for USP, especially if distance is the only factor assessed Depending on the distance, the costs to the USP may decrease	Distance from exchange considered, may meant in some instances end-users have to pay more for a connection than under the current threshold regime	End-users can easily identify whether they would be guaranteed a connection. Regime is transparent and easy for end-user to determine with certainty whether their request will be considered as reasonable.
	Option 2 Do not consider when assessing whether request is reasonable		Other factors such as the cost of the connection are used to determine whether a request is reasonable.	Less transparency for end-users that a threshold regime, where the end-user cannot determine in advance whether their request will be considered as reasonable.	End-users aware that of their connection is low cost they can connect at the standard connection charge, or where it is higher cost they can choose whether or not to pay increment costs.

QoS

Options	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1 To Keep existing targets	Net cost may be claimed. Industry required to contribute to a fund if net cost found to be an unfair burden		In some areas, due to national averaging end-users may experience more regular faults and longer repair times	End-user guaranteed USP will achieve repair and fault occurrence targets
Option 2 **Modify existing targets**	Net cost may be claimed. Industry required to contribute to a fund if net cost found to be an unfair burden	Service availability target gives USP flexibility to make efficient decisions in terms of investment	In some areas, end-users may experience more regular faults and longer repair times	Sub-national targets would mean end-users may benefit from improved availability in some areas Sub-national targets protect end-users and ensure the service quality is appropriate

Affordability

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
GAP	Option 1 Maintain obligation	Will cause constraints on the USP only in competitive areas where competition mainly focuses on bundles, therefore standalone voice offers are not the predominant driver of competition in these areas. Consequently the existing GAP obligation is not burdensome. Net cost may be claimed due to the inability of the USP to charge more costly rural end-users higher charges		Urban end-users may pay prices higher than those which may be applicable if the obligation was removed	End-users will be ensured equal treatment with respect to prices of basic voice telephony services Maintaining a GAP obligation should ensure workable competition is sustained in rural as well as urban areas, protecting end-user welfare in rural areas and areas where competition for voice access is not yet effective. Maintaining GAP will result in an overall net welfare benefit, benefiting both competition and end-users.
	Option 2 Remove Obligation		This would allow the USP (Eir currently) greater pricing flexibility and the ability to differentiate between end-users and areas in respect of its basic voice telephony services prices	Risk that this would cause an adverse effect, rural areas may have to pay higher line rental fees when using a telephone than those in densely populated areas	Urban end-users may benefit from reduced prices

	Options	Impact on Industry		Impact on End-user	
		Costs	Benefits	Costs	Benefits
			The USP would have ability and incentive to set lower prices in more competitive (primarily urban) areas to meet competition from alternative operators.	End users would not be protected against a risk of unjustified line rental and connection price increases, despite the existing RPC.	
Social Tariffs	Option 1 Impose obligation	USP may claim net cost due to the provision of Social Tariffs All undertakings required to contribute where an unfair burden is found.			Vulnerable Consumers benefit from the availability of reduced tariffs
	Option 2 Do not impose Obligation		No net cost as a result of the imposition of Social Tariffs. USP and other providers can offer tariff schemes which are suitable for vulnerable consumers		Consumers continue to be able to avail of commercially offered tariff schemes

Control of Expenditure

Options	Impact on Industry		Impact on Consumer	
	Costs	Benefits	Costs	Benefits
Option 1 **Maintain Obligations**	Low cost to the USP of the schemes	Unlikely to have material impact on any net cost claim		Disconnection policy has a positive effect by reducing the number of end-users that may have been otherwise disconnected from the network Phased connection plan is important for end-users who need to avail of it
Option 2 **Do not maintain obligations**		USP may have small reduction in any net cost claim	Loss of control of expenditure facilities that are of importance to end-users	

Step 5: Assess the Impacts and choose the best option

Imposition of AFL USO

668 We are of the preliminary view that removing the USO (Option 2) in relation to AFL at this time would be premature. Market trends show that end-users continue to rely on AFL, and in the absence of a USO, we are of the view that there are end-users who would not be connected to the network, leading to detriment to these end-users.

669 There is a risk that left to the operation of market forces alone, access to services mandated by the Universal Service Directive may not be provided to everyone irrespective of location and at an affordable price and appropriate quality.

670 As technology and competition develops, and as end-user needs evolve, it is our duty to ensure that the AFL USO continues to meet end-users' basic telephony needs, if they are not already being met by the market.

671 We consider the evidence supporting a complete withdrawal of the existing USOs would need to be undisputed, at this time we do not believe there is complete assurance that AFL services would be delivered in the future at an affordable price and appropriate quality throughout the State without any obligation in place.

672 For these reasons we are of the preliminary view that the AFL USO should continue for a period of 5 years (Option 1). However, we are of the view the current obligations could be amended yet still meet the needs of end-users. Any amendments would protect end-users, yet could allow for example the consideration of alternative infrastructure for the provision of AFL.

FIA Minimum Data Rates

673 We consider that a data rate of 28.8kbps should be regarded as the minimum target data rate for FIA which the vast majority of telephone end-users should obtain.

674 We are of the preliminary view that although 28.8kbps is not sufficient, it would not be appropriate at this time to alter upwards the required 28.8kbps data rate to a rate necessary to deliver broadband, in light of ongoing developments in the market and the government's plans in respect of broadband.

675 For these reasons, we are of the preliminary view that maintaining FIA at the current rate (Option 1) is the most appropriate at this time.

Reasonable Requests for Connection

Alternative Infrastructures

676 We are of the view at this time, that it is appropriate to consider the presence of alternative infrastructures when assessing whether or not a request for connection is reasonable (Option 1) we are of the view that this would allow the USP to provide connections only where the end-user has no alternative, meaning there is no unnecessary investment or duplication of networks. Further this would mean that end-users for whom there was no alternative would still have the ability to connect to the USP's network, although such connections would still be subject to a monetary threshold.

Reasonable Access Threshold

677 ComReg is of the preliminary view that allowing the USP to assess individual requests and decide whether the request is reasonable (Option 1) would not achieve its objectives.

678 Where a threshold is maintained we are of the preliminary view that a decrease in the RAT would not be appropriate (Option 2(b)). A decrease in the RAT could lead to detriment particularly for those in remote rural locations. Further a reduction in the RAT is unlikely to significantly impact on any net cost claim as only a small percentage of connections would pay additional charges. A reduction in the RAT, would in ComReg's view would not strike a balance between the benefits to the USP with the needs of consumers.

679 ComReg is of the view that the cost savings made by the USP following any increase in the threshold (Option 2(a)) would be outweighed by the detrimental impact on consumers and hence this option is unlikely to be pursued.

680 For the reasons set out above and due to the small number of connections to which the RAT is applied, we are of the preliminary view that the threshold should be maintained at €7,000 (Option 2(c)).

Other Reasonableness Criteria

681 We are of the preliminary view that the presence of alternatives and the reasonable access threshold should be sufficient to determine whether a request for connection is reasonable or not. We are therefore of the preliminary view that other criteria are not necessary at this time.

Quality of Service

682 We are of the preliminary view at this time that the current connection targets should be maintained.

683 However with respect to the Fault Occurrence and repair times, we are of the preliminary view that a service availability target could be introduced which would give the USP flexibility to make efficient decisions in terms of investments for preventative maintenance or operational expenditure (opex) to ensure that faults

are repaired in a timely manner, while continuing to ensure end-users are protected. For these reasons Option 2 is the preferred option at this time.

Affordability

GAP

684 If GAP obligation in respect of AFL is removed, all end users would not be protected against a risk of unjustified price increases, despite the existing RPC control. Absent GAP, Eir would have greater pricing flexibility and the ability to discriminate between end-users and areas for the basic fixed telephone services at a fixed location and in particular with respect to standalone voice end users. By maintaining GAP, consumers will be ensured equal treatment with respect to prices of voice services. Therefore we are of the preliminary view that GAP should be maintained (Option 1)

Special Tariff Plans

685 We have considered, in light of national circumstances, the potential impact on those most vulnerable in society of any potential change to affordability measures including the possibility to introduce an obligation in relation to special tariffs. On the basis of the information available to date, our view is that that there are at present other mechanisms that ensure that basic voice services are broadly affordable for end-users. We therefore are of the view there is not sufficient to require an obligation in respect of Social Tariffs at this time. Option 2 is therefore the preferred option.

Control of Expenditure

686 Our preliminary view is that no amendment to the requirements for a USP to provide a Disconnection Policy or the phased payment facility is necessary at this time.

687 Our preliminary view is therefore not to introduce any special contract terms and conditions applicable to contracts between end-users and the USP(s).

688 For regulation to be effective, we must ensure that compliance with its obligations can be monitored and, where necessary enforced. Our compliance functions include monitoring ongoing compliance with obligations, enforcing existing obligations, and handling formal disputes. We will monitor and enforce compliance with any public payphone obligations in line with these functions.

689 We are of the view that these measures are unlikely to result in a disproportionate cost burden and for the reasons set out above, the benefits to end-users are likely to be significant. In contrast, if these obligation were removed no such benefits would follow.

Q. 33 Do you agree or disagree with our draft assessment of the impact of the proposed options? Please set out reasons for your answer.

12. Draft Decision Instrument

1. STATUTORY FUNCTIONS AND POWERS

1.1 This Decision and Decision Instrument is hereby made by ComReg for the purposes of imposing obligations, requirements, and specifications for the provision of the universal services in the State electronic communications market.

1.2 This Decision and Decision Instrument is made:

i. Pursuant to and having regard to the functions and objectives of ComReg set out in sections 10 and 12 of the Act**;**

ii. Pursuant to the functions and powers conferred upon ComReg under and by virtue of Regulations 3, 7, 8, 9, and 10 of the Universal Service Regulations;

iii. Having regard to Directive 2002/21/EC (as amended) and Directive 2002/22/EC (as amended);

iv. Having, where appropriate, pursuant to section 13 of the Act, complied with the Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February 2003 and 26 March 2004;

v. Having had regard to the views of interested parties, including Undertakings and the submissions they made in response to ComReg Document No. 14/48, ComReg Document No. 15/89, and ComReg Document No. 15/124; and ComReg Document No. 16/ •

vi. Having had regard to the analysis and reasoning set out in ComReg Document No. 15/89 and Decision • which shall, where the context admits or requires, be construed together with this Decision Instrument.

