



Commission for
Communications Regulation

Assessment of eir's 2014-2015 Universal Service Fund Application

Assessment of the net cost and unfair burden for
the period 2014-2015

NON-CONFIDENTIAL

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Glossary of key terms (A to Z)¹

“**calculated direct net cost**” means the final direct net cost figure allowable for an individual USO model, or the total calculated direct net cost, as the context requires.

“**direct net cost**” of USO is the difference between the avoidable costs attributable to the provision of the USO (both direct and indirect), minus revenues (both direct and indirect) attributable to the provision of the USO, before the deduction of intangible benefits which accrue to the USP by virtue of being the USP.

“**final 2014-2015 USO funding application**” is eir’s revised USO funding application for the financial year 2014-2015 submitted to ComReg in July 2016.

“**Frontier Direct Net Cost Report**” is the final report prepared by Frontier (eir’s consultants) outlining eir’s calculations and methodology for the direct net cost for the financial year 2014-2015, together with the Frontier report outlining additional changes to the USO model, as submitted to ComReg in July 2016.

“**Frontier Intangible Benefits Report**” is the final report prepared by Frontier (eir’s consultants) outlining eir’s calculations and methodology for the intangible benefits for the financial year 2014-2015, as submitted to ComReg in July 2016.

“**initial 2014-2015 USO funding application**” is eir’s initial USO funding application for the financial year 2014-2015, submitted to ComReg in March 2016.

“**MDF area**” means a geographic area as described by the Market Distribution Frame map.

“**net cost**” is calculated as the difference between the ‘direct net cost’ and the intangible benefits which accrue to the USP, by virtue of being the USP.

“**Oxera Intangible Benefits Report**” refers to the report prepared by Oxera entitled “*Assessment of eir’s calculation of intangible benefits for 2014-2015*” and is included as **Annex 2** of this decision document.

“**TERA Report**” refers to the report prepared by TERA entitled “*Assessment of eir’s USO funding application – direct net cost 2014-2015*” and is included as **Annex 1** of this decision document.

“**Unfair Burden Report 2014-2015**”, refers to the report prepared by Oxera entitled “*Unfair burden report 2014-2015*” and is included as **Annex 3** of this decision document.

¹ Other terms and abbreviations used in this report have the same meaning as those listed in the Glossary of D04/11.

“USO model” refers to the USO direct net cost model underpinning eir’s USO funding applications to ComReg as a whole, including all calculations, data, spreadsheets, the model summary and the individual net cost models (Area, Customer, Payphone, Directories, and Disabled End Users’ Services). These individual direct net cost models may be referred to cumulatively as “USO models”.

Redacted Information

Note: In this document, ComReg has maintained the confidentiality of commercially sensitive information, as it is obliged to do under Regulation 15 of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 ² (the “Framework Regulations”) and in accordance with ComReg’s guidelines on the treatment of confidential information³ (the “Confidentiality Guidelines”). Where information of a confidential/commercially sensitive nature is discussed in this document or the accompanying consultants’ reports, the relevant information has been redacted and a [X] symbol has been inserted.

² S.I. No 333 of 2011.

³ ComReg (2005) “ComReg’s Guidelines on the treatment of confidential information”, 05/04.

1 Executive summary

1. The Universal Service Regulations⁴ provide that where an undertaking (a Universal Service Provider, or “USP”) is designated as having an obligation (a Universal Service Obligation, or “USO”), it may submit to the Commission for Communications Regulation (“ComReg”) a written request to receive funding for the net costs of meeting the USO. ComReg is then required to determine, based on a net cost calculation, whether the cost of meeting the USO represents an unfair burden on the USP.
2. eir, as the designated USP, may submit applications for USO funding in accordance with ComReg Decision D04/11⁵ (“D04/11”). D04/11 sets out how the USP, should they so choose, is to make an application, including how the net cost (after intangible benefits) is to be calculated, and sets out principles and methodologies to apply to ComReg’s assessment as to whether a positive net cost associated with meeting the USO provision, if any, represents an unfair burden on the USP.
3. The funding application being assessed in this document was submitted by eir in respect of the 2014-2015 financial year.⁶
4. eir submitted its initial application for funding for 2014-2015 on 31 March 2016 (referred to as eir’s “initial 2014-2015 USO funding application”). Following a process of engagement between ComReg and eir during which ComReg outlined certain clarifications and adjustments that it required, eir re-submitted its 2014-2015 USO funding application in July 2016 (referred to as eir’s “final 2014-2015 USO funding application”). As a result of these clarifications, eir adjusted the positive net cost claimed in its final 2014-2015 USO funding application from €14,666,768 to €12,432,981.
5. Notwithstanding certain adjustments made by ComReg to eir’s final 2014-2015 USO funding application as summarised in Figure 1 below and outlined in more detail in this decision document, ComReg decided that, subject to a further adjustment made by ComReg to the direct net cost in the Customer Model following receipt of eir’s final 2014-2015 USO funding application, eir’s application is fit for purpose.

⁴ The European Communities (Electronic Communications Networks and Services) (Universal Service and User’s Rights) Regulations 2011.

⁵ ComReg Document 11/42, D04/11 “*Decision on the Costing of universal service obligations: Principles and Methodologies*”, 31 May 2011.

⁶ eir’s financial year runs from 1 July to 30 June. All references to “2014-2015” in this document refer to eir’s financial year 2014-2015.

6. In addition to assessing eir's 2014/15 funding application in accordance with the applicable statutory framework, ComReg's assessment of the 2014-2015 funding application sought to ascertain whether the application adhered to the principles and methodologies set out in D04/11. ComReg also assessed the application for completeness, relevance and accuracy of data submitted. The approach set out in D04/11 with respect to the assessment and the subsequent determination of whether any resulting positive net cost constitutes an unfair burden, falls under the following headline areas:
- The assessment of the principles and methodologies for calculating the USO direct net cost; Section 5 of this document;
 - Principles and methodologies for calculating the intangible benefits arising from the provision of USO services; Section 7 of this document; and
 - Approach to a determination of an unfair burden; Section 8 of this document.
7. ComReg engaged an external consultant, TERA Consultants ("TERA") to advise ComReg on the methodology and calculations used in the direct net cost element of eir's funding application, and to review these against the direct net cost principles, methodologies and calculations in D04/11. Separately, ComReg commissioned Oxera Consulting Ltd ("Oxera") to undertake a review and provide its view on eir's approach to and estimates of the intangible benefits generated through the provision of the USO. Both assessments also considered whether previous recommendations arising from their review of eir's 2009-2010 USO funding application by ComReg were incorporated into the methodologies used by eir in its 2014-2015 funding application.
8. To assess whether the positive net cost represented an unfair burden on eir, ComReg also engaged Oxera to apply the relevant decisions in D04/11 and to provide expert advice as to whether the net cost of €12,432,981 claimed in eir's final 2014-2015 USO funding application represented an unfair burden on eir.
9. On 30 April 2018 ComReg published Consultation and draft determination 18/36 ("Consultation 18/36") in which ComReg set out its preliminary views in relation to eir's final application for funding 2014/15, having regard to the Universal Service Regulations, D04/11, and the consultants' reports outlined above.

10. A report prepared by TERA entitled “*Assessment of eir’s USO funding application – direct net cost 2014-2015*” dated March 2018 was included as Annex 1 of Consultation 18/36 (the “March 2018 TERA Report”). A report prepared by Oxera entitled “*Assessment of eir’s calculation of intangible benefits for 2014-2015*” dated March 2018 was included as Annex 2 of Consultation 18/36 (the “March 2018 Oxera Report”). A further Oxera report entitled the “*Unfair Burden Report 2014-2015*” was included as Annex 3 of Consultation 18/36 and this report is again included as Annex 3 of this document.
11. Between October 2017 and April 2018 ComReg had also published consultation and draft determination documents in relation to funding applications that were submitted by eir for the financial years 2010-2011, 2011-2012, 2012-2013 and 2013-2014 (together the “Consultations”).
12. The period for making submissions in response to the Consultations closed on 11 June 2018.
13. Consultation 18/36 sought the views of respondents in respect of the following four consultation questions:

Consultation document 18/36

Questions

1	Do you have any observations on the results of ComReg’s direct net cost calculation?
2	Do you have any observations on ComReg’s preliminary view that consultancy costs incurred in respect of a USO funding application do not form part of the net cost?
3	Based on ComReg’s assessment detailed in Sections 5, and 7 of consultation, do you have any observations on ComReg’s preliminary view that the positive net cost for 2014-2015 is €11,526,418 ⁷ ?
4	Following ComReg’s assessment, do you have any observations on ComReg’s preliminary view that a positive net cost of €11,526,418 (or €12,432,981 as claimed by eir) is not an unfair burden on eir for the period 2014-2015?

⁷ Prior to a further ComReg Payphone Model adjustment reflected in this Decision.

14. Responses to the Consultations were received from the following seven respondents:
- ALTO
 - BT Communications Ireland (“BT”)
 - Eir
 - Sky
 - Verizon
 - Virgin Media
 - Vodafone
15. A copy of all non-confidential responses will be published on ComReg’s website. ComReg has considered the comments of the seven respondents.
16. No respondent responded specifically to Consultation 18/36, rather all respondents responded to all of the Consultations in a single response. ComReg has summarised the key elements of the respondents’ comments, and ComReg’s views in relation to these, in Document 19/41 titled “Assessment of eir’s 2010-2015 Universal Service Fund Applications – Response to Consultations 17/73; 17/81; 17/95; 17/109 and 18/36”. This decision document should be read in conjunction with Document 19/41 which sets out the reasoning on which ComReg’s decision in respect of eir’s 2014-2015 funding application is based.
17. Having considered a point that was raised in eir’s submissions in response to the Consultations regarding the timeframe within which eir could have removed a payphone in line with ComReg Decision D08/14, ComReg instructed TERA to carry out a further assessment of one aspect of the USO Payphones Model. TERA has prepared an updated version of the March 2018 TERA Report to reflect this updated analysis and this updated report, which reflects an amended direct net cost for payphones and an amended overall direct net cost figure, is included as Annex 1 of this document.
18. In light of the same point, ComReg also instructed Oxera to reconsider its assessment of one aspect of eir’s intangible benefits. Oxera has prepared an updated version of the March 2018 Oxera Report to reflect this updated analysis, and this updated report, which reflects an amended calculations of marketing intangible benefits and an amended total intangible benefits figure, is included as Annex 2 of this document.

19. The updated figures as set out in the reports at Annex 1 and Annex 2 to this document are reflected throughout this document and are explained in more detail in sections 5.3.4 and 7.2.4.
20. Figure 1 below summarises eir's initial and final net cost estimates, the adjustments made by ComReg and its consultants to eir's final 2014-2015 USO funding application and ComReg's decision on the positive net cost.

USO Net Cost 2014-2015		2014-2015 eir's initial USO funding application	2014-2015 eir's final USO funding application	ComReg Adjustment €	2014-2015 ComReg's Final View €
Direct net cost (a)	Uneconomic Areas	€311,027	€311,027		€311,027
	Uneconomic Customers	€13,187,149	€10,919,705	(€528,345)	€10,391,360
	Directories	€1,400,000	€1,400,000		€1,400,000
	Public Payphones	€320,223	€320,223	(€190,573)	€129,650
	Services for disabled end users	€38,833	€38,833		€38,833
	Consultancy fees*	€269,227	€291,369	(€291,369)	€0
	Direct net cost	€15,526,458	€13,281,157	(€481,942)	€12,270,870
Intangible benefits (b)	Enhanced brand recognition	€667,556	€667,556		€667,556
	Life-cycle	€64,790	€53,276	(€103)	€53,173
	Ubiquity	€9,227	€9,227		€9,227
	Marketing	€118,117	€118,117	(€110,779)	€7,338
	Total intangible benefits	€859,690	€848,176	(€110,882)	€737,294
Net cost (after intangible benefits)		€14,666,768	€12,432,981	(€703,706)	€11,533,576

* ComReg has decided that consultancy fees are not a part of the net cost having regard to D04/11 and the provisions of the Universal Service Directive and the Universal Service Regulations (as more fully set out in Section 6).

Figure 1: eir's initial and final estimates and adjustments made by ComReg to eir's final 2014-2015 USO funding application and, ComReg's decision on the positive net cost.

21. In light of the consultants' reports, ComReg has assessed eir's final 2014-2015 USO funding application in line with the principles and methodologies prescribed in D04/11 and ComReg, having considered the submissions made in response to the Consultations, has decided that the positive net cost does not represent an unfair burden on eir.

2 The application under assessment

22. On 31 March 2016, ComReg received eir's initial 2014-2015 USO funding application seeking funding for the provision of the USO during eir's financial year 2014-2015. eir claimed a net cost of €14.67M for this period, after taking account of intangible benefits of €0.86M.
23. That application included a USO model and two reports prepared by Frontier Economics Ltd. ("Frontier"), whom eir engaged to assist in the preparation of its funding application. One Frontier report outlined eir's methodology and calculations for the direct net cost (and the other report outlined an estimate of the intangible benefits to eir arising from its provision of the USO during 2014/2015).
24. For the purpose of supporting its application, and in adherence with Decision 22 of D04/11 which requires that "*financial information shall be provided with an appropriate audit opinion or appropriate report*", eir also engaged PricewaterhouseCoopers (PwC). ComReg entered into a tripartite engagement with eir and PwC to formulate a set of specific verification procedures to be performed on eir's application, known as the Agreed upon Procedures ("AUPs").⁸ These procedures are for the purposes of verifying the accuracy of information and include checks on calculations used in eir's USO model, reconciliations of eir's cost and revenue inputs back to its source workbooks and a reconciliation of the USO model against eir's historical cost accounting (HCA) regulatory accounts.
25. PwC provided a report to eir and ComReg setting out their specific findings arising from the AUPs carried out in respect of eir's application (referred to as the "AUP Report"). ComReg and TERA have reviewed the AUP Report as part of the assessment process.
26. During 2016 ComReg engaged with eir in respect of the initial 2014-2015 USO funding application and the net cost calculation set out therein. As part of that process ComReg and its consultants, TERA and Oxera, reviewed and sought clarifications from eir on the USO models and supporting information submitted by eir. eir engaged Frontier to assist in responding to these requests and submitted a number of supplemental reports prepared by Frontier in response to the requests.

⁸ PwC's AUP engagement letter notes that the AUP services are "performed in accordance with the International Standard on Related Services 4400 "*Engagements to perform Agreed Upon Procedures Regarding Financial Information*" and that "the services will not constitute an audit or a review carried out in accordance with generally accepted auditing standards."

27. As a result of the engagement between ComReg and eir, eir made improvements to its costing methodology in order to give further clarity and transparency to the USO model and to align with ComReg's requirements. ComReg received a revised application from eir for 2014-2015 on 15 July 2016, referred to as eir's final 2014-2015 USO funding application.
28. eir's final 2014-2015 USO funding application included three Frontier reports submitted in July 2016:
- (i) a report outlining eir's methodology and calculations for the direct net cost 2014/15;
 - (ii) a report describing all direct net cost USO model changes since eir's initial 2014/15 USO funding application⁹ (together referred to as the "Frontier Direct Net Cost Report"); and
 - (iii) a report outlining estimates of the intangible benefits to eir arising from its provision of the USO in 2014/15 (the "Frontier Intangible Benefits Report").
29. The net cost in eir's final 2014-2015 USO funding application was for €12.43M, after the deduction of intangible benefits of €0.85M. This net cost figure is approximately €2.23M lower than the net cost figure claimed in eir's initial 2014-2015 USO funding application.
30. In late 2017 and early 2018 ComReg engaged with eir in respect of its mixed use of elements of the 2016 CAM and elements of the 2009 CAM in its 2014-2015 USO funding application. As outlined in more detail in section 5, following this engagement ComReg decided that it was necessary and appropriate to make a downward adjustment to the direct net cost to mitigate any risk of overestimation of the direct net cost due to eir's methodological approach.
31. ComReg is of the view that, subject to this adjustment, eir's application is fit for purpose.
32. Figure 1 above sets out the USO net costs claimed by eir as part of its initial and final 2014-2015 USO funding applications.

