Commission for
Communications Regulation

Response to Consultation & Draft Decision

Costing of universal service obligations: Principles and Methodologies

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All responses to this Response to Consultation and draft Decision should be clearly marked:-
"Reference: Submission re ComReg 11/15" as indicated above, and sent by post, facsimile or e-mail to arrive, on or before 5pm, on Monday 4 April 2011, to:

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Please note that ComReg will publish all respondent's submissions with the Response to this Consultation, subject to the provisions of ComReg's Guidelines on the Treatment of Confidential Information – ComReg 05/24.

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1 Introduction

1.1 The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2003, ("the Regulations"), provide that universal service provider ("USP") may submit a request for funding for a claimed net cost of meeting the Universal Service Obligation ("USO") and that the Commission for Communications Regulation ("ComReg") is obliged to assess such a request.

1.2 This document outlines the response to the ComReg Consultation *Costing of universal service obligations: Principles and Methodologies*[1] (referred to here as "Consultation 10/94" or "the Consultation") which was published on 30 November 2010. This response to Consultation and draft Decision will outline the key principles and methodologies associated with the costing of the USO, and will provide the guidance necessary to allow any USP submit an application for funding.[2] Furthermore, this document also details how ComReg will seek to assess a USO funding application and the principles it will consider in establishing if there is an unfair burden associated with meeting the USO provision.

1.3 The current USP is eircom Ltd ("eircom") which was designated as the USP from 1 July 2010[3] for a period of two years, expiring on 30 June 2012. eircom may make applications for USO funding in respect of the periods 2009-2010, 2010-2011, and 2011-2012. With regard to USP designations after 2012, ComReg intends to run a public consultation, beginning later in 2011, and it is possible that the next designation period will see changes to the provision of the USO. In that case, new ground rules may be needed for USO funding applications which in turn may entail amendments to the decisions contained in this document.

1.4 ComReg recognises that the USP, like some other utility companies, does not have a significant amount of granularity in every area of its accounts, particularly when it comes to the inventory of fixed assets. ComReg is cognisant that it should not impose requirements on a USP that are disproportionate. ComReg has proposed to adopt certain positions with respect to the use of sampling and, in some cases, the use of averaging. ComReg also needs to ensure that there is sufficient robustness and detail in a USP's application for funding for the USO. ComReg has attempted to strike a balance between these two objectives. ComReg has described the level of detail it requires of the application and expects this to be achieved in order to consider it to be 'fit for purpose'. ComReg also proposes to carry out a series of 'reality checks' in respect of any application it receives. This is further discussed in section 3 of this document.

1.5 This document does not address how a USO Fund, if established, would be implemented. ComReg intends to run a separate consultation later this year to examine how a sharing mechanism might operate in practice. That consultation will address related matters such as, what particular undertakings might be obliged to contribute and what the value of any such contribution might be, if a delayed payment scheme is necessary, and what the timing of any such contribution might be.

[1] ComReg document number 10/94.

[2] However, should there be a material change in terms of the USO designation in the future, ComReg may be required to review these key principles and methodologies for appropriateness in light of a material change.

[3] ComReg document number 10/46

1.6 The Consultation explored three principles in undertaking a net cost calculation and an unfair burden assessment.

1.7 ComReg received five responses to the Consultation and a statement from Magnet Networks that it supported the views expressed by Alternative Operators in the Telecoms Market ("ALTO"). ComReg has published a document outlining the non-confidential responses[4] of these five respondents.

1.8 The main points made by respondents to the Consultation are addressed in the main body of this document. Other responses are addressed in Appendix A.

Calculating the USO net cost

1.9 Firstly, ComReg set out, the various costing methodologies that could be used to calculate the net cost (pre-intangible benefits) and what categories of costs and revenues would be included in that calculation. The Consultation sought the views of interested parties as to which costing methodology was the most appropriate to use when calculating a net cost. Views were also sought on what avoidable costs should be included, how the treatment of efficiencies should be dealt with, how the revenues associated with the USO should be calculated and treated, and how certain costs should be allocated. Finally, views were sought regarding the format and timing of applications for USO funding.

Identifying and quantifying USO Benefits

1.10 Secondly, the potential benefits of having the USO were explored. In the Consultation, ComReg identified what it considered to be the main benefits associated with the USO. ComReg sought views on the benefits identified and whether or not there were other benefits that it had not identified.

Unfair burden

1.11 Finally, ComReg discussed and sought views on the concept of the unfair burden and in particular, when the burden of providing the USO could be considered unfair.

[4] ComReg Document No 11/15s.

2 Executive Summary

Introduction

2.1 ComReg's objective in this Response to Consultation and draft Decision is to provide as much certainty and guidance as possible as to how it will assess applications for USO funding, if such an application is made.

2.2 Accordingly, ComReg wishes to establish principles and methodologies for (i) calculating the net cost of the USO (if any); (ii) identifying and quantifying any benefits associated with the USO; and (iii) determining whether or not a net cost (if any) is an unfair burden to the USP.

2.3 ComReg will publish its decisions on the principles and methodologies in a final decision and will then apply them to subsequent applications for USO funding. ComReg may revise this decision and its guidance in the light of changed circumstances.

2.4 The list of ComReg' draft decisions is set out in Appendix G.

2.5 Appendix C contains two diagrams which illustrate at a high-level ComReg's proposed approach to the issues. The first outlines the logical flow of the proposed approach. The second maps ComReg's position on each issue against the relevant draft decisions.

2.6 The rest of this document is structured as follows:

Section 3: Approach for calculating USO net costs and revenues (excluding benefits of USO).

Section 4: Approach to calculation of benefits of USO.

Section 5: Approach to the determination of an unfair burden.

Section 6: Treatment of confidential information.

2.7 In each of sections 3-6, ComReg will:

- Summarise the issues, principles and methodologies discussed in the Consultation.
- Summarise the most relevant responses received. ComReg will also explain ComReg's position and conclusions, having regard to the preliminary views presented in the Consultation, and taking into account the views of respondents.
- Present concise decisions, in draft form, on each of the principles and methodologies. The decisions, where necessary, are to be read in conjunction with the preceding section explaining ComReg's position and conclusions.

Section 3: Approach for calculating USO net costs and revenues (excluding benefits of USO)

2.8 In this section the approach of the various costing methodologies are outlined and the views of the respondents are considered. ComReg maintains the view, as set out in the Consultation, that it is necessary to consider actual historic costing data, adjusted for efficiencies as appropriate, given that the objective of the exercise is to establish the effective costs / burden (if any) that is imposed on a USP. ComReg also considers that the actual costs incurred, suitably adjusted for efficiencies, are more likely to reflect the specific net cost of serving end-users, or groups of end-users.

2.9 ComReg's view is that the universal service obligation ("USO") net cost should be calculated on the basis of "all" investments[5] and "all" operating costs that could have been avoided, as if the provision of services to "non-viable" customers[6] by the operator was not required under a USO. ComReg considers that the primary principle of avoidable costs is that costs can be directly attributable to a service (i.e. the service activity creates the cost) and that joint and common costs are not considered valid in that regard. ComReg has also considered that USO revenues should 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 "non-viable" customers. ComReg considers that direct revenues are revenues which are directly provided by the USP or to an OAO availing of the USP's wholesale services. Conversely, indirect revenues are those revenues considered which are not being provided directly by the USP or an OAO availing of the USP's wholesale services. Examples of indirect revenues include: leased lines, replacement calls, revenues from non-geographic numbers etc.

