An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Assessment of eir's 2010-2015 Universal Service Fund Applications

Response to Consultations 17/73;17/81; 17/95;17/109 and 18/36

Assessment of the net cost and unfair burden for the periods 2010-2015

NON-CONFIDENTIAL

Response to consultations:	17/73; 17/81; 17/95; 17/109 and 18/36
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Redacted Information

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[1] (the "Framework Regulations") and in accordance with ComReg's guidelines on the treatment of confidential information[2] (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 [✂] symbol has been inserted.

[1] S.I. No 333 of 2011.
[2] ComReg (2005) "ComReg's Guidelines on the treatment of confidential information", 05/04.

1 Executive summary

1. This document provides a general response to stakeholders' submissions on each of the four consultation questions. It should be noted that all submissions were considered and account has been taken of the merits of the views expressed. This Response to Consultation document sets out the key elements of the comments provided and ComReg's views in relation to these, taking into account the views of TERA and Oxera following their review of the parts of the submissions relevant to their respective roles.

2. The Universal Service Regulations[3] 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 cost of meeting the USO. ComReg is then required to determine, based on ComReg's net cost calculation, whether the cost of meeting the USO represents an unfair burden on the USP.

3. The relevant legislation provides that it is only where there is a finding that the net cost of meeting the USO represents an unfair burden on the USP that ComReg must establish a sharing mechanism, whereby the net cost of providing the USO is apportioned among providers. ComReg is therefore required to decide what the net cost is and whether the net cost of the USO represents an unfair burden on eir.

4. Neither the relevant Directive nor the implementing Regulations provide detailed guidance on the method of calculation of the net cost or the unfair burden assessments to be carried out. To provide certainty and transparency for stakeholders as to the funding application assessment process, ComReg consulted on the principles and methodologies to be used by it to assess any funding application received and following that consultation, in 2011, ComReg issued Decision D04/11[4] ("D04/11").

5. D04/11 sets out how the USP can make an application, including the timing of such applications (which are made retrospectively following the financial year in question), guidance on how the net cost (after intangible benefits) is to be calculated, and it sets out principles and methodologies to apply to ComReg's assessment as to whether any positive net cost associated with meeting the USO provision represents an unfair burden on the USP.

[3] The European Communities (Electronic Communications Networks and Services) (Universal Service and User's Rights) Regulations 2011.
[4] ComReg Document 11/42, D04/11 "*Decision on the Costing of universal service obligations: Principles and Methodologies*", 31 May 2011.

6. Eircom Limited ("eir") has submitted to ComReg applications for funding in respect of its financial years 2010-2011, 2011-2012, 2012-2013, 2013-2014 and 2014-2015. These applications were initially submitted over a period from September 2014 to March 2016. Following a process of engagement between ComReg and eir in 2015 and 2016 during which ComReg outlined certain clarifications and adjustments that it requested, eir submitted final applications for each of these financial years on 15 July 2016. In respect of the 2014/15 application, certain of the adjustments requested by ComReg were not applied by eir and so ComReg made these adjustments to eir's final application.

7. ComReg engaged external consultants, TERA Consultants ("TERA") to advise ComReg on the application of the methodology and the calculations used in the direct net cost element of eir's funding applications and to review these against the direct net cost principles and methodologies in D04/11. TERA prepared a report in respect of the direct net cost calculation in each application.

8. ComReg also 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. Oxera prepared a report on its assessment of the intangible benefits included in each application.

9. To assess whether the positive net cost (after intangible benefits) represented an unfair burden on eir, ComReg also engaged Oxera to apply the relevant decisions in D04/11 (Decisions 38 – 42) and to provide expert advice as to whether the net cost in each application represented an unfair burden on eir. Oxera produced a report on its unfair burden assessment of each application.

10. Having considered each of these expert reports, ComReg published a consultation and draft determination in respect of each of the five applications (the "Consultations") between September 2017 and April 2018, each of which invited submissions from stakeholders in response to four specific questions relating to ComReg's preliminary views, as outlined therein. The consultation period closed on 11 June 2018.

11. ComReg received submissions in response to the Consultations from seven stakeholders. ComReg provided Oxera and TERA with copies of these submissions. Oxera and TERA assisted ComReg in considering these submissions by providing their views. Having considered those submissions, ComReg reached a decision in respect of each of the five applications under assessment.

12. No respondent responded to the Consultations on a year by year basis and in light of this ComReg has responded to those submissions in one composite Response to Consultations document (the "Response to Consultations"). Where points were raised

in submissions that pertained specifically to one or more application(s), this is highlighted in the Response to Consultation.

13. ComReg’s decision in respect of each application is set out in a decision document for each respective application (the “Decisions”). Each of the Decisions appends the relevant expert reports for the year in question. Each of the Decisions is to be read in conjunction with the Response to Consultation.

14. ComReg’s view of the net cost as outlined in each of the Decisions is set out in the table below. This takes account of the adjustments that ComReg has decided are necessary to be made to the net cost figures claimed by eir.

15. Having assessed each application applying the principles and methodologies set out in D04/11, ComReg has decided that the positive net cost (as set out in Table 1 below) for each year did not represent an unfair burden on eir in that year. ComReg determined that the net cost did not materially affect eir’s profitability and ability to earn a fair rate of return on capital employed, that the net cost was not excessive in view of eir’s ability to bear it, and that the net cost did not cause a significant competitive disadvantage for eir.

Table 1: Summary Net cost (after intangible benefits)

		2010-2011 ComReg's Final View €	2011-2012 ComReg's Final View €	2012-2013 ComReg's Final View €	2013-2014 ComReg's Final View €	2014-2015 ComReg's Final View €
Direct net cost (a)	Uneconomic Areas	€183,793	€68,609	€268,296	€229,518	€311,027
	Uneconomic Customers	€8,643,518	€7,745,449	€8,286,066	€9,447,160	€10,391,360
	Directories	€0	€0	€0	€550,000	€1,400,000
	Public Payphones	€185,310	€214,545	€311,887	€223,519	€129,650
	Services for disabled end users	€58,935	€57,568	€56,933	€40,614	€38,833
	Consultancy fees*	€0	€0	€0	€0	€0
	Direct net cost	€9,071,556	€8,086,171	€8,923,182	€10,490,811	€12,270,870
Intangible benefits (b)	Enhanced brand recognition	€1,298,367	€1,139,442	€1,002,351	€846,896	€667,556
	Life-cycle	€259,711	€228,017	€167,257	€110,564	€53,173
	Ubiquity	€3,596	€1,987	€11,144	€6,579	€9,227
	Marketing	€6,351	€3,759	€18,681	€12,213	€7,338
	Total intangible benefits	€1,568,025	€1,373,205	€1,199,433	€976,252	€737,294
Net cost (after intangible benefits)		€7,503,531	€6,712,966	€7,723,749	€9,514,559	€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 5).

2 Introduction

16. The Universal Service Regulations[5] 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 cost 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.

17. Eircom Limited ("eir"), as the designated USP, may submit applications for USO funding in accordance with ComReg Decision D04/11[6] ("D04/11"). D04/11 sets out the requirements for making an application and how the positive net cost (after intangible benefits) is to be calculated. D04/11 also sets out the principles and methodologies which ComReg uses to assess whether any positive net cost represents an unfair burden on the USP. Annex 3 to this document sets out, for ease of reference, Decisions 1 to 42 of D04/11.[7]

18. ComReg has received funding applications from eir in respect of the financial years 2010/11, 2011/12, 2012/13, 2013/14, and 2014/15; (financial year 2015/16 is not within the scope of these assessments).

19. ComReg engaged an external consultant, TERA Consultants ("TERA") to (1) review and advise ComReg on the methodology and calculations used in the direct net cost element of eir's 2010/11 - 2014/15 funding applications, against the direct net cost principles and methodologies to be applied in carrying out the calculations (2) prepare a report for ComReg in relation to the net cost calculation; and (3) conduct a review of ComReg's reasoning and its draft determinations in respect of the net cost elements of the applications and to advise and provide comments and input in respect of same.

20. ComReg commissioned Oxera Consulting ("Oxera") to undertake a review of, and to advise and provide a report in relation to, eir's approach to and estimates of the intangible benefits generated through the provision of the USO. This was done by reference to D04/11. The reviews carried out and the advice given by TERA and Oxera also considered whether previous recommendations arising from their review of eir's

[5] European Communities (Electronic Communications Networks and Services) (Universal Service and User's Rights) Regulations 2011.
[6] ComReg Document 11/42, D04/11 *"Decision on the Costing of universal service obligations: Principles and Methodologies"*, 31 May 2011.
[7] 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. 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.

2009-2010 USO funding application by ComReg were incorporated into the methodologies used by eir in its 2010-2015 funding applications.

21. ComReg also engaged Oxera to review the relevant decisions in D04/11 and provide expert advice as to whether the net cost claimed in each of eir's final 2010/11-2014/15 USO funding applications represented an unfair burden on eir in any of these financial years, and to provide ComReg with a report in this regard in respect of each application under assessment.

22. Following this initial work, between June 2017 and April 2018 ComReg issued a consultation and draft determination document in respect of each of the five applications (each, a "Consultation", together the "Consultations"), as follows:

Table 2: Consultation documents

Financial Year	Document	Publication Date
2010-2011	ComReg 17/73: Assessment of eir's 2010-2011 Universal Service Fund Application – Consultation and Draft Determination	5 September 2017
2011-2012	ComReg 17/81: Assessment of eir's 2011-2012 Universal Service Fund Application – Consultation and Draft Determination	10 October 2017
2012-2013	ComReg 17/95: Assessment of eir's 2012-2013 Universal Service Fund Application – Consultation and Draft Determination	22 November 2017
2013-2014	ComReg 17/109: Assessment of eir's 2013-2014 Universal Service Fund Application – Consultation and Draft Determination	12 December 2017
2014-2015	ComReg 18/36: Assessment of eir's 2014-2015 Universal Service Fund Application – Consultation and Draft Determination	30 April 2018

23. Each Consultation invited submissions from stakeholders in response to four questions outlined therein.

24. While each of the five applications is being assessed individually and on its own merits, ComReg was cognisant that it would be more efficient for stakeholders to respond to all five Consultations in one submission document. If stakeholders chose to respond to the five Consultations in one document, the onus was on stakeholders to structure responses clearly, in a discrete year-by-year format. All stakeholders chose to respond

to the five Consultations in one document. A copy of all non-confidential responses received will be made available on ComReg's website.

25. ComReg provided TERA and Oxera with copies of these submissions.

26. ComReg instructed TERA to review those of the submissions which related to the computation and modelling of the net cost and to provide its views on these submissions, and to conduct a review of the reasoning and conclusions set out by ComReg in its proposed decisions for each of the applications. ComReg also instructed TERA to carry out a further review of one aspect of the 2014/15 USO Payphone Model in response to submissions made by eir in this regard. TERA has prepared an updated version of the March 2018 TERA Report to reflect the updated review of the Payphone Model. This updated report, which reflects an amended direct net cost for payphones and an amended overall direct net cost figure is included in Annex 1 of the 2014/15 Decision document.

27. ComReg instructed Oxera to review and advise on those of the submissions which related to the calculation of intangible benefits. In particular, ComReg instructed Oxera to carry out a further review of one aspect of eir's marketing intangible benefits. Oxera prepared an updated version of the March 2018 Oxera Intangible Benefits Report to reflect this updated review of marketing intangible benefits, which reflects an amended marketing intangible benefits figure and an amended total intangible benefits figure included in Annex 2 of the 2014/15 Decision document.

28. ComReg also instructed Oxera to review and advise on the submissions that related to the unfair burden assessment.

29. This document provides a general response to stakeholders' submissions on each of the four consultation questions. Where stakeholders made observations that were specific to a particular application, these are specifically identified and, where appropriate, addressed within this document. It is not practical for ComReg to respond to every comment made. It should be noted that all submissions were considered and account has been taken of the merits of the views expressed. This Response to Consultation document summarises the key elements of the comments provided and ComReg's views in relation to these, taking into account the views of TERA and Oxera following their review of the parts of the submissions relevant to their respective roles.

30. A number of stakeholders made observations that did not appear to be in response to any of the four consultation questions. These submissions are included in chapter 8 within this response to consultation document.

31. This document should be read in conjunction with the decision documents for each of the financial years 2010/11, 2011/12, 2012/13, 2013/14, and 2014/15 (the "Decisions"). The Decisions are being published at the same time as this document

and have been made by ComReg having regard to the Universal Service Regulations, D04/11, the consultants' reports, the respondents' submissions and the consultants' views on the submissions.

3 Engagement between ComReg and eir leading to eir's final USO funding applications

3.1 Overview

32. This chapter outlines the engagement between ComReg and eir regarding the initial submission, and then re-submission in July 2016, of the USO funding applications for 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15.

33. As part of the review of the applications, ComReg and its consultants, TERA and Oxera, sought clarifications from eir on the USO models and supporting information submitted by eir and, arising out of the engagement and clarifications process, eir submitted revised applications. The result of this was that the net cost amounts that were ultimately claimed by eir in the re-submitted applications were lower than the amounts initially claimed.

34. Table 3 sets out the dates on which the different applications were received by eir for each financial year and the date on which the final applications were deemed to have been received.

Table 3: Dates on which funding applications were submitted

Year	eir's initial USO funding application	eir's modified USO funding application	eir's final USO funding application
2010-2011	4/9/14	5/2/16	July 2016
2011-2012	31/10/14	5/2/16	July 2016
2012-2013	31/10/14	5/2/16	July 2016
2013-2014	31/3/15	5/2/16	July 2016
2014-2015	31/3/16	N/A	July 2016

35. eir has included in its submissions a table[8] which it says sets out the timeline from receipt by ComReg of each of eir's funding applications to the publication of the Consultations. eir's table is however misleading in that it does not take account of the extensive engagement that was required between ComReg and eir in relation to the applications that were initially submitted by eir, details of which are set out further

[8] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018, Page 3, paragraph 1.

below. As set out in Table 3 above, this engagement led to eir re-submitting its funding applications for 2010-2011 to 2013-14 in February 2016, and then resubmitting its applications for each financial year under assessment in July 2016.

36. In its submissions in response to the Consultations, titled *"Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens 2010-2011, 2011-2012, 2012-2013, 2013-2014 and 2014-2015*", eir highlighted two "*methodological changes*" that were made by eir to its direct net cost calculations, at ComReg's request, between eir's initial and its final USO funding applications. These changes related to:

a. allocation of reactive maintenance costs to exchanges

b. allocation of overhead and underground costs between housing and isolated areas and cost avoidability

37. [✂ [redacted]]. In its response to consultation submissions[9], eir stated that it "…*believes that these changes were unwarranted and unjustified and should be reversed by ComReg*."

38. However, the applications under assessment by ComReg, and in respect of which ComReg has published the Consultations and is now publishing the Decisions, are the applications which were resubmitted by eir in July 2016 in which eir had made those (and other) changes.

39. ComReg's engagement with eir on both of these matters, eir's response to consultations and the rationale for ComReg's approach to the issues are set out at Annex 1 and Annex 2 of this document.

3.1.1 Initial applications

40. eir submitted its initial USO funding application for the financial year 2010/11 on 4 September 2014 [✂ [redacted]]. Arising from TERA and Oxera's review of the 2009/10 application, ComReg had made certain recommendations to eir for future USO funding applications. [✂ [redacted]

[9] eir response to ComReg 17/73, 17/81,17/95, 17/109 & 18/36, Paragraph 46.

[redacted]].

41. eir submitted its initial 2011/12 and 2012/13 USO funding applications on 31 October 2014 [✂ [redacted]]. eir said that where it was not possible to follow ComReg's recommendations or where eir did not agree with ComReg's recommendations, it had explained the approach taken.[11]

42. eir submitted its initial 2013/14 USO funding application on 31 March 2015 and outlined that eir had employed the same methodology to calculate the direct net cost of the USO as employed in the 2010/11 and 2011/12 funding applications, [✂ [redacted]].

43. eir submitted its initial 2014/15 USO funding application on 31 March 2016 [✂ [redacted]].

44. ComReg and its consultants, TERA and Oxera, reviewed each of eir's initial USO funding applications for the years 2010-2011, 2011-2012, 2012-2013, and 2013-2014. Arising out of this review, a number of issues arose in respect of which ComReg and its consultants required clarification and further information. ComReg engaged with eir on these issues between January 2015 and February 2016 and arising out of that engagement, eir resubmitted its funding applications with a number of modifications, in particular in relation to the allocation of reactive maintenance costs to exchanges. More detail on this engagement is set out in Annex 1.

3.1.2 Modified applications

45. On 5 February 2016 eir submitted four modified USO funding applications in respect of the financial years 2010/11, 2011/12, 2012//13 and 2013/14 stating in respect of each that:

[redacted] [✂ [redacted]].

11 Eircom's USO Funding Submissions – 31 October 2014. *"Overview of Application and Documentation 11 12 Final.pdf"* and *"Overview of Application and Documentation 12 13 Final.pdf"*.

[redacted] [✂ [redacted]].

[✂ [redacted]]

46. ComReg and its consultants, TERA and Oxera, reviewed of each of eir's modified USO funding applications. Arising from this review, ComReg again engaged with eir between February and July 2016 in respect of a number of further clarifications that ComReg required in respect of allocation of overhead and underground costs between housing and isolated areas and cost avoidability. This engagement (details of which are set out at Annex 2) led to eir resubmitting each of the applications in July 2016.

3.1.3 Final applications

47. [✂ [redacted]].

48. [✂ [redacted]

49. [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]].

50. It is the applications submitted in July 2016 that are the subject of the current assessment and in respect of which ComReg published the Consultations and ultimately this response to consultation document and the Decisions.

51. ComReg's engagement with eir regarding two specific issues that arose in relation to the 2014/15 funding application is set out in chapter 4 of this document.