⁹ This report also includes information on changes made to eir's other USO funding applications (2010/11 - 2013/14), final versions of which were also submitted on 15 July 2016.

3 Statutory and regulatory context for the assessment of eir's application

33. Pursuant to ComReg's powers under Regulation 7 of the Universal Service Regulations and Article 8 of the Universal Service Directive,¹⁰ ComReg, by way of ComReg Decision D10/14, designated eir as the USP to provide certain telecommunications services, known as the USO, for the period 7 July 2014 to 31 December 2015. The universal service obligations imposed on the USP are to ensure basic fixed line telephone and other minimum telecommunications services, such as public payphones and printed directory services, are available to end-users at an affordable price.
34. The provision of the USO may result in the USP(s) providing designated services at a positive net cost. In accordance with Regulation 11(1) of the Universal Service Regulations, where a USP seeks to receive funding for the net costs of meeting the USO, it may submit to ComReg a written request for such funding. ComReg is obliged to assess such a request and to verify the accuracy of the net cost claimed.
35. Schedule 2, Part A of the Universal Service Regulations states that:
- "In undertaking a calculation exercise, the net cost of universal service obligations is to be calculated as the difference between the net cost for a designated undertaking of operating with the universal service obligations and operating without the universal service obligations."*
36. Schedule 2, Part A also states that:
- "Due attention is to be given to correctly assessing the costs that any designated undertaking would have chosen to avoid had there been no universal service obligation. The net cost calculation should assess the benefits, including intangible benefits, to the universal service operator."*
37. In D04/11, ComReg set out the principles and methodologies to be applied to the calculation of the net cost and to the subsequent determination by ComReg of whether a resulting positive net cost (if any) constitutes an unfair burden on the USP.
38. D04/11 also sets out more general requirements in terms of content of the application and timelines that the USP must comply with in respect of the submission of the application to ComReg.

¹⁰ Directive 2002/22/EC of the European Parliament and 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).

39. Whilst D04/11 set out the principles and methodologies for calculating the overall net cost, it specifically envisaged that ComReg would assess each application for funding on a case by case basis and on its own merits.
40. Decisions 1 to 37 of D04/11 set out the basis for calculating the direct net cost and the intangible benefits associated with being the USP and must be adhered to in any assessment of eir's funding applications.
41. Decisions 38 to 42 of D04/11 set out the general and objective criteria by which ComReg will assess whether a positive net cost, in the particular year of application, may be considered an unfair burden on the USP.
42. These D04/11 decisions were established having regard to the European Court of Justice (CJEU) decision in *Base & Others v Ministerraad*¹¹ (the "Base case"). In particular, at paragraph 43 of the Base case, the CJEU confirmed that national regulatory authorities have significant discretion in relation to how they determine whether there is an unfair burden, providing as follows:
- "...it falls to the national regulatory authority to lay down general and objective criteria which make it possible to determine the thresholds beyond which...a burden may be regarded as unfair."
43. Decisions 38 to 42 of D04/11 also have regard to the criteria set out in paragraphs 42 and 43 of the *Base case*, which state:
- "(42) ...it is apparent from recital 21 in the preamble to Directive 2002/22 that the Community legislature intended to link the mechanisms for the recovery of net costs which an undertaking may incur as a result of the provision of universal service to the existence of an unfair burden on that undertaking. In that context, in concluding that the net cost of universal service does not necessarily represent an unfair burden for all the undertakings concerned, it intended to exclude the possibility that any net costs of universal service provision automatically give rise to a right to compensation. In those circumstances, the unfair burden which must be found to exist by the national regulatory authority before any compensation is paid is a burden which, for each undertaking concerned, is excessive in view of the undertaking's ability to bear it, account being taken of all the undertaking's own characteristics, in particular the quality of its equipment, its economic and financial situation and its market share."*
- "(43) ...the authority cannot find that the burden of providing universal service is unfair...unless it carries out an individual assessment of the situation of each undertaking concerned in the light of those criteria."*

¹¹ Case C-389/08 *Base & Others v Ministerraad*.

44. If ComReg finds that the net cost of providing the USO is an unfair burden on the USP, then in accordance with Regulations 12 (1) and (2) of the Universal Service Regulations¹², ComReg is obliged to establish a sharing mechanism to apportion the net cost of the USO among providers of electronic communications networks and services.
45. Regulation 12 (2) of the Universal Services Regulation stipulates that only the net cost of services within the scope of the USP's universal service designation may be financed. Regulation 12 (2) states:
- “(2) The Regulator shall establish a sharing mechanism administered by it or a body independent from the designated undertaking, which body shall be under the supervision of the Regulator. Only the net cost, as determined in accordance with Regulation 11, of the obligations provided for in Regulation 3, 4, 5, 6, 8 or 9 may be financed.”*
46. Following ComReg's calculation of the net cost and its completion of the unfair burden assessment, ComReg is required to make publicly available the results of the net cost calculations and the conclusions of any audit or verification undertaken in relation to the net cost calculation.¹³

¹² Regulation 12 transposes Article 13 (Financing of universal services obligations) of the Universal Services Directive into Irish law; Recitals 21 to 24 of the Universal Services Directive also govern the financing of universal service obligations.

¹³ Regulation 11(8) of the Universal Service Regulations.

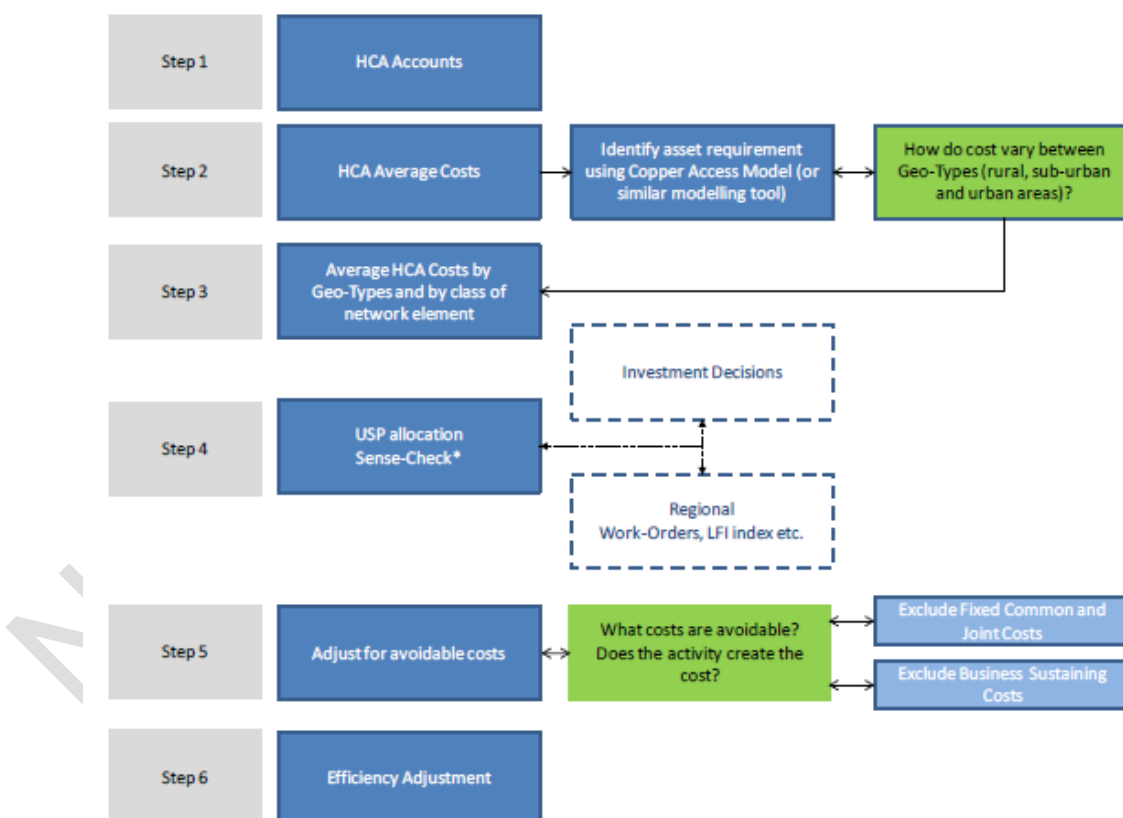
4 Overview of assessment process

47. ComReg's assessment of eir's application for funding seeks to ascertain whether eir, in making its application, adhered to the principles and methodologies established by D04/11.

48. D04/11 sets out principles and methodologies which can be summarised as coming under the following headings:

- Principles and methodologies for calculating the USO direct net cost;
- Principles and methodologies for calculating the intangible benefits arising from the provision of USO services; and
- Approach to a determination of an unfair burden.

49. **Figure 2** provides an overview of the approach set out in D04/11 with respect to the calculation of the net cost and the assessment and subsequent determination of whether a resulting positive net cost (if any) constitutes an unfair burden.



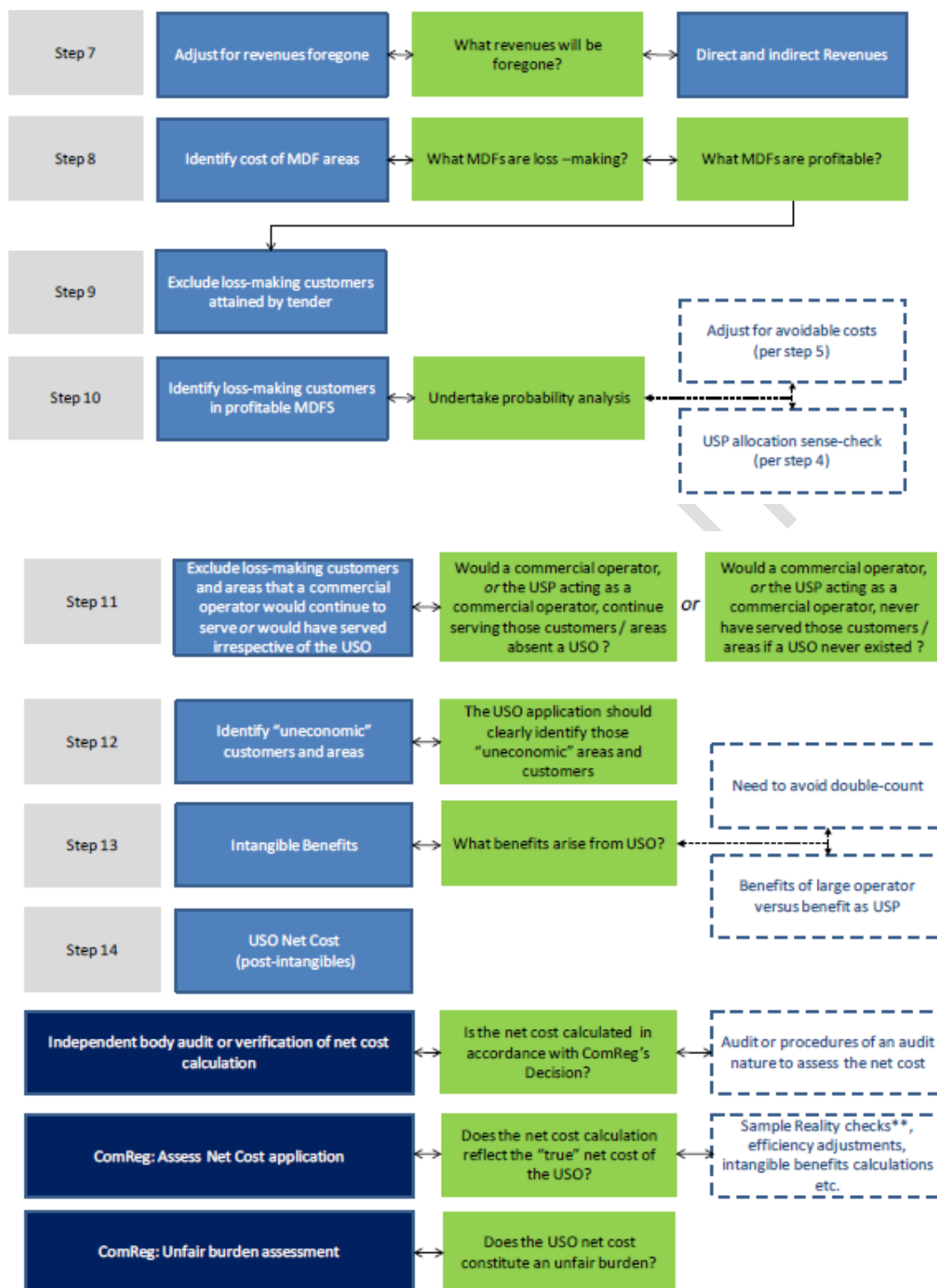


Figure 2: Overview of net cost calculation and unfair burden assessment methodology

Source: ComReg (2011), "Report on Consultation and Decision on the costing of universal service obligations: Principles and Methodologies", 31 May 2011

50. ComReg's assessment of eir's application for USO funding by reference to the above D04/11 framework is summarised in this decision document and in ComReg's consultants reports (at Annex 1, 2 and 3).

4.1 Overview of D04/11

51. Figure 3 below sets out the key areas of D04/11 and the associated decisions.

D04/11	
CALCULATING THE USO NET COSTS AND REVENUES	
Costing Methodology	Decision 1
Avoidable Costs	Decision 2
USO Revenue Calculation	Decisions 3 - 7 ¹⁴
Efficiency Adjustments	Decision 9
Cost Identification and Allocation	Decisions 8, 10 - 15
Cost Identification and Allocation: Uneconomic Payphones and Other USO Costs	Decisions 16 - 18
Format and content of the USO Funding Applications	Decisions 19 -31
Timing of Funding Applications	Decision 32 -34
CALCULATING THE BENEFITS OF THE USO	
Identification of the Benefits	Decisions 35 – 36
Methodologies and Data Requirements for Calculating Benefits	Decision 37
UNFAIR BURDEN	
Determining if there is an unfair burden	Decisions 38 – 42

Figure 3: D04/11 Key areas and associated decisions

52. The requirements of D04/11 in respect of the format, content and timing of USO funding applications and eir's compliance thereto are outlined in Figures 4 and 5 below.

¹⁴ D04/11, within the "Calculating USO net costs and revenues" heading, presented Decision 8 as falling under "USO revenue calculation". As Decision 8 refers to the treatment of avoidable costs, for the purposes of this consultation, it has been considered within section 5.2.2 (Cost Data).

53. A summary of TERA's assessment of the calculation of the USO direct net costs and revenues and ComReg's decision on this is outlined in Section 5 of this decision document. A summary of Oxera's assessment of the calculation of the benefits of the USO and ComReg's decision on this is outlined in Section 7, and ComReg's final determination as to whether there is an unfair burden is outlined in Section 8 of this decision document.

4.1.1 Format and content of eir's final 2014-2015 USO funding application - compliance with D04/11

54. The below table sets out decisions in D04/11 regarding the format and content of any funding application and accompanying information to be submitted to ComReg, and eir's compliance with those decisions.
55. As eir's compliance with the format and content requirements set out in Decisions 25, 27 and 29 of D04/11 are closely related to TERA's assessment of the direct net cost, eir's compliance with these decisions is not addressed in the Figure 4 table but rather in Section 5 of this decision document.