2. DEFINITIONS AND INTERPRETATION

2.1 In this Decision Instrument, unless the context admits or requires, the following terms shall have the following meanings:

"Act" means the Communications Regulation Act 2002;

"Alternative Network" means the physical and other infrastructure and technology of an Undertaking other than a Designated USP, which is capable at the time a request is made by an End-User to the Undertaking, of providing the End-User with a reliable, properly and fully functioning Connection and PATS at a Fixed Location, using any suitable technology or technologies, including for example, fixed line technology, or wireless technology, or both;

"ComReg" means the Commission for Communications Regulation, established under section 6 of the Act;

"Connection" means a Connection at a Fixed Location to the public telephone network, as referred to in Regulation 3 (1) of the Universal Service Regulations, which is capable of supporting: (a) voice; and (b) data communications at data

rates that are sufficient to permit FIA; and (c) facsimile (except that in relation to facsimile, regard may be had to the prevailing technologies used by the majority of End-Users and to technological feasibility);

"Designated USP" means an Undertaking, designated by ComReg pursuant to Regulation 7 of the Universal Service Regulations. The Designated USP, for the purposes of this Decision Instrument and the Universal Service Regulations, is specified in Section 4;

"Directive 2002/21/EC" 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 (Framework Directive) (as amended);

"Directive 2002/22/EC" means Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) (as amended);

"ECN" has the same meaning it has in Regulation 2 of the Framework Regulations;

"ECS" has the same meaning it has in Regulation 2 of the Framework Regulations;

"Eir" means Eircom Limited and its subsidiaries and any related companies, and any Undertaking which it owns or controls, and any Undertaking which owns or controls Eircom Limited and its successors and assigns. For the purposes of this Decision Instrument the terms "subsidiary" and "related company" shall have the meanings ascribed to them in the Companies Act 2014;

"End-User" has the same meaning it has in Regulation 2 of the Framework Regulations;

"FCS" means fixed cellular solution;

"FIA" means functional internet access which is capable at a minimum of a data rate of 28Kbps;

"Fixed Location" means beyond the curtilage of the End-User's premises, that is, the interior of the End-User's premises;

"Framework Regulations" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011;

"Good Industry Practice" means that standard and degree of skill, care, efficiency, diligence, prudence, and foresight which would reasonably and ordinarily be expected from a skilled and experienced Undertaking in the same, similar, or equivalent circumstances;

"Minimum Indoor Availability" means availability to the End-User that is functionally and technically equivalent to fixed technology that is provided at a Fixed Location;

"PATS" means the provision of a publicly available telephone service over a Connection which allows for the originating of and receiving of national and international calls, as referred to in Regulation 3 (2) of the Universal Service Regulations;

"State" means Ireland;

"Sub-National Area" means the main distribution frame areas within the State as referred to in Annex 5, which ComReg may from time to time amend;

"Undertaking" has the same meaning it has in Regulation 2 of the Framework Regulations;

"Universal Service Regulations" means the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011; and

"USP" means universal service provider.

2.2 References to "Decision Instrument", "Schedule", "Section", and "Decision" mean respectively: references to this Decision Instrument, a Schedule or Section of this Decision Instrument, and ComReg Decision •.

2.3 References to primary or secondary legislation shall be construed as references to that legislation as amended from time to time.

2.4 Other terms, words, or phrases used in this Decision Instrument shall have the same meaning as they have in the Framework Regulations or the Universal Service Regulations, unless the context otherwise admits or requires.

2.5 Words in the singular form shall be construed to include the plural and vice versa, unless the context otherwise admits or requires.

2.6 Examples shall not be construed to limit, expressly or by implication, the matters they illustrate.

3. APPLICATION, SCOPE, AND COMPLIANCE

3.1 This Decision Instrument designates the Designated USP(s) specified in Section 4 from the Effective Date, for the purpose of complying with the obligations in this Decision Instrument.

3.2 This Decision Instrument is legally binding upon and legally enforceable against the Designated USP from the Effective Date.

3.3 The Designated USP shall fully comply with this Decision Instrument in all respects as and from the Effective Date and non-compliance attracts the enforcement procedures under Regulation 32, or 35 and 36 of the Universal Service Regulations, or section 44 of the Act.

4. THE DESIGNATED USP(S) AND GEOGRAPHICAL SCOPE

4.1 Eir is hereby designated as the Designated USP for the purpose of complying with the obligations in this Decision Instrument. The geographical scope of the

obligations imposed on the Designated USP by this Decision Instrument is the entire State. For the avoidance of doubt, Eir is, for the time being, the only Undertaking that is designated as a Designated USP by this Decision Instrument, until further notice and the making of any amendments to this Decision Instrument by ComReg.

4.2 Section 4.1 is without prejudice to this Section 4.2 and therefore, notwithstanding anything in the Decision, or any Section of this Decision Instrument, ComReg may, in order to ensure that either the whole, or different parts of the State are covered by one or more Designated USPs, designate one or more Undertakings, or sets of Undertakings as a Designated USP, for such period as ComReg may specify for the purposes of complying with with any or all of the following:

a. The obligations or requirements referred to in Regulation 3, 4 (1) (a) and 4 (1) (b) of the Universal Service Regulations;

b. An obligation, term, or condition referred to in Regulation 5 and 6 of the Regulations;

c. A requirement under Regulation 8 (2) of the Universal Service Regulations; and

d. Specifications, requirements, or obligations under Regulation 9 and 10 of the Universal Service Regulations.

5 OBLIGATIONS OF THE DESIGNATED USP: CONNECTIONS, PATS, AND REASONABELNESS OF REQUESTS

Connections

5.1 The Designated USP shall satisfy any reasonable request by an End-User for a Connection.

5.2 The Designated USP shall fully comply with the FIA obligations specified in Section 6.

5.3 The Designated USP shall fully comply with the quality of service performance targets specified in Section 7.

PATS

5.4 The Designated USP shall satisfy any reasonable request by an End-User for PATS.

Reasonableness of Requests

5.5 A request by an End-User to the Designated USP for a Connection and PATS at a Fixed Location shall be presumed to be a reasonable request. However, the Designated USP may consider an End-User's request not to be a reasonable one, if at the time the request is made, there exists an Alternative Network, at the Fixed Location to which the request relates and if the Designated USP can demonstrate to the End-User's and to ComReg's satisfaction that the criteria in (a) and (b) apply and that they are met:

a. The Alternative Network and a PATS, or an ECN or ECS which uses mobile technology, can provide the same functionality (including that it guarantees Minimum Indoor Availability) as the Connection and the PATS which the End-User requested the Designated USP to satisfy; and

b. The Alternative Network and a PATS is available to the End-User on terms (relating to, for example: price, payment terms, and other terms and conditions for terminal equipment, antennae, and other necessary equipment, as well as the Connection and the PATS requested by the End-User) that are, at least, equivalent to, and as affordable as (and otherwise acceptable to the End-User) as the Connection and PATS which the End-User requested the Designated USP to satisfy.

5.6 If the Designated USP does not demonstrate to the End-User and to ComReg's satisfaction that the criteria in Section 5.5 are met, then the following shall apply:

a. The Designated USP shall treat as reasonable all requests by End-Users for Connections and requests for a PATS, if the estimated expenditure required to satisfy the request does not exceed €7,000, in which case the cost to the requesting End-User shall not exceed the standard connection charge.

b. The Designated USP shall treat as reasonable all requests by End-Users for Connections and requests for a PATS if the estimated expenditure required to satisfy the request exceeds €7,000 and the Designated USP demonstrates to the requesting End-User and to ComReg's satisfaction that the requesting End-User has agreed to pay the standard connection charge and the amount by which the estimated expenditure exceeds €7,000.

c. For the purposes of the estimate of expenditure referred to in Section 5.6 (a) and (b), the Designated USP shall base its estimate on the least cost technology that can be employed by the Designated USP (using Good Industry Practice) and the cost of providing the Connection to the Fixed Location (by means of an overhead connection, where possible). This estimate shall include only those costs which can be attributed to the requesting End-User.

d. The Designated USP shall use all reasonable endeavours and Good Industry Practice in order to ensure that all Connections are capable of achieving the minimum data rate specified in Section 6.1.

5.7 The Designated USP shall comply with the performance targets specified in Section 7 when satisfying requests by End-Users for Connections and for PATS.

5.8 The Designated USP shall, when satisfying requests by End-Users for Connections and for PATS, do the following:

a. Satisfy all requests and inform each End-User how it will do so, the time within which the request will be satisfied, unless a prior survey is required, in which case the Designated USP shall inform the End-User when the survey will be commenced and completed.

b. Adopt and publish easily accessible and transparent information and procedures to ensure that all End-Users can receive and access information on the progress of their requests.

c. Comply with the performance targets for Connections specified in Section 7.

d. Under all normal circumstances, using Good Industry Practice, avoid the use of carrier systems for new Connections in order to prevent the occurrence of problems with the roll-out of broadband and only use carrier systems after a full evaluation of the future potential of the line capability; having taken into account the views of the requesting End-User and interested third parties.

6 OBLIGATIONS OF THE DESIGNATED USP: FIA PERFORMANCE TARGETS FOR CONNECTIONS AND RELATED OBLIGATIONS

FIA: Performance Targets for Connections

6.1 The Designated USP shall, for existing Connections, achieve an overall performance target of 94% of total installed Connections capable of a minimum data rate of 28.8 kbit/second.

6.2 The Designated USP shall, on a quarterly basis, provide ComReg with written reports on the Designated USP's performance in relation to the performance target specified in Section 6.1 and the Designated USP shall publish these reports in such a manner as ComReg may specify.

6.3 The Designated USP shall, upon the request of any End-User who has *bona fide* doubts as to their line capability, provide them with a written statement, confirming the data rate capability of their telephone line. If on receipt of this written statement, the End-User still has *bona fide* doubts as to their line capability, the Designated USP may require the End-User to conduct reasonable self-tests, prior to the Designated USP assessing and testing the line, and shall inform the End-User of their right to the written statement referred to in this Section 6.3.

