

Universal Service Obligation

Provision of access at a fixed location

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Additional Information

All responses to this consultation should be clearly marked:

"Reference: Submission re ComReg 15/89" as indicated above, and sent by post, facsimile, e-mail or on-line at <u>www.comreg.ie</u> (current consultations), to arrive on or before 5pm on September 7th 2015, to:

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

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1. Executive Summary

- 1 In this consultation document the Commission for Communications Regulation ("ComReg") seeks the views of stakeholders on the need for and proposed evolution of the Universal Service Obligations ("USO") in relation to Access at a Fixed Location ("AFL").
- 2 Following receipt and consideration of the respondents' views, if ComReg remains of the preliminary view that there is a need for some specifications in respect of AFL USO(s) from 1 January 2016, then it will consult further on any designation of a USP(s) and on the specification of any obligations to be placed on the USP(s) for the provision of the AFL USO and associated draft decisions.
- 3 If appropriate, ministerial consent will be sought, as required, and any final decision(s) will be made subsequent to this further consultation process and in light of the end of the current designation period which is 31 December 2015.
- 4 The Universal Service Directive¹ requires that Member States ensure that certain services are made available and at an affordable price and at the quality specified to all end users in their territory, irrespective of geographic location². Such services include (among others) the provision of AFL³.
- 5 The Universal Service Regulations^{4,} which transpose the Universal Service Directive, place primary responsibility on ComReg for safeguarding the provision of the universal services, including AFL⁵. In summary, the Universal Service Regulations require that ComReg must ensure that customers throughout Ireland have access to an electronic communications network and voice services at a fixed location and these components must be affordable and delivered to a specified quality.

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 Article 3.1, Universal Service Directive.

³ Article 4, Universal Service Directive.

⁴ 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") ⁵ ComReg must obtain the consent of Minister for Communications, Energy and Natural Resources in connection with the exercise of certain of its powers under the Universal Service Regulations.

- 6 In July 2014, ComReg Decision D10/14⁶ designated Eircom Limited ("Eircom") as the Universal Service Provider ("USP") for AFL for a period of 18 months. The existing AFL USO will remain in place until 31st December 2015. ComReg was, at that time, of the preliminary view that following this 18 month period there would likely remain a requirement for AFL USO and hence a likely requirement to continue to designate a USP to deliver a USO over the short to medium term. However, ComReg committed to a review of the scope of the AFL USO in Ireland as soon as practicable to determine the need, if any, for an AFL USO beyond 2015.
- 7 In this respect, ComReg is now undertaking a detailed review of the AFL obligation and this initial consultation focuses on questions regarding whether or not there is need for an AFL USO in the whole of Ireland or in certain geographic areas in Ireland and the related obligations for the period commencing 1 January 2016.
- 8 ComReg considers that in light of its role to ensure that consumers 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. Therefore, this consultation aims to outline a counterfactual scenario of possible consequences if AFL USO's were to be ceased. Equally if an intervention by ComReg was deemed necessary, the design of any AFL USO should take account of the extent to which the market might fail to deliver affordable and quality AFL for all consumers.
- 9 This consultation considers forward looking requirements for the AFL element of the USO and a roadmap for its evolution. This includes a high level review of the Quality of Service (QoS) obligation, affordability aspects (including Geographic Average Pricing "GAP"), Reasonable Access Requests and Functional Internet Access ("FIA"), having regard, among other aspects, to any implication of the Government's National Broadband Plan ("NBP") as well as the geographic availability of alternative platforms for the delivery of the AFL.
- 10 In addition, this forward looking review of the AFL USO considers the potential different circumstances that may emerge in various geographic locations such as deployment of next generation access ("NGA"), fibre-to-the-home ("FTTH") networks, NBP developments, and consumer demand trends. Such developments may impact the requirement or not for AFL USOs in certain geographic areas, although the need for a USO may continue to arise nationally including in relation to affordability of services.

⁶ ComReg Document 14/71 and D10/14 "The provision of telephony services under the Universal Service Obligation, Access at a fixed location", 7th July 2014

- 11 This consultation takes into consideration the national context in terms of competitive, technological and service changes that have taken place in recent years and likely key trends over the immediate future. It also takes into consideration the likely impact of the NBP and other changes such as the rollout of next generation networks ("NGN"), increased preference for bundles, migration to Voice over Internet Protocol ('VoIP') and increased mobility that are likely to impact the market over the next five years and beyond.
- 12 As technology and competition develops, and as consumer needs evolve, ComReg's objective is to find the most appropriate approach to ensure that AFL is available to consumers throughout Ireland. ComReg aims to ensure that the services provided continue to meet consumers' needs, particularly if they are not already met by the market.
- 13 ComReg instructed expert consultants, TERA, to carry out a specific analysis and review in respect of the need for an AFL USO and this is presented in the form of a report (the "TERA Report") which has assisted in informing this consultation and accompanies this consultation document (ComReg 15/89a).
- 14 Having considered the TERA Report and other inputs, ComReg's preliminary analysis of demand and supply side trends as well as the possible scenarios, *inter alia*, relating to the various USO components indicates that on balance there is likely a continued need for an AFL USO, at least until the new NBP infrastructure is fully completed. The full impact of a completed NBP infrastructure on the implementation of USO cannot be known at this stage. Furthermore, it is not yet certain if the requirements on ComReg to ensure the provision of AFL and associated obligations pursuant to the Universal Service Regulations will be met as the NBP rollout progresses or by the NBP network once fully completed.
- 15 The European Commission is legally obliged to periodically review the scope of universal service. The European Commission is currently considering the scope of the universal service and this review will include AFL. Therefore in the context of ensuring a universal service, the existing requirements on Member States could evolve. Any amendments would be post ComReg's review. It is noted that the next European Commission Communication reporting on the scope of the universal service is envisaged later in 2015. Pending publication of this Communication or any further information, ComReg must base its review on the current Directive and Regulations in force.
- 16 Having considered the possible counterfactual scenario if all AFL USOs were to be ceased and in light of ComReg's role to ensure that the whole of the State is covered, ComReg has formed the following preliminary views, which it is now consulting on, among other aspects:-

- That there is a continued need for some kind of AFL USO for Ireland post 31 December 2015 (Section 5)
- That the duration of any designation with an AFL USO is for at least 5 years and possibly 7 years (Section 7)
- That any AFL USO designation should cover the entire State, although particular obligations to be placed on any USP(s) for the provision of the AFL USO could differ in different geographic areas as appropriate. (Section 7)
- 17 Therefore, combining these preliminary views, ComReg is of the preliminary view that there is a continued need for some kind of AFL USO(s) throughout the entire State, although specific requirements could vary depending on circumstances, geographic or otherwise, at least until the NBP is fully rolled out (the next circa 5 years). In forming this preliminary view, ComReg has taken into consideration the responses received in relation to Consultation 14/48⁷, the TERA Report, information collected on foot of information requests, together with other relevant material available to ComReg. Of course, ComReg will take into account during this consultation process any information that may become available further to the European Commission's review of universal service as well as the NBP process, as relevant.
- 18 ComReg looks forward to receiving responses from all stakeholders in relation to the questions raised in this consultation and ComReg's preliminary view on the need for an AFL USO in the entire State and the associated duration. Following receipt of submissions, ComReg will review and take into account all responses it receives before considering the next steps.
- 19 If, having considered respondents' views, ComReg remains of the preliminary view that there is a need for some intervention by ComReg in respect of AFL USO from 1 January 2016, then it will consult further on the specification of any obligations to be placed on the USP(s) for the provision of the AFL USO, which may need to evolve in light of the analysis, as well as on any designation of undertaking(s) to guarantee the provision of the AFL USO.

⁷ ComReg Document 14/48 "The Provision of telephony services under the Universal Service Obligation – Access at a Fixed Location", 16th May 2014.

2. Introduction

- 20 ComReg is responsible for the regulation of the Irish electronic communications sector, in accordance with national⁸ and EU legislation. One of ComReg's 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).
- 21 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.
- 22 In accordance with Regulation 3 of the Universal Service Regulations, which relates to the provision of AFL, an undertaking designated to provide AFL shall:
 - 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 Functional Internet Access (FIA), bearing in mind the technology used by the majority of subscribers and technological feasibility.⁹
- 23 The Universal Service Regulations also provide that such services must be affordable and attain a certain quality of service.
- 24 The Universal Service Regulations further provide that ComReg, with the consent of the Minister for Communications, Energy and Natural Resources (the "Minister") may specify requirements to be complied with by the designated USP in relation to the reasonableness of requests for connection and access, terms and conditions, FIA¹⁰ and affordability measures including GAP¹¹.

⁸ Under the Communications Regulation Act 2002, as amended.

⁹ Regulation 3(1) - (3), Universal Service Regulations.

¹⁰ Regulation 3(5)(b) of the Universal Service Regulations.

¹¹ Regulation 8(2) - (3) of the Universal Service Regulations.

2.1 Current AFL USO

- 25 As set out in ComReg Decision D10/14, Eircom is currently designated as the USP for AFL for a period of 18 months, until 31st December 2015, in relation to certain specific USOs ("the 2014 designation"). Eircom is required to 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.
- 26 In addition, ComReg has previously specified obligations in respect of requests for connection and access and FIA in ComReg Decision D9/05¹². In that Decision, ComReg introduced a threshold for determining whether a request for access should be considered "reasonable" (the Reasonable Access Threshold ("RAT")) and also set a minimum target data rate for FIA (in relation to narrowband Internet only). ComReg has also previously specified QoS performance targets in relation to the provision of specific elements of the AFL USO in ComReg Decision D02/08¹³ and established performance improvement programmes (PIPs) with associated penalties.
- 27 ComReg Decision D10/14 requires Eircom, as the USP, to continue to comply with the obligations set out in ComReg Decision D09/05 in respect of the obligations relating to RAT and FIA. ComReg Decision D10/14 also imposes on Eircom obligations in respect of GAP and QoS targets established by ComReg Decision D02/08 for the designation period.
- 28 Eircom as the USP is required to provide Access at a Fixed Location¹⁴ for a period of 18 months which remains in force until 31 December 2015. Under this obligation, Eircom shall satisfy any reasonable request to provide access at a fixed location to a public communications network.
- 29 The current scope of universal service in Ireland, in respect of AFL, is set out in the 2014 designation and contains the following aspects:
 - Obligation to satisfy any reasonable request to provide at a fixed location connections to the public telephone network, capable of allowing endusers to make and receive local, national and international telephone calls, facsimile communications and data communications, at data rates that are sufficient to permit FIA;

¹² 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

¹³ ComReg document 08/37and D02/08 "Decision Notice – Response to Consultation on Eircom's Universal Service Obligation- Quality of Service Performance Targets", 28th May 2008.

¹⁴ Decision D10/14

- Obligation to satisfy any reasonable request to provide at a fixed location access to publicly available telephone services;
- Obligation to meet QoS performance targets for the delivery of the AFL USO;
- 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 subscribers irrespective of their geographical location; and
- Obligation to apply measures to ensure that subscribers are in a position to monitor and control expenditure.
- 30 During the consultation process, leading to ComReg Decision D10/14, ComReg was also of the view that in the longer term the market may deliver universal voice access at a fixed location in its own right, without the need for a USP. However, ComReg was of the preliminary view that there would likely remain a requirement for an AFL USO and possibly a requirement to designate a USP to deliver same over the short to medium term (three to five years) beyond 2015.

2.2 ComReg 14/48 Part II

- 31 In ComReg Document 14/48 ComReg consulted on the need for an AFL USO and sought views on how ComReg could ensure that the universal service for AFL is appropriately implemented. This consultation had two parts, the first to seek views on the need to sustain a USO for AFL for a period of twelve or eighteen months from July 1st 2014, and the second on the future scope and designation of the AFL USO for a period of 3 to 5 years after the designation period.
- 32 ComReg was of the view in ComReg Document 14/48 that if an AFL USO was considered necessary after the designation period that it may be appropriate for ComReg to review the future scope of the AFL USO in Ireland in light of competitive, technological and services changes that have taken place since the previous designation.
- 33 Therefore Part II of ComReg Document 14/48 sought views on:
 - ComReg's preliminary views in respect of the future scope of the obligations associated with the AFL USO in the period after the 2014 designation, including in relation to FIA and the RAT, QoS and GAP, as well as possible geographic aspects;
 - ComReg's preliminary views in respect of measures which seek to sustain affordability;

- ComReg's preliminary views in respect of measures that assist with control of expenditure and terms and conditions to be provided by the USP; and
- Expressions of interest in being the USP(s) for services with the scope of AFL USO in the period after the 2014 designation.

Four responses were received by 8th August 2014¹⁵. The views expressed in response to Part II of ComReg Document 14/48 have been taken into consideration by ComReg in coming to its preliminary views as set out in the sections below. Non-confidential submissions received by ComReg have been published in ComReg Document 14/48s¹⁶ and the main points of relevance to this consultation are set out in this document.