D04/11	ComReg's decision
Decision 19	USO funding applications shall be consistent and in accordance with this Decision and Decision Instrument¹⁵.
	ComReg is satisfied, on the basis of the assessment and review undertaken by both TERA and Oxera, that eir's final 2014-2015 USO funding application is consistent and in accordance with Decision D04/11.
Decision 20	USO funding applications shall be fit for purpose.
	ComReg is satisfied, on the basis of the assessment and review undertaken by both TERA and Oxera and subject to ComReg's adjustment (to reflect the use of the 2009 CAM to address the inaccurate and incorrect use of the 2016 CAM) , that eir's final 2014-2015 USO funding application is fit for purpose.
Decision 21	USO funding applications shall be based on annual information which coincides with the USP's financial year.
	ComReg confirms that eir's final 2014-2015 USO funding application is based on annual information that coincides with the USP's financial year.

¹⁵ D04/11.

Decision 22	A declaration shall be signed off by the Board of Directors of the USP and it must accompany the application. (The required declaration is included in Schedule 1). Financial information shall be provided with an appropriate audit opinion or appropriate report, where the Auditor¹⁶ (as approved by ComReg) has in no way assisted with the preparation of the USO funding application.
	ComReg confirms that an independent declaration, signed off by the Board of Directors of eir, accompanying the application, was provided. Agreed Upon Procedures (AUPs), based on terms of engagement approved by ComReg, were undertaken by PwC to satisfy this requirement and an AUP report prepared by PwC was provided to ComReg.
Decision 23	USO funding applications shall be supported by calculations in an MS Excel, or MS Access format, or alternative software which is reasonably capable of proper access and review.
	ComReg confirms, on the basis of the assessment and review undertaken by both TERA and Oxera, that eir's final 2014-2015 USO funding application was supported by calculations in software which is reasonably capable of proper access and review.
Decision 24	Any models submitted in support of a USO funding application shall be transparent: there must be limited hard-coded cells (where cells are hard-coded a supporting reference document of such numbers must be provided and be capable of being reconciled and audited) and all numbers must be set out so that there is an audit trail present. The models submitted shall be set out in a clear and transparent manner, showing the separate calculations for each component (e.g. uneconomic areas, uneconomic customers, the provision of public pay telephones and specific services for disabled users). The calculations supplied must clearly set out the capital costs, operating costs, overheads, etc. (including General and Administration — (“G&A”) costs) and the methods adopted for the allocation of costs which are not directly related to the provision of the USO. Where uneconomic lines/areas are identified, the works orders associated with those areas for the year of assessment must be available upon request by the Auditor as supporting documentation for the USO application.
	ComReg is satisfied, on the basis of the assessment and review undertaken by both TERA and Oxera, that eir's final 2014-2015 USO funding application and supporting USO models was adequately clear and transparent and fulfilled the requirements of Decision 24, with the exception of eir's mixed use of the 2009 CAM and 2016 CAM. Notwithstanding the adjustment ComReg had to make to the Customer Model (as set out at paragraphs 128-137), the USO models included calculations and the underlying methodology for calculating the costs of each USO service.

¹⁶ Where an Auditor can refer to a person, corporation sole, a body corporate, and an unincorporated body.

Decision 26	There may be a requirement to make certain key data / workings publicly available and the USO funding application is deemed to be made by the USP on this understanding.
	In publishing any key data / workings related to eir's final 2014-2015 USO funding application, ComReg has considered issues of transparency and the confidentiality of certain information, having regard to relevant statutory provisions and ComReg's Guidelines on the Treatment of Confidential Information - ComReg 05/24.
Decision 28	The model provided shall be supported by comprehensive documentation, clearly setting out and explaining all inputs (both financial and otherwise), efficiency adjustments applied, engineering rules applied, cost allocation methodologies employed, depreciation methodologies applied and assumptions made.
	ComReg is satisfied, on the basis of the assessment and review undertaken by both TERA and Oxera, that eir's final 2014-2015 USO funding application and financial models were adequately supported by comprehensive documentation, with the exception of the mixed use by eir of the 2009 CAM and 2016 CAM in the customer model.
Decision 30	USP funding applications shall, where applicable, accord with ComReg Decision No. D07/10 in relation to accounting separation.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir's final 2014-2015 USO funding application is in accordance with ComReg Decision No. D07/10 in relation to accounting separation.
Decision 31	The calculation of the benefits of the USO shall be completed by an external expert, independent of the USP. These calculations must clearly set out: the respective methodologies; assumptions and supporting documentation used at deriving the benefits of the USO. These calculations must provide: (a) the benefit (in monetary terms) that the USP derives as a commercial operator; (b) the benefit (in monetary terms) that the USP derives as a result of the USO; and (c) a reconciliation with reasoning to explain the incremental difference between (a) and (b).
	ComReg confirms, on the basis of the assessment and review undertaken by Oxera, that eir has provided reports prepared by external experts, Frontier, for the purposes of calculating the benefits of the USO. The reports clearly sets out the necessary calculations, methodologies and assumptions applied in calculating the benefits the USP derives as a result of the USO.

Figure 4: Format of eir's final 2014-2015 USO Funding application

4.1.2 Timing of eir's final 2014-2015 USO funding application - compliance with D04/11¹⁷

D04/11	ComReg's Decision
Decision 33	Subsequent requests for USO funding by a USP(s) may be submitted to ComReg in respect of a relevant financial year. If a USP intends to submit such a request to ComReg, the USP(s) shall do so no later than 9 months following the end of the financial year in respect of which the request is intended to be made. ComReg may extend this deadline, but only where it considers that there are exceptional reasons for doing so.
	No extension was requested by eir for the submission of this 2014-2015 USO funding application.

Figure 5: Timing of eir's 2014-2015 USO funding application

¹⁷ Decision 32 and 34 of D04/11 are not applicable to the 2014-2015 USO funding application. Decision 32 relates specifically to the 2009-2010 USO funding application and is no longer applicable. Decision 34 revoked ComReg Document No. 07/39.

5 Approach to calculating the direct net cost

56. This section sets out ComReg's decision on the direct net cost calculation (Figure 6).
57. The TERA Report, published as part of this decision document at **Annex 1**, is structured as follows:
- Section 3 summarises the methodological approach taken by TERA to assess the direct net cost.
 - Sections 4 and 5 present an analysis of the revenue and cost data.
 - Sections 6 – 10 present a review of eir's 2014-2015 USO funding application USO model against the principles and methodologies set out in D04/11.
 - Section 11 presents an analysis of any overlap between the direct net cost and the intangible benefits
58. In order to estimate the direct net cost arising from the provision of USO services for the application period in question, eir compared the avoidable costs and foregone revenues arising as a result of its USP status for the 2014-2015 financial period to the counterfactual scenario, where the provision of USO services to uneconomic customers would not otherwise have been served by a commercial operator. In other words, the direct net cost, as calculated equates to the difference between the avoidable costs attributable to the provision of the USO (both direct and indirect) minus the revenues (both direct and indirect) attributable to the provision of USO services.
59. eir calculated the direct net cost by using the following five USO models:
1. Area Model – uneconomic areas
 2. Customer Model – uneconomic customers in economic areas
 3. Payphone Model
 4. Directories Model
 5. Disabled End Users' Services Model
60. In accordance with D04/11, eir's input data for the purposes of the models consists of two broad categories:
1. Foregone revenue

2. Avoidable costs

61. eir's initial and final direct net cost estimates, adjustments made by ComReg and its consultants to eir's final 2014-2015 USO funding application and ComReg's decision on the calculated direct net cost is set out in Figure 6 below.

USO Net Cost 2014-2015		2014-2015 eir's initial USO funding application	2014-2015 eir's final USO funding application	ComReg Adjustment €	2014-2015 ComReg's Final View €
Direct net cost (a)	Uneconomic Areas	€311,027	€311,027	-	€311,027
	Uneconomic Customers	€13,187,149	€10,919,705	(€528,345)	€10,391,360
	Directories	€1,400,000	€1,400,000	-	€1,400,000
	Public Payphones	€320,223	€320,223	(€190,573)	€129,650
	Services for disabled end users	€38,833	€38,833	-	€38,833
	Consultancy fees*	€269,227	€291,369	(€291,369)	€0
	Direct net cost	€15,526,458	€13,281,157	(€481,942)	€12,270,870

* ComReg has decided that consultancy fees are not a part of the net cost having regard to D04/11 and the provisions of the Universal Service Directive and the Universal Service Regulations (as more fully set out in Section 6).

Figure 6: 2014-2015 direct net cost

62. ComReg, having considered the TERA Report and the views set out therein on eir's compliance with the decisions in D04/11 relating to the direct net cost, together with information submitted by eir as part of the clarifications process, has decided that eir's final 2014-2015 USO funding application is in adherence with Decisions 1 – 14, 16, 17, 18, 25, 27 and 29 of D04/11 (subject to ComReg's adjustment to reflect the use of only the 2009 CAM).

5.1 Overview of TERA's direct net cost assessment

63. TERA undertook an assessment of the principles, methodologies and calculations of the direct net cost elements of eir's 2014-2015 USO funding application, by reference to the relevant principles and methodologies set out in D04/11.
64. TERA's assessment of eir's 2014-2015 USO funding application involved gaining an understanding of the approach to, and calculation of, the foregone revenue as well as avoidable cost including operational expenditure ("OPEX") and capital expenditure ("CAPEX") cost data.
65. TERA's assessment considered the methodology and subsequent calculation of the direct net cost of each of the USO services provided by eir.

66. Additionally, TERA's assessment investigated any overlap between the direct net cost estimates and the intangible benefit estimates, in order to ascertain whether there was evidence of double counting and to ensure input values were correct and consistent.
67. As part of TERA's assessment of eir's USO funding applications for the years 2010-2011, 2011-2012 and 2012-2013, TERA advised ComReg that certain clarifications were required from eir in relation to the USO Models. Frontier assisted eir in responding to these clarifications and, following a workshop with TERA and ComReg in February 2015, eir submitted a number of reports prepared by Frontier which contained responses to ComReg's questions¹⁸. These reports also informed TERA's assessment of eir's 2014-2015 USO funding application.
68. Arising from this clarifications process, and further engagement during 2015 and 2016 (and following the submission of eir's initial 2014-2015 USO funding application in March 2016), eir submitted its final 2014-2015 USO funding application in July 2016 with the direct net cost reduced by approximately €2.25M, to €13.28M.
69. In late 2017 and early 2018 ComReg engaged with eir in respect of its mixed use of the 2016 CAM with elements of the 2009 CAM in its 2014-2015 USO funding application. Following this engagement, ComReg decided that it was necessary and appropriate to make a downward adjustment to the direct net cost to mitigate any risk of overestimation of the direct net cost due to eir's methodological approach. This adjustment is set out in more detail in 5.3.2 below.
70. TERA, having considered eir's final 2014-2015 USO funding application, and on the basis of its final assessment of the USO models, found the direct net cost to be €12,270,870 (having made certain adjustments, as outlined below).

5.2 Input data

5.2.1 Revenue Data

71. The direct net cost calculation includes both the direct¹⁹ and indirect²⁰ revenues that eir would forego if the provision of services to uneconomic customers and areas was no longer required. Where services are not part of the USO, both their costs and revenues should be excluded from the USO model.

¹⁸ "Frontier Economics, 'Response to ComReg questions on eircom's 2010-2011 USO funding applications, A report prepared for eircom', February 2015; Frontier Economics, 'Response to ComReg questions on eircom's 2010-2011 USO funding applications, A report prepared for eircom', April 2015; Frontier Economics."

¹⁹ Direct revenues are those directly invoiced to a customer or another authorised operator.

²⁰ Indirect revenues include services not directly invoiced to a customer.

72. eir excluded certain revenues from the direct net cost calculation for a range of reasons. TERA has evaluated eir's treatment of revenue in each of the USO models to determine the relevance of each such inclusion or exclusion.

5.2.1.1 Key changes

73. TERA checked the reasonableness of the exclusion of each of the revenue categories. In cases where TERA found the exclusion criteria were unclear, it sought further explanation from eir (for example in relation to International and National Freefone). Having reviewed and considered eir's explanation for the exclusion of these revenues, TERA was satisfied that the exclusion of these revenue categories was reasonable.

74. Once the relevant revenues were identified, revenue needed to be allocated across MDF areas. For the purpose of allocating revenue to exchange areas eir's CDW ²¹ was used.

75. In line with Decision 4 of D04/11, eir allocated all the one-off revenue categories to the year in which they were incurred, with the exception of PSTN connections, which eir recognised in the same period as the initial connection, without amortisation. The PSTN connection revenues were, however, offset by the corresponding costs which were treated in a similar manner. All connection revenues except RAT and PSTN were also amortised in the regulatory accounts over the expected customer lifetime, so that the model input data already took amortisation into account²². Having reviewed the calculations, TERA considered that this approach was acceptable.

76. eir made the following changes to the treatment of working lines definition in the 2014-2015 calculations:

- Inclusion of :
 - PSTN
 - ISDN PRA/FRA lines over fibre;
 - POTS based retail FTTC lines;
 - WLR (WLR ISDN PRA/FRA lines over fibre);
 - Leased Lines (PPC End User Links (>155mb);
 - Supplementary (National Ethernet Lines)
- Exclusion of :
 - PSTN Wi-Fi Hub lines;

²¹ Corporate data warehouse.

²² Response to ComReg questions on eir's 2010-2011 USO funding application, February 2015.

- Leased Lines (International Private Circuits²³; NGA WSEA and NGN (multi-service access) retail lines; Fibre based national private circuits (2Mb));
- Supplementary (Mobile backhaul lines; fibre based business IP lines).

77. eir's initial 2014-2015 USO funding application omitted some broadband data usage revenue. This was corrected by eir in its final 2014-2015 USO funding application.
78. eir's initial 2014-2015 USO funding application allocated specific supplementary revenues to all lines where PSTN/ISDN rental charge was present rather than only to the lines effectively generating this revenue. This was corrected by eir in its final 2014-2015 USO funding application.
79. Having reviewed and considered eir's explanation, TERA was satisfied that the changes to the definition of working lines by eir were reasonable and appropriate in the context of the 2014-2015 USO funding application.

5.2.1.2 ComReg's decision

80. Having considered the information available including the responses provided by eir and its consultants during each of the two clarifications processes, and on the basis of the assessment and review undertaken by TERA, ComReg is satisfied that the treatment of revenue data in eir's final 2014-2015 USO funding application is reasonable and is in accordance with the relevant principles and methodologies in D04/11.
81. ComReg's decision with respect to eir's compliance with Decisions 3, 4, 5, 6, 7 and 29 of D04/11 is set out in Figure 7 below.

D04/11	ComReg's decision
Decision 3	USO revenues shall be calculated on the basis of both the direct and indirect revenues that an operator would forego as a result of ceasing to provide services to uneconomic customers.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir's calculation of USO revenues made proper provision for direct and indirect revenues that it would forego as a result of ceasing to provide USO services to uneconomic customers.
Decision 4	Direct revenues shall include those revenues which are directly invoiced to a customer for the services provided directly by the USP. They include: <ul style="list-style-type: none"> • One-off connection charges: where the revenue should be allocated over the expected life of the customer. In circumstances where a line is permanently

²³ The A end (originating circuit location) is generally associated with lines that are located in large urban exchanges such as [REDACTED] etc.