2.10 ComReg is of the view that the issue of the once-off €7,000 connection threshold (whereby the customer has to meet the connection costs that are in excess of this ceiling) should be allocated over the expected life of the customer on the basis that a customer can reasonably be assumed to remain a customer for at least four years.

2.11 In terms of the treatment of indirect revenue such as leased lines and economic customers calling uneconomic customers, ComReg considers that a two-stage approach is required to assess any changes to the status of economic or uneconomic customers / lines as a result of the proposed revenue allocation.

2.12 In terms of replacement calls ComReg considers, that it is appropriate to include this category in the net cost calculation, as these calls would generate revenue for the USP at some level they are considered relevant to the net cost calculation.

2.13 With respect to the treatment of efficiency adjustments, in assessing the respective CAPEX and related OPEX incurred, ComReg will consider whether the technology used appears reasonably efficient with regard to what was available at the time and whether any subsequent upgrades also meet this criterion. In terms of what would constitute an efficient cost of maintenance of the actual network, ComReg considers that the Line Fault Index ("LFI") provides a useful approximation of a reasonable efficiency level and is therefore an appropriate measure to determine an appropriate efficiency adjustment. Furthermore, ComReg will also 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 not be 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

[5] For clarity, where ComReg refers to the investments the USP could have avoided, it is only the capital costs associated with these investments appropriately depreciated which are taken into account in the net cost calculation.

[6] For the purposes of clarity, the terms "non-viable" and "uneconomic" are used interchangeably in this paper and have the same meaning.

documents in relation to the business case / investment decisions associated with the network roll-out and upgrade;

- independent survey report regarding the USP's efficiency;
- overseas regulatory decisions providing relevant precedents and benchmarks; and
- the development of an independent cost model where adequate and reliable accounting information is not available from the USP.

2.14 With regard to "catch-up" investment, ComReg considers that it is necessary to review any USO funding application and assess if any CAPEX would be disallowable. This would be on the basis that assets with short asset lives might now be fully written-off, had the investment taken place in the past, and therefore would now have no depreciation charge. ComReg considers that where extra OPEX has been incurred as a consequence of past under-investment, this should normally be disallowed as OPEX should relate to an efficiently provisioned network. As a potential indicator of "catch-up" investment, ComReg considers that as part of a funding application, it will be necessary for the USP to provide an investment profile between the CAPEX and OPEX relevant to the USO.

2.15 With regard to cost identification and allocation, ComReg considers it appropriate to consider whether costs can be accurately attributed to end-users or groups of end-users; whether these are actually "loss-making" and therefore, would not have been ordinarily serviced by a commercial undertaking.

2.16 Consideration should also be given to whether costs have been incurred efficiently and whether those costs could have been avoided. ComReg considers that it is appropriate to identify uneconomic areas at the main distribution frame ("MDF") level. ComReg proposes that an average depreciation charge for each class of network element (based on an average cost and asset age) will be developed by geo-types (e.g. urban, sub-urban, rural etc.). The USP can 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). ComReg considers that an appropriate version of an historical cost accounting ("HCA") averaging approach should be used (subject to it accounting for different geo-types and different depreciation profiles for different classes of assets). However, the USP's 'sense-check' will need to be coupled with ComReg carrying out of its own 'reality checks', so as to ensure that there is no over-compensation of the net costs of geographic areas. Where material discrepancies are found (following "reality" checks"), ComReg may: require a full assessment of those exchange areas deemed 'un-viable'; apply a proportionate adjustment to the net cost calculation (pre-intangibles); or reject the entire funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

2.17 ComReg considers that it is appropriate that uneconomic customers in economic areas are identified. ComReg recognises the accounting difficulties involved. The fixed assets registers does not record depreciation incurred by individual asset and location. While revenues can be attributed to individual customers with reasonable certainty; this is not true for costs. Consistent with practice overseas, ComReg considers that it is appropriate that such "uneconomic" customers are identified using a probability analysis (which calculates the likelihood of each line being unprofitable given a distribution of costs and revenues) subject to the methodology outlined above for the allocation of costs to the MDF. However, 'reality checks' would need to be undertaken and where material discrepancies are found, ComReg may: require a full assessment for those customers deemed un-viable; apply a proportionate adjustment to the net cost calculation (pre-intangibles) of those customer deemed “un-viable”; or reject the entire funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

2.18 However, ComReg notes that the decision to cease serving certain customers by a commercial operator is not based on a static assessment of costs and revenues. A single-year view does not, in isolation, give the commercial operator sufficient information to make the decision to stop serving that customer. ComReg considers that it would be inappropriate for the net cost calculation to include those customers which a commercial operator would continue to serve absent a USO. Therefore, the USP must clearly identify those customers or groups of customers (i.e. area), that in the absence of the USO, it would not serve. A request for USO funding must provide sufficient information to support the hypothetical business decision that the USP would not clearly and materially serve these “no-viable” customers, were it not for the USO.

2.19 With regard to uneconomic public payphones, ComReg considers that consideration should be given to the total avoidable cost, minus the total revenues foregone. The avoidable access costs should be calculated as an estimate per line at the exchange site to which the public payphone is connected. ComReg will consider the reasonableness of the number of payphones in a geographic coverage area. Where the number of uneconomic payphones is considered excessive/unreasonable, ComReg will adjust the net cost calculation to reflect appropriate payphone coverage (where they are mandatory).

2.20 With regard to provision of printed directories, ComReg considers that the net cost should be determined by calculating the total avoidable cost, minus the total revenues foregone.

2.21 For specific services for disabled users, ComReg considers that the net cost should be determined by calculating the total avoidable cost, minus the total revenues foregone, as a result of the USO services which are in addition to the cost and revenues associated with the standard minimum level of service incurred by all undertakings.

2.22 With regard to the format and timing of any application, ComReg has set out certain requirements in respect of information to be furnished, sign-off, and supporting reference material. ComReg has also set out deadlines for receipt of USO funding applications in any relevant financial year.

Section 4: Approach to calculation of benefits of USO

2.23 This section describes the approach for the identification and calculation of the various benefits of providing the USO.

2.24 ComReg considers that the benefits considered relevant for inclusion in the net cost calculation include, but are not limited to: brand recognition, ubiquity, lifecycle benefits, and marketing. Each of these benefits should be treated in full, with an assessment made for each category. In overseas jurisdictions, where these benefits have been calculated, there has been a mixed set of comparable results. Regardless of any such comparisons, ComReg intends to assess each benefit, using a variety of methods (including but not limited to: benchmarking, surveys, market research, etc.). It is not possible to say with absolute certainty which methodologies will be used by ComReg to quantify the value at this time although it will be become clearer once a comprehensive application for USO funding is received.