4 Direct net cost calculations

52. The direct net cost is 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.

53. In order to estimate the direct net cost arising from the provision of USO services for the application periods in question, as required by the principles and methodologies of D04/11, ComReg compared the avoidable costs and foregone revenues arising as a result of eir's USP status for the financial years 2010/11, 2011/12, 2012/13, 2013/14, and 2014/15 to the counterfactual scenario where the provision of USO services to uneconomic customers would not otherwise have been served by a commercial operator.

54. This chapter sets out respondents' general and financial year specific views (where applicable) in response to the following question contained in each of the Consultations:

Q.1	Do you have any observations on the results of ComReg's direct net cost calculation?

4.1 ComReg's direct net cost calculation – Respondents' general observations

55. Of the seven operators who responded to the Consultations, four respondents (eir, BT, ALTO and Vodafone) responded specifically to question 1.

56. Vodafone and ALTO stated that they agreed with the results of ComReg's direct net cost calculations for the periods 2010/11 – 2014/15.

57. Vodafone stated: *"Vodafone consider that ComReg have undergone a thorough examination of USO funding submissions and Vodafone agree with the overall findings."*

58. ALTO stated: *"ALTO is of the opinion that ComReg has properly deployed the principles; processes and methodologies appropriate in order to calculate the direct net cost in the circumstances…ComReg has undertaken a full and thorough consultation on the principles, processes and methodologies in Decision D04/11...".*

59. eir stated: "*eir has pointed out…the areas where it disagrees with the approach taken by ComReg in assessing eir's funding applications. Apart from these areas, eir has reviewed the remaining proposed adjustments to the direct net cost calculations in*

ComReg' Consultations 17/73, 17/81, 17/109 and 18/36 considers most of them to be reasonable."

60. eir does not agree that 'consultancy fees' should be excluded from the direct net cost (this is dealt with in chapter 5).

61. eir does not agree with the following 'two methodological changes' to its USO funding applications which were requested by ComReg and implemented by eir (without prejudice to its position) in its final USO funding applications for each financial year:

- Allocation of reactive maintenance cost to exchanges (as set out in Annex 1).
- Allocation of overhead and underground costs between housing areas and isolated areas and how these costs are avoided in each of the areas in the counterfactual of a commercial operator without the USO (as set out in Annex 2).

62. eir is of the view that these methodological changes *"'pushed' the actual estimates of the costs away from the 'likely' cost of the USO"* and for that reason eir believes the changes were unwarranted and unjustified and should be reversed by ComReg.

63. eir does not agree with:

- The adjustment made by eir to the Customer Model in eir's final USO funding application for 2014/15 (as set out in section 4.4.1 of this chapter).
- The adjustment made by eir to the Payphone Model in eir's final USO funding application for 2014/15 (as set out in section 4.5.1 of this chapter).

64. BT, ALTO and Vodafone made observations that ComReg has grouped under the following headings:

- Growing USO costs (direct net cost)
- Increasing cost of the Directory Model (as set out in section 4.1.2 of this chapter).
- Payphone Model

4.1.1 Growing USO costs

65. BT said it finds it surprising that *"the value of USO claims have grown substantially year-on-year over the past four years…given that the market for fixed line PSTN services has declined year-on-year"* but notes that *"insufficient data has been provided within the consultations to understand the reasons for the rises and such should be*

further explained and justified as efficient." BT referenced in this regard Decision 8 of D04/11.[15]

66. ALTO said that it is *"at a loss to understand how it is that eir's costs are substantially increasing year-on-year for the past four years given the extremely healthy position that eir is in, with certain legacy offerings simply becoming obsolete; and the uneconomic fixed line market appears to be growing in a declining fixed lines market. Hence the market does not appear to align with the substantially increasing direct USO costs and we consider ComReg should review and seek justification why the direct costs are increasing so substantially year-on-year."*

67. Vodafone said that*: "…elements of cost are potentially over stated. This is highlighted by the trend in eir submissions over the years in question to submit increasingly high direct net cost submissions. It is in our view not possible that the number of uneconomic lines and associated costs, for an efficient operator would be growing. It is also clear that there is an increasing level of downward correction required on the part of ComReg/TERA assessment each year."*

4.1.2 Increasing cost of Directory Model

68. BT, ALTO and Vodafone expressed concerns in relation to the direct net cost for directories.

69. BT made the following three observations on the increasing cost of the Directory Model:

- The relevant legislative provisions allow for either paper or electronic solutions. There is no evidence of any attempt to validate the demand for physical printed directory or to match print runs with demand.
- *"It is not clear whether reasonable efforts have been made to obtain a positive return for Directories".*
- There is little evidence of consideration given to the reasonableness of the costs from an efficiency perspective.

70. ALTO expressed the view that *"efforts should be made to obtain a positive return for Directories whether by a more innovative approach to directories in line with modern world such as a mobile app and other technological innovations."*

[15] D04/11 Decision No. 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 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 year".

71. ALTO said that there is no evidence in the Consultations that ComReg carried out any price review for the outsourcing of directories, similar to that which was carried out previously in respect of ECAS services to force a reduction in the ECAS call handling fee. ALTO says that the failure to carry out a price review is "*both an oversight and is not consistent with how ComReg has treated other projects*".

72. Vodafone said that the increase in directory costs in 2014-2015 is a significant concern and notes that "*the printed directory has provided a reliable revenue stream for eir until recently and it is not clear in reaching a revised agreement, which removed the revenue flow to eir, whether an efficient or more innovate solution for the provision of printed directories had been sought".*

4.1.3 Payphone Model

73. ALTO made the following observation on public payphones: "*If eir were to make a commercial decision to stop removing uneconomic public payphones then we consider that would be a commercial decision of eir and at its own cost...eir should not be compensated for inefficient decisions or inefficiently incurred costs*."

4.2 ComReg's response

74. ComReg addresses eir's observations on 'consultancy fees' in chapter 5.

75. eir's observations on the 'two methodological changes' which were implemented by eir as part of its final USO funding applications for the years 2010/11-2014/15 are dealt with in Annex 1 and Annex 2 to this document.

76. ComReg addresses eir's observations on the 2014/15 Customer Model and 2014/15 Payphone Model adjustments at section 4.4.2 and 4.5.2 of this chapter.

4.2.1 Growing USO costs

77. To calculate the direct net cost of the USO in each financial year, eir compared the avoidable costs and foregone revenues arising as a result of the USO to the counterfactual scenario where USO services would not have been provided to uneconomic customers by a commercial operator.

78. In relation to Vodafone's submission that elements of the net cost may be overstated, ComReg would note that it did not take the direct net costs submitted by eir at face value, rather it submitted eir's costs to extensive assessments undertaken by its consultants.

79. First, each application submitted by eir was accompanied by a report prepared by PwC setting out specific findings arising from Agreed Upon Procedures[16] carried out by PwC on each of eir’s funding applications. These PwC reports were reviewed by ComReg and TERA as part of ComReg’s assessment of the USO funding applications for each financial year.

80. Where as part of their assessment ComReg’s consultants identified issues or areas where further information was required with respect to inputs and calculations to fully assess the application, eir was asked to provide additional information. ComReg’s consultants requested clarification on some items with a view to increasing the accuracy of calculations. ComReg’s consultants also made adjustments to the methodologies implemented by eir where appropriate. Where TERA or Oxera suggested alternative approaches to aspects of the direct net cost calculation, these alternatives were designed to refine methodologies and to reflect the principles and methodologies of D04/11 in the most effective manner.

81. In relation to the submissions made regarding increasing USO costs, ComReg notes that USO fixed access costs increased during the period 2010-2015 due to the combination of the following factors:

- Revenues decreased at a more rapid rate than costs.
- Change in the mix of access lines between the housing and isolated areas, resulted in increasing access line lengths.
- Costs and revenues were spread over a lower access line base.

82. The rate of revenue decline exceeded the rate of the decline in costs, the net impact of which was higher costs per access line.

83. [✂ [redacted]].

[16] For the purpose of supporting its applications, 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 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”). The purpose of these procedures is to verify the accuracy of information provided by eir. The AUPs 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.

84. [✂ [redacted]].

85. The USO Customer Model calculates the customer distribution per net revenue band (i.e. access and traffic net revenues) to identify the number of economic and uneconomic customers. The profile of customer distribution per net revenue band changed over the period 2010/11 to 2014/15, with a higher number of customers concentrated in the [✂ [redacted]] lowest revenue bands; and a change in the customer distribution within these [[redacted]] bands. This change in eir's customer distribution per net revenue band meant that eir was serving a larger number of uneconomic customers.

86. In summary, the combination of revenues [✂ [redacted]] and the change in the ratio/mix of access lines in/between the housing and isolated areas resulting in increasing access line lengths, means that the costs and revenues are being spread over a lower line base. Where the rate of revenue decline exceeds the rate of the decline in costs, the net impact is a higher cost per line.

87. Having considered the views of respondents, and notwithstanding the increase in USO direct net costs, ComReg is satisfied with the assessment that it and its consultants have carried out in relation to eir's direct net cost calculations and is of the view that, following the adjustments directed by ComReg, these calculations are reasonable and that the net cost has not been overstated.

4.2.2 Increasing cost of the Directory Model

88. Decision 17 of D04/11 states: *"For Directories, the net cost calculation shall use the total avoidable cost, minus total revenues of this service".*

89. ComReg's assessment of the direct net cost of directories for each financial year is based on the Directory Services designation that was in place in the financial year in question. The scope of the designation changed over the period 2010/11 to 2014/15, as set out in Table 4.

Table 4: Scope of Directories USO 2010-2015

Financial year	Decision	Duration	Obligations
2010-2011 2011-2012	D06/10	2 years 1/7/10 – 30/6/12	(a) Ensure that a **comprehensive printed directory of subscribers**, based upon data kept and provided in accordance with paragraph (b) of this section, is made available to all end-users free of charge, and is updated at least once in each year; and (b) Subject to Regulation 14 of the European Communities (Electronic Communications Networks and Services)(Data Protection and Privacy) Regulations 2003, keep a record (to be known as the National Directory Database) of all subscribers of publicly available telephone services in the State, including those with fixed, personal and mobile numbers, who have not refused to be included in that record, and allow access to any information contained in such record to any other such undertaking or any person in accordance with terms and conditions approved by ComReg.
2012-2013 2013-2014	D07/12	2 years 29/6/12-30/6/14	In accordance with Regulation 7 of the Regulations, Eircom Ltd. is hereby designated as the USP for the purpose of complying with the following obligations, as provided for by Regulation 4 of the Regulations. 2.5 The USP shall ensure that **a comprehensive printed directory** or directories of subscribers, based on the data provided to it in accordance with Regulation 19(4), is made available to all end-users and is updated at least once in each year.
2014-2015	D07/14	4 years 7 /7/14 – 30/6/18	The USP shall ensure that a comprehensive **printed directory or directories of subscribers**, based on the data provided to it in accordance with Regulation 19(4) of the Regulations, and updated at least once in each year, **is made available to end-users** who during the period of the first two years of operation of this Decision and Decision Instrument, have not opted out of receiving that directory or directories. 19 Consultation on “Provision of Subscriber Directories: Universal Service: Scope and Designation”, Document No. 14/20, dated March 18th 2014. The USP shall ensure that a comprehensive printed directory or directories of subscribers, based on the data provided to it in accordance with Regulation 19(4) of the Regulations, and updated at least once in each year, Provision of Directory of Subscribers ComReg 14/68 is made available to end-users, who during the period of the final two years of operation of this Decision and Decision Instrument, (a) have not opted out of receiving that directory or directories, or (b) have opted in to receive that directory or directories, whichever model ((a) or (b)) is demonstrated by the USP, to the satisfaction of ComReg, to be most cost-effective for the USP.

90. In response to concerns expressed by certain respondents in respect of a lack of evidence of reasonable efforts to obtain a positive return, ComReg notes that in the financial years 2010/11, 2011/12 and 2012/13, directories were profitable and there was no direct net cost associated with each of the USO Directories Models.

91. While certain of the respondents suggested that eir should have considered a move to a more technologically innovative approach to directories, Table 3 shows that eir was required by ComReg to provide printed directories in the period 2010-2015 under the terms of the designation.

92. In response to BT's suggestion that eir should have matched print-runs on directories to demand, it is only from 7 June 2014 (when Decision D07/14 took effect) that the terms of the designation permitted eir to put in place an end-user mechanism to facilitate end-users who wished to 'opt-out' of receiving a printed directory. eir did not implement an 'opt-out' mechanism as it was not the most cost effective option available to eir.

93. ComReg and TERA carried out an assessment of the costs incurred in meeting the directories USO and engaged extensively with eir as part of this assessment. ComReg requested and was provided with copies of the commercial arrangements pertaining to eir's outsourcing of the printing and distribution of the printed directory and reviewed these to ensure that the appropriate costs were included in the USO Directory Models.

94. ComReg also reviewed eir's 2014 tender documentation and the [✂[redacted]] associated bid responses. Based on its analysis of the information provided by eir, ComReg is satisfied that eir awarded the contract to the most competitive bid (i.e. the most efficient and cost effective bid received).

95. In respect of the financial year 2013/14, ComReg requested further information from eir to explain the lack of revenues related to the printed directories in that year. eir explained that there was a change to the commercial terms agreed between eir and Truvo/FCR Media for the production and delivery of the printed directories in financial year 2013/14[17] and said that the reasons for this change related to [✂[redacted]][18]

96. Vodafone commented that the increase in cost in the 2014/15 directories model is a significant concern. Vodafone said that more efficient solutions should have been sought and that this cost should be excluded from the net cost calculation.

[17] As outlined in the TERA Report *"Assessment of eir's USO funding application – direct net cost 2013-2014"* Document No. 17/109a, published with Consultation 17/109.
[18] Clarifications provided by eir in November 2017.

97. In respect of the financial year 2014/15 ComReg requested a breakdown of the costs and revenues in the Directories Model and an explanation for the lack of revenues compared to other financial years[19].

98. In response, eir provided further information in relation to the annual basic payment from Truvo to eir which ceased to apply in 2014/15 and in relation to a change to the terms of payment of the minimum advertisement revenues, and ComReg was satisfied with this response.[20]

99. ComReg also notes that the advertising market has changed significantly with a significant market migration away from print to other media. This has resulted in a significant decrease in the level and value of third party advertising revenue within the printed directory, with a consequent impact on overall directory revenues.

100. In response to ALTO's submission regarding the ECAS price review, ComReg notes that Emergency Call Handling Service (ECAS) Call Handling Fee and directory services are different statutory regimes which require different legal and economic considerations. ComReg is satisfied that the matter has been addressed appropriately having regard to the relevant statutory scheme for USO costs.

101. ComReg is satisfied that the direct net cost of directories in each of the financial years under assessment is reasonable.

4.3 ComReg's direct net cost calculation – respondents' observations on specific applications

102. Of the seven operators who submitted response to consultation submissions, two respondents (eir and Vodafone) made observations in response to question 1 that were specific to the 2014/15 financial year.

Application	Response to specific submissions
2010 - 2011	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone responses specific to 2010-2011.
2011- 2012	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone responses specific to 2011-2012.
2012 - 2013	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone responses specific to 2012-2013.

[19] As outlined in the TERA Report *"Assessment of eir's USO funding application – direct net cost 2014-2015"* Document No.18/36a, published with Consultation 18/36.

[20] A significant proportion of this information is commercially sensitive (for both eir and its outsourced partner FCR). It is ComReg's policy to maintain the confidentiality of the information that is provided to it in confidence, and in particular, commercially sensitive information.

2013 - 2014	No eir, BT, Sky, ALTO, Verizon, Virgin Media and Vodafone responses specific to 2013-2014.
2014 - 2015	No BT, Sky, ALTO, Verizon, and Virgin Media responses specific to 2014-2015. **eir** **Customer Model adjustment** **Payphone Model adjustment** **Vodafone** **Directories model (rising cost)**

4.4 ComReg's 2014–2015 Customer Model adjustment

103. The USO Customer Model calculates the direct net cost of uneconomic customers in economic areas.

104. ComReg Consultation 18/36, in respect of the assessment of eir's 2014/15 USO funding application, outlined that eir's final 2014/15 USO funding application had used a mixture of elements of the 2009 Copper Access Model (the "2009 CAM") and elements of the 2016 Copper Access Model (the "2016 CAM") to derive cost avoidability assumption and cost allocations in the Customer Model[21]. This represented a significant change from the net cost methodology used in eir's final USO funding applications for the years 2010/11 to 2013/14.

105. The "urban/rural" classifications in the 2016 CAM are not the same and are not directly substitutable with the "housing areas" and "isolated housing areas" classifications in the 2009 CAM. Following engagement with eir, ComReg adjusted the net cost calculation in the Customer Model to reflect the use of the 2009 CAM. This was, in ComReg's view, the most appropriate and proportionate way to mitigate any risk of overestimation of the direct net cost as a result of eir's change in methodology whereby it had used both the 2009 CAM and 2016 CAM. This resulted in a downward adjustment of €528,345 to the 2014-2015 Customer Model.

4.4.1 ComReg's 2014–2015 Customer Model adjustment - eir's observations

106. eir is of the view that ComReg's downward adjustment of the Customer Model by €0.5M is "*unwarranted and unnecessary, and...it should be removed from the net cost of the USO for FY 2014/15.*"

[21] Paragraphs 23 to 28.

107. eir is of the view that its mixed use of both the 2009 and 2016 CAM models, for different purposes, was *"an improvement on its previous methodology"*.