	<p>disconnected, the remaining unallocated one-off connection charges should be allocated to that year of disconnection;</p> <ul style="list-style-type: none"> • Revenues associated with access (e.g. line rental); • Calls (e.g. local, national, mobile, international, directory enquiries (“DQ”) and premium rate services); and • Complementary services, such as, broadband services.
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the revenue scope for direct revenues incorporated by eir corresponds with the requirements of Decision 4.</p>
Decision 5	<p>Direct revenues shall include those revenues from another authorised operator (“OAO”)(who is indirectly providing the service to the customer) using the USP’s wholesale services and include, amongst other things:</p> <ul style="list-style-type: none"> • Wholesale access (single billing wholesale line rental (“SB-WLR”); • Wholesale calls; and • Complementary wholesale services, such as Bitstream and Local Loop Unbundling (“LLU”) etc.
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the revenue scope for direct revenues incorporated by eir corresponds with the requirements of Decision 5.</p>
Decision 6	<p>Indirect revenues shall include those revenues which are not directly invoiced to a customer for the services provided directly by the USP. They include:</p> <ul style="list-style-type: none"> • Wholesale interconnection revenues: fixed termination and transit services as a result of inbound calls from another fixed / mobile networks, where an OAO is invoiced for terminating and transiting a call on the USP network; • Non-geographic numbers (e.g. 1800, 1850, 11811 and 1890 numbers); • Economic USO customer calls to an uneconomic customer: firstly, the revenue of the economic customers’ calls to uneconomic customers shall be allocated to the uneconomic customer. If the uneconomic customer is now economic, as result of the allocation, then a second stage is required to ensure that this treatment does not make the previously economic customer into an uneconomic customer as a result. If as a result of this second stage the economic customer becomes uneconomic, then it is only that portion of revenue which the economic customer can spare without making themselves uneconomic that should be allocated; • Leased Lines: where initially all revenues associated with the leased line are allocated to the uneconomic line. If the uneconomic point is now economic, as a result of the allocation, then a second stage is required to ensure that this treatment does not make the previously economic point into an uneconomic point as a result. If as a result of this second stage the economic point becomes

	<p>uneconomic, then it is only that portion of revenue which the economic point can spare without making themselves uneconomic should be allocated; and</p> <ul style="list-style-type: none"> • Replacement calls: where a net cost exists, replacement calls shall be estimated and added to the net cost calculation (but only in circumstances where “uneconomic” areas or customers have been firstly identified as commercially uneconomic).
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the scope of indirect revenues incorporated by eir corresponds with the requirements of Decision 6.
Decision 7	Where it is clearly demonstrated that due to a lack of information beyond the control of the USP, that it is not practicable for indirect revenues to be calculated in accordance with Decision No. 6, the USP may use an alternative approach provided that it is properly supported with reasonable assumptions.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA that given the lack of certain data, eir used an appropriate alternative approach to calculate indirect revenues to be included in the net cost.
Decision 29	Sampling may be used for certain aspects of the modelling of net cost, for example the assumptions driving the size of replacement calls. Where sampling is used, samples must be sufficiently representative of the population being sampled. Where applicable, any application of a sampling methodology by the USP must accord with ComReg Decision D07/10.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir's use of data sampling when certain data could not be sourced or was not available, was reasonable and that that samples were sufficiently representative of the population being sampled.

Figure 7: Decision - Compliance with Decisions 3, 4, 5, 6, 7 and 29 of D04/11

5.2.2 Cost Data

82. According to the principles and methodologies set out in D04/11, the cost data includes both the capital and operating costs of providing the services relevant for the USO. The avoidable cost concept is a fundamental determinant of the net cost calculation; and it is only the portion of costs that can be directly attributable to the USO service, which can be included in the net cost calculation.
83. Furthermore, the avoidable costs included in the net costs calculation should be those which are incurred in the most efficient way.
84. TERA evaluated eir's treatment of cost including the categories of costs which are included, whether they are avoidable, how costs are allocated to MDFs and how efficiency adjustments were made.

5.2.2.1 Key changes

85. TERA considered the cost categories which were identified by eir to ensure they were treated correctly. eir included the following new OPEX and CAPEX cost categories in its final 2014-2015 USO funding application:
- building pool CAPEX²⁴
 - BIP and Ethernet SANS OPEX²⁵
86. Having reviewed and considered eir's inclusion of building pool CAPEX and BIP and Ethernet SANS OPEX, TERA was satisfied that these amendments by eir were reasonable and appropriate in the context of eir's final 2014-2015 USO funding application.
87. Having considered the cost data, TERA assessed the portion of these costs which could be avoided if certain MDF areas were no longer served by eir.
88. TERA noted that eir's changes in its definition of working lines (outlined above), have resulted in some changes to the allocation of costs to MDFs.
89. TERA also noted that the costs from eir's HCA accounts, are in the main, not identified separately for different MDF areas. Costs are therefore allocated to areas using cost drivers.
90. Where an activity code was "indirect", the avoidability percentage was estimated by considering the SRT (summary resource type) codes underpinning the activity code. eir provided further information on access network OPEX avoidability in its final 2014-2015 USO funding application and TERA noted that eir made some minor changes to the categorisation of SRT codes (compared to its 2009-2010 USO funding application).
91. TERA also conducted SRT sampling checks and was of the view that the impact of these changes on the level of avoidable costs was negligible during this financial period.
92. TERA's assessment of eir's cost avoidability assumptions noted that eir used access network costs to calculate the avoidable access network costs at the area and customer level for each MDF.

²⁴ eir's 2009/2010 funding application model had excluded the Capex associated with the building pool. TERA considered that building pool Capex can be directly attributable to geographic areas, in the most part identifiable at district level, and with particular MDFs in some cases.

²⁵ eir's 2009/2010 funding application model included BIP and Ethernet SANS revenue, and omitted the associated Opex.

93. Having reviewed and considered eir's access network cost avoidability assumptions in respect of OPEX, TERA was satisfied that eir's avoidability assumptions were reasonable and appropriate in the context of eir's final 2014-2015 USO funding application.
94. In eir's initial 2014-2015 USO funding application, its approach to cost allocation was only based on the number of faults. TERA recommended that the allocation of costs to "repair team areas" should be based on the number of repair staff in each area; and the allocation of costs to MDFs, was based on the number of faults in the MDFs, that make up each "repair team area". eir's approach to the allocation of the "Repair-Access" cost category was amended by eir in its final 2014-2015 USO application²⁶ to incorporate recommendations made by TERA. TERA considered this amended approach to be more aligned to the principle of cost causality and the 2009 CAM²⁷.
95. Finally, eir made a number of efficiency adjustments in line with Decision 9 of D04/11.
96. In this respect, two methodological changes have been made to the fault rate regression analysis in the USO model (from eir's 2009-2010 USO funding application):
- Wholesale lines were out of the scope of the target fault rate, and therefore have been excluded from the regression. As the Efficient target fault rate was now defined based on faults on eir's retail lines only, the number of working lines was changed from "all lines" (excluding fibre) to only "PSTN and Retail SABB lines". The percentage of DSL lines (calculated by taking the number of DSL lines and dividing this by the number of working lines), was updated accordingly. Similarly the line density, calculated as the number of working lines per square kilometre, was updated.
 - The analysis has been performed on the number of faults rather than on the LFI. According to eir, this led to more accurate regression results and, in particular, allowed negative results to be avoided.
97. TERA considered that the above efficiency adjustment approach was reasonable.
98. TERA also considered the allocation of distance sensitive costs, which are costs that vary depending on the length of the line. These costs need to be allocated to housing and isolated areas. eir maps the network service elements to 3 categories:

²⁶ The Frontier Direct Net Cost Report (Section 3.1.3) details the cost drivers used to allocate avoidable OPEX costs to MDFs.

²⁷ Copper Access Model.

- distance sensitive
 - non-distance sensitive
 - provisioning
99. TERA reviewed the mapping of network elements to services for these cost categories, and concluded, based on the available information, that eir's approach was reasonable.
100. Cost-volume relationship (CVRs) is the curve that describes how the cost of the core network changes in relation to call volumes. Based on TERA's recommendation in relation to eir's 2009-2010 USO funding application, eir amended its final 2014-2015 USO funding application and provided further clarification on the 2009-2010 cost curves for core network. The CVRs eir used now assume that costs increased linearly between 76% and 100%. The cost for Billing-CDCS-CMA was zero in 2014-2015 and accordingly no CVR was needed for this cost item.
101. Having reviewed and considered eir's further clarification on the use of cost curves for core network, TERA was satisfied that these amendments by eir were reasonable and appropriate in the context of eir's final 2014-2015 USO funding application.

5.2.2.2 ComReg's decision

102. Having considered the information available including the responses provided by eir and its consultants during the clarifications process, and on the basis of the assessment and review undertaken by TERA, ComReg is satisfied that the treatment of cost data in eir's final 2014-2015 USO funding application is reasonable and is in accordance with the relevant principles and methodologies in D04/11.
103. Figure 8 below sets out ComReg's decisions in relation to eir's compliance with Decisions 1, 2, 8, 9 and 12 of D04/11.

D04/11 Decision	ComReg's decision
Decision 1	The HCA methodology, properly adjusted for efficiencies and taking account of the costs that could have been avoided by the USP without having the USO, is the cost methodology that must be used to calculate the net cost of the USO.
	ComReg confirms, on the basis of the assessment and review undertaken by TERA, that eir's final 2014-2015 USO funding application adequately satisfies the criteria set out in Decision 1.

Decision 2	USO net costs shall be calculated on the basis of “all” capital costs and “all” operating costs that could be avoided on a HCA basis, as if the provision of services to uneconomic customers by a commercial operator was not required under a USO. It is only the portion of costs, both capital and operational expenditure for the given financial year, that can be directly attributed to the USO service (i.e. the service activity creates the cost) and which could have been avoided without the USO, which are included in the net cost calculation.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir has adequately fulfilled the criteria in Decision 2, save for as noted in section 6 of this decision document, ComReg does not consider that consultancy fees properly form part of the net cost.
Decision 8	The avoidable costs included in the net cost calculation, shall be those costs reflecting the provision of the USO which a commercial operator would not ordinarily have provided, and which were incurred in the most efficient way. These costs shall relate to: (a) the avoidable capital costs associated with CAPEX i.e. depreciation; (b) OPEX; and (c) overheads for the appropriate financial year.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the avoidable costs eir included in the net cost calculation have been prepared on an avoidable costs basis and that the net cost appropriately reflects the costs, considering both OPEX, CAPEX and overheads incurred in the provision of the USO, which a commercial operator would not ordinarily have provided and which were incurred in the most efficient way.
Decision 9	<p>ComReg may use a number of methodologies to determine the appropriate level of costs that would have been incurred by an efficient operator, in order to determine the quantum of adjustments necessary to the USP's net cost calculation. These methodologies may include, but are not limited to, the use of:</p> <ul style="list-style-type: none"> • The review of supporting documentation available, such as: cost-benefit analysis reports; engineering reports; fault reports of geographical areas, and other documents in relation to the business case / investment decisions associated with the network roll-out and upgrade; • A line fault efficiency rate: applying the national LFI target rate (corresponding to the financial year in question) at a regional level (and allowing for appropriately reasoned variances) ; • Independent survey report regarding the USP's efficiency; • Regulatory decisions from other jurisdictions that provide relevant precedents and benchmarks; and • The development of a model to assess the appropriateness of the efficiency adjustment proposed by the USP.

	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir has adopted appropriate methodologies in calculating costs and efficiency adjustments to determine the appropriate level of costs that would be incurred by an efficient operator in order to determine the quantum of adjustments to the USP's net cost calculation.
Decision 12	An average depreciation charge for each class of network element (based on an average cost and asset age) shall be developed by geotypes (e.g. urban, sub-urban, rural etc.). The USP may allocate the relevant depreciation charge (as reconcilable to the HCA accounts and taking account of the principle of avoidable costs) for each exchange area based on the asset requirements as determined by the Copper Access Model (as updated or similar modelling tool). The calculation must be sufficiently granular to allocate costs only to those network elements actually used by users who are potentially uneconomic. In making this allocation, the USP should draw on, and be prepared to substantiate its investment profile / decision making, works-orders etc., so as to ensure that the allocation is appropriate (i.e. the USP should satisfy itself that in making an allocation to an MDF area, it has not allocated costs which are not reflective of the USP's investment profile in that MDF area).
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA that the depreciation method applied by eir is in accordance with Decision 12.

Figure 8: Decision - Compliance with Decisions 1, 2, 8, 9 and 12 of D04/11

5.3 USO models 2014-2015

104. Broadly, the principles and methodologies outlined in D04/11 were reflected in the USO models eir used to calculate the direct net cost of the USO, although, as set out in sections 5.3.2, 5.3.4 and 6 of this decision document, ComReg required certain adjustments which were either made by eir in its final 2014-2015 USO funding application or made by ComReg as part of its assessment of the application.
105. As set out in section 5.3.2, ComReg is of the view that eir's mixed use of the 2016 CAM with elements of the 2009 CAM in its 2014-2015 USO funding application is incorrect and that an adjustment to the net cost calculation in this regard is therefore warranted and necessary. eir's choice of cost avoidability assumptions for 2014-2015 created an inconsistency in the cost avoidability and cost distribution assumptions used within the USO models, which in turn affected the accuracy of the direct net cost calculation for the financial year 2014-2015.

106. ComReg is of the view that the adjustment it made to the direct net cost calculation to reflect the use of the 2009 CAM only is the most appropriate way of addressing what ComReg regards as eir's inaccurate and incorrect use of the 2016 CAM.
107. The USO models were originally developed by eir as part of the 2009-2010 USO funding application process. As ComReg and its consultants (TERA) conducted an extensive review of eir's USO models as part of its assessment of the 2009-2010 USO funding application, TERA's assessment for 2014-2015 also analysed changes in the USO models since its 2009-2010 USO application and the impact of such changes.
108. eir's final 2014-2015 USO funding application is based on an updated version of the 2009-2010 USO models.
109. In each of the following sections under the heading "key changes", ComReg summarises, as relevant:
- key changes between eir's **2009-2010** USO funding application and eir's final **2014-2015** USO funding application
 - changes in the approach in eir's **initial** 2014-2015 USO funding application and eir's **final** 2014-2015 USO funding application
 - subsequent TERA adjustments to eir's final 2014-2015 USO funding application agreed by ComReg and taken into account in ComReg's final view of the calculated direct net cost.
110. Further details of the direct net cost calculation for each USO model and TERA's assessment are set out in the TERA Report.

5.3.1 Area Model

111. The Area Model calculates the direct net cost of uneconomic areas, with one area corresponding to one MDF. The uneconomic areas are those which eir claims would not be served by eir if it had no USO obligation.
112. TERA found that the direct net cost of uneconomic areas in the Area Model is €0.31M. This figure reflected the amount eir claimed in its final 2014-2015 USO funding application.

5.3.1.1 Key changes

113. There were no changes in the methodology or approach to calculating the cost of uneconomic areas in eir's final 2014-2015 USO funding application to that adopted in eir's 2009-2010 USO funding application.

114. TERA concluded that the changes in the direct net cost of reviewed MDFs were due to changes in the input data as a result of changes in consumption, routing factors and consumption and the regulatory accounts, as opposed to changes in the parameters or design of the Area Model itself.

5.3.1.2 ComReg's decision

115. Figure 9 below sets out ComReg's preliminary view in relation to eir's compliance with Decision 11 of D04/11.

D04/11	ComReg's decision
Decision 11	Uneconomic areas shall be identified at an MDF level.
	ComReg confirms, on the basis of the assessment and review undertaken by TERA, that eir has met the requirements of Decision 11 by identifying uneconomic areas at an MDF level.

Figure 9: ComReg's decision - Compliance with Decision 11

116. ComReg confirms on the basis of the assessment and review undertaken by TERA that the calculated direct net cost of the Area Model is €311,027.

5.3.2 Customer Model

117. The Customer Model calculates the direct net cost of uneconomic customers in economic areas.
118. The total cost of uneconomic customers claimed in eir's initial 2014-2015 USO funding application was €13.19M. This figure was revised downwards to €10.92M by eir in its final 2014-2015 USO funding application as a result of clarifications and adjustments sought by ComReg and its consultants.
119. The TERA Report notes that a probabilistic approach was used by eir's in its final 2014-2015 USO funding application Customer Model, as opposed to using universal account numbers (UAN). TERA listed a number of limitations as outlined by eir, which restrict the ability to use the UAN:
- UAN is an account identifier (currently tracks accounts, not lines).
 - An account may have lines at a number of different locations.
 - Lines may also move between accounts (amalgamated or divided accounts).
 - Each time a line transfers from eir Retail to eir Wholesale, or from one OAO to another, the relevant line is given a new UAN (so while the telephone number may remain the same, the UAN does not).