2.25 ComReg identified that it is important to distinguish between benefits which arise due to the large scale of the USP and those which arise from the imposition of USO — as only the benefits arising directly from the USO can be included in a net cost calculation.

2.26 ComReg acknowledges that care must be taken to avoid the double-counting of direct or indirect benefits and also that some of the benefits may over-lap and should be treated with that in mind. ComReg expects that the USP will be the primary source of data when determining the benefits of the universal service but that ComReg is open to undertaking a programme of research using independent consultants with expertise in the valuations of these benefits.

2.27 After assessing any application from the USP for funding, ComReg may specify a particular methodology to determine the value of each benefit consistent with best regulatory practice, proportionality and practicality. 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.

Section 5: Approach to the determination of an unfair burden

2.28 This section describes the approach for the determination of an unfair burden if there is a net cost of meeting the USO, after deducting any benefits (referred to as a "positive net cost").

2.29 The Directive gives NRAs discretion in determining what constitutes an unfair burden, and recent EU case law confirms this and provides some further guidance. It is ComReg's preliminary view that a positive net cost does not automatically mean that the burden of a net cost is unfair.

2.30 For a net cost to be an unfair burden, ComReg suggests that three cumulative conditions must be met; there must be a verifiable direct net cost, the benefits of the USO must not outweigh the net cost (i.e. there must be a positive net cost) and that (a) the positive net cost is material compared to the administrative costs of a sharing mechanism and that (b) it causes a significant competitive disadvantage for the USP.

2.31 ComReg suggests that on the basis of the audited costs of the USO, it will determine whether USO financing is not required or unjustified compared to the net cost of the USO. ComReg is of the view that it would also be relevant to compare the administrative costs to the percentage contributions made by the USP and other operators to a sharing mechanism, if any.

2.32 In relation to determining the existence or not of an unfair burden, ComReg outlines its approach which will include, at a minimum, the analysis of whether the positive net cost undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed and if the positive net cost undermines a USP's profitability, assess whether or not such a net cost materially impacts a USP's ability to compete on equal terms with competitors going forward.

2.33 ComReg also outlines its approach to the use of different criteria (both statically and dynamically) to determine whether or not a net cost burden is actually unfair. Examples of such criteria include the changes in profitability, including an understanding of where a USP generates most of its profits over time and also the changes in accounting profits and related financial measures e.g. earnings before interest, tax, depreciation and amortisation ("EBITDA") analysis. Other criteria that ComReg proposes to use, amongst others, is the analysis of any changes in direct USO net cost, if any, over time, changes in prices over time and changes in market share and/or changes in related markets.

Section 6: Treatment of confidential information

2.34 This section outlines how ComReg will approach the issue of confidentiality of data. ComReg recognises the need to protect confidential information proprietary to the USP or other stakeholders. At the same time, it recognises the need to be as transparent as possible for the benefit of other relevant stakeholders. ComReg has previously published guidelines on the treatment of confidential information, and believes that the adequately address these needs. However, there may be exceptional cases where ComReg may need to depart from those guidelines and these will be assessed on an “as needs” basis.

3 Principles and methodologies for calculating the USO net costs and revenues (excluding benefits of the USO)

Overview

3.1 This section sets out ComReg's draft decisions and guidance on the methodology, form and information requirements that it will apply to the calculation of a net cost (including identification and inclusion of associated revenues) if ComReg receives a USO funding application.

3.2 This section is structured under the following headings:

- *Principles and methodologies: the costing methodology to be used:* ComReg's draft decisions on the most appropriate costing methodology;
- *Principles and methodologies for avoidable costs*: ComReg's draft decisions on the appropriate avoidable costs;
- *Principles and methodologies for USO revenue calculations*: ComReg's draft decisions on how a USP's revenues are to be considered in determining the USO's net cost;
- *Principles and methodologies for efficiency adjustments*: ComReg's draft decisions on the efficiency adjustments that might be required in calculating the USO's net cost;
- *Principles and methodologies for cost identification and allocation:* ComReg's draft decisions on how net costs could be identified and calculated;
- *Principles and methodologies for cost identification and allocation: uneconomic payphones and other USO costs:* ComReg's draft decisions on how net costs could be identified and calculated for uneconomic payphones and other USO services; and
- *Fit for purpose format and timing of an application:* ComReg's draft decisions on the minimum presentation and information requirements to be included by the USP in any application for USO funding.

Principles and methodologies: the costing methodology to be used

The Consultation issue

3.3 The appropriate costing methodology for calculating the net cost is not prescribed by law. The decision on which to use is, to a great extent, left to the discretion of a national regulatory authority ("NRA").

3.4 A number of widely accepted costing methodologies were outlined in the Consultation and various implementation issues were considered.

3.5 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*". Regulation 7 (3) of the Regulations further provides that: "*[t]he designation methods adopted shall ensure that the obligations referred to in paragraph (1) are provided in a cost effective manner and may be used as a means of* *determining the net cost of the universal service obligation in accordance with Regulation 11*."

3.6 ComReg's preliminary view was that the Historic Cost Accounting ("HCA") method is the most appropriate costing methodology for the purposes of the net cost calculation. ComReg, however, noted that the costing methodology would need to be adjusted for efficiencies (as appropriate). Furthermore, that for the purposes of revealing the "true cost" that could have been avoided (if the USO obligation had not been imposed), an appropriate set of allocation rules for costs would need to be developed.

Summary of Respondents' views

3.7 Most respondents were in favour of the proposed use of a HCA approach. However, Vodafone noted that while they had: "*no strong view on the optimal costing methodology, we believe that ComReg should consider the merits of a Long Run Average Incremental Costs ("LRAIC") approach"*,[7] but suggested that the most important issue *"irrespective of which methodology is used, is that ComReg take account to the greatest extent possible, all of the relevant factors that feed into the net cost calculation."*[8] eircom's submission noted that the: "*USO costing model should be based on forward-looking long-run incremental costs…if, however, a HCA approach is to be used, then an appropriate set of allocation rules for costs will be required."*[9]

3.8 BT, ALTO, Vodafone, and O2 made reference in their respective submissions that the implemented costing methodology should be properly adjusted for efficiencies. O2's submission notes that: *"the USP's historic costs need to be properly and transparently adjusted for inefficiencies. Inefficiency adjustments need to be made to the Technology / Capex, Opex and Overhead costs."*[10] Vodafone suggests that: "*it is imperative that there is a rigorous analysis of potential efficiency adjustments and a willingness to examine all aspects of possible efficiency adjustments including the use of alternative technologies, particularly wireless."*[11] Vodafone's submission also suggested that, in their view, eircom has an alternative means of meeting their USO objectives through the use of mobile technology.

ComReg's Position

3.9 ComReg believes that it is most appropriate to use actual historic costing data, properly adjusted for efficiencies. Only efficiently incurred costs should be included in the net cost calculation, because allowing the recovery of inefficient costs would result in over-compensation. This would be contrary to the Directive and EU State Aid rules. Long Run Average Incremental Costs ("LRAIC") are in ComReg's view not appropriate, because the objective of this exercise is to establish the effective costs / burden (if any) that is imposed on a USP, rather than to send a "Buy/Build" signal to the marketplace (which would be more consistent with implementing a LRAIC methodology). The actual costs incurred,

[7] Vodafone, Vodafone Response to the ComReg Consultation on Costing of Universal Service Obligations: Principles and Methodologies, 20 January 2011, pg. 2.