108. eir used the 2009 CAM to derive the cost avoidability assumptions, stating that "*the cost categorisation upon which eir and ComReg mutually agreed the levels of avoidability…was not available in the 2016 CAM."*

109. eir says that it used the 'urban' and 'rural' classifications of the 2016 CAM as eir is of the view that these classifications provide *"richer geographical data"* than the 2009 CAM which, in eir's view, provides a *"stylized view in terms of the geographic deployment of housing in a given exchange area"*

110. eir notes that ComReg and eir agreed the levels of avoidability based on the cost categorisation of the 2009 CAM. Accordingly eir says it cannot accept that *it* "*could not use better (geographical) information to inform the areas where those avoidability assumptions could be applied"* or that *"the loss in consistency between the cost avoidability and cost distribution assumptions…… outweighed the 'clear gain' in using richer geographical data to estimate the distribution of costs across access lines*".

4.4.2 ComReg's response

111. The 2016 CAM was consulted upon in the context of ComReg's 2016 Pricing Decision D03/16[22]. ComReg agrees that in principle the relevant information from the 2016 CAM could be used to derive cost avoidability assumptions and allocations in the context of USO models.

112. eir should have engaged with ComReg in relation to its proposed use of the 2016 CAM for its 2014/15 funding application prior to the submission of its application. This would have enabled ComReg to review the proposed changes to the methodology with a view to ensuring that information from the 2016 CAM was being used in an accurate and correct manner.

113. eir did not discuss in advance or seek to agree with ComReg the significant changes made by eir to the net cost calculation methodology that had previously been used, despite ComReg engaging with eir in relation to other changes required for all five applications, which led to the applications being re-submitted.

114. eir recognises and appears to accept that there is a lack of [✂ [redacted] ■] This lack

[22] ComReg Document No. 16/39, "Pricing of eir's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision", 18 May 2016.

■ [✂ [redacted]]

of [✂ [redacted]] arises because the 2016 CAM uses the classifications *"urban"* and *"rural",* whereas the 2009 CAM used the classifications "*housing*" and *"isolated areas*".

115. In its 2014/15 funding application, eir has selectively used certain elements of the 2016 CAM while still using elements of the 2009 CAM. This use of mismatched data in the net cost calculation produced, in ComReg's view, inaccurate levels of cost avoidability and led to an over-estimation of the net cost.

116. Between November 2017 and March 2018 ComReg engaged with eir in respect of its mixed use of elements of both the 2016 CAM and the 2009 CAM in its 2014/15 application.

117. TERA proposed an adjustment to the net cost based on use of the 2009 CAM, which ComReg invited eir to review[24]. ComReg asked eir to calculate the level of adjustment which could be applied to the Customer Model (and any other affected models) for eir's 2014/15 application with a view to ensuring an accurate net cost figure, using either:

(1) the <u>actual</u> allocation keys for 2014/15 financial year (which ComReg understood eir could produce) or

(2) the allocation keys for 2013/14 as the reference for avoidable cost shares.

118. The "allocation key" identifies the percentage of the total expenditure associated with each network element that should be attributed to each MDF area.[25] Allocation keys are applied to the avoidable cost for each network element.

119. eir declined to use <u>actual</u> allocation keys for 2014/15 on the basis that this would involve considerable time and effort and would lead to additional delays. eir stated that it did not have a major issue with TERA's proposal to apply the 2013/14 allocations from the 2009 CAM in the USO model for 2014/15. ComReg therefore instructed TERA to make an adjustment to the 2014/15 USO model on this basis.

120. ComReg is of view that eir's choice of cost avoidability assumptions for 2014/15 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 2014/15.

[24] ComReg invited eir to add 2014-2015 data to the 2009 CAM model (2009-2013) based on eir's actual data.

[25] Frontier economics USO Model Documentation A report prepared for eircom 2014-2015, July 2016, Pages 45-66.

121. In the absence of eir making an adjustment to the direct net cost calculation in the Customer Model to reflect the more consistent and accurate use of 2009 CAM, the downward adjustment based on TERA's calculation is the most appropriate and proportionate way to mitigate any risk of overestimation of the direct net cost as a result of eir's change in methodology.

4.5 ComReg's 2014 – 2015 Payphone Model adjustment

122. The Payphone Model calculates the direct net cost of USO public payphones.

123. ComReg and TERA reviewed the Payphone Model and identified [✂ [redacted]] public payphones which eir had included in the Payphone Model but which were not USO public payphones. ComReg therefore disallowed these public payphones from the 2014/15 Payphone Model.

124. Accordingly ComReg made a downward adjustment of €198,166 in eir's final 2014/15 Customer Model, resulting in a Payphone Model direct net cost of €122,057.

4.5.1 eir's 2014 – 2015 Payphone Model adjustment observations

125. eir is of the view that ComReg's downward adjustment of the Payphone Model to €122,957 is *"unwarranted… because of ComReg's removals policy which precludes the economically efficient discharge of the public payphone obligation."*

126. eir is of the view that the number of payphones used by eir in its calculation of the net cost of uneconomic payphones for 2014/15 is appropriate.

127. eir is of the view that:

- the 'removals policy' is not a basis to inform an appropriate level of coverage and even if it was, TERA's approach to deriving the quantum of the adjustment is flawed;
- the earliest that eir could have removed any public pay phone was 8 weeks after January 2015 and not 6 weeks; and
- TERA's approach fails to consider a number of practical issues regarding the removal of public payphones.

4.5.2 ComReg's response

128. Decision 16 of D04/11 provides that "*in respect of mandatory public payphone provision, the net cost calculation shall be based on the total avoidable cost, minus the total revenues foregone*." It is clear therefore that it is only the direct net cost of

mandatory public payphone provision that is relevant to the assessment of the USO funding application.

129. Decision 16 of D04/11 also provides that “*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)*.”

130. ComReg Decision D08/14, “Provision of Public Payphones Universal Service: Scope and Designation” dated 7 July 2014 sets out (1) the ‘reasonable needs of end-users’ (based on usage threshold) and (2) the public payphone permissible removals criteria.

131. ComReg instructed TERA to analyse the number of USO public payphones within the 2014-2015 Payphone Model, based on the removals policy in ComReg Decision D08/14. Arising from this analysis TERA determined that [✂ [redacted]] public payphones that had been included by eir as USO public payphones for the purposes of the 2014/15 Payphone Model were not in fact USO public payphones, as they could have been removed by eir, and should therefore be disallowed from the 2014/15 Payphone Model. This resulted in a downward adjustment of the Payphone Model direct net cost to €122,057.

132. eir observed that while ComReg had carried out its analysis on the basis that a public payphone could be removed by eir within 6 weeks, the earliest timeframe in which it could have removed a public payphone after January 2015 was 8 weeks.[26] ComReg therefore instructed TERA to amend the calculation of the adjustment to the direct net cost of the Payphone Model to reflect this two week time difference.

133. TERA has prepared an updated version its “Assessment of Eir’s USO funding application – Direct net cost 2014-2015” report[27], which reflects this updated analysis. TERA’s updated report dated March 2019 is published with the 2014/15 Decision.

134. The revised analysis does not change the total number of USO public payphones allowed by ComReg, however the adjustment made to the direct net cost in respect of the payphones that have been disallowed has been reduced by €7,593. The total adjustment in this regard is therefore €72,456 and, accordingly, ComReg has revised upwards the direct net cost of the 2014-2015 Payphone Model from €122,057 to €129,650. ComReg has reflected this change in its 2014/15 Decision.

135. In light of eir’s submissions, ComReg also instructed Oxera to reconsider its assessment of the marketing intangible benefits, due to the fact that the benefits

[26] ComReg Decision D08/14 Provision of Public Payphones, Universal Service Scope and Designation (Document No.14/69).

[27] Document No.18/36a Published with Consultation 18/36.

generated from advertising on uneconomic public payphones are an input into eir's estimate of marketing intangible benefits.

136. On foot of this instruction, Oxera prepared an updated version of its report titled "Assessment of eir's calculation of intangible benefits for 2014/15" dated 15 March 2018, which was appended to the 2014/15 Consultation. Oxera's amended report dated 7 March 2019 is published with the 2014/15 Decision.

137. In its final 2014/15 funding application, eir estimated the marketing benefit it derives from its position as USP to be €118,117*.* In Oxera's March 2018 report, Oxera was of the view that a downward adjustment of €111,214 was required. Having carried out this further assessment, Oxera was of the view that an upward adjustment of €435 to the marketing intangible benefit was appropriate and therefore the adjusted value of intangible marketing benefits in Oxera's updated March 2019 intangible benefits report is €7,338.

4.5.3 Vodafone's 2014 – 2015 Directory Model observations

138. Vodafone's comments in relation to the 2014/15 directories model are dealt with at paragraphs 96 to 101 above.

5 Consultancy fees

140. Each of eir's 2010/11 – 2014/15 USO funding applications included a figure for "Consultancy Fees". At ComReg's request, eir provided further information in relation to these figures including invoices in respect of consultancy fees paid and details of the tendering process undertaken.

141. ComReg set out in the Consultations its preliminary view that the consultancy fees claimed by eir in each of its final USO funding applications were not net costs of the USO.

142. This chapter sets out respondents' general and financial year specific observations (where applicable) in relation to ComReg's second consultation question.

Q.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?

5.1 Consultancy fees – Respondents' general observations

143. Of the seven operators who responded to the Consultations, four respondents (eir, BT, ALTO and Vodafone) responded specifically to question 2.

144. BT, ALTO and Vodafone agreed with ComReg's preliminary view that consultancy fees incurred in respect of the USO funding applications do not form part of the net cost, noting that neither the legislation nor D04/11 makes provision for claiming consultancy fees associated making a USO funding application.

145. ALTO said that *"at no stage should the incumbent be permitted to recover costs on the basis of hiring experts to undertake the tasks of ascertaining the recoverable amount under the USO framework."* ALTO also said that "*consultants' fees incurred by eir should be disallowed from the net cost as they relate to the preparation and submission of the USO funding application and not the provision of USO services."*

146. Vodafone noted that *"no explanation was provided [within eir's submissions] for the inclusion of a consultancy figure*" and expresses concern that *"any cost input could be included in a funding application without full advance explanation and justification"*.

147. eir said that it does not agree with ComReg's preliminary view that consultancy fees are not net costs of the universal service and should be excluded from the direct net cost, and is of the view that this is *"an unacceptably narrow interpretation of the*

applicable regulatory framework and therefore any decision to exclude these costs would be flawed”.

148. eir said that absent the USO, eir would not incur these consultancy fees, citing Decision 22 (the need for an *“appropriate audit, opinion or verification report*”) and Decision 31 (*“the calculation of the benefits of USO shall be completed by an external expert, independent of the USP”*). eir also points to Schedule 2 Part A of the Universal Service Regulations which provides 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”.*

149. eir said that both Article 12(2) paragraph 1(a) of the Universal Service Directive and Regulation 11(7) of the Universal Service Regulations place the obligation on ComReg to *“to verify or audit any accounts, data or information provided as part of a funding application”* as opposed to eir. eir said that ComReg has sought to impose this obligation on eir through D04/11, which compounds the unfair burden by disallowing these costs.

150. eir said that this view is supported by international precedent, submitting that in France the funding of the net cost is done through a sharing mechanism which includes the costs of managing the fund itself and in Italy where no sharing mechanism was necessary, the verification costs of the regulator were shared between the operators.

5.2 ComReg response

151. In assessing the funding applications ComReg has not allowed eir’s claim for consultancy fees to form part of the net cost. As a general matter ComReg is of the view that consultancy fees 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. The Universal Service Regulations and D04/11 do not make provision for claiming consultancy fees associated with making a USO funding application.

152. Accordingly ComReg has excluded consultancy fees from the calculation of the positive net cost in each of eir’s 2010/11 to 2014/15 USO funding applications

153. eir’s USO funding applications in respect of the financial years 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15 each included a figure for consultancy fees with no further breakdown, explanation or justification of these costs, other than the following statement in each application:

[✂ [redacted]

[redacted]]

154. During its assessments of each of eir's USO funding applications, ComReg requested additional details from eir in relation to the consultancy fees claimed, including an explanation of all of the fees incurred. The additional information which was provided demonstrated that the consultancy fees were made up of various costs attributable to a variety of work streams carried out by the consultants involved in the preparation of the individual applications.[29]

155. Based on this information, and eir's submissions in response to the Consultations, it appears to ComReg that the costs claimed by eir in respect of the provision of services by Frontier Economics and PwC fall into three broad categories.

Regulatory advice

156. Firstly, certain costs appear to pertain to services that are specific to eir's own objectives and which are for eir's own benefit. ComReg notes that some of the Frontier Economics consultancy fees relate to advice on providing [✂ [redacted]] in respect of the applications and other [✂ [redacted]] advice.[30] In ComReg's view, costs of that nature are clearly not appropriate for inclusion as costs of the USO. eir refers in its submissions (in response to the Consultations) to consultancy fees claimed by eir being incurred in fulfilment of obligations imposed by D04/11. Clearly costs that fall into this category cannot be described as such.

Audit and verification costs

157. It appears from eir's submissions in response to the Consultations that eir considers certain of the consultancy fees to be costs of audit and verification. eir refers in its submissions to Article 12(2) of the Universal Service Directive, and to Regulation 11(7) of the Universal Service Regulations which says that "*the accuracy of accounts or other information, serving as the basis for the calculation of the net cost…shall be audited or verified, as appropriate, by the Regulator or a body approved of by the Regulator and independent of the undertaking concerned*." eir says that the obligation to audit or verify accounts or other information rests with ComReg, but that ComReg

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[redacted] [✂ [redacted]].

[29] eir noted that in 2010/11, 2013/14 and 2014/15 the actual amount incurred in respect of consultancy fees was higher than the amount claimed in its final USO funding application. eir noted that in 2011/12 and 2012/13 the actual amount incurred in respect of consultancy fees was lower than the amount claimed in its final USO funding application. eir explained this was due to variances between estimates submitted as part of the claim and actual amounts paid.

[30] Frontier Economics document "Support for application to ComReg for USO funding – A statement of work prepared for eircom" February 2017, page 15.

has sought to impose this obligation on eir through D04/11. eir appears to suggest that audit and verification costs should rest with ComReg.

158. eir makes its submissions by reference to "consultancy costs" generally rather than by reference to any more detailed description of the categories of costs. eir has not therefore specified which costs it considers to be audit and verification costs imposed on eir by D04/11. ComReg does however note, in respect of the amount claimed by eir for fees paid to PwC, that these fees were in respect of audit and verification work which is the subject of a tri-partite agreement between PWC, eir and ComReg relating to the verification of figures for inclusion in eir's funding applications[31]. That agreement was entered into on the basis that eir would discharge those costs. In respect of these costs (and indeed any other audit or verification costs which eir might say ComReg should bear), even if it were found to be the case that ComReg is obliged to bear those costs, this would not have an impact on the net cost figure which ComReg considers can properly be claimed as part of the funding applications, because costs borne by ComReg would not be a cost to eir.

Costs in relation to the preparation of eir's applications

159. The final category of consultation costs appears to be costs incurred by eir in engaging an external consultant, Frontier, to assist with the preparation of eir's USO funding applications. D04/11 prescribes that the estimation of intangible benefits must be carried out by an independent party and outlines certain requirements in relation to independent verification (dealt with by way of the PwC tri-partite agreement), but otherwise D04/11 does not prescribe that eir is required to use an external consultant to prepare its funding applications. Frontier Economics provided a range of services to eir, including in relation to the preparation of eir's application and eir's intangible benefits estimate, as well as other [✂[redacted]] advice as referred to above. eir has not provided any breakdown of the fees paid to Frontier which would allow ComReg to ascertain what level of costs were attributable to these different work streams so that, even if ComReg was minded to treat categories of consultancy fees differently, eir has not provided ComReg with the information it would require to do so.

160. In any event, for the purpose only of understanding the impact of the consultancy fees claim on the funding applications, ComReg instructed Oxera to carry out the unfair burden assessment in respect of each application on the basis of the direct net cost figure *including* the full figure for consultancy fees claimed by eir for the year in question and, in the case of each application, Oxera found that there was no unfair burden where consultancy fees were included. In other words, even when the claimed

[31] 2010-2011, 2011-2012 and 2012-2013 AUPs signed on 5 January 2015; 2013-2014 AUPs signed on 17/04/15; 2014-2015 APUs signed on 13/6/16.

consultancy fees are included as part of the direct net cost the outcome is still that no unfair burden is found.

161. The examples from other jurisdictions set out by eir in its submissions are not directly relevant to the question at issue here as these examples do not show the consultancy fees being included in a net cost calculation, rather they show consultancy fees being paid by way of a sharing mechanism. The question here is whether the consultancy fees should be deemed a USO cost and included in the net cost calculation. ComReg is of the view that they should not.

5.3 Consultancy fees – Respondents' observations on specific applications

162. ComReg notes that no observations were made in relation to consultancy fees that were specific to any of the applications under assessment.

Application	Response to specific submissions
2010 - 2011	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone. No responses specific to 2010-2011.
2011- 2012	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone. No responses specific to 2011-2012.
2012 - 2013	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone No responses specific to 2012-2013.
2013 - 2014	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone. No responses specific to 2013-2014.
2014 - 2015	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone. No responses specific to 2014-2015.

6 Positive net cost

163. This chapter sets out respondents' general and financial year specific observations (where applicable) in response to the following question:

Q.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: 2010-2011 is €7,503,521; 2011-2012 is €6,712,966; 2012-2013 is €7,723,749; 2013-2014 is €9,514,559; 2014-2015 is €11,526,418

6.1 Positive net cost – Respondents' general observations

164. Of the seven operators who responded to the Consultations, four respondents (eir, BT, ALTO and Vodafone) responded specifically to question 3.

165. eir does not agree with ComReg's preliminary view of the positive net cost in each of for the five financial years (2010/11 to 2014/15).