6.4 The Designated USP shall propose procedures to ComReg to measure individual lines and for providing the information in the written statement referred to in Section 6.3 to End-Users, no later than 4 weeks after the Effective Date. The Designated USP shall comply with a request by ComReg to make such amendments as ComReg may specify to these procedures and the content of the information in the written statement referred to in Section 6.3.

6.5 The Designated USP shall use all reasonable endeavours in accordance with Good Industry Practice (including for example, the removal of carrier systems equipment) to remedy performance problems with individual lines where their capability is found not to achieve the minimum data rate of 28.8 kbit/second.

6.6. Subject to Section 6.7 ComReg Decision No. D09/05 is hereby revoked.

6.7 If an appeal is lodged under Part 2 of the Framework Regulations, or if judicial review proceedings are commenced, or injunctive relief is sought in respect of the validity of this Decision and Decision Instrument, ComReg Decision No. D09/05 shall continue in full force and Section 6.6 shall not come into operation.

7 OBLIGATIONS OF THE DESIGNATED USP: PERFORMANCE TARGETS FOR CONNECTIONS AND RELATED OBLIGATIONS

Quality of Service Performance Targets

7.1 The Designated USP shall achieve and fully comply with the performance targets specified in this Section 7.1 for each Sub-National Area:

In-Situ Connections

a. 80% shall be completed within 24 hours of request.

b. 99.8% shall be completed within 2 weeks of request.

c. 100% shall be completed within 2 months of request.

All other Connections

a. 80% of all requests shall be completed within 2 weeks of request.

b. 85% of all requests shall be completed within 4 weeks of request.

c. 90% of all requests shall be completed within 8 weeks of request.

d. 95% of all requests shall be completed within 13 weeks of request.

e. 95% of all requests shall be completed by the agreed date, where one is agreed.

f. 100% of all requests shall be completed within 26 weeks of request.

Service Availability

7.2 The Designated USP shall achieve and fully comply with the following annual performance targets with respect to the availability of Connections for the entire State and for each Sub-National Area.

a. 99.94 % availability for the entire State.

b. 99.86 % availability for each Sub-National Area.

7.3 The targets and the Designated USP's performance in respect of them shall be calculated based on the definitions and calculation methodologies set out in Annex 3, which ComReg may amend from time to time.

Terms and conditions

7.4 The USP shall immediately and without delay refund any End-User their subscription fee for the subscription period, if during the period of the subscription their Connection or PATS, or both, is not operational for 10 days (which, for the avoidance of doubt, include weekdays, Saturdays, Sundays, bank holidays, and public holidays).

Review

7.5 ComReg shall commence a review of Sections 7.1 – 7.3 to determine if any amendments to those Sections are warranted, 2 years after the Effective Date.

Revocation and Saver

7.6 Subject to Section 7.7, ComReg Decision No. D02/08 is hereby revoked.

7.7 If an appeal is lodged under the Framework Regulations, or if judicial review proceedings are commenced, or injunctive relief is sought in respect of the validity of this Decision and Decision Instrument, ComReg Decision No. D02/08 shall continue in full force and Section 7.6 shall not come into operation.

8 OBLIGATIONS OF THE DESIGNATED USP: REPORT, AUDIT, AND PERFORMANCE MEASUREMENT

8.1 The performance of the Designated USP for the purpose of its obligations under Sections 6 and 7 shall be determined by reference to the information normally set out in ComReg information notices, published every quarter and usually entitled *"Provision of Universal Service by • - Performance Indicators",* or as ComReg may publish in another manner or format from time to time.

8.2 The Designated USP shall arrange an independent audit or review, (which shall be paid for by the Designated USP) of the performance data provided to ComReg pursuant to Sections 6 and 7.

8.3 The Designated USP shall on a quarterly basis, within 2 months of the end of the previous quarter, provide ComReg with such performance data in written form, in relation to its obligations in Sections 6 and 7 as ComReg considers necessary.

8.4 The Designated USP shall maintain records in a written form, of all requests made to it by End-Users for Connections and PATS, for 2 years from the date that the request was first made. These records shall contain, at a minimum, the following information:

a. The name of the End-User.

b. The address and postcode of the End-User.

c. The date of the End-User's request.

d. What the End-User requested.

e. The Designated USP's reasons, in accordance with the criteria in Section 5.5, demonstrating whether or not (and how) those criteria in Section 5.5 have been met.

f. The Designated USP's reasons as to whether or not (and how) an ECN or ECS which uses mobile technology can guarantee Minimum Indoor Availability.

8. 5 The Designated USP shall, on a quarterly basis, publish adequate and up to date written information concerning its performance in relation to the provision of the universal services that it is obliged to provide under this Decision Instrument and on measures taken to ensure equivalence of access for disabled End-Users, based on the quality of service parameters, definitions, and measurement methods set out in Annex III to Directive 2002/22/EC (and reproduced in the Table below) and shall also provide such published information to ComReg.

Table: Quality of Service Parameters

Quality-of-Service Parameters, Definitions and Measurement Methods referred to in Articles 11 and 22

For undertakings providing access to a public communications network

PARAMETER (Note 1)	DEFINITION	MEASUREMENT METHOD
Supply time for initial connection	ETSI EG 202 057	ETSI EG 202 057
Fault rate per access line	ETSI EG 202 057	ETSI EG 202 057
Fault repair time	ETSI EG 202 057	ETSI EG 202 057

For undertakings providing a publicly available telephone service

Call set up time (Note 2)	ETSI EG 202 057	ETSI EG 202 057
Response times for directory enquiry services	ETSI EG 202 057	ETSI EG 202 057
Proportion of coin and card operated public pay-telephones in working order	ETSI EG 202 057	ETSI EG 202 057
Bill correctness complaints	ETSI EG 202 057	ETSI EG 202 057
Unsuccessful call ratio (Note 2)	ETSI EG 202 057	ETSI EG 202 057
Version number of ETSI EG 202 057-1 is 1.3.1 (July 2008)		

Note 1
Parameters should allow for performance to be analysed at a regional level (i.e. no less than level 2 in the Nomenclature of Territorial Units for Statistics (NUTS) established by Eurostat).

Note 2
Member States may decide not to require up-to-date information concerning the performance for these two parameters to be kept if evidence is available to show that performance in these two areas is satisfactory.

8.6 The Designated USP shall clearly and promptly inform all End-Users (individually) requesting a Connection and PATS of their statutory rights under Regulation 27 of the Universal Service Regulations in relation to dispute resolution procedures, if the Designated USP regards such a request as not being reasonable.

9 OBLIGATIONS OF THE DESIGNATED USP: GEOGRAPHICALLY AVERAGED PRICING AND CONTROL OF EXPENDITURE

Geographically Averaged Pricing

9.1 The Designated USP shall apply geographically averaged prices for Connections and PATS, which shall be fully transparent and published, and applied in accordance with the principle of non-discrimination.

Control of Expenditure

9.2 The Designated USP shall:

a. Maintain and publish a scheme to allow for the phased payment of Connection fees.

b. Maintain and publish its disconnection policy in relation to the non-payment of bills.

10 STATUTORY POWERS NOT AFFECTED

10.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or the duties conferred on it under any primary or secondary legislation in force prior to or after the Effective Date of this Decision Instrument.

11 MAINTENANCE OF OBLIGATIONS

11.1 If any Section, 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, then that Section, or portion thereof shall, to the extent required, be severed from this Decision Instrument, and rendered ineffective, but as far as possible without modifying the remaining Section, or portion thereof and shall not in any way affect the validity or enforcement of this Decision Instrument or other Decision Instruments.

12 EFFECTIVE DATE AND DURATION

12.1 This Decision and Decision Instrument is fully effective from 1 July 2016 and shall remain in full force and effect until 30 June 2021, unless amended by ComReg.

JEREMY GODFREY
CHAIRPERSON
THE COMMISSION FOR COMMUNICATIONS REGULATION
THE • DAY OF • 2016

Q. 34 Do you have any comments or suggestions on our draft Decision Instrument? Please set out your answer in detail.

13. Submitting Comments

690 The consultation period will run from Thursday 4 May 2016 to Wednesday 13 June 2016, during which time we welcome written comments on any of the issues raised in this paper. It is requested that comments be referenced to the relevant question numbers from this document.

691 Having analysed and considered the comments received, we will decide on the requirements and if appropriate we will seek the consent of the Minister, in accordance with Regulation 3 (4) of the Universal Service Regulations.

692 In order to promote further openness and transparency, we will publish all respondent's submissions to this consultation, subject to the provisions of ComReg's Guidelines on the Treatment of Confidential Information – ComReg 05/24. We would request that electronic submissions be submitted in an unprotected format so that they can be appended into our submissions document for publishing electronically.

693 We appreciate that some of the issues raised in this paper may possibly require respondents to provide confidential information if their comments are to be meaningful.

694 As it is our policy to make all responses available on its website and for inspection generally, respondents are requested to clearly identify confidential material and place such material in a separate Annex to their response.

695 Such information will be treated subject to the provisions of ComReg's Guidelines on the Treatment of Confidential Information – ComReg 05/24.

Annex: 1 Statutory and Legal Basis

Regulation 3 of the European Communities (Electronic Communications Network and Services) (Universal Service and Users' Rights) Regulations 2011 ("USO Regulations") states:

3. (1) A designated undertaking shall satisfy any reasonable request to provide at a fixed location connection to a public communications network.

(2) A designated undertaking shall satisfy any reasonable request for the provision of a publicly available telephone service over the network connection referred to in paragraph (1) that allows for originating and receiving of national and international calls.

(3) A designated undertaking that provides a connection to the public communications network shall ensure that the connection is capable of supporting—

(a) voice,

(b) facsimile, and

(c) data communications at data rates that are sufficient to permit functional Internet access,

having regard to the prevailing technologies used by the majority of subscribers and to technological feasibility.

(4) Where a designated undertaking denies any reasonable request made under paragraph (1) or (2) it shall inform the person making the request of his or her right to pursue the dispute resolution procedures referred to in Regulation 27.