- eir's databases contained information that can identify the revenue of individual customers, however, a similar identification of the costs was not possible as costs were not recorded at an individual customer level.
120. The probabilistic approach used by eir in its final 2014-2015 USO funding application was the same approach as eir used in its 2009-2010 USO funding application. The approach compared the distribution of net revenue with a distribution of the avoidable costs of access, by calculating the expected number of uneconomic lines in each economic MDF area and in turn, the expected losses, from each of these lines.
121. PwC, as part of its AUP Report, reported a number of procedures it undertook to review and validate the formulae used in the Customer Model.
122. TERA having reviewed eir's use of the probabilistic approach, concluded that eir's approach was appropriate, absent the availability of more granular data, for the following reasons:
- eir showed that revenue and costs were not correlated, thereby indicating that a probabilistic approach was reasonable.
 - UAN was related to a customer's account as opposed to the number of lines on the account, and therefore a UAN did not reflect individual access line movement at the customer account level.
 - There was a difficulty in matching revenue and line length information.

5.3.2.1 Key changes

123. eir used a mixture of the 2009 CAM and the 2016 CAM in its 2014-2015 USO Customer Model whereas in previous applications eir had used only the 2009 CAM.
124. eir used the 2016 CAM to produce the cost avoidability inputs to (a) the border of the housing area and (b) the split of costs (CAPEX) between housing areas and isolated areas.
125. eir used the 2009 CAM to calculate the level of avoidability of CAPEX within isolated areas maintained at the 2013-2014 financial year level.
126. TERA reviewed the methodological approach adopted by eir and any potential impact of eir's use of the 2016 CAM on the cost avoidability inputs and noted in particular that eir's allocation of costs based on the "urban/rural" classifications in the 2016 CAM to the "housing/isolated areas" classifications in the 2009 CAM is incorrect, as these two classifications are not the same and are not directly substitutable.

127. In late 2017 and early 2018 ComReg engaged with eir in respect of its mixed use of elements of the 2016 CAM with elements of the 2009 CAM.
128. ComReg invited eir to review an adjustment approach proposed by TERA based on use of the 2009 CAM only. ComReg invited eir to use this methodology and either (1) the actual allocation keys for 2014/15 financial year (which ComReg understand eir could produce), or (2) the allocation keys for 2013-2014 as a reference for avoidable cost shares, to calculate an adjustment that could be applied to the Customer Model (and any other affected models) for eir's 2014-2015 application, with a view to ensuring an accurate net cost figure.
129. eir declined to use actual allocation keys for 2014-2015 stating that the additional work stream would involve further delay and eir did not believe that the approach was justified given the stage in the process that had been reached.
130. eir stated that it did not have a "*major issue*" with TERA's proposal to apply the 2013-2014 allocations as a reference. eir had "*reviewed the estimate of €0.5m produced by Tera and eir can understand its basis, although we do not believe such a reduction would be valid or justified.*"
131. eir continues to disagree with ComReg regarding the necessity for an adjustment and submissions made by eir in this regard in response to the Consultations are addressed by ComReg in Document 19/41.
132. ComReg is of view that eir's choice of cost avoidability assumptions for 2014-2015 created an inconsistency in the cost avoidability and cost distribution assumptions used within the USO models, which in turn affected the accuracy of the direct net cost calculation for the financial year 2014-2015. Due to the impact of this methodological change on the direct net cost calculation set out in the Customer Model, ComReg decided that a downward adjustment of the net cost calculation is warranted and necessary.
133. In the absence of eir providing its own calculation for this adjustment, the downward adjustment is based on TERA's calculation. ComReg is of the view that this is the most appropriate and proportionate way to mitigate any risk of overestimation of the direct net cost due to eir's methodological approach.

5.3.2.2 ComReg's decision

134. ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the use of a probabilistic approach for eir's final 2014-2015 USO funding application in respect of the Customer Model is reasonable.

135. ComReg has decided that, as eir's final 2014-2015 USO funding application incorporates ComReg's initial revised modelling assumptions, and subject to ComReg's adjustments to eir's direct net cost calculation, eir's final 2014-2015 USO funding application meets the requirements of Decisions 10, 12, 13 and 14 of D04/11.
136. ComReg's decision with respect to compliance with Decisions 10, 12, 13 and 14 of D04/11 are set out in Figure 10 below, subject to ComReg's adjustments to eir's direct net cost calculation, eir's final 2014-2015 USO funding application meets the requirements of Decisions 10, 12, 13 and 14 of D04/11.

D04/11 Decision	ComReg's decision
Decision 10	<p>The net cost calculation shall not include those customers who were originally considered "uneconomic" but who have now become profitable. The net cost calculation also does not include those customers attained as a direct result of a competitive tendering process (who are deemed "uneconomic").</p>
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir has met the requirements of Decision 10 by excluding customers who were originally considered "uneconomic" and have now become profitable.</p>
Decision 12	<p>An average depreciation charge for each class of network element (based on an average cost and asset age) shall be developed by geotypes (e.g. urban, sub-urban, rural etc.). The USP may allocate the relevant depreciation charge (as reconcilable to the HCA accounts and taking account of the principle of avoidable costs) for each exchange area based on the asset requirements as determined by the Copper Access Model (as updated or similar modelling tool). The calculation must be sufficiently granular to allocate costs only to those network elements actually used by users who are potentially uneconomic. In making this allocation, the USP should draw on, and be prepared to substantiate its investment profile / decision making, works-orders etc., so as to ensure that the allocation is appropriate (i.e. the USP should satisfy itself that in making an allocation to an MDF area, it has not allocated costs which are not reflective of the USP's investment profile in that MDF area).</p>
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by TERA that the depreciation method applied by eir is reasonable and meets the requirements of Decision 12.</p>

Decision 13	Uneconomic customers in economic areas shall be identified based on universal account numbers (“UANs”). However, if ComReg is satisfied, because of a lack of information beyond the control of the USP, that it is not practicable to identify uneconomic customers by UAN, the USP must demonstrate that the use of an alternative approach has the equivalent effect of identifying those customers.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir has met the requirements of Decision 13. As there was a lack of information which was beyond the control of eir it was not practicable for eir to identify each uneconomic customer by its UAN and eir appropriately applied a probability approach in order to identify uneconomic customers.
Decision 14	The USP may calculate uneconomic customers in economic areas using a probability analysis. However, the identification and allocation of these costs must be consistent with Decision No. 12. The parameters and assumptions used in the probability analysis must be clearly documented and duly reasoned as to the circumstances why the USP considers the customer uneconomic.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA in relation to the Customer Model, that eir has adhered to the requirements of Decision 12 and Decision 14 with respect to the use of a probability approach for the identification and allocation of uneconomic customers to uneconomic areas.
Decision 25	Applications shall, with reference to the supporting model, clearly identify (by MDF or by geographic location as appropriate), with adequate reasoning and cogent evidence to justify that, those customers or groups of customers (i.e. area), that in the absence of the USO, the provision of the service would <i>either</i> not continue to be provided or would never have been provided, to that customer or groups of customers (i.e. area) by a commercial operator, or by the USP acting as a commercial operator. The USP must provide its commercial reasoning, including the respective parameters used in justifying its decision, including, but not limited to: <ul style="list-style-type: none"> • The current loss-making status of those customers or areas; • The local density of those customers or areas; • The respective distances from exchange for uneconomic customers;

	<ul style="list-style-type: none"> • The network infrastructure / technology used to serve those customers or areas; and • Any other pertinent information the USP has used to influence its decision making process.
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir's final 2014-2015 USO funding application identified uneconomic customers appropriately and provided adequate reasoning for its approach.</p>

Figure 10 : Decision - Compliance with Decisions 10, 12, 13 and 14 of D04/11

137. On the basis of TERA's overall evaluation and amendment of eir's methodological approach to the Customer Model and the underlying direct net cost calculations for uneconomic customers in economic areas, ComReg has decided that the calculated direct net cost of the Customer Model is €10,391,360

5.3.3 Directories Model

138. The Directories Model calculates the net avoidable cost for the provision of a printed directory (free of charge, at least once a year). TERA reviewed the Directories Model to check that it was in accordance with Decision 17 of D04/11.
139. TERA found that the direct net cost of the Directories Model was €1,400,000.

5.3.3.1 Key changes

140. There were no changes in the methodology or approach to calculating the Directories Model in eir's final 2014-2015 USO funding application to the methodology that had been adopted in eir's 2009-2010 USO funding application.
141. eir stated that the advertising market has changed significantly, migrating to mediums alternative to printed media. This has resulted, in eir's view, in a significant decrease in the level and value of third party advertising revenue within the printed directories.
142. A new commercial agreement between eir and Truvo/FCR Media ("Truvo") for the period 2013-2016 resulted in the cessation of advertising revenue payments by Truvo to eir. Accordingly, eir did not receive payments from Truvo in respect of third party advertising revenue associated with USO printed directories.
143. The commercial agreement that was in place between eir and Truvo for 2014-2015 is summarised below:
- eir makes an annual payment to Truvo of €1.4M for the provision of directories.

- Truvo has the sole and exclusive rights to publish the White Pages directories on behalf of eir;
- Truvo has the sole and exclusive right to sell enhancements in the White Pages directory and is entitled to retain all such revenues; and
- eir is entitled to brand positioning on the covers and to a number of pages in the directories.

144. TERA considered that the cost to eir (payment by eir to Truvo) in relation to eir's own advertising in the USO printed directories was intrinsic to the commercial contract with Truvo. TERA also noted eir's statement that, in effect, the advertising charge represents a contribution towards Truvo's production, supply and distribution costs of the printed directories for 2014-2015.
145. While TERA notes that brand positioning of eir's logo and name in the printed directories book could, in principle, be considered an intangible benefit, this is only to the extent that the arrangement between Truvo and eir results in advertising cost savings to eir. For 2014-2015, TERA and Oxera considered this was not the case and that the advertising charge could be included solely in the direct net cost model.
146. Having assessed this issue ComReg is of the view that the most appropriate treatment of this advertising charge is to include it as a relevant cost in the direct net cost model.
147. ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that eir's final 2014-2015 USO funding application in respect of Directories is consistent with the principles and methodologies of D04/11 and specifically Decision 17 of D04/11.

D04/11	ComReg's decision
Decision	
Decision 17	For Directories, the net cost calculation shall use the total avoidable cost, minus total revenues of this service.
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA that the approach, assumptions and calculations applied by eir in arriving at the directories avoidable cost estimate, is in accordance with Decision 17.

Figure 11: Decision - Compliance with Decision 17 D04/11

148. ComReg confirms, on the basis of the assessment and review undertaken by TERA of the Directories Model and the underlying direct net cost calculations, that the calculated direct net cost of the Directories Model is €1,400,000.

5.3.4 Payphone Model

149. The USO consists of the provision of a defined set of services to end-users at an affordable price. As well as provision of access at fixed locations and telephone services (as discussed above), these services include provision of public payphones (mandatory public payphone provision).

150. With respect to loss making payphones, only those payphones that are subject to USO obligations can be considered as part of the direct net cost. The USO only covers those payphones that are available on the street, and in other public areas available to the public at all times (i.e. unrestricted access).

151. ComReg Decision D08/14, "Universal Service Obligation - Relocation/Removal of Public Pay Telephones", 3 March 2006, (the "Removals Policy") states that:

"The USP is permitted to remove a public pay telephone on a single site where:

- i. there is demonstrable evidence that the removal of the public pay telephone is necessary as the public pay telephone concerned is a focus for anti-social behaviour; or*
- ii. the usage in the previous six months of the public pay telephone (while in reasonable working order) has been low, indicating an absence of "reasonable need" in that location, where "low" is considered to mean:*
 - Average Usage (including local, national, international, emergency calls, DQ calls, Freephone calls and reverse charge minutes) for the previous six months is less than 1 minute per day and*
 - Average minutes for the previous six months to Freephone numbers and Emergency Services combined is not more than 30 seconds of these minutes;*

Or,

- iii. there is more than 1 public pay telephone on the site and the average usage across all of the public pay telephones on the single site does not meet the low usage standards as set out in 4.1(ii); in such instances the USP shall ensure 1 public pay telephone remains on the single site; or*
- iv. it is requested by a local authority."*

152. The Payphone Model aims to calculate the direct net cost of uneconomic payphones in economic areas (the potential cost of uneconomic payphones in uneconomic areas are captured in the analysis of net costs in the Area Model and therefore are excluded from the Payphone Model).²⁸
153. The Payphone Model identifies access, core, maintenance and phone card costs as relevant for consideration in the direct net cost assessment. eir submitted that relevant payphone revenue includes, amongst other things, call revenue, advertising revenue and WIFI revenue.
154. As set out in Figure 1 above, eir claimed a direct net cost of €320,223 for [REDACTED]] uneconomic payphones in economic areas in its final 2014-2015 USO funding application. TERA found that adjustments were required to the Payphone Model and therefore, when ComReg published Consultation 18/36, ComReg was of the preliminary view that the calculated direct net cost was €122,057. Following receipt of eir's submissions in response to the Consultations, ComReg instructed TERA to consider the Payphone Model again and, on that basis ComReg has decided that the calculated direct net cost of the Payphone Model is €129,650.

5.3.4.1 Key changes

155. TERA observed that certain inputs in the Payphone Model were different in eir's final application than in the initial application and noted that this was due to changes made to the Area Model between the initial and final application. The average cost per line in each MDF and the conclusion as to whether an MDF is economic or not from the Area Model are both inputs into the Payphone Model, and so certain changes to the Area Model flow through to the Payphone Model.
156. Overall, TERA observed an increase in the number of uneconomic payphones in economic areas and associated potential net costs compared to previous USO application periods.

²⁸ This is to avoid a potential double count of these avoidable costs and revenues foregone, in accordance with D04/11.

157. Having analysed eir's Payphone Model for cost identification and allocation, and the direct net cost estimate, and having made the necessary adjustments, TERA confirmed that the principles and methodology applied by eir in its Payphone Model in its 2014-2015 funding application and the resulting direct net cost estimate were in accordance with Decisions 16 and 27 of D04/11, subject to any further adjustment that ComReg might apply on the basis of Decision 16.

5.3.4.2 ComReg's decision

158. ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, and the subsequent amendment of the direct net cost claimed in eir's final 2014-2015 USO funding application, that calculations contained in the Payphone Model are in accordance with the principles and methodology in D04/11.
159. Decision 16 of D04/11 sets out that only the direct net cost of mandatory public payphone provision is relevant to the assessment of the USO funding application. Under Decision 16, if the number of uneconomic payphones is considered excessive and unreasonable, ComReg may adjust the net cost calculation to reflect appropriate payphone coverage (in areas where they are mandatory).
160. ComReg instructed TERA to analyse the number of USO payphones claimed by eir within the Payphone Model in light of the Removals Policy. TERA's analysis indicated that revised revenues and costs associated with [redacted] payphones should be disallowed from the Payphone Model. ComReg is of the view that eir has included additional costs associated with payphones which were avoidable and therefore decided to adjust the Payphone Model direct net cost downwards to €122,057.
161. In respect of the 2014-2015 Payphones Model eir, in its response to the Consultations, submitted that post January 2015 the earliest time period in which eir could have removed any public payphone was 8 weeks, as opposed to the 6 week period used by TERA in its analysis.
162. In light of this statement by eir, ComReg asked TERA to review its analysis taking into account the 8 week time period. TERA's further analysis indicated that, while the 8 week time period did not impact the total number of payphones that should be disallowed, it did impact the revised revenues and costs associated with the [redacted] payphones that should be disallowed from the Payphone Model. This has resulted in an upward adjustment of the Payphone Model direct net cost to €129,650.²⁹

D04/11	ComReg's decision
Decision 16	In respect of mandatory public payphone provision, the net cost calculation shall be based on the total avoidable cost, minus the total revenues foregone. Furthermore, for each public payphone that is connected to a single exchange site, the access cost for a payphone will be the same access cost as that of any line at the exchange site on which it is connected. The avoidable access costs shall be calculated as an estimate per line at the exchange site to which the public payphone is connected. If the number of uneconomic payphones is considered excessive and unreasonable, ComReg may adjust the net cost calculation to reflect appropriate payphone coverage (in areas where they are mandatory).
	ComReg is satisfied, taking into account the adjustments to the Payphone Model outlined in TERA's report and above, that eir's methodology, assumptions and calculations in arriving at the USO payphones direct net cost are in accordance with Decision 16.
Decision 27	With respect to the provision of public payphones which are "uneconomic", sufficient detail shall be provided on their geographic location and proximity of other public payphones operated by the USP (irrespective of their profitability).
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA of eir's 2014/2015 USO funding application, that sufficient information was provided by eir in respect of the location and proximity of uneconomic payphones for the purposes of this application.