2.3 Consultation Scope

- 34 The purpose of this consultation is to seek views on whether or not there is a continued need for an AFL USO to cover the whole of Ireland or only to cover certain geographic areas in Ireland after 31 December 2015 and subsequently, if an AFL USO is deemed necessary in the whole or parts of Ireland, the possible scope of the obligation. In the event that an AFL USO is deemed necessary, it is conceivable that in the context of any designation at national level that the specification of obligations to be placed on the USP(s) for the provision of the AFL USO could address concerns at both geographic and/or national levels as they arise. This consultation also seeks views on the possible impact in relation to the various components of AFL if there was no USO. It will present what the possible outcomes might be and present whether such outcomes would meet or fall short of, the requirements to ensure AFL, as set out in the Universal Service Regulations.
- 35 This consultation considers possible forward looking requirements for the AFL element of the USO and a roadmap for its evolution, including, as relevant, in terms of QoS, affordability (including GAP), Reasonable Access Requests (including RAT) and FIA, having regard, among others, to the implication of the Government's NBP and the geographic availability of alternative platforms for the delivery of the USO on the continued requirement for the AFL element of the USO. It also considers both supply and demand side market trends.

¹⁵ Responses were received from Eircom, Alternative Operators in the Communications Market ("ALTO"), Magnet Networks Limited ("Magnet") and UPC Ireland ("UPC")

¹⁶ ComReg Document No 14/48s, "USO Access at a Fixed Location - Submissions to Part 2 of 14/48" 24th March 2015

- 36 As part of the national context, the consultation also considers the Government initiatives in respect of broadband availability in particular the NBP which is designed to address the Government's target to increase broadband speeds throughout Ireland.
- 37 On 4th December 2014, ComReg published its Call for Input on regulatory implications of the NBP¹⁷. A Response to this Call for Input¹⁸ document was published on 18th June 2015 which addressed requests for clarification raised by respondents including in respect of USO matters. For clarity, ComReg has no decision-making role in the design of the NBP (including decisions on the mapping or tendering process) or the award of any contracts under the NBP. However, ComReg does have a role in the context of the European Commission's State Aid Guidelines¹⁹.
- 38 In preparation for this consultation, ComReg issued a number of information requests, during 2014/15 to collect information on AFL and its components to assist with this review. ComReg has undertaken a detailed review of this data, and other information available to it, to arrive at its preliminary view as to whether there is a continued need for an AFL USO in the whole of Ireland or in certain geographic areas.
- 39 ComReg instructed independent expert consultants, TERA, to carry out additional specific analyses and review of the evidence, which is presented in the form of a report, (ComReg 15/89a).
- 40 The TERA Report studies the latest access services market evolutions, taking into account current market trends and likely evolutions in the coming 5 years. These include among other things, intensification of competition, deployment of FTTH and the NBP. It assesses the possible consequences if AFL USOs were to be ceased. In doing this it considers the AFL USO context in Ireland and reports on the implementation of AFL USO in different European countries. Finally, the TERA Report comes to a conclusion on the continued need for an AFL USO in Ireland.
- 41 This consultation document, together with the TERA Report, therefore contains a detailed review of the AFL USO requirement, to assist ComReg in ascertaining if there may be a need for an AFL USO in the whole of Ireland or in certain geographic areas post 31st December 2015.

¹⁷ ComReg Document No 14/126 "National Broadband Plan – Call for Input on Regulatory Implications", 4th December 2014

¹⁸ ComReg Document No 15/57 "National Broadband Plan – Response to Call for Input", 18th June 2015

¹⁹ EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks, OJ C25, 26.01.2013, p.1 ("State Aid Guidelines").

- 42 If the outcome of this consultation is that there is a need for any kind of AFL USO in the whole or parts of Ireland after 31 December 2015, ComReg will issue further consultations which would serve to drill down into the various components of the AFL USO that ComReg is of the preliminary view would be required and their proposed scope; including reasonable requests for connection and access, affordability, FIA and QoS.
- 43 This consultation seeks views on topics such as:-
 - Consumer trends discussed in the consultation and any other relevant factors which ComReg has not considered.
 - Supply side trends discussed in the consultation and any other relevant factors which ComReg has not considered.
 - If any AFL USO continues to be required.
 - Factors which should be considered in respect of EU aspects and assessment of technologies suitable for delivering AFL.
 - Whether any designation should be for the entire State.
 - The duration of any AFL USO designation.
- 44 ComReg has already consulted and in some cases issued Decisions on measures for disabled end-users²⁰²¹. Other aspects of the USO such as payphones²² and subscriber directories²³ have also been the subject of separate consultation processes. These aspects will not be considered as part of this work stream.
- 45 There are other aspects that USPs may be required to provide including Itemised Billing and Call Barring facilities. However, ComReg has already imposed obligations on all undertakings in respect of Itemised Billing and Billing Mediums²⁴ and ComReg is currently consulting on Selective Call Barring²⁵, also in respect of all undertakings. Therefore, these aspects will not be considered as part of this work stream.

²⁰ ComReg Document No D15/68 and D03/15, "Universal Service Obligation Measures for disabled end-users; Terminal Equipment", 8th July 2015

²¹ ComReg Document No D15/69 and D04/15, "Universal Service Obligation Measures for disabled end-users; Text Relay Service", 8th July 2015

²² ComReg Document No 14/69 and D08/14, "Provision of Public Payphones, Universal Service Scope and Designation", 7th July 2014

²³ ComReg Document No14/68 and D07/14, "Provision of Directory of Subscribers Universal Service Scope and Designation", 7th July 2014

²⁴ ComReg Document No 13/52 and D08/13, "Consumer Bills and Billing Mediums", 6th June 2013

²⁵ ComReg Document No 15/31 "Preliminary Consultation- Selective Call Barring", 27th March 2015

- 46 Additionally, pursuant to ComReg Decision D12/14, Eircom is subject to a Retail Price Cap ("RPC") which relates to consumers' standalone fixed voice access service. Under this RPC, Eircom is not allowed to increase line rental prices by more than the rate of inflation. This obligation is not however, a USO, but is the result of a market definition and analysis exercise, and the finding of significant market power in the market for retail fixed voice access.
- 47 ComReg notes the provision of a universal service may result in the USP(s) providing designated services at a net cost. ComReg notes that the Universal Service Regulations²⁶ 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.²⁷ The designation method(s) adopted by ComReg 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 obligation²⁸. In this regard, ComReg Decision D04/11²⁹ 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.
- 48 Under the Universal Service Regulations, ComReg requires the consent of the Minister in specifying requirements to be complied with by a designated undertaking for various components of AFL. If ComReg determines obligations are necessary to be placed on the USP(s) for the provision of the AFL USO, ComReg, following consultation, with the consent of the Minister, would further specify the requirements, in accordance with its powers at Regulation 3(5) of the Universal Service Regulations.

²⁶ Regulation 11 of the Universal Service Regulations.

²⁷ Regulation 12 of the Universal Service Regulations.

²⁸ Regulation 7(3) of the Universal Service Regulations.

²⁹ ComReg Document 11/42 and D04/11 "Report on Consultation and Decision on the Costing of universal service obligation: Principles and Methodologies", May 31st 2011

3. Market Developments

- 49 In considering whether there is a continued need to sustain an AFL USO for the whole or parts of Ireland for the period commencing 1 January 2016, ComReg has considered in detail relevant market trends, both on the supply and demand side, possible competitive constraints and the potential impact if any of the Government's NBP initiative over the next 5 year period.
- 50 While the obligations with respect to the various AFL components such as RAT and FIA have been in place for a number of years, the market has changed substantially in that time. This section looks at demand trends and supply trends and how these have changed in recent years and how they are expected to change in the future.

3.1 Demand (Consumer) Trends

- 51 One of ComReg's statutory objectives is to promote the interests of users in the Community.³⁰ ComReg, through its quarterly reports³¹ has identified the following trends, amongst others, in relation to consumers of electronic communications services in Ireland:
 - 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.
- 52 The TERA Report (Section 3.1) also addresses these trends and additionally highlights a certain sensitivity to AFL prices for some end-user categories and issues in respect of narrowband users although acknowledging consumer valuations are complex.
- 53 Each of the trends listed above are detailed below.

Bundled services and increased fixed voice subscriptions

³⁰ Section 12 of Communications Regulation Act 2002, as amended.

³¹ ComReg document 15/49, "Quarterly Key Data report", 11th June 2015

- 54 ComReg's most recent Quarterly Report³² shows that despite a decline in PSTN and ISDN access paths³³ (by 3.2% in the last year), at the end of Q1 2015 there were 1,566,792 fixed voice subscriptions (a decrease of 1.0% on Q4 2014, but an increase of 0.3% on Q1 2014). Until now, there had been quarter on quarter increases in subscriptions to fixed telephony services (either standalone or as part of a bundle) since Q1 2012. Q1 2015 marked the first decline in subscriptions as shown in Figure 1 below.
- 55 Figure 1 below also demonstrates that since Q1 2012, the biggest growth in subscriptions has been for UPC and Sky, while Eircom's share has declined. As of Q1 2015 Eircom had 47% of all fixed voice subscriptions followed by UPC (22%), Vodafone (15%) and Sky (7%). It is noted that Eircom's share of standalone fixed voice access currently over 70 percent is significant.

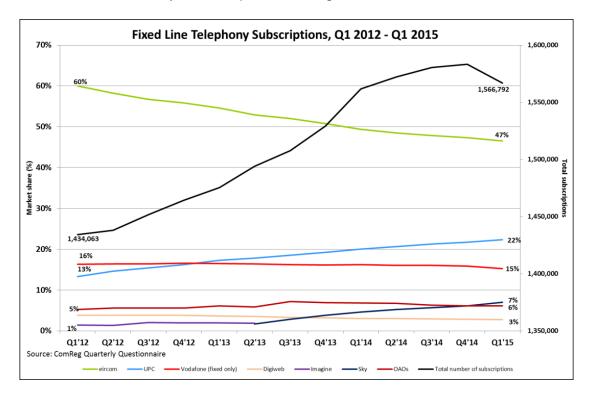


Figure 1

Source: ComReg 15/49 Figure 2.2.3

³² ComReg Document No 15/49, "Quarterly Report Q1 2015", 11th June 2015

³³ Access paths are not synonymous with access lines as for example in the case of ISDN paths, there may be more than one path provided via a single ISDN line

56 As demonstrated in figure 2 below, considering ComReg's most recent quarterly report, there has been a slight decline in the share of single play (voice or broadband or TV only) subscriptions and in double play subscriptions as triple play's and quadruple play's share of subscriptions continue to increase. However, the percentage of single play subscriptions which is significant at 46.7% in Q4 2014 and Q1 2015 has increased slightly from Q3 2014.³⁴ The overall trend shows that user demands are shifting toward greater bundling with the uptake of triple and quadruple play increasing.

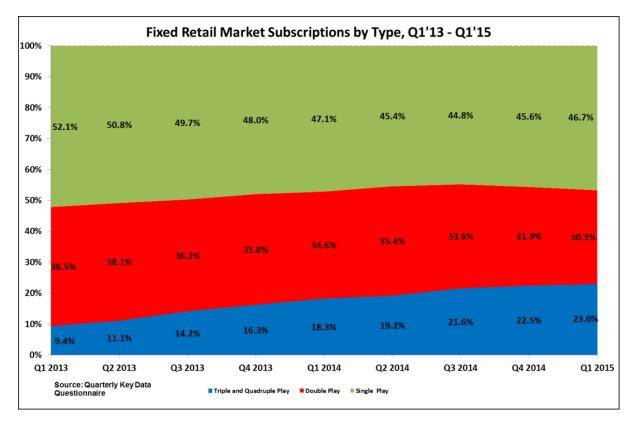


Figure 2 (Source: ComReg 15/49 Figure 2.2.4)

57 The most common product bundled with fixed voice access ("FVA") is fixed broadband. Consumers that purchase FVA bundled with fixed broadband have potentially a greater choice of supply of FVA compared to those customers who want FVA on a standalone basis.

³⁴ Single play subscriptions do not necessarily represent fixed line only subscriptions, but may also represent for example broadband only subscriptions

- 58 The TERA Report also notes the trends set out above. Furthermore, the TERA Report also notes, from ComReg's 2012 market review research³⁵, that the use of AFL varies with consumer age, and of particular note is that 95% of those consumers aged 65+ mainly use AFL for voice services. This survey also indicates that the top reason reported for selecting a fixed line supplier is related to the purchasing of bundles. In terms of determining the number of single play subscriptions that are voice only, the survey found that 28% of fixed voice telephony customers were buying voice on a standalone basis.
- 59 The estimated fixed broadband household penetration rate was 65% in Q1 2015. Fixed line services continue to be chosen by a significant majority of households in the State.
- 60 TERA point to the Eurobarometer household survey from 2014 which shows that 5% of end-users in Ireland have fixed access but not mobile access. This is on a par with countries such as UK, Italy, Austria and Poland.
- 61 ComReg understands that these aspects are particularly relevant in the context of universal service. The review indicates that those consumers who can avail of a bundle (multiple services) that suits their needs will do so but there remains a large proportion of customers on single play subscriptions (46.7%) with 37% in Q4 2013 buying voice on a standalone basis. In terms of alternative voice services (not fixed), not all households have mobile access.

Retail Voice Traffic and increase in use of VoIP

- 62 As set out previously, under the 2014 designation the provision of AFL must be capable of allowing end-users to make and receive local, national and international telephone calls.
- 63 Aside from traditional fixed voice services, there are a number of suppliers providing other fixed voice services (managed and unmanaged VoIP) to end users over a broadband access network usually in a bundle. Managed voice over broadband ("VoB") minutes account for approximately 12.2% of total fixed voice minutes, slightly down from 12.3% in Q1 2014³⁶.