[8] Vodafone, supra n 7, pg. 2.

[9] eircom, Response to ComReg Consultation 10/94 Costing of Universal Service Obligations: Principles and Methodologies, 20 January 2011, pg. 5.

[10] O2, Response to Document 10/94 Costing of Universal Service Obligations: Principles and Methodologies, 20 January 2011, pg. 3.

[11] Vodafone, supra n 7, pg. 2.

properly adjusted for efficiencies, are more likely to reflect the specific net cost of serving end-users, or groups of end-users, (i.e. uneconomic customers or uneconomic areas) where it is unlikely that an operator would invest in the short to medium term.

3.10 In the past, ComReg has built detailed cost models for the copper network using the LRAIC plus methodology (i.e. where the Modern Equivalent Asset ("MEA") was considered the relevant cost).[12] ComReg also performed a sample reconciliation exercise from the "hypothetical bottom-up model" to the actual assets in the eircom network. This highlighted the key differences between the HCA approach and the MEA approach. For example, where the MEA approach might require underground infrastructure, the HCA approach might show that overground infrastructure was actually deployed. If ComReg used the MEA approach for assessing a net cost, this could lead to a significant over-compensation. This is because underground deployment (trenching/ducting etc.) can be significantly more expensive than overground deployment, particularly in rural areas.

3.11 The HCA approach is based directly upon the historical reported financial results of an operator for a given period. Therefore, the results from the HCA accounts should be directly reconcilable with the statutory financial statements of the operator. This should make for greater transparency and ease of auditing. Furthermore, the verification of actual costs (i.e. HCA methodology) adjusted for efficiencies, ensures that any funding sought in relation to the USO does not result in overpayments i.e. undue compensation.

3.12 The HCA approach is used by a number of overseas regulators including France and Italy. While Current Cost Accounting ("CCA") is also used by other overseas regulators, as set out in the Consultation, ComReg considers that the implementation difficulties and incentives associated with this methodology may lead to uncertainty and may either unfairly compensate the USP for asset revaluations which are notional, or penalise the USP by preventing it from recovering validly incurred historic (i.e. cash) costs.

3.13 ComReg maintains the view that in implementing a HCA approach (properly adjusted for efficiencies) an appropriate set of cost allocation rules is required. This allows "see-through" of the costs that could have been avoided, absent the USO. This is discussed further in paragraphs 3.24-3.35 and 3.110.

3.14 ComReg's position on efficiency adjustments is discussed in paragraphs 3.77-3.91.

3.15 One of ComReg's regulatory objectives is to ensure that the USO funding application presents a "true" net cost of serving "non-viable" end-users or groups of end-users, and that the USP is not over, or under-compensated.

ComReg's Draft Decision(s)[13]

3.16 The HCA methodology, properly adjusted for efficiencies, and taking account of the costs that could have been avoided by the USP absent the USO, is the cost methodology that will be used to calculate the net cost of the USO.

[12] ComReg Document No. 08/56, Proposals for Local Loop Unbundling Pricing Methodologies.

[13] See Appendix G for a full list of all the draft Decisions

Principles and methodologies for avoidable costs

The Consultation issue

3.17 Schedule 2 of the Regulations provides that: "…*the net cost of the universal service obligations is to be calculated as the difference between the net cost for a designated undertaking of operating with the universal service obligations and operating without the universal service obligations*", i.e. those costs that could be avoided as if a USP were not legally required to provide USO services. This point is elaborated on in Schedule 2 of the Regulations which states that: *"[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".*

3.18 Accordingly, the "avoidable costs" principle is a fundamental determinant of the net cost calculation.

3.19 In the Consultation, ComReg suggested that the net cost calculation should identify:

- avoidable costs of access;
- avoidable costs of data or voice transmission; and
- avoidable overheads.

3.20 In the Consultation, ComReg suggested that the USO net cost should be calculated on the basis of "all" investments[14] and "all" operating costs that could have been avoided, as if the provision of services to "non-viable customers" by the operator was not required under a USO. ComReg also noted that the avoidable cost should only include the portion of costs that can be directly attributed / allocated to the USO service, and that fixed common costs and joint costs, with respect to the provision of services over the access and core networks, should not be included as avoidable costs.

Summary of Respondents' views

3.21 All respondents to the Consultation supported ComReg's preliminary view that avoidable costs are those costs that could have been avoided as if the provision of the USO to "non-viable customers" was not required.

3.22 eircom stated that: "…*if a cost category is not directly attributable to a specific service or product in the HCA fully distributed cost model then it cannot be considered avoidable. However, just because a cost can be treated as an overhead in a fully distributed costing model does not mean that it is not avoidable if a particular service or increment were no longer applied."*[15] eircom also stated that: *"…in calculating the level of avoidable costs it is important that avoidable capital assets and avoidable overheads are included."*[16] eircom also noted that top-down Long-Run Incremental Costs models are typically constructed to include independent and dependent cost categories. eircom stated that it did: *"not agree that the issue of whether costs are directly allocated on a fully distributed basis is a fundamental quantum of the net costs calculation figure as ComReg suggests. Rather,*

[14] For clarity, where ComReg refers to the investments the USP could have avoided, it is only the capital costs associated with these investments appropriately depreciated which are taken into account in the net cost calculation.

[15] eircom, supra n 9, pg. 6.

[16] ibid.

the key issue is in terms of how the costs would be expected to vary in the long run if eircom had been able to make the decision not to supply services."[17]

3.23 All respondents to the Consultation supported ComReg's preliminary view that fixed common and joint costs should not be included as an avoidable cost. O2's submission notes that: *"…the USP would not reduce its fixed common and joint costs if it were not required to provide connections to customers in uneconomic areas, or uneconomic customers in economic areas as these costs are also generated by serving economic customers and economic areas."* [18] Vodafone's submission was similar to O2's view. Vodafone stated that: *"[w]here common or joint costs would have been incurred in the absence of USO and where the cessation of USO does not entail the elimination of these costs, then clearly they should not be included as avoidable costs."*[19]

ComReg's Position

3.24 ComReg maintains the view that avoidable costs only include those costs that the USP would rationally *have chosen to* avoid if it were not required to provide USO services to uneconomic areas, or uneconomic customers in economic areas.

3.25 It is critically important that when assessing a net cost calculation, the correct application of the choices an operator might have made — when deciding to provide a service for commercial reasons and legal reasons (i.e. USO obligations) is carefully considered. There are potentially a number of ways to apply this test.

3.26 The first view that the regulator could take, is whether *in the given year of assessment* the USP would chose to build to the area / customer, regardless of past obligations to provide the service (i.e. the net cost calculation for a given year of assessment is taken as a green-field scenario). If the USP is of the view that it would not have served that customer/area — then the appropriate capital depreciation charge, if any, would be taken into account together with any relevant avoidable OPEX in the net cost calculation. For clarity, if an asset is fully depreciated then it is only the respective OPEX which would be considered in the net cost calculation.