Figure 12: Decision - Compliance with Decisions 16 and 27 of D04/11

163. On the basis of the assessment and review undertaken by TERA and ComReg of eir's Payphone Model, ComReg has decided that the calculated direct net cost of the Payphone Model is €129,650.

5.3.5 Disabled End Users' Services Model

164. The Disabled End Users' Services Model calculates the net avoidable cost for the provision of disabled end users' services (text relay, specialised equipment, and free directory enquiry and braille bills).
165. TERA found that the direct net cost of the Disabled End Users' Services Model was €0.04M. This amount reflects the direct net cost claimed by eir in its final 2014-2015 USO funding application.

²⁹ See the TERA Report at Annex 1 to this document

5.3.5.1 Key changes

166. Decision 18 of D04/11 outlines requirements for the approach and calculation of the net avoidable cost for the provision of disabled end users' services.
167. There were no changes in the methodology or approach to calculating the Disabled End Users' Services Model in eir's final 2014-2015 USO funding application. TERA considered that the methodology and calculations underlying the Disabled End Users' Services Model were in accordance with D04/11 and were reasonable for inclusion in eir's final 2014-2015 USO funding application.

5.3.5.2 ComReg's decision

168. ComReg is satisfied, on the basis of the assessment and review undertaken by TERA, that the methodology, assumptions and calculations underlying the Disabled End Users' Services Model were in accordance with D04/11 and are reasonable for eir's final 2014-2015 USO funding application. ComReg's decision with respect to compliance with Decision 18 of D04/11 is set out in Figure 13 below.

D04/11	ComReg's decision
Decision 18	The net cost for the provision of specific USO services for disabled users, shall be calculated using the total avoidable cost minus the associated total revenues foregone. The avoidable cost shall include the cost associated with the provision of USO special services over the standard minimum level of service (e.g. "minicom" relay services, free directory enquiries, etc.) and specialised equipment (e.g. restricted vision phones, inductive couplers, etc.) minus the total revenue which is incremental to the total revenue associated with the standard minimum level of service to disabled users (which is appropriate to all operators).
	ComReg is satisfied, on the basis of the assessment and review undertaken by TERA that the methodology, assumptions and calculations applied by eir in arriving at the Disabled End Users' Services avoidable net cost estimate is in accordance with Decision 18.

Figure 13: Decision - Compliance with Decision 18 of D04/11

5.4 Direct net cost overlap with intangible benefits

169. In accordance with Decision 36 of D04/11, TERA's assessment investigated potential overlaps between the direct net cost calculations and the intangible benefit estimates to ascertain whether there was evidence of double counting. TERA also performed checks to ensure input or source values relevant to both the direct net cost USO model and the intangible benefits model were correct, used consistently and corresponded to the outputs of the relevant model.

170. This involved reviewing the Frontier Intangible Benefits Report and the Oxera Intangible Benefits Report and informing ComReg of any potential overlaps.

171. Following these checks, TERA made adjustments to the direct net cost calculations in the Payphone Model (as described in section 5.3.4 above). This required some consequent minor adjustments to the intangible benefits estimates, which Oxera made, where required.

5.4.1 Key changes

172. Despite the minor calculation adjustments referred to above, there were no methodological changes which resulted in an overlap between the direct net cost calculations and the intangible benefits estimates in eir's final 2014-2015 USO funding application.

5.4.2 ComReg's decision

D04/11	ComReg's decision
Decision 36	<p>For the identification of the benefits, ComReg will observe the following key principles:</p> <ul style="list-style-type: none"> • The benefits represent effects on a USP of providing the USO which have not been accounted for in the direct costing methodology (for example, any benefits that are directly identifiable to specific revenue streams, including indirect and replacement calls revenues are excluded having been covered by the direct net cost calculation). • Avoid the double counting of any benefits. • The benefits are those accruing to the USP, as a consequence of being the designated USP (any benefit arising from the fact that the USP is a large player in the market is to be excluded from the calculations).
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by both Oxera and TERA, that there is no evidence of double counting of benefits with the direct net cost methodology and that the appropriate benefits, accruing only as a result of eir's USP status, are considered.</p>

Figure 14: Decision - Compliance with Decision 36 of D04/11

5.5 Overall direct net cost calculation – ComReg's decision

173. ComReg is of the view, on the basis of the assessment and review undertaken by TERA, that the changes to methodology between eir's initial and its final 2014-2015 USO funding application were appropriate, and that adjustments made by ComReg to eir's final 2014-2015 USO funding application (regarding the Customer Model, the Payphone Model and consultancy fees) further improved the accuracy of the direct net cost calculation in line with the relevant principles and methodologies in D04/11.
174. ComReg has decided that the calculated direct net cost which is appropriate for use in this assessment is €12,270,870, (after a total downward adjustment of €481,942), as summarised in Figure 15 below.

USO Net Cost 2014-2015		2014-2015 eir's initial USO funding application	2014-2015 eir's final USO funding application	ComReg Adjustment €	2014-2015 ComReg's Final View €
Direct net cost (a)	Uneconomic Areas	€311,027	€311,027	-	€311,027
	Uneconomic Customers	€13,187,149	€10,919,705	(€528,345)	€10,391,360
	Directories	€1,400,000	€1,400,000	-	€1,400,000
	Public Payphones	€320,223	€320,223	(€190,573)	€129,650
	Services for disabled end users	€38,833	€38,833	-	€38,833
	Consultancy fees*	€269,227	€291,369	(€291,369)	€0
	Direct net cost	€15,526,458	€13,281,157	(€481,942)	€12,270,870

* ComReg has decided that consultancy fees are not a part of the net cost having regard to D04/11 and the provisions of the Universal Service Directive and the Universal Service Regulations (as more fully set out in Section 6).

Figure 15 : Summary of Direct Net Cost

6 Consultancy fees

175. eir's final 2014-2015 USO funding application included a figure of €291,369 for "Consultancy Fees". No breakdown or explanation of this figure was provided. At the final stages of the assessment period in February and March 2017, at ComReg's request, eir provided further information including invoices in respect of consultancy fees paid and details of the tendering process undertaken by eir.³⁰
176. ComReg has decided that the consultants' fees incurred and claimed by eir in its final 2014-2015 USO funding application were not net costs of the universal service. The basis for this decision is set out in more detail in Document 19/41 ("Assessment of eir's 2010-2015 Universal Service Fund Applications – Response to Consultations 17/73; 17/81; 17/95; 17/109 and 18/36").
177. Having regard to D04/11, the wording of the Universal Service Directive and the Universal Service Regulations, ComReg is of the view that consultancy fees relating to the preparation and submission of a USO funding application, which are not directly incurred as a result of the provision of USO services, do not form part of the net cost. On this basis and for the reasons outlined below and in Document 19/41, ComReg has excluded the consultancy fees claimed by eir from the calculation of the net cost.
178. With respect to the specific costs that may be claimed by a USP as a consequence of providing USO services, Decision 2 of D04/11 states that:
- "It is only the portion of costs, both capital and operational expenditure for the given financial year that can be directly attributed to the USP service (i.e. the service activity creates the cost) and which could have been avoided without the USO, which are included in the net cost calculation".*
179. This, in ComReg's view, reflects the wording of Article 12 (Costing of universal service obligations) of the Universal Service Directive and Regulation 11 of the Universal Services Regulation. Specifically, Article 12(1) of the Universal Services Directive identifies the object of the net cost calculation as follows:
- "(1). Where national regulatory authorities consider that the provision of universal service as set out in Articles 3 to 10 may represent an unfair burden on undertakings designated to provide universal service, they shall calculate the net costs of its provision."³¹*

³⁰ In this correspondence, eir noted that the actual amount incurred in respect of consultancy fees was approximately € [€<] higher than the amount claimed in its final 2014-2015 USO funding application. eir explained this was due to variances between estimates submitted as part of the claim and actual amounts paid.

³¹ Article 12 (1) of the Universal Service Directive is transposed by Regulation 11 (1) of the Universal Services Regulations, which states:

180. In forming its decision, ComReg further considered Article 13 (Financing of universal services obligations) of the Universal Service Directive, which sets out what costs may be entitled to financing (i.e. funding), if an unfair burden is found to exist and a sharing mechanism were to be established. In this regard, Article 13 (2) states:

*"(2) ...Only the net cost, as determined in accordance with Article 12, of the obligations laid down in Articles 3 to 10 may be financed."*³²

181. ComReg also had regard to Part B of Annex IV of the Universal Service Directive which states that:

*"The recovery or financing of any net costs of universal service obligations requires designated undertakings with universal service obligations to be compensated for the services they provide under non-commercial conditions."*³³

182. Having regard to the Universal Service Directive, the Universal Service Regulations and Decision 2 of D04/11, ComReg has decided to exclude the consultancy fees claimed by eir from the net cost as costs incurred in respect of USO funding applications are not a cost of any Universal Service provision within the meaning of Regulation 11 of the Universal Services Regulations. It is also the case that certain of the consultancy fees claimed by eir pertain to services such as [§< [REDACTED]] advice that are specific to eir's own objectives and which are for eir's own benefit, and some are costs of audit and verification in respect of which specific contractual arrangements are in place. ComReg has therefore made an adjustment to the net cost figure to reflect this decision.

"11. (1) Where an undertaking designated as having an obligation under Regulation 3, 4, 5, 6, 8 or 9 seeks to receive funding for the net costs of meeting the obligation concerned, it may submit to the Regulator a written request for such funding."

³² Article 13 (2) of the Universal Service Directive is transposed by Regulation 12 (2) of the Universal Services Regulation as follows:

"(2) The Regulator shall establish a sharing mechanism administered by it or a body independent from the designated undertaking, which body shall be under the supervision of the Regulator. Only the net cost, as determined in accordance with Regulation 11, of the obligations provided for in Regulation 3, 4, 5, 6, 8 or 9 may be financed."

³³ The same wording appears in the Universal Service Regulations at Schedule 2, Part B.

7 Approach to calculating intangible benefits

183. This section sets out ComReg's decision on the intangible benefits calculation of eir's final 2014-2015 USO funding application (Figure 16).
184. Decision 35 of D04/11 requires that the net cost calculation must assess the benefits, including intangible benefits that accrue to the USP, by virtue of being the USP. It provides that, at a minimum, ComReg will consider the following benefits:
- Brand recognition³⁴
 - Ubiquity
 - Life-cycle
 - Marketing
185. Decision 36 of D04/11 sets out the key principles underpinning the identification and quantification of the aforementioned intangible benefits, summarised as follows:
- The benefits represent effects on a USP of providing the USO which have not been accounted for in the direct costing methodology
 - Avoid the double counting of any benefits
 - The benefits are those accruing to the USP, as a consequence of being the designated USP (any benefit arising from the fact that the USP is a large player in the market is to be excluded from the calculations).
186. Decision 37 refers to methodologies and data sources for calculating the benefits. In reviewing the calculations and data sources used by the USP to assess the value of benefits, Decision 37 notes that ComReg reserves the right to implement alternative methodologies and data sources to verify the appropriateness of the value of the benefits resulting from the USO.

³⁴ This may also be referred to in this consultation document as "enhanced brand recognition".

187. ComReg commissioned Oxera to review the Frontier Intangible Benefits Report for 2014-2015, which outlined eir's approach to the estimation of the intangible benefits and to obtain its view as to the robustness and accuracy of the estimate for inclusion in the net cost. Oxera's assessment was provided to ComReg in the Oxera Intangible Benefits Report, published as part of this decision document at **Annex 2**.
188. eir's initial and final intangible benefits estimates, an adjustment made by ComReg and its consultants to eir's final 2014-2015 USO funding application, and ComReg's decision on the value of intangible benefits is set out in Figure 16 below.

USO Net Cost 2014-2015		2014-2015 eir's initial USO funding application	2014-2015 eir's final USO funding application	ComReg Adjustment €	2014-2015 ComReg's Final View €
Intangible benefits (b)	Enhanced brand recognition	€667,556	€667,556	-	€667,556
	Life-Cycle	€64,790	€53,276	(€103)	€53,173
	Ubiquity	€9,227	€9,227	-	€9,227
	Marketing	€118,117	€118,117	(€110,779)	€7,338
Total intangible benefits		€859,690	€848,176	(€110,882)	€737,294

Figure 16 : eir's initial and final estimates and ComReg's decision on the Intangible Benefits

189. ComReg, having considered the Oxera Intangible Benefits Report, the TERA Report, and information submitted by eir in response to the clarifications process, has decided that eir's final 2014-2015 USO funding application is in adherence with D04/11 and specifically in terms of the intangible benefits assessment, with Decisions 31, 35, 36 and 37 of D04/11.

7.1 Overview of Oxera's intangible benefits assessment

190. Oxera undertook a detailed assessment of the methodologies and calculations applied by Frontier on eir's behalf³⁵, to establish the estimate of the intangible benefits generated as a result of the provision of USO services in 2014-2015.

³⁵ "Frontier Intangible Benefits Report - Frontier Economics (2016), 'Intangible Benefits of Universal Service Provision in Ireland – 2014-2015; A report prepared for eir', July 2016." (the "**Frontier Intangible Benefits Report**")

191. The Oxera Intangible Benefits Report is structured as follows:
- Section 2 summarises Oxera's assessment of eir's approach to estimating the enhanced brand recognition benefits, by virtue of being the USP.
 - Section 3 summarises Oxera's assessment of eir's approach to estimating the life cycle benefits, by virtue of being the USP.
 - Section 4 summarises Oxera's assessment of eir's approach to estimating the ubiquity benefits, by virtue of being the USP.
 - Section 5 summarises Oxera's assessment of eir's approach to estimating the market benefits, by virtue of being the USP.
192. Oxera's assessment of eir's 2014-2015 USO funding application involved:
- developing an understanding of the approaches and methodologies adopted by eir and determining their rationale and suitability in calculating the estimation of each intangible benefit category.
 - evaluating the methodologies adopted in eir's USO funding application and the estimates of each intangible benefit category, in respect of their effectiveness and robust implementation in the overall analysis.
193. Oxera raised a number of queries and requests for clarification in relation to the approach used by Frontier. This led to a process of engagement between ComReg and eir, whereby eir engaged Frontier to provide ComReg with responses to Oxera's queries. This led to some changes in the methodological approach to the calculation of the intangible benefits and, therefore, to the final estimates included in the Frontier Intangible Benefits Report submitted as part of eir's final 2014-2015 USO funding application.
194. Additionally, as set out in Section 5, TERA analysed and advised ComReg in relation to the direct net cost elements of the USO for 2014-2015. Oxera liaised with TERA in relation to certain matters to ensure there was no overlap or double counting between revenues accounted for in the direct net cost and the intangible benefits estimates.
195. Oxera has also liaised with TERA with respect to a number of the inputs from the direct net cost USO models (the Area Model and Customer Model) that are used in the calculation of some of the intangible benefits. Adjustments made by eir to these USO model inputs have also resulted in changes to the estimates for intangible benefits between eir's initial 2014-2015 USO funding application and its final 2014-2015 USO funding application.