³⁵ ComReg Document 12/117a "Market Review – Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers (Appendix A)" 26th October 2012 ³⁶ The numbers quoted in this report represent managed VoB information only (for example by Eircom, UPC and other providers such as Blueface) and do not include unmanaged or over the top VoB services by providers such as Skype

- 64 Retail fixed voice traffic has been in decline for a number of years, and has fallen quarter on quarter consecutively since Q1 2011. Conversely, retail mobile voice traffic totalled 3.01 billion minutes in Q1 2015, an increase of 6.0% on Q1 2014. However, the TERA Report noted (section 3.2.2.3.1) that it is generally accepted currently that substitution between fixed and mobile offers for either voice and or broadband is not yet effective and in this respect referred to a recent European Commission document which concluded that substitutability between fixed and mobile offers is limited.
- 65 The TERA Report also notes that although the volume of fixed voice calls (originated from a fixed voice network) has decreased since 2011, it exceeds 2.5 hours per month.
- 66 The TERA Report noted that despite the development of new communications means such as Facebook and Twitter, voice remains a key communication service for end-users. It noted that 98% of households in Ireland have telephone (mobile or fixed) access.
- 67 Currently, managed VoIP is primarily offered as part of a bundle thus it typically suits end-users that wish to also purchase broadband. For customers who do not already purchase a fixed broadband service, availing of managed VoIP would first require access to a fixed broadband service. There is a large portion of customers who purchase fixed telephony on a standalone basis and/or do not value broadband, and thus are potentially 'captive consumers'. For these consumers broadband with managed VoIP may not be an alternative for traditional fixed telephony.
- 68 The main benefit of VoIP as an alternative to the traditional PSTN based voice service appears to be its cost advantages for service providers. Routing phone calls over existing data (broadband) networks helps eliminate the need for Fixed Service Providers to operate separate voice and data networks, and permits cost savings through achieving economies of scope.

- 69 In ComReg Document 14/89³⁷ ComReg noted that VoIP subscriptions accounted for approximately 22% of total fixed telephony subscriptions (up from 14.8% in Q4 2011). In addition, managed VoIP minutes accounted for approximately 12% of total fixed voice minutes (up from 8.0% in Q4 2011). ComReg expected this increasing trend towards VoIP continue. TERA's Report also observed this trend and additionally noted that Decision D12/14 concluded that "broadband connections re increasingly facilitating the delivery of managed VoIP and may increasingly act as a constraint on narrowband PSTN/ISDN voice and, ultimately, the PSTN/ISDN connection".³⁸
- 70 The consumer experience of managed VoIP is often not very different from the traditional PSTN/ISDN FVA service. However, ComReg notes that some ancillary services such as monitored home alarm and fax services are not yet readily available over a broadband connection. For some customers this may represent a barrier to switching from a narrowband FVA service to a managed VoIP service until such time that these functions, or comparable features, become available over a broadband connection.
- 71 In this respect, the TERA Report concludes that "While the increasing use of VoIP is an important development in Ireland, this aspect is not directly relevant to AFL USO as the VoIP technology is in fact progressively replacing the PSTN technology but this migration occurs over physical lines which already support AFL".
- 72 The TERA Report also concluded that the use of managed VoIP is increasing and this has the potential to secure the provision of voice AFL USOs over new networks relying on the IP technology.
- 73 ComReg has already stated that in principle a managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL USO if provided at an affordable price³⁹, however, ComReg notes TERA's point that in advance of the NBP rollout, VoIP services are unlikely to provide AFL for more consumers throughout the State than already served with voice services by legacy fixed networks.

³⁸ Ibid.

³⁹ ComReg Document No 15/57- National Broadband Plan, Response to Call for Input <u>http://www.comreg.ie/_fileupload/publications/ComReg1557.pdf</u>

³⁷ ComReg Document 14/89 and D12/14 "Market Review: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers" 28th August 2014

Narrowband internet

- 74 As above, the USP is currently required to provide FIA at a minimum speed of 28.8kbps to 94% of the population. With the development and take-up of broadband, narrowband internet subscriptions have been in decline for a number of years. This trend continued in Q1 2015, with a further decline of 6.2% between Q4 2014 and Q1 2015, and a total decline of 29.3% since Q1 2014. The majority of fixed internet subscriptions are broadband subscriptions with narrowband subscriptions representing 5,815 subscriptions. Narrowband customers have speeds which are significantly lower than the vast majority of the population.
- 75 As detailed in Section 3.1.3 of the TERA Report, narrowband customers are not spread evenly throughout the country, and narrowband customers can represent over ‰ of PSTN working lines in several (exchange) areas in Ireland. The TERA Report suggests that it is likely that some of these lines cannot support more than narrowband internet access because they are too long, but also that some customers continue to purchase standalone line rental and in these instances narrowband is their only internet option.
- 76 TERA's analysis found that narrowband internet access customers tend to be located in areas that are most remote and within the smallest exchanges. The TERA Report also analysed the lines by length and the likely available internet speed depending on this and it found that there is likely to be a small proportion of customers who can only get narrowband from a fixed wired network.
- 77 However, although for some customers narrowband internet is their only option TERA's Report noted that with the development of broadband services, the number of customers requiring low speed internet access has decreased significantly over the last number of years. It notes that it is possible for some customers that take up of narrowband over broadband is not due to the too long length of their copper line but to the fact that they may be able to afford to pay for a narrowband connection but not for a broadband connection. Additionally, TERA pointed to ComReg's analysis on the Retail Fixed Voice Access (RFVA) markets and to the fact that consumers' socio-economic status, and in particular, their, age and purchasing power, may be linked to lack of internet access. For example the TERA Report set out a price analysis showing that the cost of difference of purchasing (the cheapest) broadband instead of using narrowband would be in the region of €10.16 per month.
- 78 The TERA Report also reviewed average internet usage demands (in terms of data downloads associated with different tasks) and noted that average web page sizes have increased dramatically since 2005, while the size of email attachments has remained relatively stable. This means that with a 28.8kbps connection, it takes almost 7.5 minutes to download a standard webpage at this speed.

- 79 ComReg notes the relevance of these points in the context of an AFL USO, where possible alternatives for FIA at a fixed location may be limited, non-existent or not affordable. ComReg notes that while FIA and its definition may be a concern for 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 services.
- 80 At the same time, it also appears that the current FIA specification at 28Kbps provides limited value for those who continue to utilise it.

Affordability and price sensitivity

- 81 With respect to retail line rental, Eircom is subject to a Retail Price Cap ("RPC") since 2007. Pursuant to ComReg Decision D12/14⁴⁰ finding of significant market power (SMP) on the market for retail fixed voice access ('RFVA markets') the RPC continues to apply to standalone fixed voice access services (notably PSTN and ISDN BRA line rental and connection fees, excluding voice calls). Under the RPC Eircom had the ability to increase the retail line rental price by no more than CPI in any one year. However, Eircom has not changed the retail line rental price since October 2007.
- 82 This could be due to perceived/ real competitive constraints in the market place as competitors emerged more strongly in this period. On the other hand however ComReg notes that this period also represented a period of significant recession and deflation in Ireland. Furthermore, as was noted in ComReg Decision D12/14 and in the TERA Report (section 3.1.2), even in these circumstances the line rental remained high and stable (the fourth highest price in EU after Luxembourg, Sweden and Finland).
- 83 In the context of affordability of AFL pricing, the obligation imposed on Eircom to provide geographically average prices means that currently it cannot, for example, increase retail AFL prices in non-competitive areas, while maintaining or even reducing it in competitive areas.
- 84 Eircom voluntarily offers Vulnerable User and Talktime Control Schemes to certain groups of vulnerable consumers. In respect of Talktime Control this scheme is offered to customers who previously availed of the DSP's⁴¹ Telephone Allowance Scheme. Talktime Control customers pay a reduced subscription charge of €22.50 including VAT (€18.29 ex. VAT) per month which includes line rental and a call allowance. Customers purchasing broadband are not eligible to sign up to this scheme. As at April 2015, there were approximately ‰ customers availing of this scheme.

⁴⁰ ComReg Document No14/89 and D12/14 "Market Review: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers" 28th August 2014

⁴¹ Department of Social Protection

- 85 Eircom also offers customers low user packages such as the current Vulnerable User Scheme. This scheme also offers customers a reduced monthly subscription charge of €25.22 including VAT which includes line rental and a call allowance. However, outside the bundle of calls, consumers can be billed up to double the standard rate for calls. To date take-up of this scheme has been extremely low.
- 86 The TERA Report reviews the potential sensitivity of consumers to increases in prices and in this respect provides further analysis of the research conducted by The Research Perspective⁴² for ComReg. This evidence appears to indicate that while potential reactions to significant AFL price increases (10%) are varied across consumer cohorts, a proportion of the population report that they would likely cancel their subscription if prices for fixed voice access and calls were to increase by 10%.
- 87 TERA estimate that potentially 8.8% of the total population or 13.8% of the population with a fixed line would be entirely lost in revenue terms (from a retail and wholesale perspective) to Eircom on foot of a 10% price increase in fixed telephony prices. That said, it is important to note that the 2012 Market research in respect of residential users is survey evidence and provides only high level indications of the potential reactions of fixed telephony users. It should also be noted that the survey was based on households, the broader RFVA market incorporates both residential and non-residential services and UPC's share of the non-residential segment is significantly lower than that of Eircom across all regions. The universal service requirement is in respect of all citizens and businesses. TERA's price sensitivity analysis can be found in section 3.1.2.2 of its report.

3.2 Demand Trend Summary

- 88 As noted in the TERA Report, and as demonstrated in the Quarterly Report, takeup of bundled services is leading to increased fixed voice subscriptions, however fixed call volumes are decreasing though VoIP is gradually increasing.
- 89 However, there is still a portion of the population which mainly uses AFL for voice services, and it is estimated that a significant proportion of fixed lines are voice only lines (28% in 2012). Voice remains a key communications service for consumers and despite a decrease in call volumes, fixed voice traffic represents a quarter of total voice traffic in Ireland. VoIP is increasing and has the potential to secure the provision of voice AFL USOs over new networks relying on the IP technology.

⁴² ComReg Document 12/117a, "Market Review- Retail Access of the Public telephone Network at a Fixed Location for Residential and non-residential Customers (Appendix A)", 26th October 2012

- 90 Eircom's line rental prices have not changed over the last number of years, however this was in a period of recession and deflation, in 2011 the retail line rental in Ireland was the 4th highest in the European Union. There is still a percentage of the population which mainly uses AFL for voice services (95% of 65+) which cannot be overlooked.
- 91 Demand for narrowband access is decreasing, the majority of consumers have access to the internet through a broadband connection. Although with a narrowband connection, it takes over 7 minutes to download a webpage, it remains in demand for people with low income or whose copper line is too long.
 - Q. 1 Do you agree with ComReg and TERA's review of the relevant consumer trends? Please give reasons to support your view.
 - Q. 2 In your opinion are there other relevant factors in relation to consumer trends which ComReg should consider? Please give reasons to support your view.

3.3 Supply Trends

- 92 In different geographic areas there are potentially different circumstances emerging in relation to supply side competitive conditions. In some areas there is infrastructure-based competition (mainly from UPC but potentially from SIRO⁴³ and other NGA infrastructures) as well as competition from other authorised operators relying on LLU, Line Share and SLU services. There is also some service-based competition based solely on Eircom's copper local loop i.e., WBA and SB-WLR. On the mobile side, there are a number of operators with significant 3G coverage and gradually deploying 4G.
- 93 This section aims to highlight the supply trends in the market at present and likely developments in the coming years relevant to requirement on ComReg to ensure AFL.
- 94 The TERA Report addresses infrastructure/supply side trends at Section 3.2 and the issues examined are discussed below. The TERA Report also notes that most if not all 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.

Eircom's Infrastructure used to provide AFL

⁴³ A Vodafone/ESB joint venture fibre broadband company

- 95 Eircom currently provides AFL USO using four different technologies: copper path, shared copper path, Rurtel⁴⁴ and Fixed Cellular Service⁴⁵ ("FCS"). FCS is the only technology used by Eircom to provide AFL which is not capable of FIA, at a minimum speed of 28.8kb/s.
- 96 The TERA Report, at section 3.2.1, notes that the majority of connections to the Eircom network are provided over copper, however, Eircom also uses Rurtel and FCS in more difficult to serve areas, albeit that the number of customers whose service is provided using Rurtel and FCS is extremely low.
- 97 The TERA Report also notes that PSTN/copper is the only fixed technology which works during a power outage (if the handset is not powered by electricity). However, it notes that this is not a specific requirement of the Universal Service Directive. This is addressed by Regulation 16 of the Universal Service Regulations - Availability of Services. Nevertheless, as set out in Section 6 of this consultation these are not the only technologies which can be used to provide consumers with AFL and the deployment of NGA/FTTH networks and NBP developments will need to be considered when ascertaining the most appropriate requirements for the AFL USO.
- 98 In June 2015, Eircom announced an extension to its planned fibre footprint from 1.6 million premises to 1.9 million premises (82% of all premises in Ireland), with FTTH technology used to reach additional 300,000 customers in more than 1,000 communities across the country.⁴⁶
- 99 In the future, Eircom is likely to use Next Generation Access (NGA) technologies as the primary technology to provide AFL however Eircom, considers that 4G technology may be used to serve customers in remote areas.
- 100 Eircom/Meteor also currently has a significant 3G coverage and is rolling out a next generation mobile network based on a 4G mobile technology, Long Term Evolution (LTE) which could also be used to provide AFL to some but not all customers. Section 3.2.2.3.1.1 of the TERA report details Eircom/Meteor's 3G and 4G coverage, which relates to 'outdoor' services.
- 101 In addition to operators who rely on Eircom's wholesale inputs to offer services, there are a number of operators who have alternative access networks as set out below.