166. eir disagreed with the approach taken by ComReg in assessing eir's funding applications assessment of the positive net costs in respect of the following:

- Consultancy fees
- Allocation of reactive maintenance costs to exchanges
- Allocation of overhead and underground costs between housing and isolated areas

167. Apart from the above, eir stated: "*eir has reviewed the remaining proposed adjustments to the direct net cost calculations in ComReg Consultations 17/73, 17/81, 17/95, 17/109 and 18/36, and considers most of them to be reasonable*".

168. ALTO agreed with ComReg's assessment arising from sections 5 and 7 of each consultation document. In relation to directories ALTO is of the view that *"it is not clear whether there was any effort on eir's behalf to recover costs or make a profit from this activity as in the past*". ALTO noted that eir *"failed to recover amounts legally permitted to it"* during the period 2010-2015.

169. ALTO is of the view that ComReg needs to review the USO investments in economic areas to determine whether *"eir could reasonably achieve a return on this investment by leasing infrastructure to the winner of the NBP bid or from the self-supply of FTTP services".* ALTO says ComReg should consider *"making an assessment of the increasing value of the eir access network though USO investments".*

170. BT said that ComReg has not fully assessed the line costs or the directories costs to understand whether "*the substantial year-on-year price rises*" are justified.

171. Vodafone said that there is potential for a significant proportion of eir's lines to quickly move from uneconomic to economic, as demonstrated by changes to the NBP in 2017 when eir made it clear that it could roll out FTTH services on a commercial basis to certain areas that had been targeted for subvention. While Vodafone notes that this is outside the period under review, it says that it demonstrates *"the intangible benefits that accrue to eir from maintaining its status as a monopoly provider for access."*

6.2 ComReg's response

172. ComReg addresses eir's comments on consultancy fees in chapter 5, and eir's comments on reactive maintenance costs and overhead and underground costs (housing and isolated areas) comments, in Annex 1 and Annex 2 of this document.

173. ComReg has addressed BT's observations in relation to line costs and directories costs in sections 4.2.1 and 4.2.2.

174. ComReg has addressed ALTO's comments in relation to directories in chapter 4.2.2.

175. ComReg addresses Vodafone's intangible benefits comments in chapter 8.

6.3 Positive net cost– Respondents' financial year specific observations

176. Of the four operators who responded to question 3, three respondents (ALTO, BT and eir) made submissions that were specific to the 2014/15 application.

Application	Response to specific submissions
2010 - 2011	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone observations specific to 2010-2011.

2011- 2012	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone observations specific to 2011-2012.
2012 - 2013	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone observations specific to 2012-2013.
2013 - 2014	No eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone observations specific to 2013-2014.
2014 - 2015	No BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone observations specific to 2014-2015. **eir** **Customer Model adjustment** – see eir's observations on Q.1. **Payphone Model adjustment** – see eir's observations on Q.1. **BT** **Rising cost of AFL USO** – see BT's observations on Q.1. **Direct net cost of directories** – see BT's observations on Q.1.

6.4 ComReg's response

177. ComReg addresses eir and BT's submissions in relation to the 2014/15 application in chapter 4.

7 Determination of an unfair burden

7.1 Overview

178. In respect of each of the five applications under assessment, ComReg set out in the Consultations its preliminary view that for each financial year the positive net cost of the USO did not represent an unfair burden on eir.

179. This chapter sets out respondents submissions in relation to the following question which was included in each of the Consultations:

Q4. Following ComReg's assessment, do you have any observations on ComReg's preliminary view that a positive net cost of

- €7,503,521 (or €7,929,495 as claimed by eir) is not an unfair burden on eir for the period 2010/11
- €6,712,966 (or €6,986,518 as claimed by eir) is not an unfair burden on eir for the period 2011/12
- €7,723,749 (or €8,012,033 as claimed by eir) is not an unfair burden on eir for the period 2012/13
- €9,514,559 (or €10,008,142 as claimed by eir) is not an unfair burden on eir for the period 2013/14
- €11,526,418 (or €12,432,981 as claimed by eir) is not an unfair burden on eir for the period 2014/15

7.2 Overview of Respondents' views

180. Of the seven operators who responded to the Consultations, four (eir, BT, ALTO and Vodafone) directly answered the above consultation question. Two other respondents (Verizon and Virgin Media) offered broad support for the overall preliminary finding by ComReg of no unfair burden. None of the respondents provided comments by reference to specific financial years, rather each respondent provided an overall response in respect of all of the applications under assessment.

181. Of the respondents who directly answered the above consultation question, three (BT, ALTO and Vodafone) agreed with ComReg's preliminary view that the positive net cost was not an unfair burden on eir in each year 2010/11 to 2014/15.

182. Both ALTO[32] and BT[33] stated that "*ComReg set out a clear set of conditions for the USO in Decision D04/11 which was consulted publically and all parties had the opportunity to appeal the Decisions. Hence the formal public consultation process was executed correctly and the rules were not appealed or changed. eir and the wider industry must accept that basis*."

183. BT said that changes made by eir to its prices suggest that eir was managing its prices during the assessment period and could have recovered the USO costs within the price caps allowed by ComReg, but did not do so. BT referred to a discount offered by eir for eir's broadband service for 18 months from May 2013 which BT said demonstrated that eir had sufficient profitability to maintain voluntary price cuts. This point is addressed by ComReg in section 6.18 of this document.

184. Vodafone in a submission to ComReg[34] said that an important consideration is "*whether the designated USO provider could have recovered the costs and whether it did recover the cost*". In Vodafone's view if the USP decided not to recover the costs then there is no case for inclusion of any funding shortfall in ComReg's analysis. This point is addressed by ComReg in section 6.18 of this document.

185. Sky did not answer the consultation question but did provide certain views on ComReg's unfair burden assessment,[35] which are addressed by ComReg in chapter 8 of this document.

186. eir did not agree with ComReg's preliminary view, stating that:

> *"A positive net cost over five years of in excess of €45m, or for that matter, €43m, as (incorrectly) suggested by ComReg, is clearly an unfair burden to impose exclusively on a single operator. It is a charge that is manifestly excessive for one operator to bear, taking into account that no positive benefit whatsoever accrues to the operator concerned, as any benefit is included in determining the net positive cost".*

[32] ALTO correspondence from ALTO to Director Retail & Retail Division, 18 December 2015, "Re. Universal Service Obligation – Provision of access at a fixed location Consultation Ref: 15/124" *and* ALTO Submission "Consultations: Assessments of eir's 2010 – 2011; 2011 – 2012; 2012 –2013; 2013 – 2014; 2014 2015 Universal Service Fund Applications - Refs: 17/73; 17/81; 17/95; 17/109; & 18/36. Submission by ALTO", 11th June 2018.

[33] BT Communications Ireland ["BT"] Response to the ComReg Assessment of the net cost and unfair burden for the periods 2010/2011, 2011.2012, 2012/2013, 2013/2014 and 2014-2015, Issue 1 – 11th June 2018.

[34] Vodafone non-Confidential Response – Assessment of eir's Universal Service Fund Applications Years 2010 to 2015, Response to Consultation, 10th June 2018.

[35] Sky's response to eircom ltd ("eircom") USF applications sky response to eircom ltd ("eircom") USF applications 2010/11, 2011/12, 2012/13, 2013/14 & 2015/16, 11thJune 2018.

187. eir raised a number of concerns regarding ComReg's unfair burden assessment, which ComReg has summarised, and addresses below, under the following headings:

- The unfair burden assessment and use of eir's USO net cost submissions (Addressed by ComReg in sections 7.3 and 7.4 below);
- Assessment of eir's financial position based on the fixed line business (Addressed by ComReg in sections 7.5 and 7.6 below);
- Assessment of eir's financial position based on the regulatory allowed WACC (Addressed by ComReg in sections 7.7 and 7.8 below);
- Assessment of eir's financial position based on the historical costs of assets (Addressed by ComReg in sections 7.9 and 7.10 below);
- The unfair burden assessment is carried out by reference to the financial year under assessment (Addressed by ComReg in sections 7.11 and 7.12 below);
- Additional indicators of eir's financial position (Addressed by ComReg in sections 7.13 and 7.14 below);
- Unfair for the USP to bear the USO net cost alone (Addressed by ComReg in sections 7.15 and 7.16 below);
- USP's ability to bear the USO net cost (Addressed by ComReg in sections 7.17 and 7.18 below);
- International developments (Addressed by ComReg in sections 7.19 and 7.20 below).

188. eir submitted that the following changes would need to be made to ComReg's profitability assessment "*to make it robust and in line with international best practice*":

- Profitability should be determined in respect of the USO business and not the fixed line business;
- The correct basis for the Mean Capital Employed (MCE) is the economic value, proxied by the replacement costs of assets, as opposed to the historical costs;

- eir's profitability should be compared to its actual cost of capital in the year in question, as opposed to the regulatory allowed WACC.

189. eir stated that these changes would "*lead to eir's ROCE falling significantly under a fair value or under a replacement value approach to MCE, while the appropriate WACC to compare against is the actual WACC in the year in question*."

190. In the following sections, ComReg will address the points outlined above.

191. No operator provided responses that were specific to any financial years.

Application	Response to specific submissions
2010 - 2011	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone – no responses specific to 2010-2011
2011- 2012	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone – no responses specific to 2011-2012
2012 - 2013	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone – no responses specific to 2012-2013
2013 - 2014	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone – no responses specific to 2013-2014
2014 - 2015	eir, BT, Sky, ALTO, Verizon, Virgin Media, and Vodafone – no responses specific to 2014-2015

7.3 The unfair burden assessment and use of eir's USO net cost submissions – eir's comments

192. eir stated that ComReg's assessment of the unfair burden is mainly based on a comparison of eir's return on capital from its regulatory accounts with the regulatory WACC and said that ComReg's conclusion on the question of unfair burden could have been reached without making use of eir's USO submissions.[36]

7.4 ComReg's response

193. ComReg disagrees with eir's comment that it made no material use of eir's USO net cost submissions.

194. eir, as the designated USP, may submit to ComReg a written request for funding for the net cost of providing the USO.

[36] eir's "Response to Consultation and draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018, para. 72 and 73.

195. D04/11 sets out the requirements for making an application for funding and how the net cost (after intangible benefits) is to be calculated. D04/11 also sets out the principles and methodologies which ComReg uses to assess whether the positive net cost associated with providing the USO, if any, represents an unfair burden on the USP.

196. D04/11 sets out in Decision 38 three cumulative conditions that must be met in order for there to be an unfair burden:

a. There must be a verifiable and verified direct net cost;

b. The benefits of the USO must not outweigh the net cost (i.e. there is a positive net cost);

c. 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.

197. To confirm that there was a verifiable and verified direct net cost, ComReg and its consultants carried out an analysis of eir’s applications to ensure that the most appropriate and relevant revenues and costs were considered in light of the relationship of the USO business with the wider eir Group. Both TERA and Oxera’s reports set out the manner in which the relevant revenues and costs were considered.

198. Having established that there was a positive net cost to eir in each of the years under assessment, ComReg carried out an assessment to determine whether the net cost represented an unfair burden on eir in each of the years under assessment.

199. The unfair burden assessment considered eir’s ability to bear the net cost having regard to the absolute net cost, the net cost relative to eir’s financial position, changes in eir’s profitability and an assessment of additional indicators of eir’s financial position and the economic situation faced by eir, as broader context for the profitability assessment.

200. In accordance with Decision 39 of D04/11, the positive net cost was compared to the estimated transfers to eir if a sharing mechanism was set up and to an estimate of the administrative costs that would be involved in setting up a sharing mechanism (as prepared during the assessment of the 2009/2010 application). It was concluded in respect of each application under assessment that the positive net cost was material compared to the administrative costs of a sharing mechanism. Therefore, ComReg undertook the next step of the assessment process and assessed by reference to Decision 38 (iii) (b) whether the positive net cost caused a significant competitive disadvantage for eir.

201. Consistent with Decisions 40 and 42 of D04/11, Oxera undertook an assessment of eir's financial position in each relevant period, including an assessment of whether the net cost has an impact on eir's profitability and ability to earn a fair rate of return on capital employed. These profitability assessments were carried out on the basis of the value of the calculated net cost.

202. For the purpose of assessing the impact of the net cost of the USO on eir and therefore its ability to bear the burden of the net cost, ComReg considered not only the level of eir's actual profitability, but also the size of the USO net cost relative to that profitability (ROCE), more specifically:

- In assessing each application, Oxera determined what eir's ROCE would be in a counterfactual scenario where eir had not incurred the net cost of providing the USO. Accordingly, the impact on the ROCE, with and without the net cost of the USO, has been examined as part of the financial analysis undertaken by Oxera.
- Oxera also considered the impact of the net cost on eir by examining additional financial indicators such as net cost as a proportion of (i) revenues and (ii) EBIT). Oxera's reports clearly set out the extent of the analysis of eir's financial position.[37]

203. In addition, the net cost is reflected within the observed financial performance of eir (i.e. delivery of the USO affects the relevant fixed-line business revenues and costs, and thereby eir's observed ROCE which is analysed as part of the assessment of eir's financial position).

204. It is therefore incorrect to say that ComReg's preliminary view as outlined in the Consultations was reached without reference to the net cost and eir's USO net cost submissions.

7.5 Assessment of eir's financial position based on the fixed line business – eir's comments

205. In understanding the impact of accounting profits, it is necessary to define a relevant scope for the business. Oxera determined that for its assessment of eir's financial position, the appropriate business level is the fixed-line business that includes all of eir's integrated fixed-line business.

[37] For example, see Oxera (2018), 'Oxera unfair burden report 2014/15', 14 March, ComReg Document 18/36c, section 4.

206. eir is of the view that the fixed line business is not the correct definition for the purpose of ComReg's assessment and states that the USO business is a more appropriate definition[38]. To support this view eir says, in summary:

- The narrower scope of 'USO business' is a more appropriate definition in that it includes only those services which are related to the discharge of the USO – therefore a better representation of the return on capital of a USP operator;
- Services that fall out of the narrower USO business definition are to a large extent provided under competitive conditions or in markets that have no ex-ante regulation;
- To group all the separate markets together when making a regulatory decision on the basis that they share costs seems counter-intuitive where the Separated Accounts precisely allow ComReg to understand the costs and revenues associated with each individual service;
- Any benefits flowing from non-USO services (e.g. broadband) to customers in uneconomic areas have already been internalised by eir within the net costs of the USO.

7.6 ComReg's response

207. ComReg is of the view that the most relevant business level for analysis of eir's financial position (and profitability) is eir's fixed-line business, for the following reasons[39]:

- Consistent with economic principles, an assessment of whether the net cost has an impact on profitability should reflect all parts of the business that are not dissociable from the USO activities. The USO network and assets are not only used to deliver the USO services. This means that eir has the ability to generate further economies of scope and scale, and increase the profitability with respect to eir's actual capital employed (ROCE). Many of the activities included in eir's integrated fixed-line business are not dissociable from the USO;
- Overall, the profitability of eir's fixed-line business represents a good proxy for the profitability of the businesses that could be directly linked to the USO network. If certain fixed non-USO services were to be excluded from the analysis, the

[38] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018, paragraphs 84–89.

[39] ComReg dealt in detail with the relevant scope of eir's business to be used in the profitability analysis in Oxera's report - Oxera (2013b), *"Review of eircom's response to ComReg's consultation on the 'Assessment of Eircom's Universal Service Fund Application for 2009-2010'", 28 October 2013,* and which is further outlined in summary at Appendix A1, '*The scope of the relevant business'* of the Oxera Unfair Burden Report for each of the financial years 2010/11 to 2014/15.

profitability of eir's USO network and assets, and hence its 'ability to earn a fair rate of return on its capital employed', would not be correctly estimated;

- The analysis of the impact of the net cost of the USO on eir should take into account the relevant parts of its integrated business, which should include consideration of the extent to which the finances of the rest of the fixed-line business are affected by the same factors that are causing a positive net cost, and therefore how eir's profitability as the USP is best measured;

- D04/11 requires that the net cost of the USO is calculated on the basis of all costs that could be avoided on a HCA basis and on the basis of direct and indirect revenues that the USP would forego.[40] The fact that non-USO services that are linked to the USO network (e.g. broadband) are assessed as part of the net cost calculation supports the broader fixed-line business definition for the assessment of eir's financial position. This approach is consistent with eir's own approach to estimating the USO direct net cost which, for example, includes costs that are incurred indirectly as a result of the USO, even if they are not allocated to USO products, and revenues from other services that are offered over the USO network and therefore contribute to the financing of the USO; and

- eir's use of and reliance on transfer charges to allocate its profitability across different segments of the business further supports the view that activities included within the integrated fixed-line business are not dissociable from the USO.

208. Oxera's rationale for using the fixed line business is therefore based on a number of factors, and not just the fact that there are common or shared costs between the services, as eir appears to suggest.

209. eir said that Oxera's use of the 'dissociability' concept is weak and inconsistent where mobile services are excluded but other retail services are being included within the relevant business definition. eir suggested that similar arguments could be made for the inclusion of mobile in the business definition. ComReg does not agree that this is the case. Mobile services differ from services within eir's integrated fixed-line business as they are not carried over the USO network and assets. As eir uses a separate mobile network infrastructure to deliver mobile services, economies of scope and cost sharing (for instance, in respect of IT and billing) among fixed and mobile services are not significant. Mobile services do not meet the criteria for inclusion in the relevant business definition because, as set out in Oxera's earlier report (2013b), they do not rely on USO assets nor are they a direct substitute for USO services.[41] In the USO context, mobile is presently not considered as access at a fixed location and therefore

[40] See Decisions 2, 3, 4, 5, and 6 of D04/11.
[41] See Table 2.1 of Oxera (2013b), "Review of eircom's response to ComReg's consultation on the 'Assessment of Eircom's Universal Service Fund Application for 2009-2010'", 28 October 2013.

is not substitutable for the USO service. On that basis, (direct) mobile costs and revenues are excluded from the estimation of the direct USO net cost, and should not be included in the business definition for the purposes of the assessment of eir's financial position.