196. Figure 16 above sets out the estimates for each intangible benefit category as verified by ComReg and its consultants. The key changes in eir's final 2014-2015 USO funding application with respect to the methodology and calculations used to estimate intangible benefits are summarised in this Section and further details are set out in the Oxera Intangible Benefits Report.

7.2 Identification and quantification of the intangible benefits

197. As noted above, Decisions 35 and 36 of D04/11 set out the principles to identify of the benefits (including intangible) that can accrue to the USP, and to avoid any double counting of benefits between the direct net cost calculation and the intangible benefits estimate.
198. In accordance with Decision 35 of D04/11, eir's final 2014-2015 USO funding application estimates the following benefits:
- Enhanced brand recognition;
 - Ubiquity;
 - Life-cycle; and
 - Marketing.

7.2.1 Enhanced brand recognition

199. Enhanced brand recognition refers to the benefits generated as a result of greater brand recognition, corporate reputation and associated goodwill as a result of the provision of USO services.
200. The enhanced brand recognition estimates set out in eir's initial 2014-2015 USO funding application remained the same in eir's final 2014-2015 USO funding application, €667,556.
201. Oxera has reviewed the approach taken by eir in determining the value of brand recognition benefits. In Oxera's view, eir's high-level principles for estimating the enhanced brand recognition benefit were consistent with D04/11. It was noted by Oxera that the specific micro economic model used by eir and its application of principles had been modified to take account of Oxera's previous recommendations on improvements to the methodology for this benefit valuation. This is set out in detail in the Oxera Intangible Benefits Report.

202. On the basis of the analysis and reasoning set out in the Oxera Intangible Benefits Report, ComReg has decided that the value estimated by eir for the enhanced brand benefit of €667,556 for the purposes of eir's final 2014-2015 USO funding application is reasonable.

7.2.2 Life-Cycle benefits

203. Potential life-cycle benefits that may be enjoyed by the USP over time include subscribers who may have been uneconomic, but who become profitable owing to changes in respect of usage of the USP's services.
204. eir used a net present value approach to estimate the profits generated from uneconomic customers in each year over their lifetime, based on forecasts of future volumes, prices and avoidable costs. The present value of this stream of profits was then calculated for each customer. Customers who had a positive net present value (from a life-cycle perspective) were considered to be economic and were removed from the list of uneconomic customers when the direct net cost of the USO was calculated. The benefit was therefore calculated as the reduction in the estimated net cost of the USO due to the removal of customers and areas that were uneconomic in a single year, but economic from a life-cycle perspective.
205. eir has used a time horizon of five years as it considered that eir's customer lifetime was the appropriate time period to use when calculating the life-cycle benefits.³⁶
206. Oxera found eir's approach to estimating the life-cycle benefits and the assumptions used as part of the calculation to be reasonable. Oxera noted that eir's high-level principles for estimating life-cycle benefits were consistent with the principles followed in eir's 2009/10 Intangible Benefits Report³⁷. Oxera noted, however, that the application of the principles had been modified to take account of Oxera's recommendations in respect of eir's 2009-2010 USO funding application. Oxera noted that the methodology for calculating the life cycle benefit and the intangible benefits model eir used for 2014-2015 are the same as those used in its final 2013-2014 USO funding application.
207. Oxera has also confirmed certain matters with TERA to ensure there was no overlap or double counting between revenues accounted for in the direct net cost calculation and the intangible benefit estimates.

³⁶ eir uses a time horizon of five years to generate a 'central estimate'. To check how sensitive the estimates are to the time period used, eir considered a range of three to five years and found that the results were not sensitive to the choice of time period.

³⁷ WIK-Consult, 'Intangible Benefits of Universal Service Provision in Ireland; Report for eircom for the 2009/10 financial year', 30 November 2012.

208. Overall, Oxera considered that eir's approach to estimating the life-cycle benefits, and the assumptions used as part of the calculation, were reasonable and consistent with D04/11.
209. On the basis of the analysis and reasoning set out in detail in the Oxera Intangible Benefits Report, ComReg has decided that the value estimated by eir for life-cycle benefits of €53,276 in eir's final 2014-2015 USO funding application, with a downward adjustment of €103³⁸, is reasonable.

7.2.3 Ubiquity benefits

210. Ubiquity benefits refer to the profit that the USP derives, owing to its USP status, from retaining a proportion of consumers who move from uneconomic to economic areas. Specifically, some customers who migrate are likely to remain as customers of the USP rather than switching to an alternative provider, because they are aware that the USP can provide them with services in all areas and are uninformed about the presence of other providers.
211. In addition, ubiquity benefits can arise from the ability of the USP to market to business customers that it is able to service their requirements nationally. Ubiquity benefits may also arise from the economic benefit a USP derives as a result of positive network externalities.
212. eir's estimate of the ubiquity benefits is solely based on the benefits arising from migration flows, i.e. an estimate of the increase in profit margins that eir generated from retaining a greater share of customers moving from uneconomic to economic areas, as a result of its USP status, than it would otherwise have retained.
213. In the 2014-2015 USO funding application, eir included an additional parameter, alpha (α), that was not included in eir's 2009/10 Intangible Benefits Report, to reflect that only some of its customers were unaware of alternative providers when they move.
214. Alpha (α) represented the percentage of eir residential customers who were unaware of alternative providers. This parameter has been added to ensure that only customers who moved from uneconomic to economic areas *and* who were unaware of alternative providers were included in the calculation.

³⁸ Specifically, eir's final submission used the WACC estimate of 10.21% as determined by ComReg in 2008 to calculate the life-cycle benefits mark-up. In December 2014, ComReg determined a lower WACC of 8.18% that should be used for calculation of the life-cycle benefits mark-up for the 2014/15 application.

215. Oxera also noted that the way in which β ³⁹ is calculated for eir's final 2014-2015 USO funding application⁴⁰ has been changed since eir's 2009-2010 Intangible Benefits Report, although the meaning of the term remained the same.
216. The number of eir customers was based on the number of eir's lines as opposed to the number of accounts. eir clarified, and Oxera agreed, that for the purposes of estimating ubiquity benefits the number of lines was used consistently throughout the calculations.⁴¹
217. Oxera noted that eir's high level principles for estimating ubiquity benefits were consistent with the principles followed in eir's 2009/10 Intangible Benefits Report, though some aspects of eir's intangible benefits model have been modified to take account of Oxera's recommendations in respect of its 2009-2010 USO funding application. Oxera also noted that the methodology for calculating the ubiquity benefit and the intangible benefits model eir used for 2014/15 are the same as those used in its final 2013/14 USO funding application. On the basis of the analysis and reasoning set out in the Oxera Intangible Benefits Report, Oxera considered that the approach used by eir to calculate the ubiquity benefit was reasonable.
218. Having reviewed Oxera's assessment of the methodology and calculation of ubiquity benefits, ComReg is of the view that eir's approach and estimation of ubiquity benefits for the purpose of its final 2014-2015 USO funding application is reasonable. On the basis of advice provided by Oxera and TERA, ComReg is has decided that ubiquity benefits of €9,227 are reasonable to include in the net cost calculation.

7.2.4 Marketing benefits

219. Marketing benefits associated with the USO include the benefits that the USP may derive from having access to customer data that is acquired because it is the USP, and from being able to advertise itself on uneconomic public payphones at no cost.

³⁹ β is eir's market share among migrants from uneconomic to economic areas – eir's market share in economic areas;

⁴⁰ This change was made between the original and final applications for 2014/15.

⁴¹ eir noted that basing the number of eir subscribers on the number of eir's lines is a reasonable approach and eir has also highlighted that the difference in the number of lines and the number of accounts has a very marginal impact on the estimated intangible benefits. We have been unable to test the impact of the assumption on the estimate of ubiquity as the intangibles model is based on data for individual lines.

220. eir's estimate solely focused on the benefits generated from advertising on uneconomic public payphones. eir argued that benefits from being able to use customer data from uneconomic customers and from displaying its logo on Wi-Fi hotspot login pages, was either likely to be negligible or incapable of being quantified robustly.
221. eir's approach to calculating the marketing benefit was consistent with the approach taken in eir's 2009/10 Intangible Benefits Report. eir's 2014/15 application used a more detailed source of revenue data. eir was able to collect advertising revenue for each individual payphone, where in prior years only total payphone advertising revenue was available.
222. eir's estimate of the marketing benefits (€118,117) in its final 2014-2015 USO funding application was the same as from eir's initial 2014-2015 USO funding application
223. Oxera noted that eir's high-level principles for estimating the marketing benefits were consistent with the principles followed in eir's 2009-2010 Intangible Benefits Report, which Oxera considered were reasonable.
224. Oxera proposed a downward adjustment of €111,214 to eir's estimate of marketing benefits in its final 2014-2015 USO funding application. This reflects the change of status of payphones which become economic once advertising revenue is taken into account, and the exclusion of payphones for which the net cost could have been avoided by eir (see section 8.2.1 of the TERA Report and sections 5.2 and 5.3 of the Oxera Intangible Benefits Report). eir's marketing benefit estimate was accordingly adjusted by Oxera, resulting in a reduced marketing benefit of €6,903.
225. Following receipt of eir's submissions in response to the Consultations in relation to the time period in which eir could have removed any public payphones, considered also at section 5.3.4 of this document in the context of the Payphone Model, ComReg instructed Oxera to consider the marketing intangible benefits again. Oxera was of the view that an upward adjustment of €435 to the marketing intangible benefit was appropriate and, on that basis, ComReg has decided that the total adjustment required to the marketing intangible benefit is €110,779 and therefore that the calculated intangible market benefits is €7,338⁴².
226. Having reviewed the marketing benefit assessment provided by Oxera and TERA's advice, ComReg has decided that the adjusted value of €7,338 for eir's marketing benefits is reasonable to include in the net cost calculation.

⁴² See the Oxera Intangible Benefits Report at Annex 2 to this document

7.3 ComReg's decision – total intangible benefits and positive net cost

227. ComReg is of the view, on the basis of the assessment and review undertaken by Oxera, and following a downward adjustment of €110,882 to the marketing benefit and a downward adjustment of €103 to the life-cycle benefit that €737,294 is a reasonable estimate of the total intangible benefits that arose from eir's provision of the USO in 2014-2015 and that this amount should be included in the net cost calculation.

D04/11	ComReg's decision
Decision 31	<p>The calculation of the benefits of the USO shall be completed by an external expert, independent of the USP. These calculations must clearly set out: the respective methodologies; assumptions and supporting documentation used at deriving the benefits of the USO.</p> <p>These calculations must provide: (a) the benefit (in monetary terms) that the USP derives as a commercial operator; (b) the benefit (in monetary terms) that the USP derives as a result of the USO; and (c) a reconciliation with reasoning to explain the incremental difference between (a) and (b).</p>
	<p>ComReg confirms, on the basis of the assessment and review undertaken by Oxera, that eir has provided reports prepared by external experts, Frontier, for the purposes of calculating the benefits of the USO. The reports clearly set out the necessary calculations, methodologies and assumptions applied in calculating the benefits of the USO.</p>
Decision 35	<p>The net cost calculation must incorporate an assessment of the benefits, including intangible benefits that can accrue to the USP. ComReg will consider, at a minimum, the following benefits (as a result of the USO) for a USO net cost calculation:</p> <ul style="list-style-type: none"> • Enhanced brand recognition. • Ubiquity. • Life-cycle. • Marketing.
	<p>ComReg confirms, on the basis of the assessment and review undertaken by Oxera, that eir's estimations assessed the relevant benefits.</p>

Decision 36	<p>For the identification of the benefits, ComReg will observe the following key principles:</p> <ul style="list-style-type: none"> • The benefits represent effects on a USP of providing the USO which have not been accounted for in the direct costing methodology (for example, any benefits that are directly identifiable to specific revenue streams, including indirect and replacement calls revenues are excluded having been covered by the direct net cost calculation). • Avoid the double counting of any benefits. • The benefits are those accruing to the USP, as a consequence of being the designated USP (any benefit arising from the fact that the USP is a large player in the market is to be excluded from the calculations).
	<p>ComReg is satisfied, on the basis of the assessment and review undertaken by both Oxera and TERA, that there is no evidence of double counting of benefits with the direct net cost methodology and that the appropriate benefits, accruing only as a result of eir's USP status, are considered.</p>
Decision 37	<p>The methodologies to assess the value of the benefits that will actually be used cannot be prescribed in advance of receiving an application for USO funding from the USP.</p> <p>Pending receipt of the first USO funding application, ComReg will actively continue to evolve and refine a number of potential methodologies for the purposes of valuing the benefits of the USO.</p> <p>ComReg reserves the right to implement alternative methodologies and data sources to verify the appropriateness of the value of the benefits resulting from the USO.</p> <p>During the course of the USO funding application assessment, ComReg will review the valuation of the benefits provided by the USP.</p>
	<p>ComReg engaged with Oxera to review the estimates prepared by Frontier (eir's independent expert) of the benefits to the USP. This included a review of the robustness and accuracy of the estimates and methodologies used by eir.</p>

Figure17: ComReg's decision - Compliance with Decisions 31, 35, 36 and 27 of D04/11

228. The net cost, as calculated equates to the difference between the avoidable costs attributable to the provision of the USO (both direct and indirect) minus the revenues (both direct and indirect) attributable to the provision of the USO.

229. Taking account of ComReg's decision on the calculated direct net cost and the total intangible benefits that arose from eir's provision of the USO, as outlined in Section 5 and Section 7 respectively, ComReg has decided that there is a positive net cost to eir for the financial year 2014-2015 of €11,533,576.

8 Determination of an unfair burden

8.1 Assessment approach

230. The existence of a positive net cost does not automatically constitute an unfair burden or automatically give rise to the need for USO funding. D04/11 sets out the principles and methodologies to be considered in determining whether a net cost represents an unfair burden on a USP. Those principles and methodologies, and the relevant statutory provisions, have informed ComReg's assessment of whether the positive net cost of providing the USO constituted an unfair burden on eir.
231. Based on Oxera's analysis in the Unfair Burden Report 2014-2015, ComReg's has decided that for the financial year 2014-2015 the positive net cost did not constitute an unfair burden on eir.
232. The analysis in Oxera's Unfair Burden Report 2014-2015 has been conducted on the basis of the positive net cost figure claimed by eir of €12.43M, rather than the lower positive net cost figure of €11.53M which ComReg considers to be the more accurate net cost figure.⁴³
233. This section provides an overview of the steps that ComReg, with the benefit of Oxera's advice, took in arriving at its decision as to whether the positive net cost to eir of providing the USO in 2014-2015 constituted an unfair burden.
234. To facilitate ComReg in forming decision as to whether or not there is an unfair burden on eir in respect of its final 2014-2015 USO funding application, ComReg engaged Oxera to assess the relevant information and data relevant to eir's financial period 2014-2015.
235. Oxera was instructed to conduct its analysis by reference to the established principles and methodologies for assessing an unfair burden in Decisions 38 to 42 of D04/11. For ease of reading, these decisions are set out below:

⁴³ It should be noted that ComReg's decision on the unfair burden would be the same had Oxera instead based its analysis on the positive net cost figure as adjusted by ComReg of €11.53M.