⁴⁴ A solution using the 20MHz spectrum band

⁴⁵ A solution which uses GSM

http://pressroom.eircom.net/press releases/article/eircom expands fibre broadband investment in tipperary/

UPC

- 102UPC has the largest cable TV network in Ireland with 853,000 homes passed and 512,000 customers. UPC operates mainly in large urban areas.⁴⁷
- 103Recent years have seen UPC investing significantly in its cable network in Ireland which has opened the way for direct provision of products other than TV. UPC offers cable voice ("home phone"), though only as part of a bundle with its broadband service.

<u>SIRO</u>

104 In addition, SIRO⁴⁸ is investing €450 million in building Ireland's first 100% fibre-tothe-building broadband network, offering speeds from 200 Mbps to 1000 Mbps to 500,000 premises in fifty regional towns⁴⁹. According to Vodafone, SIRO will exclusively offer a wholesale open access network meaning that it will be available to telecoms operators in Ireland to resell to their customers. The initial phase of the project, which consists of fifty towns, is expected to be fully rolled-out by the end of 2018 with scope for a second phase that will reach 300 smaller towns.

Mobile Infrastructure

- 105 In addition to Eircom/Meteor, Vodafone and Three also have significant 3G coverage, Vodafone have 90% population coverage, while the Three 3G network covers 96% of the population. Moreover, Vodafone also offers significant 4G coverage in 6 cities with speeds of up to 75mbps. Likewise, Three have started to rollout a 4G network with a focus on the larger cities.
- 1063G and 4G provide broadband with current typical speeds of 1Mbps and 10Mbps respectively.
- 107As set out above Eircom (Meteor/Emobile) also currently has a significant 3G coverage and is rolling out a next generation mobile network based on a 4G mobile technology, Long Term Evolution (LTE).
- 108As noted in the TERA Report, coverage for mobile networks is based on outdoor service and therefore the indoor quality of mobile services can in some cases be poor. Indeed, it is generally accepted currently that the substitutability between fixed and mobile offers for either voice and or broadband is not yet effective. For example, as set out in the TERA Report the European Commission has recently concluded that substitutability between fixed and mobile offers is limited.

⁴⁷ <u>http://www.libertyglobal.com/oo-ireland.html</u>

⁴⁸ ESB and Vodafone Ireland have created a fibre broadband joint venture company named SIRO

⁴⁹ http://www.esb.ie/main/downloads/SIRO-Press-Release.pdf

109That said, as set out in Section 6 below, mobile technology could potentially be used to provide AFL.

Fixed Wireless technologies

- 110Digiweb and Imagine provide Broadband Wireless Access, which supports fixed, nomadic and mobile systems and it enables combined fixed and mobile operation in licensed frequency bands below 6GHz. Both Digiweb and Imagine provide fixed voice services. These networks therefore have the capabilities to provide AFL, however the current coverage of these networks may also be a factor.
- 111 Fixed Wireless technologies, which offer "home-zone" products, are also available in the market. These offers allow the reuse of GSM/UMTS radio frequencies to provide voice and internet communications at a fixed location. The availability of the service is restricted to a specific coverage area called "home-zone", Vodafone offer a "home-zone" solution, however this is available for business customers only.
- 112A further more detailed analysis of the above current and planned market supply trends is set out in Section 3.2 of TERA Report.

3.4 National Broadband Plan

- 113The Government's NBP was published by the Department of Communications Energy and Natural Resources ("DCENR") on 30 August 2012⁵⁰. Further details were announced by the Minister for the DCENR (the Minister) on 25 April 2014 which stated that the focus of the NBP is a *"long term, future proofed infrastructure build with fibre as a key component underpinning whatever technology delivers the service (fixed or wireless)*"⁵¹.
- 114As part of the NBP, 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.
- 115 The NBP sets the Government's targets in respect of increasing broadband speeds. The NBP states that it "sets out the strategy to deliver high speed broadband throughout Ireland. Specifically, it will facilitate broadband download speeds of 70Mbps with a minimum of 40Mbps generally available and 30Mbps available in harder to reach rural areas".

⁵⁰ http://www.dcenr.gov.ie/NR/rdonlyres/1EA7B477-741B-4B74-A08E-6350135C32D2/0/NBP.pdf

⁵¹ http://www.dcenr.gov.ie/Press+Releases/2014/Major+fibre+build-

out+to+rural+Ireland+will+be+cornerstone+of+Government+strategy.htm

- 116On the 15 July 2015, the Minister issued a public consultation on proposals for an intervention strategy in respect of the rollout of a high speed broadband network. The draft strategy (informed by detailed reports from expert advisors) sets out the key elements of intervention what services are proposed and how they will be delivered.⁵² It is to be noted that the Government has committed to delivering high speed broadband access to every home, school and business in the country by 2020, regardless of where they are located.⁵³
- 117 In the context of NBP and in undertaking this forward looking review of AFL USO, ComReg and its expert advisors, TERA, have therefore considered to what extent any assessment of the evolution of AFL during the next 5 to 7 years should reflect the NBP roll out which is expected to commence at the end of 2016. In this respect, the outcome of the NBP procurement process and its timing will not be known definitively during ComReg's consultation process and therefore neither will its exact impact and the timing of any impact, on implementation of an AFL USO. At this stage of the NBP process it is not yet clear whether any new arrangements pursuant to the NBP could effectively fulfil the delivery of basic telephony services (including affordable voice), required under US, in the intervention areas. In addition provision of US outside the intervention areas has to continue to be considered. One consideration is whether VoIP would be adequate for meeting USO requirements and ComReg has already stated that in principle a managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL US⁵⁴. Another consideration is whether end users will be able to avail of voice services at an affordable price. Before forming a view on these considerations, ComReg will need to understand precisely the nature and capabilities of the new network and the associated contractual conditions. Nevertheless, as the NBP roll out progresses, ComReg with TERA will, during this process, consider further information as it becomes available. In this respect, TERA's report broadly outlines three areas including "NBP areas" when assessing the potential impact of market developments on AFL US and the associated components. ComReg will liaise with the DCENR to ensure relevant information regarding the NBP which potentially impacts on the AFL US (if an AFL USO is considered to be required) can be considered by ComReg.

⁵² http://www.dcenr.gov.ie/communications/en-ie/Pages/Consultation/NBP-Strategy-Intervention-Public-Consultation.aspx

⁵³ http://www.dcenr.gov.ie/news-and-media/en-ie/Pages/PressRelease/Minister-Alex-White-expects-85-of-population-to-have-high-speed-broadband-access-in-2018.aspx

⁵⁴ ComReg Document No 15/57- National Broadband Plan, Response to Call for Input http://www.comreg.ie/_fileupload/publications/ComReg1557.pdf

118ComReg will also need to consider the impact of the new NBP infrastructure on the implementation of any AFL USO once it has been fully completed, possibly post 2020. The expected scenario post NBP rollout means that in principle and technically all end users will have ability to connect to a public communications network at a fixed location. In principle, in relation to AFL and US, a managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL US if provided at an affordable price. On this basis, it is conceivable that any necessary AFL ('access to a communications network' as well as adequate voice service at an affordable price (managed VoIP for example)) could be delivered over the high capacity broadband infrastructure rolled out under the NBP, causing the requirement, if decided, for any USO for AFL to be re-examined.

3.5 Supply Trend Summary

- 119ComReg notes TERA's analysis and it is clear from this and the above 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.
- 120 There are several types of infrastructure which are in principle capable of providing AFL, in this respect a detailed analysis of the most appropriate AFL technologies is set out in section 6 below.
- 121 However, as the different infrastructures have different coverage, the competitive constraints with respect to AFL vary across the country. In section 3.2.3 of the TERA Report it has therefore identified 3 main competitive areas, namely:
 - Areas with greater market-driven infrastructure-based competition including from Vodafone/ESB/SIRO or UPC, (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 Eircom faces no competition from any fixed infrastructure but could face competition from mobile networks providing fixed access solutions ("Eircom only" areas) especially forward looking.

- 122 The new high capacity NBP infrastructure may not be fully completed until at least 2020. Thus, in respect of the areas broadly defined in the TERA report, the dynamic in the NBP areas, in TERA's view, is likely to be similar to the "Eircom only" areas during the next 5 years. However, for the purposes of assessing the potential impact of trends and market developments on any implementation of AFL USO, ComReg in this consultation and in the TERA Report separately analysed these broad areas.
- 123It is important to note that these 3 areas are 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 aiming at defining Larger Exchange Areas (LEA) conducted in ComReg Document No. 11/72 and in ComReg Document No. 13/14 in the context of the obligation not to unreasonably bundle imposed on Eircom in the Retail Fixed Narrowband Access Markets (LEA have been defined in the specific context of the implementation of a margin squeeze test). In these documents, 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 since 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.

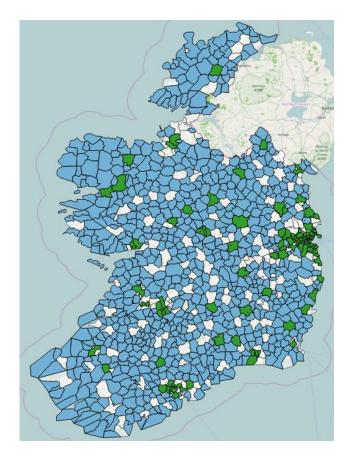


Figure 3 (Source TERA Report - 3 different competitive environments - location and number of lines)

Area	Legend	Active PSTN lines	%
Market driven infrastructure-based competition (Vodafone/ESB, UPC)		590k - 720k	45% - 55%
NBP		330k - 460k	25% - 35%
Eircom Only		195k - 330k	15% - 25%
	TOTAL	1,310k	

Table 1: Source: TERA Consultants analysis

- 124 The TERA Report notes that the map and table above do not provide a completely accurate view of the coverage of the different network infrastructures in place in Ireland as only publicly available information was available to TERA. However, for the purposes of this assessment, TERA was of the view the geographic assessment conducted was broadly sufficient.
- 125Later on, in assessing the need for an AFL USO, ComReg will consider the impact of not imposing a USO on each of these geographic areas.
- Q. 3 Do you agree with ComReg and TERAs review of the relevant supply side trends? Please give reasons to support your view.
- Q. 4 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. European Context

4.1 European Commission Review

- 126 The European Commission is legally obliged to periodically review the scope of the universal service.⁵⁵ The last European Commission Communication reporting on the scope of the universal service was published in November 2011 concluding that, at that point in time, there was no need to change the scope of the universal service at EU level.
- 127 ComReg notes that as part of the Digital Single Market Review⁵⁶, the European Commission is expected to deliberate on the role of the universal service *inter alia* on whether or not, and how, to change the scope of the universal service at EU level. The outcome of the European Commission's review and amendment, as relevant, of the legislative framework in the coming years in this regard will not be known in the immediate future. Consequently, ComReg will consider further information as it becomes available and with respect to a long-term implementation of Ireland's USO if so decided.

4.2 Benchmarking

128 Even with a common regulatory framework, USO is implemented in different ways and for different services throughout the EU depending on national circumstances. The current scope of the USO consists of an AFL component which is required to support voice, FIA and facsimile, and access to other services including public payphones, directory services and measures for disabled end-users. Section 7 of the TERA Report contains a detailed benchmark of European USO practices and details the approaches taken to the various components of the AFL USO. This benchmark contains a review of the implementation of AFL USO for 17 European countries. Not only existing or past AFL USO (static review) but recent changes in AFL USO (dynamic review) have been identified. ComReg has fully considered this benchmarking, a summary of which is set out below.

⁵⁵ In accordance with Article 15 of the Universal Service Directive

⁵⁶ http://ec.europa.eu/priorities/digital-single-market/index_en.htm

- 129The TERA Report benchmark, is focused on 12 Member States (Sweden, Spain, Italy, France, the UK, Poland, Portugal, Slovenia, Greece, Romania, Belgium, and the Czech Republic) plus Switzerland. In general, these countries are large countries with relatively low population density and with similar level of development as Ireland⁵⁷. The benchmark is extended to other European countries (Latvia, Lithuania, Netherlands and Austria) where relevant implementations of the AFL USO are reported but with a lower level of detail.
- 130ComReg notes, that the scope of universal services for which a USP has been designated varies by country, however in the vast majority of countries where a USP has been designated, AFL is included in the scope. In countries such as Finland and UK there is more than one provider designated as the USP, however in Germany and Luxembourg there is no USP designated for any element of the USO.
- 131As set out above, the TERA Report details the approaches taken to the various components of the AFL USO, such as GAP, affordability, QoS and FIA across the EU.
- 132 The analysis shows that in relation to the reasonableness of requests for connection, a number of European countries have imposed a monetary threshold while availability of mobile services are a consideration in other countries.
- 133With respect to FIA, a number of countries have also set minimum data rates, however these rates for some countries are up to 1Mbps, which is substantially higher than the 28.8kbps set in Ireland.
- 134 Another element of the AFL USO which is also imposed in the majority of countries is GAP. However TERA's analysis shows that for densely populated countries this is often not the case.
- 135With respect to measures to control expenditure, almost all countries reviewed in the analysis require the USO to provide adequate measures to control expenditure. All countries studied were found to continue to impose QoS targets.
- 136It is clear that various approaches have been taken in respect of AFL USO. Notwithstanding this, the majority of countries still impose an AFL USO. Indeed, many countries, such as the UK, adopt a policy similar to that currently adopted in Ireland, that is, AFL is to be provided subject to certain conditions.