(5) The Regulator may, with the consent of the Minister, for the purpose of the services referred to in this Regulation, specify requirements to be complied with by a designated undertaking in relation to—

(a) functional Internet access, having regard to prevailing technologies used by the majority of subscribers in the State and to technological feasibility,

(b) the reasonableness of requests for connection at a fixed location to a public communications network under paragraph (1) and the provision of a publicly available telephone service that allows for the originating and receiving of national and international calls referred to in paragraph (2), or

(c) the terms and conditions upon which connection at a fixed location to a public communications network referred to in paragraph (1) and the provision of a publicly available telephone service over such a network connection that allows for the originating and receiving of national and international calls referred to in paragraph (2) shall be provided.

(6) A designated undertaking that fails to comply with the requirements of paragraph (1), (2), (3) or (4) commits an offence.

Annex: 2 Calculation of FIA Target Lines

2.1 Calculation of Functional Internet Access (FIA) %

The USP shall take the utmost account of the published guideline target in relation to Functional Internet Access (FIA) as set out in ComReg Decision DXX/16, ComReg Document 16/XX.

This figure shall be collected by Eir and calculated for each Data Collection Period. The Broadband Line Base and the Remainder (of the working line base) are added together to give the PSTN Line Base that is currently capable of carrying 28.8kbps or greater.

The figure of each Data Collection Period is calculated as follows:

Calculation of Broadband Line Base %
A significant portion of the Working Line Base is currently capable of carrying DSL broadband service. DSL Lines are, before activation, the subjects of a Line Pre-Qualification Process.

Broadband Line Base % = $\frac{Number\ of\ Broadband\ Lines}{(PSTN\ Line\ Base)} * 100$

Calculation of Remainder (%)
This means that the Remainder of the overall Working Line Base is dependent on dialup services to access the internet. Notwithstanding the other influencing factors on achieved internet access Bit Rates, the speeds achieved by End-users connecting over Sample Time periods to eircom.net is taken as a proxy for the achievable Line Bit Rates. The sample taken is then assumed to indicate the percentage of the dial-up base achieving the narrowband FIA speed of 28.8kbps.

Sample Time slots are selected on each Monday evening of the Data Collection Period during a Busy Hour Period and measurement of the Bit Rate is made of the Data collected from all Dial-Up End-users connecting to eircom.net. The result of this test, the quarterly average sample rate, gives the percentage of the active PSTN Line Base population connecting to eircom.net that has achieved Bit Rates of 28.8kbps or better.

$$\boldsymbol{Remainder}\ (\%) = (\mathbf{100} - \boldsymbol{Broadband\ Line\ Base}\ \%) * (\boldsymbol{Quarterly\ \ average\ sample\ rate}\ \%)$$

$$\boldsymbol{Functional\ Internet\ Access}\ (\boldsymbol{FIA})(\%) = Remainder\ (\%) + Broadband\ Line\ Base\ (\%)$$

Annex: 3 Calculation of Quality of Service (QoS) Metrics

A 3.1 Clarifications for the purpose of collecting, publishing and measuring Fault Rate Occurrence as stipulated in Section 7 of the Decision Instrument ComReg DXX/16

A 3.2 **Based on standard ETSI EG 201 769-1 V1.1.1 (2000-04)**

Definitions of Terms:-

Access Line: - This is a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the Main Distribution Frame.

Line: - A line is an Access Line which is providing a PSTN service to an Eir Business or Residential customer.

Fault Report: - This is an incident of disrupted or degraded PSTN service reported by a customer which is considered valid unless it can be attributed with reasonable confidence to components outside the Eir network.

Line Fault: - A Fault Report which is attributable to a Line, as defined above, excluding faults that have occurred due to Vandalism (including theft) and/or Third Party damage.

Exchange Fault: - A Fault Report which is attributable to an exchange or core network, excluding faults that have occurred due to Vandalism (including theft) and/or Third Party damage.

Other Fault: - A Fault Report which cannot be attributed either to a Line or an Exchange but lies within the Eir network, excluding faults that have occurred due to Vandalism (including theft) and/or Third Party damage.

Faults due to Vandalism and/or Third Party damage: -

A Fault Report that has occurred due to Vandalism (including theft) and/or Third Party damage.

Total Faults: - The sum of Line Faults plus Exchange Faults plus Faults due to Vandalism and/or Third Party damage, plus Other Faults.

Data Collection Period: - The period for collection of the data is quarterly. There are 4 data reporting periods in a Year. These are 1st July to 30th September; 1st October to 31st December; 1st January to 31st March; 1st April to 30th June.

Year: - A year covers the period July 1st Year X to June 30th Year X + 1. The first year commences July 1st 2016.

Average Number of Lines within the Data Collection Period: –The sum of the number of Lines on each of the 2nd Thursday of each month in the Data Collection period/3.

Third Party: - means any person other than eircom or its contractors or subcontractors

Vandalism (including theft): - destruction or damage of Eir plant caused by a Third Party

This clarifications document is legally binding upon Eir and ComReg. It sets out the method to be relied upon for collecting, calculating and publishing quality of service performance measurements for Fault Occurrence for the purpose of assessing compliance by Eir with the binding performance targets set out in DXX/16, this document and Dxx/16 shall in this respect be construed together. This clarifications document also sets out additional quality of service performance measurements for which Dxx/16 sets no binding targets but which Eir and ComReg agree should be calculated by Eir and published by ComReg in the manner provided herein.

This clarifications document may be reviewed and/or amended from time to time, as the occasion requires, by agreement between ComReg and Eir.

Definition of Calculation Methodology:-

Total Faults per 100 Lines

This figure is collected and calculated for each Data Collection Period. The figure for each Data Collection Period is calculated as follows:-

$$\frac{Number\ of\ Total\ Faults\ for\ the\ Data\ Collection\ Period}{Average\ Number\ of\ Lines\ within\ the\ Data\ Collection\ Period} * 100$$

This calculation is illustrated below using Eir's figures from 2007 which are confidential:-

✂

Annual Total Faults per 100 Lines:-

This figure is calculated on an annual basis. The calculation uses the data reported to ComReg during the Data Collection Periods for that Year.

It is calculated as follows:-

Sum of Number of Total Faults for the Data Collection Periods for the Year
_____ X 100
(Sum of Average Number of Lines reported to ComReg for each Data Collection Period for the Year) /
Number of Data Collection Periods in a Year

This calculation is illustrated below using Eir's figures from 2007 which are confidential:-

✂

Line Faults per 100 Lines

This figure is calculated using the data collected for each Data Collection Period. The figure for each Data Collection Period is calculated as follows:-

$$\frac{\text{Number of Line Faults for the Data Collection Period}}{\text{Average Number of Lines within the Data Collection Period}} \times 100$$

This calculation is illustrated below using Eir's figures from -2007 which are confidential:-

✂

Annual Line Faults per 100 Lines

This figure is calculated each Year and measured against the Fault Rate Occurrence performance obligations in Section 7 of Decision Instrument ComReg DXX/16.

$$\frac{\text{Sum of Number of Line Faults for the Data Collection Periods for the Year}}{\text{(Sum of Average Number of Lines reported to ComReg for each Data Collection Period for the Year)/ Number of Data Collection Periods in a Year}} \times 100$$

This calculation is illustrated below using Eir's figures from 2007 which are confidential:-

✂

Assumptions

Customer Fault Reporting

A customer can report a fault to Eir in a number or ways including IVR on the Phone; On-Line report or talking to an Eir Representative. Eir will endeavour to log all attempts to report faults.

Ratio between Line Faults and Total Faults

Eir have confirmed that the ratio of Line Faults to Total Faults should remain relatively constant on a quarterly and annual basis and from Year to Year.

Eir will not amend its fault categorisation processes or definitions for any reason including for the purpose of altering the proportion of Line Faults to Total Faults,

however there may be circumstances where legitimate changes are appropriate which could impact the ratio and any such changes will be advised and agreed in advance with ComReg.

Business and Residential Data

All data supplied by Eir during the data collection period will be supplied for both Business and Residential customers and combined for both Business and Residential customers.

Decimal places and Rounding

All data reported will be supplied to the nearest integer. All calculations will be performed to 3 decimal places. The final calculated figures will be then rounded to the nearest 1 decimal place.

Number of faults not deemed Valid

Eir will not amend its fault categorisation processes or definitions for any reason including for the purpose of changing the ratio of invalid to valid Fault Reports, however there may be circumstances where legitimate changes are appropriate which could impact the ratio and any such changes will be advised and agreed in advance with ComReg.

Faults due to Vandalism and/or Third Party damage:

Eir will provide audited data on a quarterly basis in respect of issues which impact Line Fault performance - including data in respect of cleared Fault Reports which were due to Vandalism (including theft) and/or Third Party damage.

The audited data will be provided to ComReg at the same time as the submission of quarterly and annual universal service performance data in relation to Fault Reports and should be outlined separately in the excel file for ComReg information purposes only. The audited data in this regard will not be published by ComReg.

Eir will not amend its fault categorisation processes or definitions for any reason including for the purpose of changing the ratio of cleared Fault Reports which were due to Vandalism (including theft) and/or Third Party damage. However, there may be circumstances where legitimate changes are appropriate which could impact the ratio of cleared Fault Reports which were due to Vandalism (including theft) and/or Third Party damage and any such changes will be advised and agreed in advance with ComReg.

A 3.3 Clarifications for the purpose of collecting, publishing and measuring Fault Repairs as stipulated in Section 7 of the Decision Instrument ComReg DXX/16

A 3.4 Based on standard ETSI EG 201 769-1 V1.1.1 (2000-04)

1. DEFINITIONS AND INTERPRETATION

1.1 In this clarifications document, the following words and phrases shall have the following meanings:

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"Agreed Date" means the appointment date and (if applicable) the time that Eir and a Customer have agreed for Eir to visit a Customer's premises in respect of a Fault Repair; in the case of all such Agreed Dates, the Agreed Date shall be recorded and fully auditable.

"All Repairs" means all Fault Repairs including Fault Repairs with an Agreed Date or a Revised Agreed;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative who has notified Eir of a Fault for a specified address;

"**Customer Visit**" means the system date and time stamp generated when an Eir technician records arrival at the Customer premises in respect of the repair of a Fault with an Agreed Date or a Revised Agreed Date.

"Data" means the data relating to the calculation methodologies set out in sections 2, 3 and 4 hereof and the performance targets specified in section 7 of Dxx/16;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Dxx/16" means the Decision Notice and Decision Instrument issued by ComReg on XX June 2016.