210. eir pointed to decreasing profitability under different business definitions (Group level, fixed line business and USO business), and says that on any of the three business definitions returns on eir's capital are converging to a range of around 11% to 12%.[42] This supports ComReg and Oxera's assessment of profitability of the fixed line business which demonstrates that eir, as the designated USP, achieved actual return rates at or above the relevant benchmark level (i.e. the regulatory allowed WACC) in each of the financial years 2010/11 to 2014/15.

7.7 Assessment of eir's financial position based on the regulatory WACC – eir's comments

211. As part of its unfair burden assessment, ComReg compared eir's return on capital employed ("ROCE") to the weighted average cost of capital ("WACC") which was set by ComReg in 2008 in Decision D08/35[43] (the "2008 WACC Decision") and subsequently in 2014 in Decision D15/14[44] (the "2014 WACC Decision"). [45]

212. eir said that ComReg can "*use existing historical information from the relevant periods (i.e. from 2010/11 to 2014/15) as a basis for its analysis*" instead of the regulatory WACC.[46]

213. eir said that significant changes in financial and economic conditions that took place following the global financial crisis of 2008 led to a higher cost of capital for eir than was reflected in the 2008 WACC Decision. eir submitted that use of the 2008 WACC was not therefore appropriate as a benchmark of returns available to investors in 2010/11 and the subsequent four years.

[42] eir response, Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018, paragraph 86, Figure 4.

[43] ComReg (2008), 'Eircom's Cost of Capital', May, ComReg Document 08/35.

[44] ComReg (2014), 'Cost of Capital. Mobile Telecommunications; Fixed Line telecommunications; Broadcasting (Market A and Market B)', December. ComReg Document 14/136 & D15/14.

[45] The cost of capital is a weighted average of the cost of equity (re); and the cost of debt (rd). The weighting is determined by the relative proportions of debt and equity held by the firm. The Capital Asset Pricing Model (CAPM) was used to calculate the cost of equity. A detailed description of the WACC methodology and the relevant factors used to set the regulated return rate is presented in the Decisions D08/35 and D15/14.

[46] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018, paragraphs 75–83.

214. eir set out its own modified estimates of the pre-tax WACC[47] for the years under assessment[48] which it said point to the following conclusions:

- For 2010/11 eir estimates the WACC as being 14.5% and for 2011/12 eir estimates the WACC as being 13.6%. This is higher than the WACC of 10.2% (as per the 2008 WACC Decision) used in the unfair burden analysis which, eir says, underestimates the cost of capital for an Irish operator in 2010/11 and 2011/12;
- For 2012/13 eir says that its modified WACC suggests that the 2008 WACC Decision is a "reasonable proxy";
- For 2013/14 and 2014/15, eir submits the estimates provided by the 2008 WACC Decision and the 2014 WACC Decision were within an acceptable range.

215. eir also said that its estimated modified cost of capital benchmark may have been an underestimate - specifically eir suggests that in the years 2012/13 to 2014/15, the cost of capital may have been higher than its estimates due to the upward pressure on the cost of debt experienced by eir due to challenging market conditions.

7.8 ComReg's response

216. As set out in the Consultations, ComReg and Oxera considered it appropriate, as part of the analysis of eir's financial position for each year, to compare eir's actual financial returns (ROCE) to the competitive benchmark (the WACC), to establish the impact of the net cost on eir's profitability and ability to earn a fair rate of return on its capital employed, as outlined in Decision 40 of D04/11.

217. As set out in Oxera's Unfair Burden Reports, a comparison of a ROCE measure of financial returns to a competitive benchmark level of return on capital is typically used to assess whether profits are excessive. This is seen as a key indicator of an operator's ability to earn a fair rate of return on its capital employed. In addition, there is general consensus among regulators and competition authorities as regards the appropriateness of using a measure of the WACC as a reasonable competitive benchmark for measuring whether profitability is excessive.

[47] In doing so, eir set the yields of the Irish sovereign debt as the risk-free rate (one parameter of the CAPM) and took from Oxera's report the 'upper-bound' estimate of 190 base points for the debt premium. In eir's view reasonably geared Irish companies are constrained by the country-specific circumstances in which they operate, including the prevailing expectations in the year, reflected in significantly high spreads.

[48] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 page 29, Table 1.

218. ComReg has taken eir's regulatory allowed cost of capital (or the regulatory allowed rate of return), as specified in the 2008 WACC Decision and the 2014 WACC Decision as the competitive benchmark return against which to measure eir's profitability.

219. ComReg considers it appropriate to rely on the regulatory allowed WACC as an appropriate level of return on capital for the following reasons:

- The 2008 WACC was calculated specifically for eir using assumptions of a notional efficient regulatory network in line with good regulatory practice and, in ComReg's view, was an appropriate and a robust estimate of the cost of capital for eir's fixed-line regulated business, which includes USO activities;
- The WACC is a measure of the reasonable return on investment that eir, designated as an operator with Significant Market Power,[49] is allowed to make. For regulated businesses, it is standard practice for the allowed rate of return, or allowed WACC, to be determined on an ex-ante basis as the allowed profit on invested capital. The regulatory allowed WACC estimate gives the best approximation of the forward looking return that stakeholders can expect in an efficiently run business;[50]
- The WACC level was established using robust and well recognised techniques.[51]
- Contrary to eir's submissions, ComReg did incorporate the potential impact of financial turmoil and volatility in financial markets into eir's cost of capital determinations in the 2008 WACC Decision.[52] ComReg's analysis considered possible movements in eir's WACC parameters due to financial turmoil, recognising that the cost of capital represents the forward-looking rate of return required by investors to commit capital and bear future financial and business risk. Following consultation with stakeholders ComReg decided that, within the established range of 7.77% to 11.08%, the allowed return of 10.21% (0.78%

[49] eir continues to be designated with Significant Market Power in fixed line access markets at the wholesale and retail levels.
[50] The WACC is based on a Hypothetical Efficient Fixed Line Operator with an efficient capital structure, a standard approach widely used by regulators. A regulator's estimate of the allowed WACC may not necessarily align with the actual ROCE earned by the regulated company. The objective of the WACC allowance is not to determine the exact out-turn return that will be earned; rather, it is to incentivise an efficiently run business – investors have to outperform the regulator's cost assumptions to earn higher than a benchmark return (e.g. a return on regulated equity that exceeds the ex-ante cost of equity allowance). It should also be noted that ComReg does not have any obligation to ensure that eir maintains any particular level of profitability.
[51] In reaching the 2008 WACC Decision and the 2014 WACC Decision, ComReg undertook a rigorous and comprehensive assessment of all aspects underlying the WACC value and adopted international best practice in its estimation techniques and methodologies. ComReg and Oxera used extensive evidence from primary research, peer comparison and regulatory precedent.
[52] Oxera assessed the potential impact of the financial turmoil on the individual cost of capital parameter estimates to investigate whether an adjustment to the original estimates consulted on would be appropriate.

above the originally proposed mid-point of the range of 9.43%) was appropriate and constituted an adequate forward-looking estimate of the required return on investment for eir. The 2008 WACC Decision was not appealed;

- ComReg notes eir's acknowledgement that when making the 2014 WACC Decision ComReg considered the potential effect of the financing conditions facing Irish operators in the aftermath of the sovereign debt crisis.[53]

220. In the 2014 WACC Decision ComReg set the WACC at 8.18%, indicating that the WACC for eir has reduced in the aftermath of the financial crisis. The 2014 WACC Decision was not appealed.

221. For the above reasons, ComReg does not agree with eir's view that ComReg and its consultants have not reviewed and quantified a benchmark for profitability which considered the actual financing conditions in years of financial turmoil and that such an exercise was necessary. ComReg and its consultants appropriately determined an ex ante allowed rate of return in line with good regulatory practice, which represented a robust estimate of the forward-looking required return for equity and debt investors in eir's regulated fixed-line business.

222. Departing from a regulatory WACC, as described above, would result in uncertainty and inconsistency in regulatory decisions.[54]

223. eir notes in relation to its estimated modified cost of capital benchmark that it does not purport to present *"a fully-fledged calculation of the cost of capital."* ComReg notes that eir's estimate does not update all of the cost of capital parameters that are required as input into such a calculation. ComReg's 2008 WACC decision, which was subject to industry consultation and scrutiny, represents a more robust benchmark than eir's ex-post estimate which only varies certain parameters.

224. eir expresses a concern that the 2008 WACC Decision underestimates out-turn cost of capital[55] for eir for 2010/11 and 2011/12. ComReg and its consultants, Oxera have considered the merits of the alternative WACC benchmark presented by eir. Oxera

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[53] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraph 78.

[54] As the WACC is a key input in the setting of cost recovery/price control obligations, it has implications for setting of efficient prices for consumers and the creation of ongoing investment incentives for eir's regulated services.

[55] The out-turn cost of capital refers to an ex post estimate, rather than an ex ante estimate. In a regulatory price control context, cost of capital estimation is typically undertaken using forecast data, on an ex ante basis, for a multi-year period in the future. Since the cost of equity within the cost of capital is not observable (as it is a required return, which is not contractually agreed), this can only ever be estimated. Accordingly, there may still be disagreement on the appropriate ex post value estimate, or out-turn cost of capital.

considers that updating just the risk free rate parameter does not provide a robust update of the WACC.

225. Notwithstanding this, a sensitivity analysis of eir's representations of an alternative out-turn cost of capital was undertaken by Oxera as a cross-check. Oxera uses an alternative estimation methodology for determining the risk-free rate within the cost of capital estimate. Having examined changes in market data over the relevant period, Oxera used publicly available data on country risk premia for Ireland and yields on German and Dutch government bonds to test the sensitivity of the risk-free rate assumptions that eir presented in its modified WACC estimates.

226. Oxera's analysis found that the WACC of 10.21% was appropriate for the period 2010/11 to 2013/14 and the WACC of 8.18% was appropriate for the period 2014/15.[56] Using an alternative risk-free rate estimation methodology to test the sensitivity of eir's assumptions, Oxera found that in each year of assessment (2010/11 to 2014/15), the ROCE for the fixed-line business remains higher than an estimate of the out-turn WACC.

227. Having considered eir's representations it is noted that eir earns actual ROCE for the fixed line business in excess of their estimates out the out-turn WACC in each year. In particular, ComReg notes in relation to the 2010/11 application that eir's actual ROCE is 26.1% for the fixed line business and significantly higher than eir's suggested modified WACC of 14.5% (and in excess of the 2008 regulatory allowed WACC of 10.21%). In relation to the 2011/12 application eir's actual ROCE is 22.3% for the fixed line business, which is, again significantly higher than eir's suggested modified WACC of 13.6% (and in excess of the 2008 regulatory allowed WACC of 10.21%).

228. However, and for the avoidance of doubt, ComReg does not accept that eir's approach and the ex-post modified WACC estimates provided by eir are appropriate to use for the profitability analysis based on ROCE and unfair burden assessment.

229. For the reasons set out above, ComReg disagrees with eir that the use of the 2008 WACC Decision was inappropriate. It is ComReg's view that the 2008 WACC Decision provides an appropriate benchmark for returns available to investors in the period 2010/11 to 2013/14 and the 2014 WACC Decision provides an appropriate benchmark for the period 2014/15. ComReg is satisfied that the regulatory WACC provides the most appropriate benchmark for this part of the unfair burden assessment.

[56] Note that this observation is also consistent with eir's analysis, which concluded that eir's estimate of the modified WACC for 2012/13 was consistent with the 2008 WACC Decision, and that eir's estimates of the modified WACC for 2013/14 and 2014/15 were within an acceptable range of both the 2008 WACC Decision and 2014 WACC Decision.

7.9 Assessment of eir's financial position based on the historical costs of assets – eir's comments

230. The ROCE is an accounting-based financial returns metric which captures the relationship between operating profits and capital employed in a business. Oxera's estimate of ROCE for eir is calculated as the ratio of eir's operating profits (measured by EBIT) and Mean Capital Employed ("MCE") (based on historical cost accounting "HCA" values of assets) in its fixed-line business.

231. eir is of the view that using an MCE figure set on the basis of the historical costs is inappropriate for profitability assessments and inconsistent with best practice. eir says that the UK Competition Commission guidelines for measuring profitability consider 'replacement cost' or 'Modern Equivalent Asset value' to be the economically meaningful measure in most cases.

232. eir stated that: "*We are of the view that if capital employed was calculated based on a fair evaluation, the level of capital employed would have been materially higher. This would then mean that the ROCE would be lower, impacting on the conclusions drawn on profitability. For example, net to gross book value ratios for poles, aerial cable, duct and civils averaged close to 30% in the six years to the financial year 2014/15*."

233. In support of that view, based on its conclusion that a 'fair value' approach would result in a 50% uplift on HCA MCE values, eir set out what it considered would be the USO business return on capital employed for particular years.[57]

7.10 ComReg's response

234. ComReg disagrees with eir that in the present context a replacement cost or Modern Equivalent Asset (MEA) value would be a more appropriate measure of MCE than HCA for an assessment of profitability in the context of the unfair burden assessment.

235. ComReg acknowledges that, according to economic principles, valuing the assets of a firm according to their current equivalent cost or current cost accounting (CCA) values provides a more economically meaningful measure of asset values than their historical cost, particularly when determining future prices. However, it is ComReg's view that although a replacement valuation concept (such as MEA or CCA[58] valuation) may be properly used for other regulatory purposes depending on the specific

[57] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 Figure 6 page 34.

[58] The CCA methodology focuses on updating historic costs, relative to the existing reality of the market (i.e. current costs) and may, therefore, proxy the MEA or replacement values of assets. The information is derived from the HCA accounts by valuing the non-fully depreciated assets using current costs instead of historic costs, with appropriate accounting for the consequent holding gains and losses and adjustments to depreciation charges as a result of revaluations.

regulatory objectives, HCA valuation is the preferred approach for the purposes of verifying the net cost and undertaking the unfair burden assessment. The reasons for ComReg's position are outlined below.

236. Decision 1 of D04/11 states that:

> "*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*."[59]

237. Therefore, in accordance with D04/11 ComReg assesses on a HCA basis the cost of the USO by reference to the difference in actual costs that the USP, as a commercial operator, would have incurred had the USO not been in place for the year of an application for funding.

238. ComReg set out clearly during the consultation process which led to D04/11,[60] why it considers it appropriate in the context of the USO net cost verification to start with accounting cost (profit) on a HCA basis and take capital employed values directly from eir's HCA separated accounts in assessing the USP's costs and revenues (profitability) as part of the net cost calculation. This is because:

- Adopting HCA incurred costs, rather than economic costs, avoids the risk of a possible under/over-estimate of any net cost figure. One of ComReg's regulatory functions is to ensure that the USO funding applications present a "true" net cost of serving uneconomic end-users, and that the USP is not over or under compensated;
- eir's separated accounts for the relevant financial period are prepared on a HCA basis; the use of HCA helps facilitate the verification of eir's costs by ComReg to ensure that any funding sought in relation to the USO does not exceed what is necessary or appropriate;

[59] ComReg considered in D04/11 that the use of the HCA accounting approach to avoidable costs and benefits is appropriate, and that this would then be consistent with return on capital estimates using the Net Book Value ("NBV") value of assets as reported in eir's regulatory HCA accounts for the relevant financial period (i.e. Decision 12).

[60] For further discussion see ComReg consultation document 10/94 paragraphs 4.7-4.29: https://www.comreg.ie/publication/costing-of-universal-service-obligations-principles-and-methodologies/ and ComReg Response to Consultation and draft decision document 11/15, section 3, paragraphs 3.3 to 3.15: https://www.comreg.ie/publication/response-to-consultation-and-draft-decision-costing-of-universal-service-obligations-principles-and-methodologies/

- The use of HCA values of MCE is relatively identifiable.[61] The HCA is also the transaction cost. It is what eir paid at the time of the asset purchase (less annual depreciation over time).

- The use of HCA values (of actual incurred costs) for the period enables ComReg to achieve its objective of transparency and practicability as it relies on actual data that exists and is verifiable, from eir's HCA accounts which are audited. eir no longer prepare CCA accounts.

239. As the net cost of USO provision is calculated using HCA accounting principles, it is internally consistent to use HCA values of capital employed in assessing the financial position of the USP.

240. The HCA valuation of assets is a more meaningful basis for the assessment of the profitability and unfair burden in the context of USO services. ComReg considers that it is reasonable that a USO assessment only considers the costs the USP has actually incurred to operate and maintain the network it is using to meet the USO. All such relevant investment would be captured in the HCA separated accounts.

241. eir is designated with SMP, as a result of which wholesale and retail price control and cost accounting obligations are imposed on eir by ComReg. The setting of price controls (e.g. SB-WLR)[62] is underpinned by the cost accounting system obligation imposed on eir, which is based on eir's HCA accounting and separated accounts. Therefore, HCA accounting is not only used in calculating the USO net cost. It is internally consistent to use HCA values of capital employed and to derive the relevant values from eir's HCA regulatory accounts for the period in question in assessing the profitability of eir's fixed-line business.