3.27 The second more extreme view that the regulator could take is that it is only those costs that the USP could *now* avoid which should be considered in the net cost calculation (i.e. in the given financial year of application), on the basis that past decisions are irreversible. Under this assessment some of the capital expenditure undertaken in the past, related to lines which the USP has identified as ones which they would not continue to serve in the current year, would not be considered as part of a recoverable net cost and would be considered sunk (i.e. the remaining relevant capital depreciation charge, if any, would not be taken into account).

3.28 ComReg is currently of the mind that the first view is a more reasonable assessment and correctly captures the intent and purpose envisaged by the Directive, as the USP is compensated for the legal obligation to provide the service where an unfair burden is determined. However, ComReg notes that there is an additional consideration in determining if these costs are truly avoidable, as a commercial operator may rationally chose to continue providing services to uneconomic areas, or uneconomic customers in

[17] eircom, supra n 9, pg. 7.

[18] O2, supra n 10, pg. 3.

[19] Vodafone, supra n 7, pg. 3.

economic areas and hence these costs would not be avoided. This is discussed further in paragraphs 3.117-3.123.

3.29 The first principle of avoidable costs is that a given cost can be directly attributed to a given service i.e. the service activity creates the cost (be it an overhead or otherwise). Secondly, these costs would not exist in part, or in their entirety, if the service was not required to uneconomic areas, or uneconomic customers. For clarity, it is this portion of costs either in part, or in its entirety, that is avoidable. For example, certain overheads e.g. corporate head office rent or CEO salaries are "independent" of the quantity of service. They would therefore be incurred irrespective of whether services to certain uneconomic areas or customers could be avoided. On the other hand, just because a cost is classified as an "overhead" in the accounts, does not necessarily mean that it is not avoidable. This will depend on how the cost would vary if the USO services to particular customers were discontinued. Therefore, to calculate the quantum of net costs, it is crucial that a proper allocation key is developed.

3.30 ComReg considers that certain costs would not reduce if the USP were not required to provide connections to customers in uneconomic areas, or uneconomic customers in economic areas. These costs are also generated by serving economic customers and economic areas (these costs are considered to represent "Business Sustaining Costs"). The operator would only be able to avoid these Business Sustaining Costs if the USP were to withdraw from the market entirely. While some relevant overheads may not be directly apportioned in the HCA accounts, for example certain costs associated with exchange sites (if deemed uneconomic in their entirety), they are directly attributable to the uneconomic exchange that the USP would have chosen not to serve and therefore would be considered avoidable.

3.31 The Consultation set out a number of cost categories and definitions. Respondents to the Consultation did not raise any issues in relation to them. ComReg believes the categories and definitions are appropriate for the calculation of net cost.[20] The cost categories identified, which are not mutually exclusive, are:

- Direct costs;
- Indirect costs;
- Common costs;
- Joint costs;
- Fixed costs;
- Variable costs; and
- Incremental costs.

3.32 In order to fully establish whether costs could have been or could be avoided in the future were the USP to discontinue the services, the direct cost of providing that service should be identified. In ComReg Decision No. D08/10[21], it was explained that a direct cost does not mean an allocated cost, as this would not be categorised as a "direct" cost of serving those customers or those exchanges areas deemed uneconomic. The relevant avoidable

[20] For further information see: ComReg Document No. 08/10 Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of eircom Limited.

[21] ibid.

cost would need to be identified to those areas or lines to identify the actual cost. However, ComReg is aware that for some companies, in particular utility-like companies where there are a high proportion of fixed and common costs — and costs have been incurred over several years/decades, it may be difficult to identify direct costs in the purest sense of the word. Therefore, it may be necessary to derive direct costs through the allocation of cost types. For example, the depreciation of poles may be considered in aggregate, but still considered a direct cost of access and then allocated to particular areas based on certain assumptions.

3.33 Activity-Based Costing ("ABC") is a technique commonly used by USPs to identify costs and revenues for business reporting purposes. However, the allocation key/tool must be sufficiently transparent, fully supported and reconcilable to appropriate documentation, and independently verified by third party auditors. The costs as allocated, may in fact not be considered avoidable, following a more detailed assessment.[22] ABC systems were not designed for the function of supporting a USO funding application and hence care is required in manipulating and interpreting ABC-based data.

ComReg's Draft Decision(s)[23]

3.34 USO net costs will be calculated on the basis of "all" capital costs and "all" operating costs that could have been avoided, as if the provision of services to "non-viable customers" by the operator was not required under a USO. It is only the portion of costs, both capital and operational expenditure, that can be directly attributed to the USO service (i.e. the service activity creates the cost) and which could have been avoided, which will be included in the net cost calculation.

3.35 Fixed common costs and joint costs, with respect to the provision of services over the access and core networks, are not avoidable costs. They will not be included in the net cost calculation.

[22] For clarity, as outlined in paragraphs 3.29-3.30 and 3.32, there may be some costs that are not avoidable and consequently, the ABC method will not be able to fully distribute all costs from the regulatory accounts.

[23] See Appendix G for a full list of all the draft Decisions

Principles and methodologies for USO revenue calculation

The Consultation issue

3.36 In order to determine a net cost of providing a USO service, the tangible benefits (revenues) which are generated by the USP in providing the USO, must be taken into account. These revenues can be broadly categorised as either *direct* or *indirect*.

3.37 In the Consultation, ComReg suggested that direct revenues are revenues which are directly invoiced to a customer for the services provided directly by the USP, or ones directly invoiced to another authorised operator ("OAO") using the USP's wholesale services. ComReg also considered that one-off connection charges (which are generated as a result of subscribers meeting the cost of their connection which exceeds €7,000 in expenditure, together with normal one-off connection charges) should be included as direct revenues for the relevant financial year in which it was incurred.

3.38 In the Consultation, ComReg suggested that indirect revenues are revenues which are not directly invoiced to a customer for the services provided directly by the USP, or to an OAO using the USP's wholesale services. Indirect revenues generally incorporate revenues in relation to the receiving party pays (e.g. non-geographic numbers) or through wholesale interconnection services where an OAO pays.

3.39 ComReg also suggested that indirect revenues were generated through the provision of "leased lines"[24] and noted that in circumstances where a leased line generated revenues between an A-end customer premises (which was uneconomic) and B-end customer premises (which was economic), that all revenues should be apportioned to the uneconomic customer. ComReg also suggested that indirect revenues were generated through USO economic customers' calls to USO uneconomic customers and that the revenues from these calls should be apportioned to the uneconomic customer.

3.40 The Consultation discussed the concept of "replacement calls". A replacement call is when a disconnected customer still generates indirect revenue for the USP because they use the telephone of a relative, a friend, or one at work. ComReg sought views on whether stakeholders considered this a material issue and, if so, what methodology in their view would provide a fair measure of such revenues.

3.41 ComReg also asked stakeholders to identify any other revenues which they considered relevant and which were not identified, in their view, in the Consultation.