"Fault" means an incident of disrupted or degraded Public Switched Telephone Network service;

"Fault Repair" means the repair of a Fault resulting in the restoration of the Public Switched Telephone Network service to normal working order;

"Fault Repair Time" means the duration from the instant of a Fault Report to the instant of Fault Repair;

"Fault Report" means a Fault reported by a Customer which is valid; unless it can be reasonably attributed to components outside the Eir network;

"Line" means an Access Line which is providing a Public Switched Telephone Network service to a Customer;

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a subscriber number or name;

"**Network Termination Unit**" (NTU) –The NTU shall be the physical interface between the Access Line and Customers Premises Equipment (C.P.E.), and will mark the boundary between Eir`s Network and the customers private wiring, which includes anything connected on the customers side of the NTU.;

"Public Switched Telephone Network" means an electronic communications network which is used to provide publicly available telephone services; it supports the transfer between Network Termination Points of speech communications and also other forms for communication, such as facsimile and data;

"Revised Agreed Date" means a change to an Agreed Date, made either at the Customer's request or at Eir's request. In the cases of all such Revised Agreed Dates, the Revised Agreed Date shall be recorded and fully auditable.

"Working Hour" means 60 minutes duration between 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday and public holidays);

"Working Day" means 8 Working Hours; and

"Year" means the period between 1 July, Year X to 30 June, Year X + 1. The first Year commences 1 July 2008.

1.2 This clarifications document is legally binding upon Eir and ComReg. It sets out the method to be relied upon for collecting, calculating and publishing quality of service performance measurements for Fault Repair for the purpose of assessing compliance by Eir with the binding performance targets set out in DXX/16, this document and Dxx/16 shall in this respect be construed together. This clarifications document also sets out additional quality of service performance measurements for which Dxx/16 sets no binding targets but which Eir and ComReg agree should be calculated by Eir and published by ComReg in the manner provided herein.

1.3 This clarifications document may be reviewed and/or amended from time to time, as the occasion requires, by agreement between ComReg and Eir.

2. CALCULATION METHODOLOGY – ALL REPAIRS

2.1 Measurement

Data collected for measurement shall be reported in Working Days (excluding Saturdays, Sundays and public holidays). The unit of measurement for all calculations shall be Hours.

Annex 1 provides a detailed description of how to calculate the Fault Repair Time for Fault Repairs with an Agreed Date or Revised Agreed Date.

Section 2 does not contain binding targets for the purpose of section 5 of DXX/16. However, the Data shall be collected and calculated by Eir and shall be published by ComReg.

2.2 Repair Time - fastest 80% completed for All Repairs

This figure shall be collected and calculated by Eir for each Data Collection Period. Data collected for measurement shall be reported in Working Hours. The figure for each Data Collection Period shall be calculated as follows:

The measurements taken shall give a list of times recorded for the events, i.e. a list of Fault Repair Times. This list of Fault Repair Times shall be counted and sorted into ascending order.

The shortest 80% of the measurements shall be selected and then the longest Repair Time of these measurements shall be selected. The Fault Repair Time for this measurement, rounded to the nearest integer Working Hour (s) shall be reported.

2.3 Repair Time - fastest 95% completed for All Repairs

This figure shall be collected and calculated by Eir for each Data Collection Period. Data collected for measurement shall be reported in Working Hours. The figure for each Data Collection Period shall be calculated as follows:

The measurements taken shall give a list of times recorded for the events, i.e. a list of Fault Repair Times. This list of Fault Repair Times shall be counted and sorted into ascending order.

The shortest 95% of the measurements shall be selected and then the longest Repair Time of these measurements shall be selected. The Fault Repair Times for this measurement, rounded to the nearest Working Hour (s), shall be reported.

3. CALCULATION METHODOLOGY - FAULT REPAIRS WITH AN AGREED DATE

3.1 Fault Repairs with an Agreed Date

This figure is calculated using the Data collected for each Data Collection Period. The figure for each Data Collection Period is calculated as follows:

$$\frac{\text{Number of Customer Visits for the Data Collection Period which are by the Agreed Date or Revised Agreed Date}}{\text{Total number of Agreed Dates or Revised Agreed Dates within the Data Collection Period}} \times 100$$

3.2 Fault Repairs with an Agreed Date *versus* All Repairs

The Fault Repairs with an Agreed Date versus All Repairs is not a measurement for which there is a binding target set for the purpose of section 5 of DXX/16. However, the Data shall be collected and calculated by Eir and shall be published by ComReg.

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Total number of Fault Repairs with an Agreed Date or Revised Agreed Date within the Data Collection Period}}{\text{Total number of All Repairs completed within the Data Collection Period}} \times 100$$

3.3 Use of Data in relation to section 3.2

Section 3.2 above does not contain binding targets for the purpose of section 7 of DXX/16. However, the Data shall be collected and calculated by Eir and shall be published by ComReg.

4. CALCULATION METHODOLOGY - FAULT REPAIR TIME

Annex 1 provides a detailed description of how to calculate the Fault Repair Time for Fault Repairs with an Agreed Date or Revised Agreed Date.

4.1 Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eir using the Data collected for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

Number of All Repairs completed within the Data Collection Period
where the Fault Repair Time is within 2 Working Days
_____ X 100

Total All Repairs completed within the Data Collection Period

4.2 Fault Repairs within 4 Working Days

This figure shall be collected and calculated by Eir using the Data collected for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

Number of All Repairs completed within the Data Collection Period where the Fault
Repair Time is within 4 Working Days
_____ X 100
Total All Repairs completed within the Data Collection Period

4.3 Fault Repairs within 5 Working Days

This figure shall be collected and calculated by Eir using the Data collected for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

Number of All Repairs completed within the Data Collection Period
where the Fault Repair Time is within 5 Working Days
_____ X 100

Total All Repairs completed within the Data Collection Period

4.4 Fault Repairs within 10 Working Days

This figure shall be collected and calculated by Eir using the Data collected for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

Number of All Repairs completed within the Data Collection Period
where the Fault Repair Time is within 10 Working Days
_____ X 100

Total All Repairs completed within the Data Collection Period

5. CALCULATION METHODOLOGY FOR MONITORING PERFORMANCE AND ENFORCING COMPLIANCE WITH Dxx/16

5.1 Time from which calculation begins and period post 1 July, 2016

Calculation shall be in accordance with paragraphs 5.2 – 5.6 below. The performance targets referred to in Section 7 of Dxx/16 shall be achieved and maintained for so long as Dxx/16 remains in force. Performance shall be monitored, published and enforced by ComReg each Year after 1 July 2016, using the methodologies set out in sections 2, 3 and 4 hereof.

5.2 Measurement of Fault Repairs within 2 Working Days

(Sum of All Repairs where the Repair Time is within 2 Working Days for the 4 Data Collection Periods within the Year) / (Sum of All Repairs completed for the 4 Data Collection Periods within the Year) X 100

5.3 Measurement of Fault Repairs within 4 Working Days

$$\frac{\text{Sum of All Repairs where the Fault Repair Time is within 4 Working Days for the 4 Data Collection Periods within the Year}}{\text{Sum of All Repairs completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.4 Measurement of Fault Repairs within 5 Working Days

$$\frac{\text{Sum of All Repairs where the Fault Repair Time is within 5 Working Days for the 4 Data Collection Periods within the Year}}{\text{Sum of All Repairs completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.5 Measurement of Fault Repairs within 10 Working Days

$$\frac{\text{Sum of All Repairs where the Fault Repair Time is within 10 Working Days for the 4 Data Collection Periods within the Year}}{\text{Sum of All Repairs completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.6 Measurement of Fault Repairs with an Agreed Date

Number of Customer Visits by the Agreed Date or Revised Agreed Date for

the 4 Data Collection Periods within the Year
_____ X 100
Total number of Agreed Dates or Revised Agreed dates for the 4 Data Collection Periods within the Year.

6. EXPLANATORY NOTES

6.1 Business and residential Data

All Data as collected in its raw form shall be provided by Eir to ComReg in comma separated variable ("CSV") format on appropriate electronic media.

The performance measurement figures referred to in sections 2, 3, 4 and 5 hereof shall be provided by Eir to ComReg in hard copy format and in Excel spreadsheet form.

All Data provided by Eir during the Data Collection Periods shall be provided by Eir both separately and combined for all business and residential Customers.

6.2 Customer Fault reporting

A Customer can report a Fault to Eir in a number of ways, including interactive voice response ("IVR") on the phone, on-line report, or by talking to an Eir representative. Eir shall properly capture all Fault Reports and all attempts to log Fault Reports in its fault handling system ("FHS").

6.3 Decimal places and rounding

All Data provided by Eir to ComReg shall be performed to 3 decimal places. The final calculated figures shall then be rounded up by ComReg to the nearest 1 decimal place.

6.4 Number of Fault Reports not deemed valid

Eir shall not amend its Fault categorisation processes or definitions for any reason, including for the purpose of changing the ratio of invalid (e.g. Customer premises equipment or similar) to valid Fault Reports. However, there may be circumstances where legitimate changes are appropriate which could impact the ratio and any such changes shall be advised to and agreed with ComReg by Eir in advance of their being made .

6.5 Calculation of Repair Time

Eir shall not amend its measurement processes or definitions for any reason including for the purpose of changing the processes for acceptance and recording of Fault Reports received by its Customers to reduce the Repair Time. However, there may be circumstances where legitimate changes are appropriate which could impact on Repair Time and any such changes shall be advised to and agreed with ComReg by Eir in advance of their being made .

6.6 Fault Repairs with an Agreed Date or Revised Agreed Date

Fault Repairs with an Agreed Date shall only arise when an appointment is required for a technician to visit the premises of a Customer to enable the Fault Repair process. In relation to Fault Repairs with an Agreed Date or a Revised Agreed Date, these shall be reported in the "% of Fault Repairs by Agreed Date" metric. Eir shall include the Fault Repair Time for Fault Repairs with an Agreed Date or Revised Agreed Date in the following metrics;

1. "X% within X Working Days";
2. Fastest 80% completed for All Repairs; and
3. Fastest 95% completed for All Repairs,

Eir shall use best endeavours to meet the Agreed Date. If the Agreed Date cannot be met, Eir shall use best endeavours to meet the earliest possible Revised Agreed Date. Until such time that Eir's systems can record all Revised Agreed Dates, Eir shall, as a minimum, record the Agreed Date and, if applicable, the final Revised Agreed Date for the purposes of measuring its performance for "Fault Repairs with an Agreed Date". This is subject to ongoing monitoring and agreement by ComReg of the percentage of Revised Agreed Dates which are not being recorded.