242. eir's suggested 'fair value' or economic approach to capital employed is generally inconsistent with ComReg's approach within D04/11 and ComReg's regulatory objectives in the USO context, which is to establish the actual net cost of the USO while also achieving objectives of transparency, practicability and predictability. This is because:

- It is ComReg's view that 'replacement cost' or 'MEA' will be [a] notional, rather than identifiable, measure in the absence of a transparent and detailed current cost or MEA analysis which is robust and auditable. ComReg notes that in its guidelines for competition investigations, the UK Competition Commission explains that getting a reliable fair value valuation for the capital employed is an

[61] Based on asset values reported in eir's HCA regulatory accounts for the financial period.
[62] Single Billing Wholesale Line Rental.

indispensable factor before applying a ROCE profitability assessment. [emphasis added];[63]

- Whilst CCA may inform what is in principle an 'economically meaningful measure of profitability', a full set of CCA accounts (i.e. core and access) are not currently available to use to reliably and transparently value MCE from an economic perspective. eir does not currently maintain records for CCA purposes for the access network. The only CCA accounts prepared by eir were for its core network. In addition, a complete and recent asset register based on CCA valuation is not available from eir. In this light, it does not seem possible to currently derive a robust and transparent CCA valuation of eir's assets, in particular those associated with its access network;[64]

- In the absence of a transparent and detailed analysis which is robust and auditable[65] asset re-valuations are largely notional or hypothetical and do not reflect actual historically incurred costs by eir;

- In general, when using CCA accounting measures for asset valuation, biases can occur due to assumptions about a range of factors.[66] It is noted that eir does not set out precisely what it considers the relevant 'fair value' estimate of its capital employed to be or, its rationale as to why such an approach might be more appropriate compared to HCA accounting valuation in the context of the unfair burden analysis, while ensuring methodological consistency with D04/11. In addition, eir does not provide full details of its MEA analysis or assumptions relied on to inform its judgement of what may be an economically meaningful measure of ROCE or profits, and the conclusions drawn by eir that a 'fair value' approach would lead to the MCE being approximately 50% higher than the HCA MCE value;

- eir implies that it is straight forward to make an adjustment to accounting profit to arrive at what may be an economically meaningful measure of profitability.

[63] See CC3 (Revised)—Guidelines for market investigations: Their role, procedures, assessment and remedies April 2013 at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/284390/cc3_revised.pdf
Note: The UK CC no longer exists and anti-competitive behaviour is now dealt with by the Competition and Markets Authority (CMA).

[64] See European Commission Recommendation "*On consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment*", 2013, p7 and 8, paragraphs (33) to (38), as regards the valuation of civil engineering assets such as duct and poles.

[65] Regulation 11 (7) of the Regulations provides that irrespective of the costing methodology applied: *"[t]he accuracy of the accounts or other information or both, serving as the basis for the calculation of the net cost of an obligation shall be audited or verified, as appropriate, by the Regulator or by a body independent of the undertaking concerned and approved of by the Regulator".*

[66] For example, amongst other things, economic and accounting asset values, scope of the assets, opening and closing values, NBV etc.

However, the principle of current cost valuation is difficult from a practical implementation perspective. It is considered that a complete re-valuation of the access network would largely require significant survey analysis and additional cost data before it could be properly assessed;[67]

- Any changes in the value of assets used to provide price regulated services or the USO possibly also require a significant modification to the way in which depreciation is addressed and the extent assess costs have already been recovered. However, as set out above Decision 1 of D04/11 specifies the particular treatment of depreciation in the context of calculating USO net costs.

243. As noted earlier, Oxera's estimate of ROCE for eir is calculated by dividing eir's level of operating profit (measured by EBIT)[68] by the capital employed based on HCA values of assets[69] in its fixed-line business, each taken from eir's audited separated accounts. However, it is noted that eir only considers one element of this financial returns metric and does not take into account the numerator of this ratio (operating profit). Any implications for eir's operating profit (e.g. holding gains and losses, and depreciation charges) as a result of a change in how assets are valued would also need to be appropriately and transparently addressed in eir's cost accounting system and financial accounts (i.e. eir's balance sheet and financial statements), as set out above.

244. Therefore, while ComReg acknowledges that, according to economic theory, current-cost valuation may in certain circumstances be a more appropriate measure than historical cost values of the economic value of an asset, as the USO assessment is considering the profitability of the firm within and without the USO, it is more appropriate to use HCA valuation in undertaking the unfair burden analysis than a replacement cost valuation.

245. For the above reasons, and having regard to eir's submission, ComReg's position is that the HCA approach taken regarding capital employed for verifying the net cost and assessing eir's profitability and possible unfair burden is appropriate and is in accordance with D04/11.

7.11 The unfair burden assessment is carried out by reference to the financial year under assessment – eir's comments

246. eir considers that ComReg's analysis of eir's financial performance is based on an inappropriate judgment of what the relevant time-period for analysis should be and

[67] As discussed in ComReg Response to Consultation and draft decision document 11/15, section 3, paragraphs 3.3 to 3.15.

[68] As part of assessing eir's financial position, Oxera considered eir's reported absolute profit (EBIT) in the fixed line business, measured as revenues less operating costs, on a HCA basis.

[69] These are values as reported by eir, in its historical cost regulatory separated accounts. Note that Decision 1 of D04/11 requires the use of the HCA methodology in calculating the net cost of the USO.

that: "…*given the multi-year nature of the USO, the assessment of whether it constitutes an unfair burden or not should be made with reference to a period longer than one year. The amortisation of capital expenditure related to the USO will in most cases exceed a one-year period and frequently will exceed the designation period. From this point of view, the designation period could be seen as a lower-bound for a relevant period of assessment of eir's profitability*."[70]

7.12 ComReg's response

247. ComReg disagrees with eir's assertion that assessing whether the net cost is an unfair burden by reference to the financial year in respect of which an application was made is inappropriate.

248. The Regulations provide that a request for funding shall be accompanied by such supporting information as may be reasonably required by the Regulator and "*the data may be based on such period as may be specified by the Regulator*".[71]

249. In accordance with D04/11, applications by eir for funding must be submitted on an annual basis no later than 9 months of the end of eir's financial year in respect of which eir's request is being made.[72] Decision 21 requires that '*USO funding applications shall be based on annual information which coincides with the USP's financial year*.'

250. ComReg broadly agrees with eir that capital expenditure in network assets can typically facilitate the delivery of services over a multi-year period and amortisation (or depreciation) of network assets may be experienced over a multi-year period. However, this does not mean that it is inappropriate to calculate the net cost and carry out an unfair burden assessment on a yearly basis.

251. Under HCA costing methodology, and in the production of eir's HCA Separated Accounts, eir's costs (including any relevant capital or depreciation charge) and revenues are represented on an annual basis, including being annualised, where appropriate, as in the case of depreciation or amortisation expenses. Decision 2 of D04/11 states that "… *it is only the cost (including as appropriate any relevant capital cost, i.e. any relevant depreciation for that year) that the USP could avoid in that given financial year for which the USO funding application is made, which is included in the net cost calculation*."[73] The yearly assessment, based directly on the historical reported financial results for a given financial year, is necessary and appropriate

[70] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraphs 90–92.
[71] Regulation 11(2) of the Universal Service Regulations.
[72] The HCA approach i.e. the actual historic data reconcilable to the corresponding financial year audited separated accounts appropriately adjusted for efficiencies and avoidable costs.
[73] Thus for example, the net cost calculation takes into account the relevant depreciation levels in that financial year.

because it provides greater transparency in the net cost calculation and reconciliation to the actual historic accounts.

252. ComReg considers that when assessing whether or not the USO net cost represents an unfair burden on eir, the analysis should align with the USO net cost calculation which is assessed by reference to the USP's financial year and should therefore consider eir's financial position and economic situation in the year in respect of which the application for funding was made.

253. ComReg considers that a single year approach to the unfair burden assessment is appropriate given that the assessment to be carried out is to determine whether or not the burden of the net cost (for the specific year of application) is excessive in view of the USP's ability to bear it, account being taken of all the USP's own characteristics. Considering eir's financial position (including a comparison of eir's fixed-line business ROCE – including and excluding the net cost of the USO) based on metrics calculated separately for each financial year is appropriate and representative of eir's specific circumstances in the relevant year.

254. ComReg considers that information on eir's financial performance up until the relevant year of application can provide context for the assessment. Specifically, the impact of the net cost can be observed prior to the year under assessment and over several years. As set out in the Oxera Reports[74] chapter 4, Figure 4.1 in the case of each application ComReg and Oxera have considered changes in eir's performance and indicators of eir's economic situation over time by comparing the period under assessment to previous years.[75]

255. With regard to the period beyond the relevant year of application, ComReg considers that such information should not affect the assessment of an application for a particular year. If the USO net cost was to significantly increase, or the situation of the USP was to significantly deteriorate, the potential impact of any such events or patterns may be considered by ComReg in the assessment of future applications, as relevant, should eir submit to ComReg a written request to receive funding for the net costs of meeting the USO, in accordance with D04/11.

[74] Oxera Unfair Burden Reports 2010-2015 Chapter 4.

[75] ComReg notes however that it was not possible for Oxera to carry out a like-for-like comparison of revenues and profitability in 2010/11 against those in 2009/10, due to changes in the format of the regulatory accounts. In particular, in the 2009/10 regulatory accounts eir's business was disaggregated into Businesses and Activities categories, while the HCA regulatory accounts for 2010/11 split eir's business into Market Groups and Markets categories.

7.13 Additional indicators of eir's financial position – eir's comments

256. eir said that the use of additional indicators of its financial position demonstrates a lack of commercial judgment on the part of Oxera. In support of that view, eir derived a 'notional' net cost of the USO based on the revenues earned by eir's competitors.[76] The results of this analysis are reproduced in the following table.

Table 6: Notional net cost of the USO (NCUS)[77]

	2011	2012	2013	2014	2015
Vodafone	335	279	290	282	300
Liberty Global	41	44	59	76	76
BT	143	139	131	131	128

257. eir said that this shows that the imposition of a cost of the order of €45m is far too material "*in the context of eir*" to be considered fair and therefore to be borne exclusively by eir.

7.14 ComReg's response

258. ComReg does not agree with eir that the use of additional indicators of eir's financial position demonstrates a lack of commercial judgment.

259. It should be noted that, overall, the analysis of whether the net cost represents an unfair burden considered eir's ability to bear it having regard to the absolute net cost, the net cost relative to eir's financial position, changes in eir's profitability, and also an assessment of additional indicators of eir's financial position and the economic situation faced by eir as broader context for the profitability assessment.

260. As noted in Oxera's Unfair Burden Reports, a ROCE-based profitability analysis is a key indicator of eir's ability to earn a fair rate of return on its capital employed. As part of the analysis of the USP's financial position per Decision 40, the impact of the USO by reference to additional financial indicators, i.e. net cost as a proportion of (i) revenues and (ii) absolute profit (EBIT)[78] was also considered. These indicators compare the net cost (as claimed by eir) in the application period to the size and profits of the fixed-line business of eir (i.e. as a ratio of its revenues and EBIT). These indicators provide contextual information regarding the effect of the net cost on the USP's financial position.

[76] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraphs 128–129.
[77] eir's "Response to consultation and draft decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens June 2018. Table 6 Notional NCUS.
[78] Earnings before interest and taxes (EBIT) measured as revenues less operating costs.

261. Oxera’s analysis was conducted by reference to the positive net cost figure claimed by eir. In this respect, the analysis of whether the net cost of USO represents an unfair burden has regard to eir’s individual characteristics rather than a ‘notional’ net cost of the USO based on revenues. D04/11, and in particular Decisions 38–42, apply the Base case by taking into account eir’s own characteristics and its ability to bear the net cost. According to the Base case, a national regulatory authority must consider whether the burden on a USP 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.”*[79]

262. Oxera applied D04/11 to assess whether the net cost represents an unfair burden on eir having regard to eir’s individual characteristics. ComReg understands that eir’s analysis is a notional representation of how material the cost of the USO would be for eir’s competitors if a similar ratio of net cost to revenues (i.e. eir’s net cost as a proportion of revenue in the financial year 2010/11, 0.62%) was applied to them. eir did not make clear the definitions and the source of the figures. While the source of the figures used is not clear, ComReg understands that the calculations presented by eir relate to the overall business of these companies. Therefore, eir’s analysis may also include revenues that are (i) generated outside Ireland and (ii) not related to the fixed-line activities. In any event, and while the position is not clear, such analysis provides limited relevant information for establishing whether the net cost of USO represents an unfair burden.

263. In any case, comparison of absolute numbers across companies is not meaningful. If companies have different scale (e.g. in terms of absolute levels of revenue or profits) then meaningful comparison between companies would be in terms of financial ratios. This is why, for example, financial analysis of profitability takes into account ratios (e.g. profit margins) rather than absolute levels of profit.

7.15 Unfair for the USP to bear the USO net cost alone – eir’s comments

264. eir said that it is intrinsically unfair that the net cost of the USO is not shared with the industry and that other operators benefit from the existence of a USP as it provides connectivity to areas and people who would not otherwise be served. eir is of the view that it is subsidising its competitors, which is poor for competition.[80]

[79] *Base NV and Others vs Ministerraad,* op. cit., para. 42

[80] eir’s “Response to Consultation and Draft Decision Assessment of eir’s Universal Service Fund Applications Assessment of the net costs and unfair burdens” 11 June 2018, paragraphs 100–108.

265. eir submitted that if eir's profitability and its financial position are valid criteria to justify that eir should bear in part or in total the costs of the USO, ComReg has not explained why the size and profitability of other telecommunications operators were not considered.

7.16 ComReg's response

266. eir appears to suggest that it is unfair that it has to bear the USO net cost when other operators share the benefits associated with the USO and that, in principle, the cost should be shared.

267. The Universal Service Regulations provide that:

> "*Where the Regulator, on the basis of the net cost calculation referred to in Regulation 11, finds that the net cost of meeting an obligation under Regulation 3, 4, 5, 6, 8 or 9 represents an unfair burden on an undertaking it shall apportion the net cost of the universal service obligation among providers of electronic communications networks and services*."[81]

268. Therefore, the setting up of a sharing mechanism (and industry contribution to a universal fund to share the USO net costs) is only provided for under the Universal Service Regulations where a net cost has been found to be an unfair burden on the USP.

269. 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 Regulations, ComReg will establish a sharing mechanism to apportion the net cost of the USO among providers of electronic communications networks and services.

270. This is also stated in the decision in the Base case, which refers to "*the unfair burden which must be found to exist by the national regulatory authority before any compensation is paid".*

7.17 USP's ability to bear the USO net cost– eir's comments

271. eir stated that "*Under the Universal Service Directive the key concern is to assess whether or not in the absence of a properly designed funding mechanism the USP is able to compete fairly with the rest of the industry. Determining if a competitive*

[81] Regulation 11 of the Universal Service Regulations. European Communities (Electronic Communications) (Universal Service and Users' Rights) Regulations 2011.

disadvantage exists requires that ComReg review the changes in market structure and how these changes interact with the universal service obligation.'[82]

272. eir said that the USO designation has impeded eir from competing fairly with the rest of industry. In support of that view, eir submitted that the loss of market shares primarily in urban areas would have a significant impact on the ability of the USP to finance the cost of the USO. eir prepared a review of market share in urban areas as an indicator of the USP's ability to finance the cost of the USO. The analysis suggested that the profitability surplus available to fund the uneconomic areas and uneconomic customers has been eroding and therefore eir's ability to cross subsidised is undermined.[83]

273. eir also claimed that USO regulation (the provision of access at a fixed location at geographically averaged prices, or "GAP USO"),[84] in the presence of competition, creates market distortions and reduces eir's ability to compete effectively in urban areas. eir refers to the fact that it is a regulated entity and that its profits would be higher absent the USO (i.e. in the counterfactual scenario). According to eir, funding for the USO would help compensate eir for the negative impact of the GAP USO and would be necessary for eir to compete fairly with other market participants. [85]

7.18 ComReg response

274. As part of the unfair burden assessment, ComReg and Oxera considered under Decision 38 (iii) (b) whether the positive net cost "*causes a significant competitive disadvantage for a USP*" and determined that this condition was not met.

275. In responding to eir's claim that the USO net cost causes a significant competitive disadvantage for eir, it is noted that the effect of a potential market distortion due to the USO is already reflected in the net cost, which is calculated with reference to the status quo with the USO and the counterfactual scenario without USO. This takes into account changes in the financial position of the USP (i.e. the difference in the USPs' profit with and without USO which is equal to the difference between avoidable cost and forgone revenue).

276. Oxera considered the potential impact of the net cost (which includes the proportion of the net cost which arises as a result of the GAP USO) on eir's profitability (measured

[82] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraph 109.

[83] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraphs 110–127.

[84] eir's universal service obligations during the relevant period included the GAP obligation, which ensures universal services provided by the USP are available at a uniform price, irrespective of geographical location in Ireland.

[85] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraph 127.

as eir's fixed-line business ROCE - including and excluding the net cost of the USO). Oxera's analysis illustrated that, in a counterfactual scenario, if eir had not incurred the net cost of providing the USO, its ROCE would possibly have increased somewhere in the order of less than 0.8 percentage points in a relevant period (2010/11 to 2014/15).[86]

277. To further contextualise eir's financial position, the analysis noted that for there to be no returns above the regulatory allowed WACC, the net cost of the USO would have to have been a significant number of times higher; or, alternatively the absolute profit (EBIT) for the fixed-line business would have to have been a significant percentage lower for each year of application 2010/11 to 2014/15.

278. Oxera also considered, in line with Decision 42 (4), whether eir was able to earn sufficient profits to finance its costs in uneconomic areas/customers from profits in economic areas/customers. The unfair burden assessment set out that from the perspective of the USP's financial position, if the USP earns sufficient profits within the integrated fixed-line business to enable it to cross-subsidise the costs of providing the USO, this would indicate that the USP is able to bear the burden of the USO net cost.[87] Given the level of actual profits that were being earned by eir in the fixed-line business in each of the years under assessment (which reflects eir's financial and economic situation and the impact of competitive pressures on the profitability of eir), ComReg considered that eir was well positioned to internalise the net cost (or to cross-subsidise the provision of the USO by using profits that were earned in segments of the fixed-line business). In particular, eir's actual profits earned while providing the USO in each year of application were in excess of the competitive benchmark or, the fair rate of return. In that context, it was considered that eir had the ability to bear the burden of the net cost of the USO in 2010/11 to 2014/15.