Summary of Respondents' views

3.42 All respondents agreed that USO revenues should be calculated on the basis of direct and indirect revenues that a USP would forego as a result of ceasing to provide services to "non-viable" customers.

3.43 eircom noted that: "*it is also important that the revenue is identified in such a way as to include only net revenue…where a revenue stream such as calls to premium rate numbers or mobiles is considered, the corresponding costs must also be considered.*"[25] eircom disagreed with the inclusion of revenues generated from monitored home alarm service

[24] The term "leased lines" refers to fixed, permanent telecommunications connections providing broadly symmetric capacity between two points. A leased line is permanent, in that capacity is available between the two fixed points, and is generally used to provide dedicated connectivity for business customers.

[25] eircom, supra n 9, pg. 8.

and noted that: *"a fixed voice line is not a requirement for a Phonewatch alarm."*[26] eircom also stated that Phonewatch makes no payment to eircom and that because Phonewatch has a lower penetration in uneconomic areas, the materiality of revenue is further reduced.

3.44 eircom believes that the inclusion of wholesale revenues is valid, but that wholesale call revenue is irrelevant to the USO costing calculations: *"eircom does not receive wholesale revenue for call origination and for call termination, but as these costs are based on LRIC on the relevant service, one can assume the cost avoided if the customer was not served with SB-WLR is exactly equal to the revenue."* [27] eircom notes that: *"only the net revenue (i.e. revenue after costs) for any wholesale service which is not strictly cost orientated (e.g. DQ calls) might be relevant."*[28]

3.45 In relation to "one-off connection" revenues, eircom disagrees with ComReg's view that it should be included in its entirety as direct revenue in the financial year it was incurred. eircom proposes that: *"in keeping with the fundamental "matching" concept, such revenue should be spread over the expected lifetime of the customer."* [29]

3.46 Most respondents agreed with ComReg's preliminary view on the treatment of indirect revenue from leased lines. However, eircom suggested that allocating all the revenue from the economic line may render the line uneconomic, and that it is important to avoid the double-counting of revenue. Instead, eircom proposes that the revenue from leased lines should be apportioned equally between the two customers (i.e. the uneconomic and economic customers). Similarly, eircom noted that the proposed treatment of revenue from economic customers' calls to uneconomic customers may render economic customers uneconomic.

3.47 With respect to replacement calls, Vodafone, ALTO and BT note in their respective submissions that they are in favour of including them in the net cost calculation. However, O2 and eircom do not consider replacement calls to be a material issue. ALTO and eircom also acknowledge the difficulty in estimating the value of replacement calls. ALTO suggests that one way to quantify the revenues would be to: *"survey a sample of customers or quantify the level of calls from a sample of cells where the situation exists."*[30]

3.48 With regard to any other relevant revenue to "non-viable" customers not mentioned in the Consultation, ALTO and BT suggested that broadband revenues should be included and that this: *"adds other indirect revenues such as eircom selling broadband ports; backhaul; Internet connectivity etc."* [31] Vodafone believes that: *"retail revenues arising when eircom, Meteor, eircom mobile and E-mobile customers call eircom's USO customers should be included as indirect revenue."*[32]

[26] eircom, supra n 9, pg. 8.

[27] ibid, pgs. 8-9.

[28] ibid.

[29] ibid, pg. 9.

[30] ALTO, Response to Consultation on Costing of Universal Service Obligation – USO: Principles and Methodologies Ref: 10/94, 20 January 2011, pg. 7.

[31] ALTO, supra n 30, pg. 7.

[32] Vodafone, supra n 7, pg. 3.

ComReg's Position

3.49 ComReg maintains the view that it is appropriate that direct revenues include those revenues which are directly invoiced to a customer for the services provided directly by the USP. For the avoidance of doubt, ComReg considers that this includes any telephone allowance (provided for by the Department of Social Protection) received by the USP as a result of the provision of USO services.[33]

3.50 As set out in paragraph 3.24, the net cost calculation only takes account of avoidable costs — as such where there is a cost associated with, for example, premium rate numbers or mobiles, these will be taken into account and will result in effectively a net revenue. In relation to revenues associated with "broadband services", ComReg wishes to clarify that this direct revenue will include the revenues associated with the USP selling broadband ports, backhaul, and internet connectivity.

3.51 ComReg has given further consideration to the question of including revenues from monitored home alarm services. ComReg understands that a fixed telephone line is not required for the provision of Phonewatch. eircom, the current USP, does not therefore receive USO related revenues from this service. However, ComReg believes there is an enhanced brand association with "eircom Phonewatch", partly driven by the current status of eircom as the USP. Therefore, the value of this brand benefit should be included in the intangible benefits calculation. The treatment of revenues generated from monitored alarms services will be reviewed, should there be a change in circumstances with regard to the delivery by the USP of these services i.e. if in the future the technology used to deliver these services (e.g. mobile/wireless) requires the use of the infrastructure used by the USP in provision of USO services.

3.52 ComReg maintains the view that it is appropriate to include wholesale revenues in the net cost calculation. ComReg understands that the wholesale revenues include a mark-up to recover all fixed and common costs through the accounts, plus a rate of return (as determined by ComReg). As set out in paragraph 3.35, ComReg's draft decision is that fixed common costs and joint costs (for the provision of services over the access and core networks), should not be included as avoidable costs. Therefore, as the LRIC cost of calls is an average for the entire core network, it may not necessarily correspond to the appropriate avoidable cost. The revenue attained through wholesale revenues may be higher than the associated avoidable cost for the purposes of the net cost calculation. Therefore, contrary to what eircom had suggested in its response to the Consultation, this revenue should be considered relevant for the purposes of the net cost calculation.

3.53 ComReg has re-considered whether or not one-off connection charges incurred in the relevant financial year should be included in the USO revenues. ComReg believes it is more appropriate to "match" or allocate the revenue over the expected life of the customer, on the basis that any customer who is willing to pay the connection fee, which exceeds €7,000, can reasonably be assumed to remain as a customer for a period of at least four years. Accounting for the revenue in this way allows for greater transparency of the actual net cost and it should be fully reconcilable to the HCA accounts for that financial year.

3.54 ComReg maintains its view that indirect revenues would include those revenues which are not invoiced directly to a customer for the services provided by the USP, or to an OAO

[33] The telephone allowance received by "uneconomic" customers must be included in the net cost calculation and must be clearly identified in a USO funding application, to ensure that the USP is not over-compensated by a USO fund if an unfair burden established.

availing of the USP's wholesale services. For the purposes of clarity, ComReg considers that this would include inbound calls from the USP's mobile network. As noted in paragraph 3.49, where there is an avoidable cost associated with generating this revenue — the net cost calculation will take this into account and as a result be calculated on a net revenue basis.[34]

3.55 ComReg has reviewed its position in relation to the proposed treatment of indirect revenue where a USO economic customer calls an uneconomic customer. ComReg proposes to implement a two-stage approach. Firstly, the indirect revenue of the economic customer's calls to uneconomic customer will be allocated to the uneconomic customer. If the uneconomic customer is now economic, as a result of the allocation, then the second stage is required to ensure that this treatment does not make the previously economic customer into an uneconomic customer as a result.[35] ComReg considers that there are potentially three approaches, where as a result of this allocation the economic customer is now uneconomic; (a) only allocate as much revenue as the economic customer can "spare" without making themselves uneconomic; (b) apportion the revenue equally; *or* (c) do not apportion the economic customers' calls to uneconomic customers. ComReg considers, if, as a result of the second stage (as referred to above) that a previously economic customer is made uneconomic, it is appropriate that only that portion of revenue which the economic customer can spare without making themselves uneconomic should be allocated. ComReg considers that this approach is consistent with the "customer lifetime concept" as discussed in paragraphs 3.117-3.123, where the decision by a commercial operator to serve a particular area or customer is greater than the net cost calculation in a financial year for that particular area or customer. As such, if by allocating as much as the economic customer can spare makes the customer economic then it is likely that a commercial operator would continue to serve that otherwise uneconomic customer.