If the Agreed Date needs to be revised by Eir or if the work needed to be done is not completed by Eir during the appointment for whatever reason, a further visit may be necessary. The date of the further appointment shall be deemed to be a "Revised Agreed Date".

Only Faults which occur on Eir's network are taken into account for the purpose of the performance targets. If, on entering the Customer's premises, the technician discovers the Fault to be on the exchange side of the Customers Network Terminating Unit ("NTU") then the Fault is deemed to be on Eir's network and can therefore be considered for the purpose of the performance targets. However, if the Fault is found to be on the NTU or on the Customers side of the NTU, the Fault is not deemed to be on Eir's network and shall not be considered for the purpose of the performance targets herein.

6.7 Customer-introduced delay for Fault Repairs with an Agreed Date or Revised Agreed Date

For any Fault Repairs with an Agreed Date or Revised Agreed Date where there is recorded and fully auditable evidence of any Customer-introduced delay, Eir shall exclude the Customer-introduced delay from these Fault Repairs for the purposes of calculating the Fault Repair Time for the performance targets herein. For the avoidance of doubt, where there is no recorded or fully auditable evidence of any such Customer-introduced delay, the delay shall be deemed to be Eir-introduced delay. Eir shall include the Eir-introduced delay in these Fault Repairs with an Agreed Date or a Revised Agreed Date for the purposes of calculating the Fault Repair Time for the performance targets herein.

Annex 1 contains the detailed description of how the Repair Time for Faults with an Agreed Date or Revised Agreed Date should be calculated.

Fault Repairs with an Agreed Date or Revised Agreed Date

- Calculation of Repair Time

Repair Time for Faults with an Agreed Date

The Repair Time for Faults with an Agreed Date or Revised Agreed Date is the time taken, in Working Hours, from when the Customer contacts Eir to report the Fault to when Eir clears the Fault, excluding any delays introduced by the Customer, called Customer Introduced Delay (CID)[105].

The time when a Customer contacts Eir to request an appointment is the first recorded time that Eir must record to when measuring the Repair Time for Faults with and Agreed Date or Revised Agreed Date. This is referred to a T_d in the flow chart below.

The next time that Eir must record is the earliest or soonest time that the Customer is available to allow Eir technician to enter their premises to investigate the Fault. This is referred to as T_s in the flow chart below. T_s must be no sooner than 1 Working Day after T_a.

If Eir cannot facilitate the appointment on T_s then the next time that must be recorded is the next available time that Eir offers the customer for an appointment. This time is recorded as T_o in the diagram below.

When the Customer and Eir finally agree on an appointment date and time for Eir to attend a Customer premises this must be recorded. This time is recorded as T_e in the diagram below.

Note: T_d, T_s, T_o and T_e must be recorded at the point where the customer is requesting an appointment.

The final date and time that Eir must be able to record is the time that the Fault is cleared. In the diagram below this time is recorded as T_f.

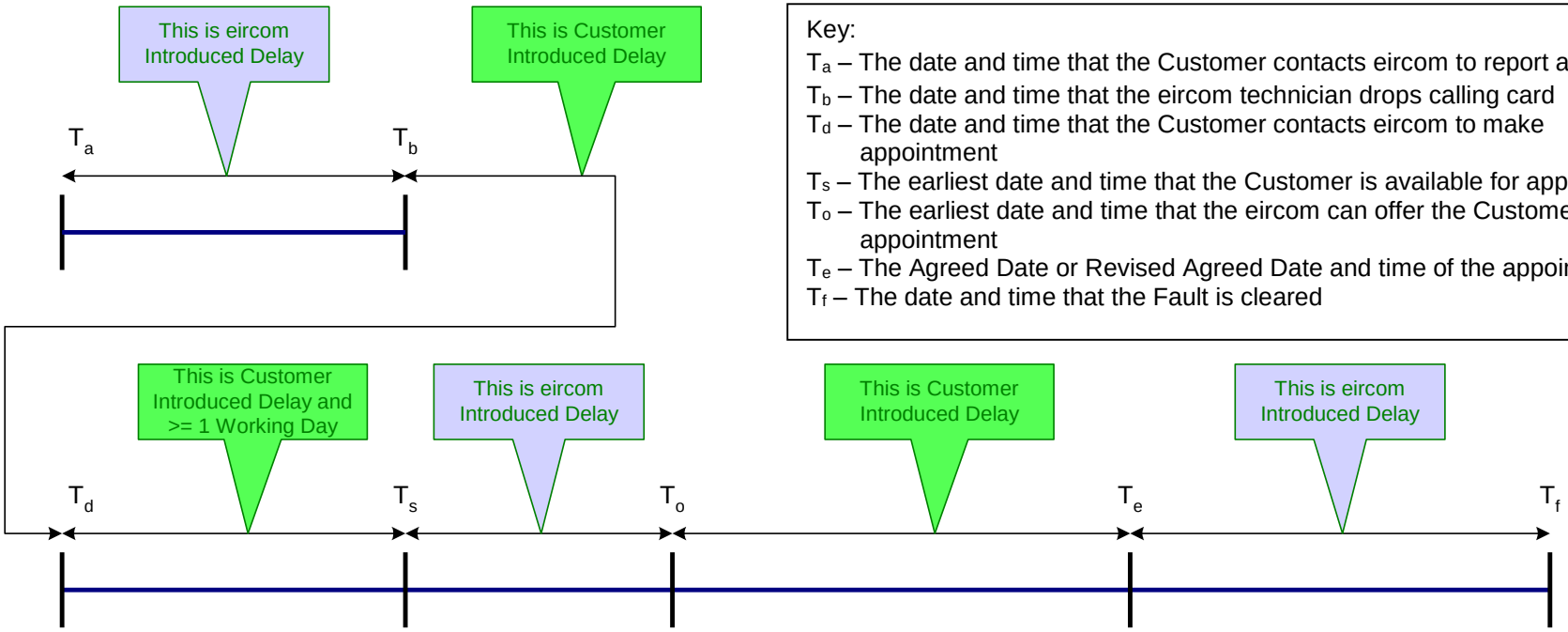
Calling Cards initiated Repair Time for Faults with an Agreed Date or Revised Agreed Date

A small percentage of Faults with an Agreed Date or Revised Agreed Date occur as a result of an Eir technician dropping a calling card at the Customer premises where they are unable to gain access to investigate the Fault Report. If the Customer calls for an appointment within 2 Working Days of the calling card being dropped, then the Repair Time of the Fault with an Agreed Date or a Revised Agreed Date (as detailed above) will include the amount of time from when the Fault was logged to when the calling card was dropped. These times are recorded as T_a and T_b in the diagram below.

[105] In the flowchart CID is made up of

- the time between when the customer contacts eircom and the soonest time that the customer is available for the appointment (T_s –T_d).
- the time between when eircom is available to meet the customer and the time of the agreed appointment date and time (T_e – T_o).

Flowchart of the Repair Time for Agreed Date Faults



Key:

T_a – The date and time that the Customer contacts eircom to report a Fault

T_b – The date and time that the eircom technician drops calling card

T_d – The date and time that the Customer contacts eircom to make appointment

T_s – The earliest date and time that the Customer is available for appointment

T_o – The earliest date and time that the eircom can offer the Customer an appointment

T_e – The Agreed Date or Revised Agreed Date and time of the appointment

T_f – The date and time that the Fault is cleared

Examples

For simplicity all events occur at 12noon

Scenario 1 – Blue card drop

T_a = Monday
T_b = Wednesday
T_d = Thursday
T_s = Monday next week
T_o = Tuesday next week
T_e = Wednesday next week
T_f= Thursday next week

Customer Introduced Delay is the time

- From when the calling card is dropped to the earliest date that the Customer is available (Ts-Tb) = 3 Working Days and,
- From when Eir offers an appointment to the Customer to the Agreed Date. (Te-To) = 1 Working Day

Total CID is 4 Working Days

Elapsed Time is 8 Working Days

So the Repair Time for this fault is Elapsed Time (8 Working Days) less the CID (4 Working Days) = 4 Working Days

Scenario 2 – No Blue card drop

T_d = Monday
T_s = Wednesday
T_o = Thursday
T_e = Thursday
T_f= Friday

Customer Introduced Delay is the time

- From when the calling card is dropped to the earliest date that the Customer is available (Ts-Td) = 2 Working Days and,
- From when Eir offers an appointment to the Customer to the Agreed Date. (Te-To) = 0 Working Day

Total CID is 2 Working Days

Elapsed Time is 4 Working Days

So the Repair Time for this fault is Elapsed Time (4 Working Days) less the CID (2 Working Days) = 2 Working Days

A 3.5Clarifications for the purpose of collecting, publishing and measuring Connections as stipulated in Section 7 of the Decision Instrument ComReg DXX/16

A 3.6Based on standard ETSI EG 201 769-1 V1.1.1 (2000-04)

1. DEFINITIONS AND INTERPRETATION

1.1 In this clarifications document, the following words and phrases shall have the following meanings:

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"Agreed Date" means the date that a Customer has requested and that Eir and a Customer have agreed for the completion of a Valid Service Order. For the avoidance of doubt, a date can only be agreed and revised for In-Situ Connections where a Customer requests a deferred installation; all such Agreed Dates shall be recorded and fully auditable.