279. As part of examining indicators of eir's economic situation, ComReg and Oxera considered changes in eir's market share, changes in total number of customers and changes in ARPUs over time (i.e. data for the particular year of application relative to previous financial periods). Based on that analysis, it was noted that in each financial period, there was a decline in eir's total number of customers and that from 2010/11 eir's revenue yield (total ARPU) began to decline.

280. Oxera considered changes in eir's financial position and indicators of eir's economic situation over time. These included indicators such as eir's fixed line market share by revenue and suggested that eir faced an increase in competitive pressures. eir was able to retain a majority market share by revenue in the fixed-line market, and eir's

[86] See section 4.1., Figure 4.3 in the Unfair Burden Reports 2010/11 to 2014/15.
[87] See section 4.1., Figure 4.3 in the Unfair Burden Reports 2010/11 to 2014/15.

financial position indicated that the provision of the USO did not represent an unfair burden.

281. For the fixed-line business as a whole, Oxera's analysis showed that, eir's profitability and ability to earn a fair rate of return on its capital employed had not been significantly affected by the net cost of the USO in each application year 2010/11 to 2014/15.[88]

282. Having regard to eir's individual characteristics, ComReg is of the view that the burden of the net cost was not excessive in view of eir's ability to bear it. Condition 38 (iii) (b) of D04/11 was not met or, in other words, the positive net cost in respect of the specific financial period under assessment did not cause a significant competitive disadvantage for eir. The Consultations set out that, given Oxera's conclusions in respect of Decision 40 and ComReg's preliminary views, ComReg did not consider that it was necessary to carry out an assessment pursuant to Decision 41 of D04/11 (i.e. whether the net cost materially impacts eir's ability to compete on equal terms with competitors going forward).

283. Regarding the point made by eir in relation to GAP, ComReg has previously considered the possible impact of USO regulation, including the GAP USO, and whether it would create market distortion.[89] In ComReg Decision (D05/16[90]) as regards universal service (i.e. access at a fixed location), having considered the analysis and consultation submissions, ComReg decided that maintaining the GAP USO would result in an overall net welfare benefit, benefiting both competition and end-users. In 2016 Consultation 15/89,[91] ComReg set out as regards the potential impact on the USP that "*there is no evidence to suggest that the combination of the (safeguard) RPC on standalone voice services and GAP obligation in respect of universal services unduly hampers eir competing, considering the broader context. At the retail level, we note that GAP is mandated in respect of universal services including AFL and hence the GAP constrains the price of the voice access service. eir has pricing flexibility regarding its retail bundle offers.*"

284. It should be noted that eir provided no evidence at that time to indicate that a GAP USO would lead to market distortion.

285. In response to the points made by BT and Vodafone as regards eir's ability to recover the net costs and earn sufficient profits through its pricing, ComReg acknowledges that eir has some pricing flexibility in relation to its wholesale fixed voice access input

[88] Section 4 of the Unfair Burden Report.

[89] See ComReg Decision D05/16 which designated eir as the USP for provision of access at a fixed location (AFL USO) entitled "U*niversal Service Requirements: Provision of access at a fixed location (AFL USO)*", ComReg document no.16/65, 29/7/2016, section 7.5.2 pages 97 to 105.

[90] ComReg Decision D05/16 "Universal Service Requirements – Provision of access at a fixed location" dated 29 July 2016.

[91] ComReg Document 15/89 "Universal Service Obligation, Provision of Access at a Fixed Location", 7 August 2015.

charges (SB-WLR) and the retail price control i.e. Retail Price Cap (RPC). The net cost is calculated with reference to the difference between avoidable cost and forgone revenue (which is equal to the difference in eir's profit with and without USO). As part of assessing eir's profitability, Oxera considered the level of actual profits that were being earned by eir in the fixed-line business in each of the years under assessment (i.e. eir's reported absolute profit, measured as EBIT) which reflects, amongst other things, revenues based on eir's implemented prices including allowed revenues based on regulated price controls.

286. The unfair burden assessment (which reflects eir's wider financial and economic situation and the impact of the USO and competitive pressures on the profitability of eir) shows that eir managed to earn actual returns in excess of the competitive benchmark (i.e. eir remained profitable from the activities directly linked to the USO) both with reference to the status quo with USO and the counterfactual scenario without USO. Therefore, eir has been able set prices at a level to internalise the net cost of the USO. In circumstances where eir has already been able to recover the net cost of the USO through its profits, which are generated across its customer base, then, as indicated by ComReg in D04/11, eir's customers have already paid for the net cost.

7.19 International developments – eir's comments

287. eir submits that ComReg's approach is different to what has been done by other NRAs when assessing funding applications. eir is of the view that ComReg has shown no concern for international precedent, and that if the practical approaches employed by NRAs in Spain, Portugal or France were applied to eir, ComReg would find that the net cost of the USO would represent an unfair burden on eir.[92]

7.20 ComReg response

288. National regulatory authorities have significant discretion in relation to how they determine whether there is an unfair burden. The European Court of Justice in the Base case[93] confirmed at paragraph 43 that:

> *"…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"***

289. In this respect, Decisions 38 to 42 of D04/11 set out the general and objective criteria by which ComReg assessed whether a positive net cost, in the particular year of application, may be considered an unfair burden on the USP.

[92] eir's "Response to Consultation and Draft Decision Assessment of eir's Universal Service Fund Applications Assessment of the net costs and unfair burdens" 11 June 2018 paragraphs 130–137.

[93] Case C-389/08 *Base & Others v Ministerraad, paragraph 43.*

290. Having assessed approaches in other jurisdictions, ComReg observes that there is no uniform approach as regards the unfair burden assessment among regulators who have assessed USO costs and possible unfair burdens. The approaches taken take into account country specific regulatory frameworks and market conditions.

291. The aim of the unfair burden assessment is to determine whether eir, as the USP, is able to bear the net cost of USO having regard to its own characteristics. In these circumstances, international precedents are likely to have limited direct relevance to the unfair burden assessment of the USO in Ireland.

8 Other issues raised which are deemed by ComReg to be outside the scope of the Consultations

292. This chapter sets out certain additional observations made by respondents to the Consultations which ComReg considers to be outside the scope of the Consultations.

293. These additional observations are summarised and addressed below under the following headings:

- Intangible benefits and unfair burden concepts
- Revenues voluntarily forgone by eir
- USO – Quality of service (QoS) performance
- Role of mobile networks

8.1 Intangible benefits and unfair burden concepts – respondents' general observations

294. Sky was of the view that ComReg should widen the existing categories of intangible benefits (which are expressed in Decision 35 of D04/11 to be "*at a minimum*") and consider new information in assessing the "unfair burden". Sky also said that ComReg is taking *"too narrow a view of factors that should be considered in offsetting any alleged 'unfair burden'"*.

Intangible benefits

295. Sky submitted that *"in particular it seems clear from market developments that eir place a significant value on maintaining monopoly status in its access network where possible and the value it places on it on such an outcome significantly overrides concerns about having to provide access services to uneconomic customers within such geographical boundaries*", citing the Commitment Agreement pursuant to which eir agreed to provide service to 300,000 premises that had previously been within the NBP intervention area, which Sky said suggests "*that historically covering the access cost of uneconomic AFL customers in this footprint did not only not constitute an unfair burden on eircom but in fact afforded eircom a commercial advantage.*"

296. Sky was of the view that since a large portion of the underlying infrastructure costs such as ducts, poles and trenches are identical it may be argued that a willingness to

invest in uneconomic customers in providing FTTH is directly comparable with providing services via copper (AFL). Sky argued that this shared infrastructure confers a significant 'intangible benefit' on eircom and that *"eircom's status as the USP in providing AFL in this footprint has ensured the infrastructural ubiquity that allowed it to underwrite its Commitment Agreement with the government."*

297. Sky was of the view that *"the benefits of maintaining a monopoly in the 300k footprint as a consequence of eircom's status as USP could logically be considered in the context of the 'life-cycle' benefit and specifically on future earnings of these access lines. The extensive public relations activity carried out by eir in relation to the rollout could further be considered under the 'marketing' heading in consideration of intangible benefits."*

298. Sky expressed concern that ComReg has not assessed this issue in the latest Oxera report (assumed to be the 2014-15 Oxera Intangible Benefits Report), and states that it would be irrational for ComReg to ignore the weight of the intangible benefit argument given the magnitude of the likely monetary value of such a benefit.

299. Vodafone was of the view that while the National Broadband Plan and the Commitment Agreement are both outside the period under review, the Commitment Agreement confirms that eir can rollout FTTH services on a commercial basis in this area demonstrating *"the intangible benefits that accrue to eir from maintaining its status as a monopoly provider for access."*

300. ALTO was of the view that *"eir's extensive duct and pole (PIA) infrastructure into rural areas may significantly assist the rollout of high-speed broadband services for the winner of the Government NBP tender … and that considerable revenue can now be earned from leasing PIA facilities"* and this should be considered as an intangible benefit to eir.

Unfair burden assessment

301. Sky referenced D04/11 and stated that *"for there to be an unfair burden certain conditions including any positive net cost "causing significant competitive disadvantage to the USP [**Decision 38**] must be satisfied."* Sky was therefore of the view that ComReg should consider whether in the context of the Commitment Agreement, eir's USP designation has *"afforded it an opportunity to exploit a competitive advantage"* within this area, when assessing whether eir are suffering significant *"competitive disadvantage"* by virtue of its USP designation.

8.2 ComReg's response

302. ComReg notes Sky and Vodafone's views on intangible benefits and unfair burden concepts.

303. The National Broadband Plan procurement process is currently underway and a contract has yet to be awarded. The Commitment Agreement was signed between DCCAE and eir in April 2017. Accordingly both the Commitment Agreement and the National Broadband Plan are not relevant to the intangible benefits and unfair burden assessment for the time period in respect of which applications are under assessment.

304. Decision 35[94] 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: enhanced brand recognition; ubiquity; life-cycle; and marketing.

305. Decision 36 of D04/11 requires ComReg to observe three key principles for the identification of benefits:

- The benefits represent effects on a USP of providing the USO which have not been accounted for in the direct costing methodology;[95]
- Avoid the double counting of any benefits; and
- 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).

306. ComReg and its consultants assessed the methodology and results that formed part of each of eir's applications (2010/11; 2011/12; 2012/13; 2013/14 and 2014/15) in line with the principles set out in Decision 36 of D04/11. ComReg is satisfied that all relevant intangible benefits have been assessed.

8.3 Revenues voluntarily foregone by eir - respondents' general observations

307. Sky was of the view that revenues voluntarily foregone by eir which result in a high volume of uneconomic customers, or an increase in the net cost, should not be capable of being reclaimed from other operators.

308. From May 2013 to August 2015 eir was using its fixed access infrastructure to leverage its take up of Fibre to the Cabinet ("FTTC") services, by simultaneously discounting FTTC revenues and pursuing funding as a USP for AFL services, which Sky considered to have *"conferred a significant intangible benefit on eircom",* which, Sky said, ComReg or Oxera does not appear to have taken into consideration.

[94] Regulation 11 (4) (a).

[95] 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.

309. Sky was of the view that the foregone retail revenue (i.e. a €3 monthly WLR discount) resulted in an increase in the level of uneconomic AFL retail customers with an associated increase in the net cost of existing uneconomic customers, and that the same principles apply to Retail Price Cap revenue foregone by eir. The delta in the number of uneconomic customers which arises as a consequence of revenues voluntarily foregone, should in Sky's view, be excluded from the net cost calculation.

310. Sky considered that ComReg is obliged to give consideration to the widening of its current interpretation of the concepts of 'intangible benefits' and 'unfair burden'.

311. Similarly BT and ALTO were of the view that eir was actively managing its pricing during the assessment period and had sufficient capability within the Retail Price Cap to recover USO costs, which eir chose not to do. ALTO estimates this at €45.5 million.

312. BT and ALTO observed that eir's access and broadband line discount (i.e. €3 per month from May 2013 to August 2015) demonstrates that eir was sufficiently profitable to sustain substantial voluntary price reductions. ALTO considered that these *"are self-inflicted uneconomic decisions made by eir."*

8.4 ComReg's response

313. In relation to the Retail Price Cap, the price cap regime is separate and distinct from USO. An operator who is assessed to have significant market power ("SMP") may be designated as an SMP operator. The Retail Price Cap is an SMP retail remedy that sets the <u>maximum</u> retail prices that may be charged by the SMP operator. As outlined in ComReg Decision 12/14[96] paragraph 5.22: *"…Although Eircom is subject to a retail price cap of CPI – 0 on its narrowband FVA prices, it is nevertheless free to reduce price, which ComReg would expect it to do if it faced sufficient competitive pressure including from mobile and any direct or indirect constraint from broadband with managed VOIP, and or bundled LLVA."* An SMP operator is free to reduce its price.

314. eir's AFL retail pricing was governed by its USO obligation to offer geographically average pricing (GAP).

315. Some respondents have estimated the total Retail Price Cap revenue foregone by eir to be in excess of €45ML. This estimate is based on eir's average annual retail access line base and implicitly assumes a level of price elasticity.

316. The average annual retail uneconomic customer access lines, is a sub-set of the average annual retail access line base. Accordingly, where relevant, it would be the percentage of uneconomic customers multiplied by the potential revenues forgone

[96] Market Review: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers, D12/14, ComReg 14/89.

which would represent the potential impact of the retail price cap revenue voluntary foregone by eir, as opposed to the total value as outlined by respondents.

317. Price elasticity of demand is a measure to show the responsiveness, or elasticity of the quantity demanded of the service to a change in its price when nothing but the price changes. Respondents appear to have assumed that retail demand for AFL is elastic relative to price. There is limited scope for ComReg to make an objective assessment of the price elasticity of demand, were eir to maximise its AFL pricing under the retail price cap.

318. ComReg's assessments, in line with D04/11, are based on the actual revenues and costs as verified through the agreed upon procedures (AUPs) in respect of financial years.

8.5 USO - Quality of Service (QoS) Performance – Vodafone's general observations

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

320. Vodafone was of the view that *'meeting the obligation'* suggests that this is a condition for the validity of any funding request by the USO provider and that "*the USO performance data for the periods in question would indicate otherwise.*" Vodafone says that in its analysis of 2015 USO performance in ComReg document 17/27 *"ComReg identified a number of areas where eir failed to meet its USO performance improvement targets and as a result has failed to meet the obligation and for this reason the submission of funding claims are invalid.*"

8.6 ComReg's response

321. Compliance with performance targets is a separate issue that is dealt with in accordance with the appropriate legislation. eir's compliance or failure to comply with USO performance targets does not cause an application to be unfit for purpose, nor does it influence the determination of the net cost incurred or the assessment of whether the positive net cost was an unfair burden.

8.7 Role of mobile networks – Virgin Media's general observations

322. Virgin Media is of the view that ComReg has not given sufficient weight to the role that mobile networks play in meeting the basic electronic communications needs of consumers and it is of the view that mobile networks represent a cheaper USO delivery solution that fixed networks.

8.8 ComReg's response

The obligation to provide access at a fixed location does not have to be provided using a specific technology. However, in the context of eir's existing PSTN network and the requirement for access to be at a fixed location in many cases the use of the PSTN network may be an acceptable solution. Notwithstanding this, ComReg understands eir has provided both fixed cellular solution (FCS) and fixed wireless access (FWA) solutions where appropriate.

9 Annex 1 – Reactive maintenance

9.1 Overview

323. This annex sets out eir and ComReg's respective views on the treatment of the allocation of reactive maintenance OPEX as part of the direct net cost calculation, the engagement that took place between ComReg and eir in respect of same, and the rationale for the methodology which ComReg requested eir to implement.

324. ComReg then addresses the points raised by eir in its submissions in response to the Consultations. eir expressed the view in its submissions that "*the net effect of ComReg's change was an implausible shift of costs between areas with high fault incidence (as a result of unexpected events) to areas with lower fault incidence, i.e. between rural areas to urban area and thus a significant reduction in the net costs of the USO.*"

325. Sections of this Annex contains confidential information (the sections dealing with the engagement between ComReg and eir). These sections have been redacted in full as a partial redaction would lead to the provision of incomplete information and therefore could potentially be misleading.

9.2 Introduction

326. Reactive maintenance operational expenditure ("OPEX") describes the costs or expenditure incurred by eir in responding to and repairing faults as they occur within the access network. A significant proportion of reactive maintenance OPEX is made up of the costs of paying service assurance (repair) teams.

327. The calculation of the USO direct net cost requires that reactive maintenance OPEX is allocated to the areas of the access network where faults occur. In particular, Decision 12 of D04/11 states that:

> *"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 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."*

328. ComReg is of the view that, absent the necessary level of granularity within the USO Model, the CAM is an appropriate proxy for cost distribution. The CAM has been

subject to engagement between eir and ComReg and was consulted upon in the context of ComReg's 2016 Pricing Decision D03/16[97]. ComReg's Copper Access Model (CAM) was initially developed in the context of ComReg Decision D01/10[98]. It was recently reviewed and updated as part of ComReg's 2016 Pricing Decision D03/16[99] concerning eir's Wholesale Fixed Access Services (the "2016 Access Pricing Decision"), with the updated CAM being referred to as the "Revised CAM".

329. More recently, ComReg Decision D11/18 on the market reviews of the wholesale local access ("WLA") market at a fixed location and the wholesale central access ("WCA") market at a fixed location for mass market products largely re-imposed the pricing obligations and associated prices for WLA and WCA services as determined in the 2016 Access Pricing Decision, with the Revised CAM underpinning that Decision.

330. The CAM is a forward looking 'scorched node'[100] network model of an efficient operator. The model therefore ensures that investment is optimised and inefficient activities cannot be recovered. It is used to inform the pricing of regulated wholesale copper access products.