3.56 ComReg has reviewed its proposed treatment of leased lines. ComReg considers that where revenues are generated from a point-to-point lease line with an uneconomic end point, the methodology that all the revenue should be allocated to the uneconomic customer is consistent with the concept of avoidable costs. Leased lines involve a point-to-point contact and without the uneconomic point, the provision of the leased line would not be required, nor would any revenues be generated. However, ComReg proposes to implement a similar two-staged approach as outlined in paragraph 3.55, where initially all the revenues are allocated to the uneconomic line. If the uneconomic point is now economic, as result of the allocation, then the second stage is required to ensure that this treatment does not make the previously economic point into an uneconomic point as a result. Similar to the proposed approach outlined above, where the economic point is now uneconomic as a result of this allocation, ComReg considers that it is appropriate that only that portion of revenue which the economic point can spare without making themselves uneconomic should be allocated.

3.57 ComReg considers it appropriate to include replacement calls in the net cost calculation after a net cost is determined for a user or group of users. Replacement calls would generate revenue for the USP at some level (i.e. either at call origination, call termination or both) and therefore, are considered relevant for the purposes of the net cost calculation. For example, an uneconomic customer has an avoidable cost of €1,000 and total revenue

[34] For example, for non-geographic numbers it is only the net revenue that accrues to the USP which will be taken into account (i.e. call origination and / or call termination).

[35] For clarity, ComReg considers that this calculation would include retail revenues.

(direct and indirect) of €400 (i.e. a net cost of €600). The concept of replacement calls implies that if this customer was disconnected they would still generate indirect revenue for the USP — as they would use the telephone of, *say*, a relative which generates revenue for the USP of €100. However, the €100 is a replacement to some of the total revenue originally generated (i.e. €400). As such, should the customer no longer be served the total revenue foregone would only be €300 (i.e. €400 minus the €100 replacement calls) and therefore the net cost of that customer would be €700 (i.e. €1,000 avoidable cost minus €300 total revenue foregone)[36]. ComReg notes that this calculation is dependent on the precise revenue and cost breakdown of replacement calls and this in turn is influenced by factors such as fixed-to-mobile substitution. Hence, the appropriateness of the USP's assumptions will be reviewed on application.

3.58 For clarity, such a treatment of replacement calls is only relevant in circumstances to calculate the net cost of the hypothetically *permanently* disconnected customer. ComReg considers that such a calculation would be inappropriate in the case of *temporarily* disconnected customers (e.g. through fault rates or repair work), as this would create perverse incentives for a USP to cause poor line performance to generate replacement call revenue — which would in turn increase the net cost for USO costing purposes. As such, the net cost calculation should not include replacement calls as a result of temporarily disconnected customers.

ComReg's Draft Decision(s)[37]

3.59 USO revenues will 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 "non-viable customers."

3.60 Direct revenues will 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;
- 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.

3.61 Direct revenues will include those revenues from an OAO (who is indirectly providing the service to the customer) using the USP's wholesale services which will include *inter alia:*

- wholesale access (single billing wholesale line rental ("SB-WLR");
- wholesale calls; and
- complementary wholesale services, such as Bitstream and Local Loop Unbundling ("LLU") etc.

3.62 Indirect revenues will include those revenues which are not directly invoiced to a customer for the services provided directly by the USP. They include:

[36] These figures are for illustrative purposes only.

[37] See Appendix G for a full list of all the draft Decisions

- 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 will 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 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 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 should be estimated and added to the net cost calculation (where such a net cost is proven to exist).

Principles and methodologies for efficiency adjustments

The Consultation issue

3.63 Under the Regulations and the Directive it is clear that the USO is to be delivered efficiently and that net costs are to be calculated with efficiency in mind. Regulation 7 (3) of the Regulations for example, provides that that: *"[t]he designation methods adopted shall ensure that the obligations referred to in paragraph (1) are provided in a cost effective manner and may be used as a means of determining the net cost of the universal service obligation in accordance with Regulation 11"* (emphasis added). This is supported by Recital 14 of the Directive which states that: *"it is important that universal service obligations are fulfilled in the most efficient fashion so that users generally pay prices that correspond to efficient cost provision*" (emphasis added).

3.64 It follows that the costing methodology used to determine the net cost must be capable of either accounting for, or be adjusted for efficiencies.

3.65 The Consultation discussed that where a net cost is identified, then an additional analysis is required to determine if the USP's costs of meeting the USO were incurred in the most efficient way available at the time. The costs to be examined include Capital Expenditure ("CAPEX"), Operational Expenditure ("OPEX") and Overheads[38].

3.66 Where costs are demonstrated to be inefficient, then a separate analysis is required to determine the "actual" efficient costs the operator would/should have incurred. It is these efficient costs which will be used in the net cost calculation of the USO. The Consultation explained that the issue is not whether the USO service could *now* be delivered more efficiently, rather, whether at the time of instalment or upgrade, the costs were discharged in the most efficient manner.

3.67 The Consultation noted that it is: *"important that only the efficient operational costs associated with the maintenance of the access network are included in the net cost calculation."*[39] ComReg suggested the line fault index ("LFI") could be used to determine an "efficient" operating maintenance cost for a particular year under assessment. For the purposes of the current USO designation, ComReg suggested that an LFI of 12.5% should be used to calculate the efficient cost of the maintenance of eircom's actual network.

3.68 ComReg also described a number of possibilities for the treatment of "catch-up" investment. The Consultation requested views on the potential treatment of an inefficient CAPEX programme (that may arise by a USP "sweating assets" over a number of years) resulting in potentially higher maintenance charges over the period and potentially once-off bullet or catch-up CAPEX and OPEX associated with instalment and upgrade in later years.

3.69 ComReg sought views on how a USP should be allowed to recover its costs, in circumstances where an unfair burden is established and ComReg determines the quantum of costs would be unreasonable to recover in any one particular financial period. This issue needs to be considered in light of the fact that the period of certain designation is limited by the specific time period set (most recently from 1 July 2010 to 30 June 2012). This may result in the operator not being able to fully recover the determined net cost if it were not re-designated as USP after 30 June 2012.

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[38] Where avoidable.

[39] ComReg, supra n 1, pg. 22.