⁵⁷ Of the EU15, two countries are not described: Denmark and Finland. In Finland, a recent amendment in the national legislation provides FIA with a data-rate of 1 Mbps.

- 137ComReg also notes that with respect to the technology used, in several EU countries such as Portugal, Spain, Czech Republic and Romania, wireless technologies are used by the USP as a compliment to traditional wired technologies to provide AFL.
- Q. 5 In your opinion are there other relevant factors in relation to the European context or benchmarking which ComReg should consider? Please give reasons to support your view.

5. Review of impact of not imposing AFL USOs

- 138 This section considers whether there is a need to sustain the USO for AFL in the whole or parts of Ireland post 31 December 2015. In this respect it considers the market trends as set out in section 3 and their likely evolution, the NBP developments and other relevant factors including developments in relation to USO elsewhere in Europe which may influence and determine the continued need, if any, for the AFL USO.
- 139In the context of the continued demand for fixed telephone services, in particular standalone fixed telephony and the provisions of the Universal Service Regulations requiring the basic right of end-users to AFL to be ensured by the regulator, ComReg must examine if AFL would continue to be delivered absent a USO.
- 140Key to this is the assessment is the possible and likely scenarios absent any AFL USO and whether such scenarios would adequately address, for at least the next 5 and possibly up to 7 years, the necessary requirements, set out in the Universal Service Regulations, regarding AFL.
- 141 The scenario(s) examined below explore the likely impact on the various components of AFL if there was no AFL USO, including Reasonable access requests, QoS, affordability, FIA and other possible universal service obligations such as in relation to the Terms and Conditions of Service.
- 142It is important to note that 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. Therefore, ComReg is of the preliminary view that the AFL USO may continue to play an important role.
- 143The universal service ensures the provision of basic telecommunication services throughout the State, particularly in areas of the State (such as rural or sparsely populated areas) where the market might otherwise not deliver these services. Thus, the universal service contributes to social and economic inclusiveness and cohesiveness in society. It is ComReg's 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.

- 144 The existing AFL USO will remain in force until 31 December 2015. Absent any AFL USO after that date, there may be a risk that the market would not deliver basic AFL services (as required by the Universal Service Regulations), at all or not at an affordable price or appropriate quality to certain areas of the State (such as rural or sparsely populated areas) and / or to less economic customers distributed nationally.
- 145 This section therefore assesses, in light of supply and demand trends, the possible impact of the removal of the various components of the AFL USO on competition, consumers and Eircom.
- 146Section 3.1 above and Section 3.1 of the TERA Report, give an overview of the demand trends in Ireland. In summary ComReg has noted:
 - Growing attractiveness and take up of bundled services leading to increased fixed voice subscriptions;
 - A decline in retail PSTN retail voice traffic;
 - Declining use of narrowband internet services; and
 - Increased use of VoIP services.
- 147 In addition section 3.2 of the TERA Report considers the potential different circumstances that may emerge in various geographic locations inter alia deployment of NGA, FTTH networks, NBP developments, and consumer demand changes. Such developments may impact the requirement or not for an AFL USO in certain areas, although the need for a USO may continue to arise nationally for example, including in relation to affordability of services.
- 148As per the TERA Report, and as set out above, having considered the main players in the market, together with the deployment of the NBP and next generation mobile/wireless technologies, it appears that three main geographic areas can be identified in the country, arising from the different competitive pressures in these areas. The areas are:
 - Market-driven infrastructure-based competitive areas where Eircom is likely to adapt its behaviour to compete with other infrastructures
 - NBP areas where a high capacity broadband access network is envisaged to become available through Government subsidies
 - Eircom only areas where Eircom faces no competition from any fixed infrastructure networks.

- 149 In considering the counterfactual, i.e. what might happen in the market if the AFL USO was removed, the impact in each of these 3 geographic areas has been considered by TERA. This allows ComReg to distinguish between possible outcomes absent an AFL USO in various geographic locations including locations with varied technological and competitive conditions. As explained in the TERA Report because Eircom is currently designated as the USP until 31st December 2015, the counterfactual focuses on how Eircom could behave and the impact of that behaviour on end users of AFL, absent any AFL USO.
- 150 Furthermore, the timelines for the deployment of competing infrastructure has been considered, for example SIRO is currently at an early stage of deployment and the roll out of the NBP is planned to take until 2020.
- 151 Absent an AFL USO the scenarios distinguish between possible outcomes in the broadly identified geographic locations with varied technological and competitive conditions.
- 152As technology and competition develops and as consumer needs evolve, it is ComReg's duty to ensure that the AFL USO continues to meet consumers' basic telephony needs, if they are not already being met by the market.

5.1 **Provision of Connection/ Reasonable Request**

- 153In accordance with ComReg Decision D09/05, Eircom is required to 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 shall be the standard connection charge. That is, at present requests for connections which involve expenditure by Eircom in excess of €7,000 are considered reasonable if the applicant agrees to pay the standard connection charge plus incremental costs above €7,000.
- 154Over time, the number of customers impacted by this threshold, will change as inflation and other factors alter the amount of infrastructure that can be provided for a given amount of money.
- 155 In the situation where the AFL USO is removed, the threshold for determining whether a request for connection is reasonable would no longer be of relevance, and the decision to provide a connection would be at Eircom's sole discretion. As set out in the TERA Report, in this case, Eircom, acting as a profit-maximising operator, is likely to try to maximise profits by comparing the cost of connecting a customer to its estimated future revenues before deciding whether or not to connect the customer.

- 156The TERA Report considers the possible lifetime or period over which Eircom can expect future revenues. As the period over which Eircom could expect future revenues depends on the competitive pressure in the areas, section 4.3 of the TERA Report separately considers 3 different areas
 - In market-driven infrastructure-based competition areas, consumers are more accustomed to move from one supplier to another and the expected customer lifetime is circa 4 years⁵⁸;
 - In NBP areas, this period of time over which Eircom can expect future revenues depends on when the NBP network will be deployed and when customers will migrate to the NBP. This could be estimated at minimum 4 years;
 - In "Eircom only" areas where Eircom faces no competition from any fixed infrastructure networks, a maximum 20 years period can be considered.
- 157 The 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 Eircom 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, Eircom would be unlikely to choose to connect customers if the connection cost was above €700 (€2,000 for Eircom only areas). However, it also notes that the decision to connect or not might be mitigated by the lost opportunity to sell further products to the customer such as broadband and calls.
- 158As a consequence, in the worst case scenario, having assessed data provided by Eircom, the TERA Report estimates that up to ≫ new customers might not be connected by Eircom over a 5 year period. In addition, existing customers who are considered by Eircom as uneconomic may also be at risk of being disconnected. This aspect is also considered under GAP and affordability aspects.
- 159However, absent a USO, Eircom may choose 3G or 4G wireless technologies to connect some or all of these customers. There is however a risk, that as 3G and 4G networks do not have 100% coverage and considering indoor coverage, a number of these customers may not be connected.

⁵⁸ 110610_USO_eircom_Response - 13D request.pdf

- 160 On the other hand, ComReg notes that due to the current national geographic scope of the USO, the addition of new consumers to the network may result in additional ubiquity benefits, which derive from the basis that a proportion of customers who move from uneconomic to economic areas are likely to remain customers of the USP despite moving into an area which has alternative providers. Therefore, there may still be an incentive for Eircom to connect at least some of these customers, but this is cannot be guaranteed.
- 161 Furthermore, each additional consumer added to the network increases the value of the service to other users of the network. However the actual benefit of this network externality may be difficult to determine and hence may not be considered by Eircom when deciding whether to connect a customer in the absence of a USO.
- 162ComReg notes that, absent a USO, if Eircom chooses to connect customers, it is difficult to determine what the cost to consumers of the connection would be. It is likely that those consumers who would be most affected are those located in more remote rural areas. It is likely that mobile networks may not have coverage, or sufficient indoor coverage in these areas, and hence the impact on these consumers is likely to be substantial. It is also possible that some consumers in urban areas may also not be addressed, as is demonstrated by the existence of uneconomic customers in economic areas, in Eircom's net cost funding applications.
- 163Conversely, absent the USO, Eircom would potentially benefit from reduced costs, due to a reduction in higher cost connections. This in turn may reduce or remove any possible net cost application.

5.2 Voice, facsimile and FIA

- 164As set out above, AFL must be capable of supporting voice, facsimile and FIA. The current service requirement of FIA is that data communications which are provided at a specified data rate are sufficient to permit FIA. In accordance with ComReg Decision D9/05, the USP is currently required to adopt 28.8kbps as a reasonable minimum data rate.
- 165Alternative technologies are available which are capable of providing voice telephony but not of achieving FIA at the minimum speeds currently specified by ComReg. The majority of connections to the network are copper connections, however Eircom also uses other technologies for example FCS which is not capable of supporting FIA, but is capable of supporting voice and facsimile.

- 166 In accordance with the current service guidelines ComReg has specified a target that 94% of installed telephone lines must be capable of a reasonable minimum data rate of 28.8kbits/s.
- 167 As outlined above, ComReg's Q1 quarterly key data report in 2015 indicated there were 1,706,106 broadband subscriptions in Ireland. This is a decrease of 0.2% since Q4 2014, but an increase of 0.3% since Q1 2014. The estimated fixed broadband household penetration rate as of Q1 2015 was 65.0%.

168The TERA Report outlines that:

- Where Eircom's narrowband Internet access platform exists, Eircom is likely to maintain this platform over the next 5 years;
- Eircom currently provides a data rate of 28.8 kbps to more than 94% of installed telephone lines.
- Absent any AFL USO, while Eircom is likely to maintain its voice, facsimile and dial-up internet core platforms, it is also likely that Eircom would not use its copper access network in some areas because the copper access network could be too expensive to maintain.
- 169As a consequence, in TERA's view, absent any AFL USO, it is possible that the number of customers affected could be substantial if it is considered that unprofitable customers as measured by Eircom in its USF net cost model are a good proxy for these customers. In Eircom's USF model, around ‰ customers have been identified as unprofitable.
- 170 The TERA Report notes that these customers may be able to get FIA through alternative infrastructures, such as those set out previously in Section 3.3. However on the other hand, due for example to limited network coverage (UPC or SIRO or 3G and 4G indoor coverage) or possibly affordability issues that may arise for some customers, a certain cohort could remain without FIA in the absence of a USO. Although it is possible that Eircom's current narrowband Internet access customers would still be able to get FIA, ComReg is concerned that there is a chance of the removal of FIA minimum data rates (and targets) may result in a number of connections which are currently capable of FIA being replaced, for example in the event of a fault on the line, with connections which do not have the same capability. In addition, it is likely that for certain new customers other technologies such as FCS which are not capable of FIA would be rolled out.
- 171 Even in the context of the current regulatory obligations, and until the NBP is fully rolled out, some consumers are still likely to be unable to get FIA.

- 172ComReg notes that in areas where there is infrastructure based competition the impact of the removal of the FIA component of the USO is less likely to have an impact on consumers, as they are already able to get better internet speeds, although this would be conditional on affordability.
- 173On the other hand, those customers in Eircom only areas are likely to be most impacted absent a FIA obligation. These customers may not have or continue to have a connection capable of the current FIA rate. Additionally, ComReg notes the TERA Report which estimates that at the current FIA rate of 28.8kbps it takes almost 7.5 minutes to download a webpage.

5.3 Affordability

- 174 The Universal Service Regulations provide that ComReg can require that the USP adheres to an obligation with a view to maintaining affordability of universal services. For example, the Universal Service Regulations provide that ComReg may require a designated undertaking to provide special tariff options and may apply common tariffs including geographical averaging throughout the State, in the light of national conditions.
- 175As set out above, Eircom is also subject to a RPC. However, this is imposed in the context of its designation with significant market power on the RFVA market. Hence, the removal of the USO designation would not directly affect this complementary safeguard on consumer retail line rental prices.
- 176 With respect to affordability, under its current USO designation Eircom must apply geographically average prices (GAP) throughout the State for AFL. GAP means that charges are the same for all subscribers throughout the State irrespective of their geographic location. GAP 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.