331. While the USO Direct Net Cost Model is a historical view of the actual eir network and costs incurred by eir as the USP (including a level efficiency adjustment), ComReg is of the view that the CAM provides an appropriate 'cross check' for cost distributions within the USO Model, in accordance with Decision 12 of D04/11.

9.3 Allocation of reactive maintenance OPEX costs

9.3.1 eir's view of reactive maintenance OPEX

332. eir is of the view that an appropriate allocation methodology for reactive maintenance OPEX is to divide the total reactive maintenance OPEX costs per MDF, by the total number of faults per MDF, to derive an <u>average</u> reactive maintenance OPEX cost per fault, per MDF.

333. eir is of the view that the distribution of its maintenance staff across Ireland (by primary area and associated MDFs) does not accurately reflect where eir's maintenance (repair) costs are actually incurred, since its maintenance staff often perform repairs

[97] ComReg Document No. 16/39, "Pricing of Eir's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision", 18 May 2016.

[98] ComReg Document No. 10/10, "Response to Consultations & Final Decision: Local Loop Unbundling (LLU) and Sub-Loop Unbundling (SLU) Maximum Monthly Rental Charges", 9 February 2010.

[99] ComReg Document No. 16/39, "Pricing of Eir's Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision", 18 May 2016.

[100] The scorched node approach uses the location of the existing network nodes and then builds an optimised network within the constraint of those existing nodes.

outside of their primary area base, particularly where large scale network damaging events occur.

9.3.2 ComReg's view of reactive maintenance OPEX

334. ComReg is of the view that the methodology it has requested eir to use, which is based on the principles set out in the CAM, is a more appropriate methodology than the methodology used by eir in its initial USO funding applications. This revised methodology allocates reactive maintenance OPEX to each of eir's maintenance team areas, based on the number of staff in each team, and within each area. It then allocates reactive maintenance OPEX to different MDFs, based on the number of faults within each maintenance team area. It is therefore more accurate than using an average for all faults.

335. ComReg is of this view based on eir's explicit acknowledgement in its initial 2010-2013 USO funding applications that eir's own methodology[redacted] may not be optimal [✂ [redacted] *]* D04/11 Decision 2 sets out the basis for the calculation of 'avoidable costs'. ComReg is required to ensure that the costs claimed are accurate. Accordingly, ComReg reviewed eir's methodology to ensure that the costs claimed are accurate

9.3.3 Overview of engagement between ComReg and eir

336. [✂ [redacted]

337. [redacted]

[redacted][✂ [redacted]]

9.3.3.1 [redacted]

338. [redacted]

339. [redacted]

340. [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

341. [redacted]

342. [redacted]

[redacted] [[redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

9.3.3.2 [redacted]

343. [redacted]

344. [redacted]

345. [redacted]

346. [redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted]

347. [redacted]

348. [redacted]

9.3.3.3 [redacted]

349. [redacted]

350. [redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]

[redacted] [✂ [redacted]

[redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

351. [redacted]

352. [redacted]

353. [redacted]

354. [redacted]

355. [redacted]

356. [redacted]]

9.4 eir's 'response to consultation' views

357. eir in its 'response to consultation' document is of the view that ComReg in 2010-2015, requested that the allocation of cost mirrored that in the CAM, in contradiction to its 2009-2010 assessment, eir is also of the view that from a cost causality perspective, an allocation of service repair costs based on the volume of faults is a more reasonable allocator *"than the one imposed by ComReg"*.

9.5 ComReg's response

358. ComReg, having considered the arguments put forward by eir in its "response to consultation and draft decision" submission, remains of the view that the methodology adopted by ComReg and TERA to the allocation of reactive maintenance costs to exchanges is aligned with sound economic principles and in particular the principle of cost causality, and that it provides a more accurate calculation of the relevant costs.

359. ComReg does not agree with eir's view that ComReg should have accepted the same eir methodology in 2010-2015 as that used by eir in its 2009-2010 USO funding application submission.

360. The rationale for ComReg’s methodology is based on:

- [✂ [redacted]] and

- ComReg’s view that, absent the necessary level of granularity within the USO Model provided by eir, the CAM provides an appropriate proxy for cost avoidability.

361. ComReg in accordance with D04/11, and in particular Decisions 12 and 25, must ensure the most accurate assessment of the direct net cost. The rationale for ComReg’s revised methodology is as outlined by ComReg in its engagement with eir, details of which are outlined above, and is principally based on [✂ [redacted]], and the fact that, absent the necessary level of granularity within the USO Model, the CAM provides an appropriate proxy for cost distribution.

Table 1: Frontier Economics “USO Model documentation A report prepared for eir” Opex cost categories extract [✂]

[redacted]

10 Annex 2 - overhead and underground costs

10.1 Introduction

362. This annex sets out in summary the engagement that took place between ComReg and eir in respect of methodology to be applied in calculating those costs that the USP would directly avoid if it was not subject to the USO, and the rationale for the methodology which ComReg requested eir to implement in its final USO funding applications for the financial years 2010/11 to 2014/15.

363. Sections of this Annex contains confidential information (the sections dealing with the engagement between ComReg and eir). These sections have been redacted in full as a partial redaction would lead to the provision of incomplete information and therefore could potentially be misleading.

364. The over-arching aim of the net cost calculation is to arrive at a reasonably reliable, transparent and predictable assessment of the costs that are a direct consequence of the provision of the USO. As set out in Schedule 2 of the Universal Service Regulations: *"[d]ue 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."*[116]

365. The principle of avoidable costs involves identifying those costs that the USP would directly avoid if it did not have the USO (i.e. without the requirement to serve uneconomic customers). It is necessary to identify and exclude from the net cost calculation those costs and revenues that the USP as a commercial operator, without the USO, would continue to incur for commercial reasons.

366. The Customer Model, which forms part of the USO Model, was developed by eir to calculate the number of uneconomic customers in economic areas and the direct net cost of the uneconomic customers or areas. It determines the cost that could have been avoided by eir in each area, or main distribution frame ("MDF"), for a given customer, or clusters of individual customers, in the counterfactual scenario of eir having no USO designation.

367. In its initial 2010/11 – 2013/14 USO funding applications, eir used a different cost avoidability methodology in the Customer Model to that which had been used in its 2009/10 USO funding application. [✂ [redacted]

[116] Schedule 2, Part A of the Regulations.

[redacted]] and in January 2015 eir provided ComReg with a report it had commissioned from PwC UK to support its revised cost avoidability methodology[118].

368. Decision 25 of D04/11 requires the USP to clearly identify customers or groups of customers to whom services would never have been provided, or to whom services would not continue to be provided, in the absence of the USO with *“adequate reasoning and cogent evidence to justify”* its decision in this respect.[119] ComReg is of the view that eir did not provide adequate reasoning or cogent justification for its proposed cost avoidability methodology and therefore ComReg is of the view that a cost avoidability methodology based on the Copper Access Model (the “CAM”) would be more appropriate.

369. The CAM is a forward looking ‘scorched node’ network model of an efficient operator.[120] The model therefore ensures that investment is optimised and inefficient activities cannot be recovered. It is used to inform the pricing of regulated wholesale copper access products.

370. The CAM was initially developed in the context of ComReg Decision D01/10.[121] It was recently reviewed and updated as part of ComReg’s 2016 Pricing Decision D03/16[122] concerning eir’s Wholesale Fixed Access Services (the “2016 Access Pricing Decision”), with the updated CAM being referred to as the “Revised CAM”. The CAM is used in many significant decisions, for instance it recently underpinned ComReg Decision D11/18[123] on the market reviews of the wholesale local access market at a fixed location and the wholesale central access market at a fixed location for mass market products.

371. ComReg is of the view that the CAM provides an appropriate ‘cross check’ for cost distribution within the USO Model and, in particular, can be used where eir is unable to provide the necessary level of granularity and evidence of where costs are incurred.

[redacted] [✂ [redacted]].

118 PwC UK Report “Review of eircom’s revised cost allocation methodology” January 2015.

119 D04/11, Decision 25.

120 The scorched node approach uses the location of the existing network nodes and then builds an optimised network within the constraint of those existing nodes.

121 D01/10 Response to Consultation Documents No. 09/39 and 09/62 Local Loop Unbundling “LLU”) and Sub Loop Unbundling (“SLU”) Maximum Monthly Rental Charges.

122 D03/16 Pricing of Eir’s Wholesale Fixed Access Services: Response to Consultation Document 15/67 and Final Decision.

123 D11/18 Pricing of wholesale broadband services Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets Response to Consultation Document 17/26 and Final Decision.

Hence ComReg deems it appropriate to use the CAM as a proxy for cost distribution in modelling the counterfactual scenario of eir having no USO designation[124].

372. ComReg's preferred methodology calculates for each MDF the percentage distribution of assets in the CAM for each of the four distance sensitive cost categories for CAPEX and OPEX. Distance sensitive costs are those that vary depending on the length of a given line, and can be split into four categories:

a. Overhead cable and pole costs, including associated maintenance;

b. Underground cable, duct and trenching costs, including the associated maintenance;

c. Radio access network costs and associated maintenance costs; and

d. Repair costs.

373. ComReg is of the view that the underground network costs associated with street cabinets are, in the majority of cases, unavoidable.

374. eir does not agree that the costs associated with street cabinets are, in the majority of cases, unavoidable and, in its submissions in response to the Consultations, disagrees with the methodology proposed by ComReg. This is the methodology implemented by eir in its final USO funding applications for 2010/11 to 2014/15.

10.2 Engagement between ComReg and eir

375. [✂ [redacted]

376. [redacted]

[redacted]

[redacted]

[124] D04/11, Decision 12 regarding the use of the CAM.

c. [redacted]

10.2.1 [redacted]

377. [redacted]

378. [redacted]

379. [redacted]

380. [redacted]

[redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted]

381. [redacted]

382. [redacted]

383. [redacted]

384. [redacted]

385. [redacted]

386. [redacted]

387. [redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted]

388. [redacted]

389. [redacted]

10.2.2 [redacted]

390. [redacted]

391. [redacted]

392. [redacted]

- [redacted]
- [redacted]
- [redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

393. [redacted]

394. [redacted]

10.2.3 [redacted]

395. [redacted]

396. [redacted]

397. [redacted]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

398. [redacted]

399. [redacted]

400. [redacted]

401. [redacted]

402. [redacted]

403. [redacted]]

10.3 eir's 'response to consultation' views

404. eir in its response to consultation regarding the cost avoidability of overhead and underground in housing areas and isolated areas, stated that:

- ComReg's analysis is not conceptually sound as there is a fundamental inconsistency in determining the avoidability of the cost of connecting street cabinets based on the analysis of uneconomic customers, as this leads to a fundamental issue of circularity in the analysis.

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

[redacted] [✂ [redacted]]

- Comparing the number of uneconomic customers to the minimum number of lines connected to a cabinet is not economically justified as it implicitly disregards the "joint costs" associated with serving isolated customers.

- ComReg's analysis of cabinetised MDFs ([✂ [redacted]]% of the MDFs) does not inform the avoidability assessment of the remaining [✂ [redacted]]% of MDFs and that therefore concluding that all cabinets in all MDFs are fully unavoidable is a 'very extreme inference'.

10.4 ComReg's response

405. ComReg is of the view that, in the absence of the necessary level of granularity in eir's proposed methodology, the more appropriate cost avoidability methodology is one based on the CAM. This methodology calculates for each MDF the percentage distribution of assets in the CAM for each of the distance sensitive cost categories[139] for CAPEX and OPEX. ComReg is of the view that the duct and trenches in addition to the underground cables cannot be fully avoidable in isolated housing areas.

406. The rationale for the cost avoidability methodology proposed by ComReg is based on:

- ComReg's view that, absent the necessary level of granularity within the USO Model provided by eir, the CAM provides an appropriate proxy for cost avoidability;

- [✂ [redacted] [140]]

- the difficulties in deriving an analysis that can categorically indicate the underground costs are 100% avoidable in isolated housing areas[141] (which does not accord with the methodology that was used in eir's initial 2010/11 – 2013/14 applications, or the versions resubmitted in February 2016); and

- [✂ [redacted]]

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[139] Underground network used to connect two housing areas; underground network used to connect street cabinets; laying heavy cables servicing large number of customers (where the cable is such that it cannot be supported by poles.

[140] [✂ [redacted]]

[141] eir e-mail to ComReg 22 June 2016 [✂".[redacted]]

407. In accordance with D04/11, in particular Decisions 12 and 25, ComReg must ensure the most accurate assessment possible of the direct net cost and this is a significant factor in ComReg requesting eir to use a methodology based on the CAM.

408. ComReg notes that the phenomenon of shared costs means that the removal of one or more customers will result in increasing costs for the remaining individuals and may turn what was an economic customer into an uneconomic one. This is a conceptually unmanageable problem with a large number of customers. Hence an approximation in estimating avoidability is needed, as otherwise the calculation of avoidability would be computationally unmanageable. Accordingly, to assess the reasonableness or otherwise of eir's view that the cost of the underground and overhead network connecting street cabinets is fully avoidable in isolated areas, ComReg compared the minimum size of a street cabinet (i.e. the minimum number of customers) with the number of uneconomic customers per MDF for all [✂ [redacted]] economic MDFs. ComReg compared the minimum size of a street cabinet with the number of uneconomic customers per MDF. This analysis showed that for [✂ [redacted]] MDFs, the number of uneconomic customers was lower than the minimum size of a street cabinet, and therefore if these uneconomic customers were removed (i.e. in the USO counterfactual) [✂ [redacted]] % of these street cabinets would still remain to serve the remaining profitable customers. This demonstrated that the cost of these street cabinets was not an avoidable cost. ComReg shared this analysis with eir.

409. ComReg notes that the calculation it carried out, as referred to above, is conservative as it assumes that all the uneconomic customers within an MDF are connected to one street cabinet. In reality, uneconomic customers are more likely to be located across a number of street cabinets within an MDF. Accordingly the remaining customers would continue to be served via a number of street cabinets. The associated "joint costs" is distributed over these economic customers. ComReg does not therefore agree with eir's view that ComReg's cross check analysis is not conceptually sound or economically justified.

410. ComReg notes that in accordance with D04/11, in particular Decision 25, the USP must provide "*...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 service would either not continue to be provided or would never have been provided ……".*

411. ComReg is of the view that eir did not provide it with adequate reasoning and cogent evidence to justify eir's view that street cabinets are avoidable.

412. In relation to eir's arguments regarding ComReg's analysis of MDFs with associated street cabinets, ComReg undertook an analysis where it calculated the average size of street cabinet per MDF (i.e. average number of customers served by the street

cabinet). ComReg then divided the overall number of uneconomic customers by the average street cabinet size per MDF. This demonstrated that for [✂[redacted]]% of MDFs the number of uneconomic customers was lower than the average size of a street cabinet per MDF. Therefore, if eir was no longer required to serve these uneconomic customers (i.e. in the counterfactual where eir is not subject to the USO), [✂[redacted]]% of these street cabinets would still be required to serve the remaining profitable customers. Accordingly, ComReg is of the view that the cost of those street cabinets was not an avoidable cost.

11 Annex 3 - D04/11 Decisions 1- 42

1. Table 5 below sets out the key areas of D04/11 and the associated decisions.

Table 5: D04/11 key areas and 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[142]
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

142 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).

D04/11	
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**.
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**.
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.**
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:** **• One-off connection charges: where the revenue should be allocated over the expected life of the customer. In circumstances where a line is permanently disconnected, the remaining unallocated one-off connection charges should be allocated to that year of disconnection;** **• 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.**
Decision 5	**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:** **• Wholesale access (single billing wholesale line rental ("SB-WLR");** **• Wholesale calls; and** **• Complementary wholesale services, such as Bitstream and Local Loop Unbundling ("LLU") etc.**

Decision 6	**Indirect revenues shall include those revenues which are not directly invoiced to a customer for the services provided directly by the USP. They include:** **• 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 uneconomic, then it is only that portion of revenue which the economic point can spare without making themselves uneconomic should be allocated; and** **• 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).**
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.**
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.**
Decision 9	**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:** **• 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.**
Decision 10	**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”).**
Decision 11	**Uneconomic areas shall be identified at an MDF level.**
Decision 12	**An average depreciation charge for each class of network element (based on an average cost and asset age) shall be developed by geo-types (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).**
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.**
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.**

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).**
Decision 17	**For Directories, the net cost calculation shall use the total avoidable cost, minus total revenues of this service.**
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).**
Decision 19	**USO funding applications shall be consistent and in accordance with this Decision and Decision Instrument[143].**
Decision 20	**USO funding applications shall be fit for purpose.**
Decision 21	**USO funding applications shall be based on annual information which coincides with the USP's financial year.**
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 Auditor[144] (as approved by ComReg) has in no way assisted with the preparation of the USO funding application.**
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.**

143 D04/11.

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

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.**
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 *either* 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:** **• 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;** **• 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.**
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.**
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).**
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.**

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.**
Decision 30	**USP funding applications shall, where applicable, accord 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).**
Decision 32	**Eircom, the current USP may submit a request for USO funding to ComReg in respect of its financial period 1 July 2009 to 30 June 2010. If eircom intends to submit such a request to ComReg, it shall do so no earlier than 1 month, and no later than 6 months following the effective date of this Decision, ComReg may extend this deadline, but only where it considers that there are exceptional reasons for doing so.**
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.**
Decision 34	**ComReg Document No.07/39 dated 2 July 2007 and entitled "The Provision of the Universal Service: Request for funding by eircom" is hereby revoked in its entirety.**
Decision 35	**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:** • **Enhanced brand recognition.** • **Ubiquity.** • **Life-cycle.** • **Marketing.**
Decision 36	**For the identification of the benefits, ComReg will observe the following key principles:** • **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).**
Decision 37	**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.** **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.** **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.** **During the course of the USO funding application assessment, ComReg will review the valuation of the benefits provided by the USP.**
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)** **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	**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	**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	**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	**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.**