"All Connections" means the sum of In-Situ Connections and All Other Connections;

"All Other Connections" means Lines that are not In-Situ Connections and are not Connections with an Agreed Date and includes, without limitation, those that are new build and pre-cabled;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person or their representative, making a Valid Service Order for a specified address;

"Data" means the data relating to the calculation methodologies set out in sections 2, 3 and 4 hereof and the performance targets specified in section 7 of Dxx2/16;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection Periods in a given Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"Dxx/16" means the Decision Notice and Decision Instrument issued by ComReg on X June 2016, entitled *"Response to Consultation –"*;

"Electronically Enabled" means that the activation of a Line can be carried out remotely, through systems configuration, without the need for physical intervention;

"Hour" means 60 minutes duration;

"In-Situ Connection" means an Electronically Enabled Line excluding Connections with an Agreed Date;

"Line" means an Access Line which is providing a Public Switched Telephone Network service to an Eir Customer;

"Month" means 31 consecutive Days;

"Network Termination Point" means the physical point at which an end user is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a subscriber number or name;

"Public Switched Telephone Network" means an electronic communications network which is used to provide publicly available telephone services; it supports the transfer between Network Termination Points of speech communications and also other forms for communications, such as facsimile and data;

"Revised Agreed Date" means a change to an Agreed Date, made at the Customer's request and for the avoidance of doubt only applies to In-Situ Connections where a Customer requests a deferred installation. All such Revised Agreed Dates shall be recorded and fully auditable;.

"Supply Time" means the duration from the date all Valid Service Orders in respect of a Line are received by Eir to the instance a working service is made available for use. For the avoidance of doubt, Supply Time calculations for Fastest 95% and Fastest 99% All Connections do not include Agreed Date Connections;

"Valid Service Order" means an order by a Customer for a Line (whether made orally, or in writing, including by any electronic means, or in any other acceptable form), that is not later deemed invalid;

"Week" means 7 consecutive Days; and

"Year" means the period covering 1 July, Year X to 30 June, Year X + 1. The first year commences 1 July, 2016.

1.2 This clarifications document is legally binding upon Eir and ComReg. It sets out the method to be relied upon for collecting, calculating and publishing quality of service performance measurements for Connections for the purpose of assessing compliance by Eir with the binding performance targets set out in Dxx/16, and this document and Dxx/16 shall in this respect be construed together. This clarifications document also sets out additional quality of service performance measurements for which Dxx/16 sets no binding targets but which eir and ComReg agree should be calculated by Eir and published by ComReg in the manner provided herein.

1.3 This clarifications document may be reviewed and/or amended from time to time, as the occasion requires, by agreement between ComReg and Eir.

2. CALCULATION METHODOLOGY – SUPPLY TIMES

2.1 Measurement

Data collected for measurement shall be reported by Eir in elapsed Days (including Saturdays, Sundays and public holidays). The unit of measurement for all calculations shall be Days, but the calculations will be shown in Hours.

2.2 Supply Time - fastest 95% for All Connections

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

The measurements taken shall give a list of times recorded for the events, i.e. a list of Supply Times for All Connections. The list of Supply Times shall be counted and sorted into ascending order.

The shortest 95% of the measurements shall be selected and then the longest of these measurements shall be selected. The Supply Time of this measurement, rounded to the nearest integer elapsed Day(s) shall be reported. Eir shall exclude any Connections with an Agreed Date or Connections with a Revised Agreed Date where the Revised Agreed Dates following Customer-introduced delays are recorded and fully auditable.

2.3 Supply Time - fastest 99% for All Connections

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

The measurements taken shall give a list of times recorded for the events, i.e. a list of Supply Times for All Connections. This list of times shall be counted and sorted into ascending order.

The shortest 99% of the measurements shall be selected and then the longest of these measurements shall be selected. The Supply Time of this measurement, rounded to the nearest integer elapsed Day(s) shall be reported. Eir shall exclude any Connections with an Agreed Date or Connections with a Revised Agreed Date where the Revised Agreed Dates following Customer-introduced delays are recorded and fully auditable.

2.4 Use of Data in Section 2

This section 2 does not contain binding targets for the purpose of section 7 of Dxx/16. However, the Data shall be collected and calculated by Eir and shall be published by ComReg.

3. CALCULATION METHODOLOGY – IN-SITU CONNECTIONS

3.1 In-Situ Connections in 24 Hours

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of In-Situ Connections completed within the Data Collection Period where the Supply Time is within 24 Hours}}{\text{Total number of In-Situ Connections completed within the Data Collection Period}} \times 100$$

3.2 In-Situ Connections in 2 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of In-Situ Connections completed within the Data Collection Period where the Supply Time is within 2 Weeks}}{\text{Total number of In-Situ Connections completed within the Data Collection Period}} \times 100$$

3.3 In-Situ Connections in 2 Months

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of In-Situ Connections completed within the Data Collection Period where the Supply Time is within 2 Months}}{\text{Total number of In-Situ Connections completed within the Data Collection Period}} \times 100$$

4. CALCULATION METHODOLOGY – ALL OTHER CONNECTIONS

4.1 All Other Connections in 2 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of All Other Connections completed within the Data Collection Period where the Supply Time is within 2 weeks}}{\text{Total number of All Other Connections completed within the Data Collection Period}} \times 100$$

4.2 All Other Connections in 4 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of All Other Connections completed within the Data Collection Period where the Supply Time is within 4 Weeks}}{\text{Total number of All Other Connections completed within the Data Collection Period}} \times 100$$

4.3 All Other Connections in 8 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of All Other Connections completed within the Data Collection Period where the Supply Time is within 8 Weeks}}{\text{Total number of All Other Connections completed within the Data Collection Period}} \times 100$$

4.4 All Other Connections in 13 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of All Other Connections completed within the Data Collection Period where the Supply Time is within 13 Weeks}}{\text{Total number of All Other Connections completed within the Data Collection Period}} \times 100$$

4.5 All Other Connections in 26 Weeks

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of All Other Connections completed within the Data Collection Period where the Supply Time is within 26 Weeks}}{\text{Total number of All Other Connections completed within the Data Collection Period}} \times 100$$

4.6 .All Connections with an Agreed Date

This figure shall be collected and calculated by Eir for each Data Collection Period. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of Connections with an Agreed Date completed within the Data Collection Period where the Supply Time is by the Agreed Date}}{\text{Total number of All Connections with an Agreed Date completed within the Data Collection Period}} \times 100$$

4.7 Connections with an Agreed Date *versus* All Connections

Section 7 of Decision Dxx/16 does not set any binding target in relation to the supply of Connections with an Agreed Date versus Total Connections. However, Data relevant to this measurement shall be collected and calculated by Eir for each Data Collection Period and shall be published by ComReg. The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of Connections with an Agreed Date completed within the Data Collection Period}}{\text{Total number of All Connections and Connections with an Agreed Date completed within the Data Collection Period}} \times 100$$

4.8 Use of Data in relation to section 4.7

Section 4.7 above does not contain binding targets for the purpose of section 7 of Dxx/16. However, the Data shall be collected and calculated by Eir and shall be published by ComReg.

5. CALCULATION METHODOLOGY FOR MONITORING PERFORMANCE AND ENFORCING COMPLIANCE WITH Dxx/16

5.1 Time from which calculation begins and period post-1 July, 2016

. Calculation shall be in accordance with paragraphs 5.2 – 5.10 below. The performance targets referred to in Section 7 of Dxx/16 shall be achieved and maintained for so long as Dxx/16 remains in force. Performance shall be monitored, published and enforced by ComReg, as appropriate, each Year after 1 July 2016, using the calculation methodologies set out in sections 2, 3, and 4 hereof.

5.2 Measurement of In-Situ Connections completed within 24 Hours

$$\frac{\text{Sum of In-Situ Connections where the Supply Time is within 24 Hours for the 4 Data Collection Periods within the Year}}{\text{Sum of total In-Situ Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.3 Measurement of In-Situ Connections completed within 2 Weeks

$$\frac{\text{Sum of In-Situ Connections where the Supply Time is within 2 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total In-Situ Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.4 Measurement of In-Situ Connections completed within 2 Months

$$\frac{\text{Sum of In-Situ Connections where the Supply Time is within 2 Months for the 4 Data Collection Periods within the Year}}{\text{Sum of total In-Situ Connections completed for the 4 most recent Data Collection Periods within the Year}} \times 100$$

5.5 Measurement of All Other Connections completed within 2 Weeks

$$\frac{\text{Sum of All Other Connections where the Supply Time is within 2 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total All Other Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.6 Measurement of All Other Connections completed within 4 Weeks

$$\frac{\text{Sum of All Other Connections where the Supply Time is within 4 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total All Other Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.7 Measurement of All Other Connections completed within 8 Weeks

$$\frac{\text{Sum of All Other Connections where the Supply Time is within 8 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total All Other Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.8 Measurement of All Other Connections completed within 13 Weeks

$$\frac{\text{Sum of All Other Connections where the Supply Time is within 13 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total All Other Connections completed for the 4 most recent Data Collection Periods within the Year}} \times 100$$

5.9 Measurement of All Other Connections completed within 26 Weeks

$$\frac{\text{Sum of All Other Connections where the Supply Time is within 26 Weeks for the 4 Data Collection Periods within the Year}}{\text{Sum of total All Other Connections completed for the 4 Data Collection Periods within the Year}} \times 100$$

5.10 Measurement of Connections with an Agreed Date

$$\frac{\text{Sum of Connections with an Agreed Date completed by Agreed Date for the 4 Data Collection Periods within the Year}}{\text{Sum of Connections with an Agreed Date completed for the 4 Data Collection Periods within the Year}} \times 100$$

6. EXPLANATORY NOTES

6.1 Business and residential Data

All Data as collected in its raw form shall be provided by Eir to ComReg in comma separated variable ("CSV") format on appropriate electronic media.

The performance measurement figures referred to in sections 2, 3, 4 and 5 hereof shall be provided by Eir to ComReg in hard copy format and in Excel spreadsheet form.

All Data provided by Eir during Data Collection Periods shall be provided by Eir both separately and combined for business and residential Customers.

6.2 Decimal places and rounding

All Data provided by Eir to ComReg shall be performed to 3 decimal places. The final calculated figures shall then be rounded up by ComReg to the nearest 1 decimal place.

6.3 Calculation of Supply Time

Where a Valid Service Order is placed on one Day and completed on another, the Supply Time shall be measured in Days and calculated as Hours. ComReg notes that Eir's system TIS does not currently have the functionality to record in units of Hours, but in Days. However ComReg may request that Supply Times be measured in Hours if at any time TIS is updated and can record in Hours.