- 177 In order to assess any impact of ceasing the GAP USO, section 4.5.2 of the TERA Report looks at possible constraints on Eircom's retail line rental price and incentives for Eircom to increase line rental. In this respect, TERA's Report considers at a high level a range of factors. One consideration is the presence of the RPC and consumers' potential sensitivity to fixed telephony price changes. Another consideration is the impact of Eircom's obligation to provide wholesale line rental (SB-WLR), and in this regard the current ComReg proposition⁵⁹ to move from a retail minus price to a cost orientated SB-WLR price. It is also important to take into account competitor offerings for example the fact that UPC does not currently offer any standalone AFL product and other potential developments including the NBP. The TERA Report notes that outside market-driven infrastructure-based competition areas, competitive constraints are relatively lower. It notes "Wireless technologies can generate constraints on the line rental price despite the lower level of substitutability between fixed and mobile services. Looking forward constraints generated by wireless technologies are likely to increase (thanks to coverage extension, QoS improvements, development of fixed wireless technologies addressing indoor coverage issues etc.). The NBP high capacity broadband network may exert some competitive pressures in the long term once fully rolled out but not in the short to medium term. In any case, it is known whether voice retail services could or would be provided over the NBP network and whether prices will be affordable in respect of universal service".
- 178Having considered these factors TERA's Report suggests that both customers' price sensitivity and competition combine to somewhat constrain Eircom's ability to increase the line rental price particularly for customers who take up bundled voice increasing demand and supply of bundled offers nationally. However TERA found *"outside market-driven infrastructure-based competition areas,....,,, competitive constraints on line rental from bundles are lower....customers can only move to the NBP network (which is not likely to be fully available in the next 5 years and for which it is not yet known whether AFL will be available and prices affordable), to mobile and fixed wireless networks (which is not currently an effective substitute) and to OAOs reselling Eircom's line rental product relying on SB-WLR".*
- 179Absent a GAP USO, the TERA Report highlights that Eircom could behave differently in the different areas identified in the TERA Report, depending on the relative level of competition and whether this was likely to be sufficient price constrained by other innovative services. Therefore, in the context of affordability, any impact on consumers is likely to vary depending on the area within which they are located and the pricing strategy pursued by operators.

⁵⁹ ComReg Document 15/67 "Consultation on current generation wholesale access services", 3rd July 2015

- 180 For example, TERA found, in market-driven infrastructure-based competition areas, "absent any GAP USO, Eircom may wish / be forced (in order to remain competitive) to maintain or decrease its line rental price like it did through the use of a promotional discount for SB-WLR in respect of certain bundled offers". There is no similar evidence of a competitive constraint for stand-alone voice services.
- 181TERA found that in the Eircom only areas, although infrastructure based competition is lower, Eircom could also possibly be somewhat constrained by customers' price sensitivity. However, TERA highlight that the outcome of the consultation on Eircom's Wholesale Access Services⁶⁰ is relevant here as *"If the current regime is kept (retail-minus), Eircom will have much greater incentives to increase its retail line rental compared to a situation where SB-WLR becomes cost oriented*".
- 182Furthermore, the TERA Report found that in NBP areas the situation in relation to consumer price sensitivity and competition is likely to be broadly similar to the Eircom only areas at least over the next 5 years.
- 183Therefore, the TERA Report suggests on balance that "absent any GAP USO and despite existing constraints on the retail line rental price, it cannot be excluded that Eircom may wish to increase prices in specific areas where constraints are yet insufficient or relatively less, such as areas with no wireless coverage, which could exclude people from AFL. Even in areas with wireless coverage, the absence of fixed voice offers in the market based on wireless networks means that an increase in prices cannot also be excluded".
- 184 If the obligation to provide GAP for AFL is removed, it may negatively affect consumers, particularly those in Eircom only areas who may experience increases or no decreases in telephony access prices. These customers are unlikely to have an alternative to easily switch to should Eircom increase the retail line rental price or fixed telephony prices in general. A similar situation could possibly arise for those customers in NBP areas, at least during the roll out phase of the new infrastructure over the next (circa) 5 years.
- 185Consumers in market-driven infrastructure-based competition areas may benefit from decreases in access prices however, it is likely that those who would be most (negatively) affected are those located in more rural areas.

⁶⁰ http://www.comreg.ie/_fileupload/publications/ComReg1567.pdf

5.4 Quality of Service

- 186Eircom as the AFL USP must also comply with the performance targets in relation to AFL as set out in ComReg Decision D02/08.⁶¹ In accordance with the obligations in respect of QoS, established in ComReg 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 and fault repair times. ComReg has also established PIP 3 in respect of QOS.
- 187The TERA Report analysed Eircom's past behaviour with respect to compliance with specified QoS performance targets and also considered Eircom's possible future behaviour absent a USO and USO QoS, assuming it would act as a profit maximising operator.
- 188TERA found that, Eircom's incentives to maintain an adequate level of QoS are different across the country:
 - In market-driven infrastructure-based competition areas, Eircom is likely to need to maintain / improve its QoS to be able to compete.
 - In NBP areas, two situations can be envisaged:
 - If Eircom wins the NBP bid, Eircom may not want to improve QoS in these areas to facilitate migration from copper to the NGA infrastructure;
 - If Eircom 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 "Eircom only" areas, Eircom may have lower incentives to invest to maintain QoS. Competition from mobile and wireless technologies may mitigate this risk.
- 189The TERA Report looks at whether Eircom has financial incentives to invest in its network to reduce the number of faults. In doing this TERA looked at the costs of removing and repairing faults together with planned investment in the coming years. It found that *"acting a profit-maximising operator, Eircom 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"*.
- 190The TERA Report also notes that deterioration in the level of QoS would likely be significant and that this deterioration also affects OAOs relying on Eircom's copper network (with SB-WLR or with ULMP).

⁶¹ ComReg also established a "Performance Improvement Programme" (PIP) which sets out the PIP targets and the financial consequences of a breach of annual performance improvement targets. The current "PIP3" agreement relates to the period July 2014 – December 2015.

- 191 The TERA Report assessed the likely impact on the different geographic areas of the removal of the USO. It 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 \gg (1 fault every \gg years) in 2014;
 - The LFI in NBP areas is \gg (1 fault every \gg years) in 2014.
- 192 However, the TERA Report also notes that the "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".
- 193 In this respect, The 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.*"
- 194 Other QoS aspects such as fault repair times and investment were analysed also in the 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.
- 195 It was noted that the USO QoS Targets and PIP Targets are set on a national basis and Eircom 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.
- 196The TERA Report therefore concludes that "in the absence of QoS AFL USOs, Eircom may tend to favour areas with infrastructure-based competition even more than that and ensure shorter repair times in these areas as end-users are more likely to switch supplier in case of long faults."
- 197 When considering access network investment, The TERA Report ascertained 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."

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

- 198 In summary, it is anticipated that absent any AFL USO in relation to which QoS performance targets are imposed on the USP, Eircom 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. Having analysed QoS performance over the past few years, The 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;
 - 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."

5.5 Selective Call Barring, Terms and Conditions and other aspects.

- 199As set out above, there are other aspects that USPs may be required to provide, including Itemised Billing and Call Barring facilities. However, ComReg has already imposed obligations on all undertakings in respect of Itemised Billing and Billing Mediums⁶³ and ComReg is currently consulting on Selective Call Barring⁶⁴, also in respect of all undertakings. Therefore, these aspects will not be considered as part of this work stream.
- 200 Additionally, under the Universal Service Regulations the USP may also be required to allow for phased payment of connections and to maintain and publish a disconnection policy in relation to non-payment of bills.
- 201 ComReg notes that in recent years Eircom has maintained a connection promotion whereby connection charges were set to €0. Therefore no customer needed to rely on the phased payment plan.
- 202That said, the TERA Report concluded that in the absence of the AFL USO there is a risk that services such as call barring (in the absence of an obligation being imposed as a result of the current consultation process) and the disconnection policy, would not be maintained by Eircom.

⁶³ ComReg Document No 13/52 and D08/13, "Consumer Bills and Billing Mediums", 6th June 2013

⁶⁴ ComReg Document No 15/31 "Preliminary Consultation- Selective Call Barring", 27th March 2015

203In addition, without a USO, ComReg may not be able to specify requirements in respect of the terms and conditions relating to the provision of AFL to subscribers, if it deemed this appropriate.

5.6 ComReg's preliminary view regarding the need for an AFL USO

- 204 Having considered each of the various AFL components, ComReg is of the preliminary view that absent an AFL USO, certain groups of customers may not have access to an electronic communications network and voice services at a fixed location at an affordable price and delivered with a specified quality.
- 205As set out above, over the last number of years there has been a gradual decline in retail PSTN Fixed Voice Access subscriptions and associated retail voice traffic.
- 206ComReg recognises that the AFL USO needs to evolve with the changing digital environment. Technological and market developments indicate that users' main interests may be shifting with broadband and mobile solutions often in bundles are increasingly in demand. Take up of broadband has been increasing, dial-up internet is now used by only a very small number of consumers, bundled voice and broadband is increasingly driving some migration to VoIP. In addition, there is some substitution of mobile for fixed voice telephony. As a result the question emerges as to how these trends should be reflected in USO policy and what this may mean for any future AFL USO.
- 207 However, as set out above, 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 and at an affordable price and appropriate quality. As technology and competition develops, and as consumer needs evolve, it is ComReg's 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.
- 208The TERA Report found that, even assuming that in some cases where wireless technologies could be used to connect customers, there is a risk that, absent an AFL USO, some reasonable requests for connection may not be met and existing connections which are uneconomic may also be affected. It also found that some customers could be connected on the basis of alternative technologies if available, however there is a risk in some cases that alternative technologies may not be available and that the alternative technologies that are available may not able to provide FIA. Nevertheless, in the future with improved mobile network coverage this risk will lower.

- 209 The TERA Report also set out that it cannot be excluded that Eircom would increase line rental prices, especially for standalone voice access customers. In coming to this view TERA noted that if SB-WLR was to be cost orientated, operators using this could generate an additional constraint. Furthermore, the TERA Report determined absent the USO it is likely that QoS would deteriorate, especially in Eircom only and NBP areas. Table 12 of the TERA Report summarises its conclusion of the likely impact of the scenario absent AFL USOs. It identifies a significant number of customers which could be affected (in different ways) by the absence of AFL USO, in a worst case scenario.
- 210 Having considered the TERA Report and other information available to it in respect of the various components of the current AFL USO, ComReg is of the preliminary view that absent any AFL USO and at least until the NBP is rolled out, there is a real risk that the basic telephony service that ComReg is required to ensure may not be delivered to all customers by any undertaking or may not be delivered at an affordable price or acceptable quality and therefore could not be ensured by ComReg. For example:
 - The cost of provision of a service to certain areas/customers is more expensive than others and without a USO it is possible that no undertaking would choose to deliver the basic AFL service to those areas/customers. Even if it were delivered it may not be at an acceptable quality.
 - Certain customer groups may not be an attractive commercial proposition and without a USO, it is possible that no undertaking would choose to offer the basic AFL service to those customers.
 - In light of the points above, without a USO for geographically averaged prices the basic service may be provided, but not at an affordable price.
- 211 For the above reasons, ComReg may need to impose some kind of AFL USO(s) to fulfil its responsibilities and to ensure consumer rights to universal AFL services. As set out in Section 3 above, demand for fixed telephony in the short to medium term continues to be significant. Fixed voice subscriptions have been increasing quarter on quarter since Q1 2011. 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.

- 212However, a significant segment of end-users do not currently have/utilise a fixed broadband connection and, for these end-users, broadband with managed VoIP is unlikely to provide an alternative for their basic fixed telephony service at least until the NBP is rolled out. In this context, a potential set of "vulnerable" or "captive" customers exists in Ireland –approximately 47% of fixed line subscriptions are single play.
- 213Survey results indicate that certain customer types such as elderly people, family households and businesses, remain more attached to fixed access services. This suggests that non-price factors may be important drivers of the demand for FVA for these customers thereby limiting the extent to which they would switch to alternative networks.
- 214ComReg also notes that by virtue of Eircom's universal service funding applications there are fixed voice customers which Eircom may choose not to serve absent a USO. Furthermore, ComReg notes that, following the call for expressions of interest in being a USP in ComReg Document 14/48 in 2014, no expressions of interest were received, therefore indicating an absence of other service providers willing or able to provide AFL to every customer.
- 215ComReg is aware that in time the market (and the NBP intervention) may deliver universal voice AFL in its own right without the need for the designation of a USP, however, for the above reasons, a certain set of customers may be negatively affected by removal of the AFL USO at this time. ComReg is of the preliminary view that there is a continued need for some kind of AFL USO post 31 December 2015.
 - Q. 6 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.
 - Q. 7 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.
 - Q. 8 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.

6. AFL USO Technology

- 216The provision of a quality connection and service at a fixed location is clearly important to Irish consumers. It allows people to keep in contact with family and friends and provides other services, such as, e-mail and internet access as well as access to new forms of communication, ways of doing business and access to emergency services. Its availability is therefore expected by all.
- 217The current scope of the AFL USO was designed with a conventional telecommunications environment of fixed voice-based networks in mind. However, ComReg recognises that any AFL USO needs to evolve as appropriate with a rapidly advancing digital environment. As set out in Chapter 3, technological and market developments indicate that users' main interests are shifting with broadband and mobile solutions increasingly in demand, as well as fixed connections. Take up of broadband is increasing and dial-up internet is now almost obsolete. The prevalence of bundled voice and broadband services appear to be increasing subscriber migration to VoIP as well as some substitution away from the fixed line phone to mobile for voice telephony.
- 218In response to ComReg Document 14/48 Part II a number of respondents raised issues relating to the technology used to provide AFL as set out below
- 219 Eircom requested: "ComReg to clarify its position with regard to the appropriateness of mobile services to satisfy the AFL USO. ComReg states in the Part 2 consultation (para. 5.76) "While current mobile services accessed by a mobile handset only do not meet the requirements for access at a fixed location, AFL can in principle be provided by a mobile ECS provider." It would be helpful if ComReg could set out the reasons why current mobile services do not meet the requirements for AFL. As we highlighted in our response to Part 1, "It is clear that there are only 5% of households in Ireland that are reliant on fixed access, whereas 41% of Irish households are reliant on mobile access. This seriously calls into question ComReg's continued focus on the eircom fixed network for the provision of basic telephony services in the context of universal service."
- 220 UPC Ireland noted that it: "welcomes the acknowledgment by ComReg that the provision of USO access at a fixed location and publicly available telephone service could be provided by means other than fixed networks. However, UPC Ireland remains concerned that ComReg maintains an implicit assumption of USO provision by fixed networks only."
- 221 ALTO in response to Part 1 of ComReg Document 14/48 was of the view that it is possible to provide AFL USO by means other than fixed network technologies, especially where the cost of the adopted solution could be less than the current fixed network solutions.