Decisions 38 to 42 of D04/11

- **(Decision 38)** – For there to be an unfair burden, three cumulative conditions must be met:
 - i. There must be a verifiable and verified direct net cost
 - ii. The benefits of the USO must not outweigh the net cost (i.e. there is a positive net cost)
 - iii. This positive net cost is (a) material compared to administrative costs of a sharing mechanism, and (b) causes a significant competitive disadvantage for a USP.
- **(Decision 39) — Administrative cost assessment** - if the positive net cost is relatively small, ComReg will determine, on the basis of audited costs of the USO, whether USO financing is or is not justified, taking into account the administrative costs of establishing and operating a sharing mechanism (compared to the positive net cost of the USO) and taking into account whether these costs are disproportionate to any net transfers to a USP.
- **(Decision 40) — Assessment of the USP's financial position** - if the positive net cost is not relatively small, ComReg will assess whether or not this net cost significantly affects a USP's profitability and/or ability to earn a fair rate of return on its capital employed.
- **(Decision 41)—Competitive distortions assessment** - if the positive net cost significantly affects a USP's profitability, ComReg will assess whether or not such a net cost materially impacts a USP's ability to compete on equal terms with competitors going forward.
- **(Decision 42) —Supporting criteria to determine unfair burden –**
ComReg will use the following criteria, statically and dynamically, to determine whether or not a net cost burden is actually unfair:
 1. Changes in profitability, including an understanding of where a USP generates most of its profits over time.
 2. Changes in accounting profits and related financial measures—e.g. earnings before interest, tax, depreciation and amortisation (EBITDA) analysis.
 3. Changes in direct USO net cost, if any, over time.
 4. Estimates of average level of cross-subsidy between classes of more or less separately accounted for services, and changes in these over time.
 5. Changes in prices over time.
 6. Changes in market share and/or changes in related markets.
 7. Market entry barriers.

8.2 Summary of Oxera's unfair burden assessment

236. Oxera's assessment was provided to ComReg in the "Unfair Burden Report 2014-2015", published as part of this decision document at **Annex 3**. The Unfair Burden Report 2014-2015 addresses the following issues:

- Section 2 summarises the approach taken by Oxera to assess whether the net cost represents an unfair burden.
- Section 3 presents analysis of the level of the net cost, consistent with Decision 39.
- Section 4 consistent with Decision 40 and Decision 42, presents analysis of eir's financial position including the impact of the net cost on eir's profitability and ability to earn a fair rate of return on capital employed, and sets out Oxera's view on whether the net cost for this application represents an unfair burden.
- Section 5 sets out Oxera's conclusion to inform ComReg's decision.

237. In summary, Oxera carried out the following assessments:

- **Administrative cost assessment (Decision 39)**⁴⁴ - Oxera determined that the net cost of the USO is not small relative to the administrative costs of establishing and operating a sharing mechanism.
- **Assessment of the USP's financial position in 2014-2015 (Decision 40)** - Oxera, having assessed that the net cost of the USO was not small relative to the administrative costs of a sharing mechanism (Decision 39), and having regard to the criteria outlined in Decision 42, analysed the USP's financial position in 2014-2015. This analysis included an assessment of the absolute level of eir's profitability as well as its return on capital employed.
- Oxera also considered additional financial indicators, and as broader context for the profitability analysis, indicators of eir's economic situation such as its pricing and fixed line market share, which illustrate the context of the fixed line market in which eir operates. Oxera found that the USP's profitability and ability to earn a fair rate of return on its capital employed⁴⁵, had not been significantly affected by the USO.
- Oxera set out its findings in relation to quantitative indicators relevant to its unfair burden assessment, in Table 1.1 of its Executive Summary (below):

⁴⁴ In this context, Oxera also had regard to Decision 38 (iii) (a) which states that one of the conditions to be met before an unfair burden can be found is that: "*This positive net cost is (a) material compared to administrative costs of a sharing mechanism*".

⁴⁵ Based on asset values reported in eir's HCA regulatory accounts for the financial period 2014/15 (which reflect the HCA cost methodology required by Decision 1 of D04/11).

Quantitative indicators to assess unfair burden

	2014/15	Relevant section
USO net cost	€12.4m	Section 3
Administrative costs ¹	€0.4m	Section 3
Earnings before interest and taxes (EBIT)	€197m	Section 4.1
Return on capital employed (ROCE)	11.4%	Section 4.1
Increase in ROCE, if there were no USO net cost	0.72%	Section 4.1
WACC range (point estimate)	6.26–9.44% (8.18%)	Section 4.1
USO net cost as a proportion of revenue	1.36%	Section 4.2
USO net cost as a proportion of EBIT	6.3%	Section 4.2
Market share by revenue ²	49%	Section 4.3
Annual change in total ARPU	[] %	Section 4.3
Annual change in total customers	[] %	Section 4.3

Note: ¹We have not estimated a new figure of administrative costs for this application; rather, we have used the figure which applied in the assessment of the 2009/10 funding application. The extent of the differential between the current net cost of the USO (i.e. €12.4m) and the previous estimate of administrative costs of €0.4m is significant enough to suggest that an increase in administrative costs (e.g. due to inflation) since 2009/10 would not have eliminated this differential. ²The market share by revenue is based on total external revenues from fixed-line services.

Source: Oxera analysis.

- Scope of the relevant business – fixed line:** It should be noted that Oxera's analysis of eir's financial position was based on eir's fixed-line business. This includes all of eir's integrated fixed-line business, including wholesale and retail, business and residential, including data communications and interconnection services but excludes mobile services. Amongst other things, Oxera considered this was appropriate because eir's integrated fixed-line business represents a good proxy for the profitability of the businesses that could be directly linked to the USO network.
- Oxera's analysis in support of the choice of the fixed line business is further outlined in **Appendix A1**, '*The scope of the relevant business*' of the Unfair Burden Report 2014-2015 and is also addressed by ComReg in Document 19/41 ("Assessment of eir's 2010-2015 Universal Service Fund Applications – Response to Consultations 17/73; 17/81; 17/95; 17/109 and 18/36") responding to submissions made by eir in this regard in response to the Consultations.
- Oxera's findings** - The Executive Summary of Oxera's Unfair Burden Report 2014-2015 summarises its findings as follows:

“Given the USP’s financial position in 2014/15, Oxera is of the view that the net cost did not significantly affect eir’s profitability, and its ability to earn a fair rate of return on its capital employed. Oxera has not therefore applied Decision 41 (i.e. whether the net cost materially impacts eir’s ability to compete on equal terms with competitors going forward).”

In summary, eir’s financial position indicates that, in the period under assessment, the net cost of the provision of the USO did not impose an unfair burden. During the financial year 2014/15, eir provided the USO while earning profits that were in excess of the regulatory allowed weighted average cost of capital (WACC), referred to as the ‘competitive benchmark’.⁶ Notwithstanding a decline in its total number of customers, eir’s average revenue per user was stable in 2014/15 relative to the 2013/14 financial year and it retained a majority market share by revenue in the fixed-line market, and it was well positioned to internalise the cross-subsidy in providing the USO.”

⁶WACC is a benchmark measure of the return that investors (i.e. equity owners and lenders) can expect from investing in a business. See section 4 for further discussion.

- Following Oxera’s unfair burden assessment, it concluded:

“In summary, having analysed eir’s financial position and having considered indicators of eir’s economic situation which illustrate the context of the fixed line market in which eir operates and serve as broader context for the profitability analysis, we find that eir’s profitability and ability to earn a fair rate of return on capital employed have not been significantly affected by the net cost of the USO and, therefore, that the burden of the net cost in the period of application was not excessive in view of eir’s ability to bear it.”

We find that the net cost of the USO did not represent an unfair burden on eir in 2014/15.”

- Overall, Oxera concluded that the net cost of the USO did not constitute an unfair burden on eir in 2014-2015.

8.3 ComReg’s decision in respect of an unfair burden

238. ComReg has carefully considered Oxera’s Unfair Burden Report 2014-2015 to facilitate its determination regarding whether there is an unfair burden on eir in the specific financial period under assessment.

ComReg has also considered the submissions made by the seven respondents in response to the Consultations.

239. In respect of the choice of relevant business, based on Oxera's analysis, and in particular because the activities included within the integrated fixed line businesses are not dissociable from the USO, ComReg is of the view that the fixed-line business is the most relevant to the analysis of eir's financial position.

240. Having considered eir's final 2014-2015 USO funding application and the reports prepared by its consultants TERA and Oxera, ComReg has decided that the first two of the three conditions in Decision 38 of D04/11 (outlined above) are met, as:

- i. There is a verified direct net cost to eir of €12,270,870. This figure represents the calculated direct net cost as determined by ComReg and takes account of adjustments made by ComReg and its consultants after receipt of eir's final 2014-2015 USO funding application, as outlined in Figure 1 of this document; and
- ii. The estimate of benefits to eir as a result of the provision of the USO, amounting to €737,294, do not outweigh the direct net cost of the USO. ComReg has decided that there is a positive net cost of €11,533,576.

241. ComReg decided that the first condition of Decision 38 (iii), outlined at Decision 38 (iii) (a), was met. ComReg's views on this are set out below.

Decision 38 (iii) (a) – “The positive net cost is (a) material compared to administrative costs of a sharing mechanism”:

- The objective of this test is to assess whether the costs of implementing a sharing mechanism are below the net revenue that would be collected by the USP from the other market players in the event that a sharing mechanism was implemented.
- ComReg has decided, having considered Section 3 of the Unfair Burden Report 2014-2015, that the size of the positive net cost in 2014-15 is material compared to the administrative costs of a sharing mechanism. This is informed by the results of Oxera's assessment showing that the size of the positive net cost is not relatively small and that the positive net cost and / or net transfers to the USP (if an unfair burden were determined by ComReg) would most likely exceed the administrative costs of establishing and operating any sharing mechanism.
- Consequently, ComReg has decided that these administrative costs would not likely be disproportionate to any potential net transfers the USP would receive through such a sharing mechanism, and that the objective of this test is met.

- ComReg has therefore decided that it was appropriate to undertake the next step of the assessment process, namely assessing whether the positive net cost creates an unfair burden on the USP by reference to Decision 38 (iii) (b).

242. ComReg decided that the second condition of Decision 38 (iii), outlined at Decision 38 (iii) (b), was not met. ComReg's views on this are set out below.

Decision 38 (iii) (b) – “The positive net cost [is] (b) causes a significant competitive disadvantage for a USP”:

- Having considered Oxera's conclusions in respect of Decision 40, as set out in Section 4 of the Unfair Burden Report 2014-2015, ComReg is of the view that the positive net cost for 2014-2015 did not significantly affect eir's profitability and ability to earn a fair rate of return on capital employed.
- Given Oxera's conclusions in respect of Decision 40 ComReg did not consider that a competitive distortions assessment pursuant to Decision 41 of D04/11 was required for the 2014-2015 unfair burden assessment as the assessment carried out pursuant to Decision 40 demonstrated that the positive net cost had not caused a significant competitive disadvantage for eir.
- ComReg does not therefore consider that Decision 38 (iii) (b) of D04/11 was met or, in other words, that the positive net cost in respect of the financial year 2014/15 caused a significant competitive disadvantage for eir and has decided on that basis that the positive net cost for 2014/15 did not represent an unfair burden on eir.

243. In conclusion, ComReg has decided that the positive net cost for the financial year 2014-2015 of €11,533,576 (or the higher figure of €12,432,981 as claimed by eir) does not represent an unfair burden on eir.

9 Regulatory impact assessment (RIA)

244. A RIA is a structured approach to the development of policy, and analyses the impact of regulatory options on different stakeholders. ComReg's approach to RIA is set out in the Guidelines published in August 2007.⁴⁶ In conducting the RIA, ComReg take account of the RIA Guidelines⁴⁷ issued by the Department of An Taoiseach in June 2009 and adopted under the government's Better Regulation programme.
245. Section 13(1) of the Communications Regulation Act 2002, as amended, requires ComReg to comply with certain Ministerial Policy Directions. Policy Direction 6 of February 2003 requires that before deciding to impose regulatory obligations on undertakings we must conduct a RIA in accordance with European and International best practice, and otherwise in accordance with measures that may be adopted under the Government's Better Regulation programme. In conducting the RIA, ComReg also has regard to the fact that regulation by way of issuing decisions, for example imposing obligations or specifying requirements, can be quite different to regulation that arises by the enactment of primary or secondary legislation.
246. ComReg's published RIA Guidelines, in accordance with a policy direction to ComReg, state that ComReg will conduct a RIA in any process that may result in the imposition of a regulatory obligation, or the amendment of an existing obligation to a significant degree, or which may otherwise significantly impact on any relevant market or any stakeholders or consumers. However, the Guidelines also note that in certain instances it may not be appropriate to conduct a RIA and, in particular, that a RIA is only considered mandatory or necessary in advance of a decision that could result in the imposition of an actual regulatory measure or obligation, and that where ComReg is merely charged with implementing a statutory obligation then it will assess each case individually and will determine whether a RIA is necessary and justified.

⁴⁶ ComReg Document 07/56 & 07/56a.

⁴⁷ RIA Guidelines - Department of Taoiseach.

247. In this decision document, ComReg considers that it is not exercising its discretion by imposing a discretionary regulatory obligation that would require a regulatory impact assessment (RIA) but is acting under a statutory obligation imposed on it by Regulation 11 of the Universal Service Regulations, which requires that upon receipt of an application for funding from the USP, ComReg shall determine whether a positive net cost has been incurred and if so, whether this positive net cost represents an unfair burden for the USP. As such, if an application for funding has been received, ComReg has no discretion as to whether or not such an assessment is undertaken. Therefore, a RIA is not being undertaken for this decision document.

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10 Determination

Statutory Powers

- 1.1 This Determination is hereby issued by the Commission for Communications Regulation ("ComReg"):
- i. Pursuant to Regulation 11 of the European Communities (Electronic Communications Networks and Services) (Universal Service and end users' rights) Regulations 2011 ("the Regulations").
 - ii. Pursuant to the principles and methodologies set out in ComReg Document, D04/11 "Report on Consultation and Decision on the Costing of Universal Service Obligations Principles and Methodologies" dated 31 May 2011;
 - iii. Having regard to the analysis and reasoning set out in ComReg Document No. 18/36;
 - iv. Having regard to the analysis and reasoning set out in ComReg Document No. 19/ 40 and 19/41;
 - vi. Having regard to ComReg's functions and objectives under sections 10 and 12 respectively of the Communications Regulation Acts 2002 – 2011;
 - vii. Having, where relevant, complied with Policy Directions made by the Minister for Communications, Energy, and Natural Resources.

Determination

- 1.2 Following the assessment of the funding application received from Eircom Limited ("eir") pursuant to Regulation 11(1) of the Regulations on 15 July 2016, in relation to the net cost of meeting its universal service obligations in the financial year 2014-2015, as accompanied by supporting information in compliance with Regulation 11(2) and 11 (5) of the Regulations, ComReg has determined, in accordance with Regulation 11 (3) and 11 (4) of the Regulations, that there was a positive net cost comprised of the following figures:

USO Net Cost 2014-2015		ComReg €
Direct net cost (a)	Uneconomic Areas	€311,027
	Uneconomic Customers	€10,391,360
	Directories	€1,400,000
	Public Payphones	€129,650
	Services for disabled end users	€38,833
	Consultancy fees*	€0
	Direct net cost	€12,270,870
Intangible benefits (b)	Enhanced brand recognition	€667,556
	Life-cycle	€53,173
	Ubiquity	€9,227
	Marketing	€7,338
	Total intangible benefits	€737,294
Net cost (after intangible benefits)		€11,533,576

- 1.3 Pursuant to the calculation of the positive net cost, and in accordance with Regulation 11(3), 11(4) and 12(1) of the Regulations, ComReg has determined that for the financial year 2014-2015, the positive net cost does not represent an unfair burden on eir.

Annex 1 – TERA Report - “Assessment of eir’s USO funding application – direct net cost 2014-2015” Doc. No. 19/40a

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Annex 2 - Oxera Report - "Assessment of eir's calculation of intangible benefits for 2014-2015" Doc. No. 19/40b

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Annex 3 - Oxera Report - “Unfair Burden Report 2014-2015” Doc. No. 19/40c

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