6.4 In-Situ Connections *versus* All Other Connections

ComReg recognises that the unit of measurement in Eir's order management system ("TIS") is Days. To address this, In-Situ Connections shall assume to have been completed within 24 Hours, unless it is found that In-Situ Connection(s) was not successfully completed by the next Day.

In-Situ Connection orders which fail will follow the Failed EE process once reported by the customer and will accordingly not be recorded among the "80% of In-Situ Connections within 24 Hours".

Eir shall not reclassify In-Situ Connections as All Other Connections because they have failed.

Eir has a mechanism in place to ensure that failed In Situ-Connections are not recorded as having completed within the 24 Hours metric. In the case where an In-Situ Connection fails, Eir is not aware of such failure until such time that the Customer reports that the service is not working. Upon report from the customer, Eir will submit a Failed EE Order and record the Supply Time to be the Supply Time for the Failed EE Order plus 1 Day.

6.5 Agreed Date

The issue of Connections with an Agreed Date arises exclusively when the Customer requests a particular date and Eir agrees to connect the Line. For the avoidance of doubt, the Agreed Date is the date that Eir and the customer agree for the Line to be connected. In real terms this occurs when the customer requests service to be set up at a particular date in the future, and Eir can agree to provide service at this time. It is captured by Eir setting a "Due Date" at a different date to the "Application Date" for all In-Situ Connection orders.

In relation to "Connections with Agreed Date", the Data shall be reported in the "% of Connections by Agreed Date" metric and shall not be reported in the In-Situ Connection metrics. Eir shall not report this Data in the Supply Time-_Fastest 95% and 99% for All Connections metrics.

In the case of a Revised Agreed Date that is requested or required by a Customer (Customer-introduced delay), such a Revised Agreed Date shall replace the Agreed Date and shall be counted as a Valid Service Order that is completed by the Agreed Date. In this case, Eir shall not report this Data when calculating the "Supply Times % within X Days" metrics.

6.6 Customer-introduced delay for All Other Connections

For any Valid Service Orders where there is recorded and fully auditable evidence of any Customer-introduced delay, Eir shall exclude these Valid Service Orders for the purposes of the performance targets herein. For the avoidance of doubt, where there the delay shall be deemed to be Eir-introduced delay, Eir shall include these Valid
Service Orders for the purposes of the performance targets herein.

A 3.7 Clarifications for the purpose of collecting, publishing and measuring Service Availability as stipulated in Section 7 of the Decision Instrument ComReg DXX/16

A 3.8 **Based on standard ETSI EG 201 769-1 V1.1.1 (2000-04)**

Calculated For each of the Sub National Areas and the National area:

$$\boldsymbol{Service\ Availability} = \mathbf{1} - \frac{\boldsymbol{X} \times \boldsymbol{Y}}{\mathbf{365}}$$

X = **Result of Fault Occurrence per 100 lines**

Y = **Result of Repairs within 2 working days% of 1 + Result of Repairs within 4 working days% of 3 + Result of Repairs within 5 working days% of 4.5 + Result of Repairs within 10 working days% of 7.5 + Result of Repairs above 10 working days %of 10**

Assessed using the average (midpoint) of each range: X% within 2 days (1 day in average), X% between 2 and 4 days (3 days in average), X% between 4 and 5 days (4.5 days in average), X% between 5 and 10 days (7.5 days in average), X% above 10 days (10 days considered)

Annex: 4 Annual Quality of Service Performance Targets (D02/08) and Annual Performance Improvement Programme Targets (PIP3)

A 4.1 Connections

Description of Target	Annual Performance Target (D02/08)	Annual Performance Improvement Programme Target (PIP3)
In-situ connections within 24 hours of request	**80%**	**80%**
In-situ connections within 2 weeks of request	**99.8%**	**99.5%**
In-situ connections within 2 months of request	**100%**	**99.8%**
All other connections within 2 weeks of request	**80%**	**80%**
All other connections within 4 weeks of request	**85%**	**85%**
All other connections within 8 weeks of request	**90%**	**90%**
All other connections within 13 weeks of request	**95%**	**95%**
All other connections within 26 weeks of request	**100%**	**99.8%**
Connections completed by Agreed Date	**95%**	**94.2%**

A 4.2 Fault Repairs

Description of Target	Annual Performance Target (D02/08)	Annual Performance Improvement Programme Target (PIP3)
Fault repairs completed by Agreed Date	**95%**	**95%**
Fault repairs completed within 2 working days	**80%**	**82%**
Fault repairs completed within 4 working days	**95%**	**95%**
Fault repairs completed within 5 working days	**99.8%**	**96%**
Fault repairs completed within 10 working days	**100%**	**99%**

A 4.3 Fault Rate Occurrence

Description of Target	Annual Performance Target 30 June 2012 (D02/08)	Annual Performance Improvement Programme Target (PIP3)
A maximum fault rate of line faults per 100 lines	**12.5**	**14.5**

Annex: 5 List of MDFs by area

Annex: 6 List of Questions

Page

Q. 1 Do you have any further submissions on our preliminary view that there is a continued need for an AFL USO for the period commencing 1 July 2016? Please give reasons to support your view. 29

Q. 2 Do you agree or disagree with our preliminary view that it is unlikely to be necessary to specify fast broadband FIA requirements inside the NBP intervention area but that it may be necessary in future to specify such obligations at locations outside the intervention area? Please give reasons to support your view. 42

Q. 3 Do you agree it is not appropriate at this time, for July 2016, to decide whether or not to specify fast broadband FIA requirements at locations outside the intervention area? Please give reasons to support your view. 42

Q. 4 In your opinion, when FIA is reviewed in the future how should the minimum data speed be determined? Do you have a view about what the speed should be? Please give reasons to support your view. 42

Q. 5 When do you think that we should revisit this issue? Please give reasons to support your view. 42

Q. 6 Do you agree that we should maintain the current FIA requirements for the time being? Please give reasons to support your view. 42

Q. 7 Do you agree or disagree with the regulatory options for reasonable access requests as set above? Are there other options that we should consider? Please give reasons to support your view. 66

Q. 8 What do you believe is the most appropriate factor(s) to define a reasonable request? Are there other factors which you believe we should consider when assessing what defines a reasonable request? Please give reasons to support your view. 66

Q. 9 What is your view regarding how to assess if the alternative infrastructure is affordable? Please provide reasons to support your view. 67

Q. 10 Do you agree that indoor coverage is an important factor in assessing alternative connections and PATS? Please provide reasons to support your view. 67

Q. 11 Do you agree that where a threshold is set, only costs that can be attributed to the individual end-user should be measured and that the estimated cost of connecting an end-user should also be based on the least cost technology to provide the required service, irrespective of the technology the USP choose to utilise in practice? Please provide reasons to support your view. 67

Q. 12 Do you agree that end-users should be entitled to adequate and regular information regarding their request for connection? Please provide reasons to support your view. 67

Q. 13 Do you agree with the approach taken to estimate the predicted fault occurrence based on weather, line length and overhead percentage? Please provide reasons and evidence to support your view. 81

Q. 14 Do you agree with the preliminary view that any sub-national targets should be in accordance with the 3 areas defined in the TERA reports? Please provide reasons and evidence to support your view. 81

Q. 15 Do you agree with the preliminary view that fault occurrence targets and repair targets should be combined to provide a service availability target? Please provide reasons and evidence to support your view. 81

Q. 16 Do you agree with the preliminary view that a service availability target should be set nationally and sub nationally by area? Please provide reasons and evidence to support your view. 81

Q. 17 Do you agree with the preliminary view that the national service availability target should be 99.94% and the target for each sub-national area should be 99.86%? Please provide reasons and evidence to support your view. If not, what alternative availability targets do you believe are justified and why? 81

Q. 18 Do you agree with the preliminary view that end-users that have service availability for >10 days should be automatically refunded? Please provide reasons and evidence to support your view. 81

Q. 19 Do you agree with the preliminary view that the connection targets levels that are in place are appropriate for sub national targets? Please provide reasons and evidence to support your view. 81

Q. 20 Do you agree with the preliminary view that the measurement of connection targets at sub-national level is appropriate? Please provide reasons and evidence to support your view. 81

Q. 21 Do you agree with the preliminary view in respect of the measurement, publishing and auditing of the performance figures? Please provide reasons and evidence to support your view. 81

Q. 22 Do you agree with the preliminary view that the performance targets should be commence from 1 July 2016? Please provide reasons and evidence to support your view. 81

Q. 23 Do you agree with the preliminary view that the necessity for a review of the performance targets should be examined in 2 years? Please provide reasons and evidence to support your view. 81

Q. 24 Do you agree with our preliminary view that the obligation to maintain geographically averaged prices should be maintained? Please provide reasons to support your view. 94

Q. 25 Do you agree or disagree with our preliminary view that at this time a requirement to offer Social Tariffs should not be introduced? Please give reasons and/or evidence to support your view. 94

Q. 26 Do you agree or disagree with our preliminary view that the USP should be required to continue to provide its Disconnections Policy? Please give reasons to support your view. 98

Q. 27 Do you agree or disagree with our preliminary view that the USP should be required to continue to provide a Phase Payment Plan for connection fees? Please give reasons to support your view 98

Q. 28 Do you agree or disagree with our preliminary view in respect of the terms and conditions of contract? Please provide reasons to support your view. 98

Q. 29 Do you agree with our proposal to designate a USP to deliver AFL USO for a period of 5 years, with a review to take place after 5 years or sooner if circumstances justify it? Please give evidence and reasons to support your view. 108

Q. 30 Do you agree with our proposal that the USO designation should be applied to the geographic area of the entire State? Are there other factors which should be considered by us in this regard? Please give evidence and reasons to support your view. 108

Q. 31 Do you agree with our preliminary view that the most appropriate approach is to designate Eir as the USP from 1 July 2016? Please give evidence and reasons to support your view. 108

Q. 32 Are there other factors or options which should be considered by ComReg in making a designation in respect of a USP? Please give evidence and reasons to support your view. 108

Q. 33 Do you agree or disagree with our draft assessment of the impact of the proposed options? Please set out reasons for your answer. 135

Q. 34 Do you have any comments or suggestions on our draft Decision Instrument? Please set out your answer in detail. 146