222Magnet believed that it is necessary for the designated USP to look at alternative infrastructures that are capable of supplying fixed telephony other than a PTSN copper line.

6.1 **Principle of Technological Neutrality**

- 223ComReg notes that the requirement in the Universal Service Directive and Universal Service Regulations (which transpose the Universal Service Directive) is to provide access at a fixed location. The manner in which this is 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.
- 224 The Universal Service Directive outlines that Member States should not impose constraints on the technical means by which AFL is provided, in particular allowing for the use of wired or wireless technologies, nor should they impose any constraints on which operator(s) provide AFL.⁶⁵ Further, the Universal Service Regulations requires that no undertaking is in principle excluded from being designated.⁶⁶
- 225 Accordingly, the obligation to provide AFL is technologically neutral. This means that alternative technologies could be used to deliver this obligation. In this respect, 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 customer premises equipment, etc. It is for ComReg to determine what technologies are, in fact, capable or not capable of delivering AFL.
- 226ComReg is therefore of the preliminary view that it is appropriate to review 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. This section therefore seeks views on the technological scope of the obligation to provide AFL (if it is deemed necessary to impose an AFL USO post December 2015).
- 227Currently, Eircom must, as USP, provide universal 'connection and access to telephone services at a fixed location' to satisfy the provision of the AFL USO, amongst other USO obligations until 31 December 2015. As set out previously, any connection must be capable of supporting:
 - Local, national and international telephone calls;

⁶⁵ Recital 8 to the Universal Service Directive.

⁶⁶ Regulation 7(3) of the Universal Service Regulations.

- Facsimile (fax) communications; and
- Data communications at data rates that are sufficient to permit functional internet access (the USP is currently required to adopt 28.8kbps as a reasonable minimum data rate).
- 228 The specific obligation of "access at fixed location" is intended to refer to the enduser's primary location or residence and not to a requirement for providers of electronic communications services ("ECS") to use fixed technology. ComReg considers 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.
- 229In this respect there are alternative access technologies by which an AFL type service can in principle be supplied which can be grouped as follows:
 - Narrowband
 - Mobile
 - Broadband
- 230The following sections detail what ComReg considers to be the relevant functionalities and characteristics of these technologies together with their perceived ability to fulfil a request for AFL.
- 231 Section 5.3 of the TERA Report addresses the question as to which technologies and networks support AFL USO. Table 13 of the same report summarises the technologies and networks which support AFL USO.

6.1.1. Narrowband technology

232One distinctive feature of fixed narrowband access is that the PSTN/ISDN technology provides for functionalities and characteristics which cannot, or not easily, be replicated over other infrastructures. These include certain quality features, security and reliability, independent power supply and the ability to deliver and receive fax messages. These features make the PSTN networks especially suitable for specific applications such as alarm and monitoring systems. The fact that PSTN provides electrical power makes it more robust than other solutions that rely on the normal power network and which then may not function in the event of a power cut.

- 233However ComReg acknowledges that, as the provision of any AFL USO should be technology-neutral, new, or perhaps more cost effective or efficient, technologies may be in principle capable of fulfilling the delivery of AFL.
- 234ComReg notes that in some cases, the cost to connect new customers can be expensive, and as set out above, in some cases internet access speeds available are too low. However, this network currently covers the whole State, and also supports voice, facsimile and FIA.

6.1.2. Mobile technology

- *235*Bearing in mind the technological neutrality requirement provided in the Universal Service Directive, a recent judgment of the European Court of Justice ("ECJ") on 11th June 2015 (in relation to a request for a preliminary ruling by the Belgian courts)⁶⁷ states that the term "at fixed location" should be understood as meaning the opposite to "mobile". The background to the case is that two operators challenged Belgian legislation requiring operators to contribute to the financing of the net cost of services arising from the provision of mobile communication services and internet subscriptions at specific tariff conditions. Following a reference from the national courts, the ECJ confirmed that Article 9 (affordability of tariffs) ⁶⁸ and Article 13 (financing of universal service obligations)⁶⁹ of the Universal Services Directive.
- 236ComReg considers that it is important to note that the judgment related to the application of Articles 9 and 13 of the Universal Service Directive, and not to the meaning of AFL under Article 4 of the Universal Service Directive. Further, the judgement considered what constitutes a universal service, rather than what technology is capable of providing a universal service. ComReg's view is that the ECJ's statement that AFL means the opposite to mobile is not inconsistent with ComReg's previous position that the obligation to provide AFL does not have to be provided using a specific technology. The question for ComReg to consider is

⁶⁷ Case C-1/14 - Request for a preliminary ruling in the proceedings *Base Company NV and Mobistar NV v Ministerraad*, 11th June 2015.

⁶⁸ Article 9 of the Universal Service Directive, in particular Article 9(2), provides *inter alia* that: "*Member States may, in the light of national conditions, require that designated undertakings provide to consumers tariff options or packages which depart from those provided under normal commercial conditions…*"

⁶⁹ Article 13 of the Universal Service Directive, in particular Article 13(1), provides *inter alia* that: "Where, on the basis of the net cost calculation referred to in Article 12, national regulatory authorities find that an undertaking is subject to an unfair burden, Member States shall, upon request from a designated undertaking, decide (a) to introduce a mechanism to compensate that undertaking for the determined net costs under transparent conditions from public funds and/or (b) to share the net cost of universal service obligations between providers of electronic communications networks and services".

whether a particular type of technology is capable of delivering access at a fixed (i.e. not mobile) location.

- 237While current mobile services accessed by a mobile handset only do not, in ComReg's preliminary view meet the requirements for access at a fixed location, AFL can in principle be provided by a mobile ECS provider.
- 238Converged fixed mobile services are available such as Vodafone's 'One Net Express' service provided over its mobile network but with a geographic telephone number associated with a fixed location. This highlights the possibility for a mobile operator to use non-wired or wireless-based network inputs to also provide a FVA type service. Vodafone's One Net Express product is targeted primarily at small-to-medium sized businesses rather than residential consumers⁷⁰.
- 239However, consumer perceptions appear to regard the call quality and reliability of retail fixed voice calls as being close to but slightly better than mobile call quality. Additionally, poor mobile telephone network coverage, including indoors, in some locations can result in a poor call quality or an inability to make calls at all. Moreover, QoS can deteriorate with bad weather conditions.
- 240Nevertheless, (although the cost to connect uncovered areas may be expensive) mobile is a cheaper technology compared to wired technology. Additionally, 3G and 4G supports voice, facsimile and FIA.
- 241 To date, Converged Services do not appear to be widely available and thus may not represent a suitable substitute for a significant set of end-users seeking fixed telephony. For example, the option generally for end users to purchase (technically) integrated fixed and mobile services is not yet available (e.g., home-zone which attributes a geographical telephone number for making and receiving calls in the home-zone and charging lower fixed termination rates).

6.1.3. Broadband technology

242There are a number of suppliers providing voice type services (managed VoIP⁷¹) to end users over a broadband access network. These services are usually provided in a bundle, which may be via cable, fibre, fixed wireless connections or a Digital Subscriber Line (—DSL). Managed VoIP over broadband is a functionally similar service to the traditional PSTN and ISDN based voice service.

⁷⁰ ComReg Document 14/48 at para 5.84.

⁷¹ "Managed" services are provided over a managed network allowing the supplier to retain some control over the quality of the service. Managed VoIP in Ireland includes only services provided by switched licensed operators in the Republic of Ireland and does not include web based services such as Skype and Viber.

- 243 "Unmanaged" services are provided over the networks of third parties and the supplier has very limited control over the quality of the service experienced by the end user. In addition, the end user would also need access to a non-telephone access device e.g., a computer. Customers must access the service via the internet using their own broadband connections.
- 244 Furthermore most of the managed VoIP subscriptions currently active in Ireland are provided over cable and fibre networks as part of a bundle with broadband and television services. A significant segment of end-users do not currently have/utilise a fixed broadband connection and, for that cohort of end-users, broadband with managed VoIP may not provide an alternative for their basic fixed telephony service at least in the short to medium term. ComReg has already stated that in principle a managed VoIP service over a high speed quality network could satisfy the requirements of a voice AFL USO if provided at an affordable price⁷². Broadband technologies can support voice, facsimile and FIA.
- 245 With respect to the NBP infrastructure, in theory this could support voice, facsimile and FIA. It is not yet known whether retail offers will provide voice services at an affordable price. The outcome of the NBP procurement process and thus its exact impact and timing of that impact on any AFL USO, is not known definitively at this time.
 - Q. 9 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.
 - Q. 10 In your opinion are there other factors that ComReg should consider at this time ? Please give reasons to support your view.

⁷² ComReg Document No 15/57- National Broadband Plan, Response to Call for Input <u>http://www.comreg.ie/_fileupload/publications/ComReg1557.pdf</u>

7. Geographical Scope and Duration of any potential Designation of USP

7.1 ComReg's preliminary view regarding the duration for any AFL USO

- 246ComReg is cognisant of the planned NBP which has objectives in relation to the national availability of high capacity broadband in Ireland. These developments may potentially impact on the continued need for any AFL USOs in the whole or parts of Ireland and, if any AFL USOs are deemed to be necessary, the future scope of any AFL USO.
- 247 ComReg is of the preliminary view that there is still a significant demand for fixed telephony services and a risk that market forces alone would not ensure consumer rights, inter alia access to a public communications network at a fixed location and services over that connection as relevant. Accordingly, ComReg needs to ensure that all end users have access to this basic universal service.
- 248 It is ComReg's preliminary view therefore that, in light of market and technological developments, including the planned rollout of the NBP, if it is determined that there is a continued need for an AFL USO in the whole or parts of Ireland post 31 December 2015, it would appear to be most appropriate to designate a USP(s) for the provision of AFL USO(s), to be specified, for the next 5 years and possibly longer.
- 249ComReg envisages that it would need to reconsider any designation after the NBP infrastructure and services rollout is fully completed (possibly post 2020) in order to take into account the full impact of the NBP and any other relevant market and technological developments at that time. It is also conceivable that any individual elements of the USO could be reviewed within this designation period if the circumstances justified it.
- 250 Do you agree or disagree with ComReg's preliminary view that, if it is determined that there is a need for an AFL USO in the whole or parts of Ireland post 31 December 2015, that any subsequent designation of a USP(s) to provide the AFL USO (s) specified should be for a period of at least 5 years and possibly 7 years? Please give reasons to support your view.

7.2 ComReg's preliminary view regarding designation of an AFL USO for the Entire State

- 251 If it is determined that there is a continued need for an AFL USO in the whole or parts of Ireland post 31 December 2015, the Universal Service Regulations require ComReg to designate one, or more, operators to guarantee the provision of the universal services to ensure that the whole of the State is covered⁷³. Different operators (undertakings), or sets of operators, can be designated to provide different elements of the universal service, and/or to cover different parts of the State.
- 252If, as a result of this consultation, ComReg forms the preliminary view that there is a continued need for an AFL USO post 31 December 2015, ComReg must consider the geographical scope of such AFL USO and, in particular, whether or not it would be appropriate to designate an AFL USO to cover the entire State.
- 253In order for ComReg to fully consider designation for specific areas or customers, rather than on a national basis, ComReg has reviewed the analysis as presented in the TERA Report. The TERA Report identified 3 distinct areas, based on the infrastructure in those areas as set out in Section 3.5 above. This analysis highlights areas which would possibly not be served by any operator in the market should the AFL USO not exist. However, it is also possible that even within some areas which are generally well served by infrastructure and services, there is some risk that there may be certain customers who would not be appropriately served in respect of AFL absent an AFL USO.
- 254The TERA report highlighted significant geographic differences in terms of competitive constraints, in terms of network availabilities, network costs etc. It found that some areas are unlikely to be affected absent an AFL USO, while others would be significantly affected.
- 255ComReg remains concerned that absent a USO, affordable AFL at an appropriate quality might not be provided to all or some consumers in the State. ComReg is of the preliminary view that, any designation (if so decided) should, in principle, be for the entire State.

⁷³ Regulation 7(1) of the Universal Service Regulations.

- 256 ComReg is of the view that it is likely to be difficult to identify individual geographical pockets/ areas which would or would not be subject to an AFL USO, where appropriate. As demonstrated in the TERA Report, there are potential issues throughout the country with respect to the provision of AFL. Although in theory, the removal of an AFL USO would likely have less of an impact on consumers in competitive areas, there is a risk that in practice some customers in such areas may not be served, for example including uneconomic customers within economic areas.
- 257The TERA Report recognised that a precise identification of customer groups and/ or an exact definition of areas which may continue to need AFL USOs is almost impossible. It also noted that having national AFL USOs and a national designation of a USP could allow greater flexibility in the design of any AFL USOs and in the management of the obligations that may be placed on the USP(s) for the provision of the AFL USO where relevant. Furthermore, the implementation of GAP if deemed appropriate would be difficult without nation-wide USOs and USPs.
- 258Therefore the TERA Report concluded that "there should be no areas without AFL USOs in the specific context of Ireland at least over the next 5 years and especially as long as the NBP network is not fully deployed. However this does not mean that specific obligations could not be defined differently from one area to another."
- 259At this time, having analysed services or customers that would likely not be served by market forces alone. ComReg remains concerned that appropriate AFL may not be provided in some areas of the State absent a USO. Voice only customers and or uneconomic customers can be distributed nationally. Notwithstanding this, aware that due to different circumstances in different ComReg is locations/circumstances, it may be considered more appropriate to have flexibility and or potentially distinct obligations, depending on the location, e.g. different QoS performance targets depending on, for example, different geographic locations. However, specification of the various obligations that may be placed on the USP(s) for the provision of the AFL USO (if so decided) would be subject to a separate consultation process or processes.
 - Q. 11 Do you agree or disagree with ComReg's preliminary view that, if it is determined that there is a need for an AFL USO in the whole or parts of Ireland post 31 December 2015, any subsequent designation of a USP(s) to provide the AFL USO should be, in principle, for the entire State, allowing for flexibility in respect of individual components as relevant? Please give reasons to support your view.

8. Regulatory Impact Assessment (RIA)

- 260A 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 stakeholders.
- 261 ComReg's approach to RIA is set out in the Guidelines published in August 2007, in ComReg Document No. 07/56 & 07/56a⁷⁴. In conducting this RIA, ComReg takes account of the RIA Guidelines,⁷⁵ adopted under the Government's *Better Regulation* programme.
- 262In relation to universal services, where ComReg is charged with implementing a statutory obligation, it will assess each case individually and determine whether a RIA is necessary and justified, having regard to its degree of discretion and the principles of reasonableness and proportionality.
- 263ComReg must use all reasonable, proportionate measures to promote the interests of citizens by ensuring that citizens have access to universal service as specified in Directive 2002/21/EC⁷⁶.
- 264ComReg's approach to the scope and designation of the provision of the AFL USO is in accordance with the currently applicable legislation.
- 265A RIA should enable ComReg 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. RIAs aim to identify areas where regulation can be reduced.

⁷⁴ ComReg Document No. 07/56 "ComReg's Approach to Regulatory Impact Assessment – Response to Consultation and Guidelines" 10th August 2007 and ComReg Document No. 07/56a "Guidelines on ComReg's Approach to Regulatory Impact Assessment", 10th August 2007.

⁷⁵ http://www.taoiseach.gov.ie/eng/Publications/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf

⁷⁶ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, as amended ("Framework Directive") at Article 8.

- 266A RIA should identify the impact of the various options on stakeholders, on competition and on consumers and also the key risks associated with each option. A RIA therefore increases transparency of decision making and ensures the best possible outcome for stakeholders, consumers and competition.
- 267 At this time the high level options available to ComReg are either to a) decide that there is a continued need for some kind of AFL USO and to impose AFL USO(s) or b) decide that there is no longer a need for an AFL USO and not to impose any AFL USO. For the former option, there is a supplementary issue to be considered as to whether the AFL USO should be put in place for the whole of the State or only in certain geographic areas. If ComReg decides that there is a continued need for any AFL USOs in the whole or parts of the State, ComReg will 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.
- 268 Therefore the specifics in terms of the potential impact on the USP(s) of providing the AFL USO cannot be quantified at this time as the impact will be determined by the specific obligations which may be imposed on the USP(s) should an AFL USO be deemed to be required. That is, 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 consumers 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 this RIA outlines, at a high level, how the two options set out above will impact on stakeholders and chooses the most appropriate means of achieving its aims.

Step 1: Describe the Policy Issue and identify the Objectives

- 269ComReg is reviewing the continued need if any for an AFL USO in the State. In this regard, ComReg's objective is to ensure consumers continue to have access to AFL in the future as relevant to ensure consumer rights.
- 270Eircom was designated as the USP for AFL for the period from July 2014 to 31st December 2015. For the reasons set out above ComReg is of the preliminary view that there will likely be a continued need for an AFL USO throughout the State for the immediate future, for a period of 5-7 years from 1 January 2016.
- 271 ComReg is of the preliminary view that that it must ensure that the universal service for AFL is implemented appropriately as necessary, any future provision of an AFL USO needs to continue to evolve appropriately and align with consumers' changing needs and market developments.

- 272ComReg is of the preliminary view that an AFL USO is necessary to protect consumers there is a risk that all customers who require access at a fixed location may not be provided with, or may not continue to be provided with, such a service at all or at an affordable price and appropriate quality absent an AFL USO with associated obligations on the USP(s). In this respect, ComReg's aim is to ensure that all customers who require a connection at a fixed location and services over that connection can get them at a reasonable price and at an appropriate level of quality.
- 273ComReg is concerned that, although the number of narrowband subscribers has decreased, as the high capacity NBP infrastructure has not yet begun to be rolled out, there may be unacceptable short term implications for some customers if the AFL USO is withdrawn until the NBP is completed.

Step 2: Identify and Describe the Regulatory Options

274ComReg has 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

- 275ComReg is considering the impact of maintaining an AFL USO throughout the State post 31 December 2015. If an AFL USO is maintained, it would ensure that all consumers, regardless of their geographic location would be reasonably entitled to a connection at a fixed location.
- 276 Should it be determined that an AFL USO continues to be required for the next 5-7 years, ComReg will consider which undertaking(s) should be designated with the AFL USO and review the scope of each of the various components of the AFL USO to determine whether these obligations remain necessary. This will be subject to a consultation process or processes at a later date.
- 277 It is important to note that 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.
- 278As technology and competition develops, and as consumer needs evolve, it is ComReg's 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.
- 279 If it is decided that an AFL USO continues to be required, ComReg may decide to designate a single USP for the entire State. Alternatively, different operators (undertakings), or sets of operators, can be designated to provide different elements of the universal service, and/or to cover different parts of the State.

280Therefore, if requiring an AFL USO, ComReg may decide to designate USP(s) for the entire State (Option 1a) or for different geographic areas (Option 1b).

Option 2: Remove the AFL USO Obligation

- 281 ComReg is also considering the impact of not placing 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 consumers may not be adequately served.
- 282Absent 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 customers distributed nationally.
- 283The 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 consumers 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 customers.

Steps 3 & 4: Determine the impacts on stakeholders and competition

284 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. This is set out in the tables below.

Need for AFL USO - Options

Measure Proposed	Impact on Industry		Impact on Consumer	
	Costs	Benefits	Costs/Issues	Benefits
Option 1a Maintain an AFL USO in place for a 5-7 year period for the entire State	Possible net cost on USP, depending on the specific obligations imposed. Irrespective of who the USP(s) is/are, if there is a net cost claimed which is deemed to be an unfair burden on any USP then providers of electronic communications networks and services will be required to contribute to a universal service fund.	Additional customers added to the network potentially benefit all operators The period of designation coincides with the planned completion of the NBP rollout and provides certainty for industry in respect of length of current regime and possible implications for fund issues.		Consumers regardless of their geographic location would be reasonably entitled to a connection and service at a fixed location. Furthermore, each additional consumer 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. Customers may benefit in terms of QoS, connection charges, availability of lines capable of FIA etc., depending on the specific obligations imposed.

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Measure Proposed	Impact on Industry		Impact on Consumer	
	Costs	Benefits	Costs/Issues	Benefits
Option 1b Maintain an AFL USO in place for a 5-7 year period but not covering all geographic areas of the State	Possible net cost on USP, depending on the specific obligations imposed. Net cost may be slightly lower where entire State is not covered. Irrespective of who the USP(s) is/are, if there is a net cost claimed which is deemed to be an unfair burden on any USP then providers of electronic communications networks and services will be required to contribute to a universal service fund	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.	Some areas may not be adequately served depending on the geographic area in which they are located.	Some consumers 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 customers. Some customers may benefit in terms of QoS, connection charges, availability of lines capable of FIA etc., depending on the specific obligations imposed.

Measure Proposed	Impact on Industry		Impact on Consumer	
	Costs	Benefits	Costs/Issues	Benefits
Option 2 Remove the AFL USO	XX	Eircom (as current USP) would potentially benefit from reduced costs, due to a reduction in higher cost connections. Benefit the industry, due to the removal of any possible net cost claim where such a net cost is deemed an unfair burden on the USP.	It is likely that those consumers who would be most affected are those located in more remote rural areas, however certain urban 'uneconomic' customers may also be impacted. Consumers in these areas 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. Consumers may not be able to access services at all or at an affordable price. Some customers 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 consumers in these areas.

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Measure Proposed	Impact on Industry		Impact on Consumer	Impact on Consumer	
	Costs	Benefits	Costs/Issues Benefits		
			Customers may have connections which are not be capable of FIA. Quality of Service may deteriorate to an unacceptable standard in certain geographic areas.		

Step 5: Assess the Impacts and choose the best option.

- 285ComReg is of the preliminary view at this time that there is a continued need for some kind of AFL USO throughout the State post 31 December 2015. Removing the obligation, in ComReg's preliminary view, would not strike a balance between the benefits to any USP(s) or industry with the needs of consumers.
- 286ComReg is of the preliminary view that costs incurred by USP(s) in respect of an AFL obligation would, on balance, be outweighed by the benefits to consumers and hence the possible option to remove all AFL USOs is unlikely to be pursued.
- 287As set out above, there is a risk that left to the operation of market forces alone, basic universal services may not be provided to everyone at an affordable price. As technology and competition develops, and as consumer needs evolve, it is ComReg's 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.
- 288ComReg is aware that in time the market may deliver universal voice AFL in its own right without the need for a USP, however, for the above reasons, a certain set of customers may be negatively affected by removal of all AFL USOs.
- 289ComReg has also considered whether or not it would be appropriate to designate AFL USOs to cover the entire State or parts of it, however it is likely to be difficult to identify individual areas which would or would not be subject to AFL USOs. There is a risk that if the entire State is not covered, it is possible that there are some customers who would not be served at all or at an affordable price absent an AFL USO.
- 290 However, ComReg is mindful that mandating AFL USOs could result in a net cost to the USP(s), which may in turn impact on industry in respect of a sharing mechanism if net costs are claimed and determined to be an unfair burden on the USP(s). Nevertheless ComReg is of the preliminary view that on balance Option 1a is likely the most appropriate at this time covering the next 5 year period (at least) which is at least until the NBP is planned to be fully rolled out.
- 291 For regulation to be effective, ComReg must ensure that compliance with its obligations can be monitored and, where necessary enforced. ComReg's compliance functions include monitoring ongoing compliance with obligations, enforcing existing obligations, and handling formal disputes. ComReg will monitor and enforce compliance with any AFL obligations in line with these functions.

- 292ComReg is of the view that these measures are unlikely to result in a disproportionate cost burden relative to the benefits to the end users. For the reasons set out above, the benefits to consumers are likely to be significant. In contrast, if these obligations were removed no such benefits would follow to the detriment of the consumers and potentially inconsistent with the Universal Service Regulations.
 - Q. 12 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.

9. Submitting Comments

- 293The consultation period will run from Friday7th August 2015 to Monday 7th September 2015, during which time ComReg welcomes 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.
- 294 In order to promote further openness and transparency, ComReg will publish all respondents' 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 the ComReg submissions document for publishing electronically.
- 295ComReg appreciates that some of the issues raised in this paper may possibly require respondents to provide confidential information if their comments are to be meaningful.
- 296As it is ComReg's 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.
- 297 Such information will be treated subject to the provisions of ComReg's Guidelines on the Treatment of Confidential Information ComReg 05/24.

10. Next Steps

- 298As set out above, responses to this consultation are to be submitted by interested parties not later than 7th September 2015.
- 299 Having analysed and considered the comments received, ComReg will review the preliminary views set out in this consultation paper, and maintain or amend its preliminary views, as appropriate.
- 300 Where ComReg remains of the preliminary view that there is a need for some kind of AFL USO in the State post 31 December 2015, it is envisaged that ComReg would issue further consultation paper(s), during Q3 of 2015 on its preliminary view on the designation of undertaking(s) with the AFL USO and the scope of each of the various aspects of the AFL USO, such as the reasonableness of requests for connection, FIA, affordability measures and QoS.
- 301 This further consultation phase, as relevant, would assess in detail what specific proposed requirements for AFL might be necessary. This could include QoS standards, affordability measures including GAP, the specification of a reasonable access request and the specification of FIA.
- 302 If appropriate, ministerial consent will be sought, as required, and any final decision(s) will be made subsequent to this further consultation process and in light of the end of the current designation period which is 31 December 2015.

Annex: 1 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 List of Questions

Page

Q. 5 In your opinion are there other relevant factors in relation to the European context or benchmarking which ComReg should consider? Please give reasons to support your view.

Q. 7 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.
 52

Q. 9 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. 58

250 Do you agree or disagree with ComReg's preliminary view that, if it is determined that there is a need for an AFL USO in the whole or parts of Ireland post 31 December 2015, that any subsequent designation of a USP(s) to provide the AFL USO (s) specified should be for a period of at least 5 years and possibly 7 years? Please give reasons to support your view. 59