3.70 ComReg's preliminary view was that avoidable costs should only relate to the USO service which a commercial operator would not ordinarily provide, and that it is reflective of the "true" efficient cost of meeting the USO (i.e. CAPEX, OPEX and overheads).

Summary of Respondents' views

3.71 As discussed in paragraph 3.8, BT, ALTO, Vodafone, and O2 all agreed with ComReg's preliminary view that the costing methodology requires adjustment for efficiencies. eircom's submission also agreed with the principle that USO costs should be efficiently incurred, however, it noted that: *"the scope for ComReg to apply further efficiency adjustments in the context of USO net cost calculations is quite limited"*[40] due to previous pricing and costing reviews by ComReg.

3.72 Vodafone suggests that possible efficiency adjustments should include the use of: *"alternative technologies, particularly wireless."*[41] Vodafone further suggests that the use of mobile technology has long been available to the current USP in meeting its USO objectives. eircom notes that it is important that: *"investment decisions made by eircom in the past be judged against investment options at that time and not against some future potentially more efficient solution."*[42]

3.73 With regard to the potential use of a LFI of 12.5%, BT and ALTO note that: *"it is a step in the right direction but is still too generous to eircom."*[43] eircom is strongly opposed to the use of the LFI of 12.5%. It states that the targets do not necessarily reflect the actual performance of the network and that the *"actual LFI achieved by eircom's network should be used."*[44] eircom also notes that: *"even if the targets set in D02/08 were relevant (and eircom clearly does not agree that this is the case), then eircom would note that D02/08 sets different targets for different years, and that 14.5%, not 12.5%, is the value set in D02/08 for June 2010."*[45]

3.74 With regard to the potential treatment of "catch-up" investment, O2 wished to reserve comment until it knew more of the potential scale of any such catch-up adjustment. Vodafone, BT and ALTO argued that a delay in a CAPEX programme is a commercial decision, and that they were opposed to the current USP potentially being rewarded / compensated for such a decision. Vodafone's submission also notes that: *"[c]osts which subsequently are incurred rectifying past under-investment should not be deemed unavoidable but should instead be considered as arising from eircom commercial decisions."*[46] Vodafone suggests that ComReg should disallow, in total, any costs associated with USP performance targets as: *"part of the current wholesale regulatory regime, eircom is entitled to recover its regulated return on investment (RoI). This return is predicated on the assumption that eircom will make the necessary capital investments at the optimum time to ensure it continues to act in a rational and profit maximising fashion. Failure by eircom to invest in this manner is a result of eircom taking a business decision*

[40] eircom, supra n 9, pg. 10.

[41] Vodafone, supra n 7, pg. 2.

[42] eircom, supra n 9, pg. 11.

[43] BT Response to ComReg's Consultation Paper entitled "Costing of Universal service obligation principles and methodologies" (ComReg 10/94), 20 January 2011, pg. 4.

[44] eircom, supra n 9, pg. 11.

[45] ibid.

[46] Vodafone, supra n 7, pg. 4.

to accept higher opex costs in return for lower capital outlays."[47] eircom states that: *"eircom does not believe that any part of the investment which we enter into to fulfil our USO should be disregarded by ComReg"*,[48] and that *"[e]ven in a case of "catch-up" investment, the CAPEX will assist eircom to meet its USO over the EUL [economic useful lives] of the asset, so ComReg should not disallow any part of the resulting annual depreciation."*[49]

3.75 ALTO and BT noted in their respective submissions that in their view, a USO sinking fund or delayed payment scheme is not relevant. O2 reserved comment. eircom stated that there is a clear parallel between this issue and that of the: *"recent exercise by ComReg in setting the maximum permitted charge for the provision of Emergency Call Answering Service (ECAS)…ComReg taking into account the fact that BT Ireland is the designated ECAS operator for a period of 5 years…set the price based on the fact that BT should be entitled to reclaim all of the relevant CAPEX expenditure over this period."*[50] eircom note that taking a similar approach with respect to the USO designation period would eliminate the need for a sinking fund or delayed payment scheme. However, they also note that, if eircom were to lose its USO designation, and that if some of the USO assets were not fully depreciated, then it should be allowed to recover all: *"outstanding USO CAPEX expenses…at the time of the removal of the USP designation, or within a short time thereafter."*[51]

3.76 eircom's submission suggests that since some assets have been: *"depreciated up to 2008/09 using a much shorter asset life than ComReg has now found appropriate in D03/09"*[52] that an element of the Net Book Value ("NBV") should be written-back so that the: *"actual depreciation charge taken in the USO funding model is properly reflective of the age and the original value of the relevant asset base."*[53]

ComReg's Position

3.77 Annex IV of the Directive makes it clear that NRAs *"are to consider all means to ensure appropriate incentives for undertakings (designated or not) to provide universal service obligations cost efficiently*" (emphasis added). ComReg maintains its view that: *"an efficiency adjustment, as appropriate, is one approach to provide a forward-looking incentive for the USP to meet its USO in the most efficient and cost effective manner."*[54] This would provide strong incentives for a USP to be cost efficient, as the adjustment would ensure that the USP would not be compensated for some past decisions which on careful examination could properly be considered inefficient.

3.78 ComReg maintains its view that in assessing the CAPEX and related OPEX incurred, it will need to decide whether the technology used appears reasonably efficient with regard to what was available and effective at the time, and whether any subsequent upgrades etc.

[47] Vodafone, supra n 7, pg. 4.

[48] eircom, supra n 9, pg. 11.

[49] ibid.

[50] ibid, pg. 12.

[51] ibid.

[52] ibid, pg. 11.

[53] ibid.

[54] ComReg, supra n 1, pg. 21.

also meet this criteria (i.e. whether it was cost effective that subsequent upgrades to the network were based on the pre-existing technology that was already in place at the time of upgrade). ComReg will assess at a high level the appropriateness of the technology used (e.g. would it have been more cost effective to use wireless technology) as part of its verification process, as discussed in 3.110 and 3.112, for those uneconomic areas and uneconomic customers identified. ComReg notes that a high capacity radio spectrum has been available to the USP for a number of years and may in certain circumstances have been a more efficient technology to implement. However, the appropriateness, or otherwise, of alternative technologies will be considered on a case-by-case basis.

3.79 ComReg considers that the use of the LFI provides a reasonable and proportionate indicator of an efficient cost of maintenance of the actual network. ComReg considers that it would be simply wrong to use the *actual* LFI attained in a given year (where it is greater than the relevant LFI target for a given year, as determined by ComReg (as set out in ComReg Decision No. D02/08 or as amended) as this would potentially reflect past decisions which may be inefficient and might result in ComReg effectively ignoring any requirement for an efficiency criterion. The LFI targets set out by ComReg are based on a national average, allowing for normal year-on-year weather conditions. ComReg considers that the use of the LFI index provides appropriate incentives for the USP to invest in the network and to meet these targets, as the net cost calculation would not compensate / take account of costs which would be in excess of these levels. As set out in the Consultation, ComReg considered that a maximum LFI of 8% is not appropriate for the USO, as this LFI is based on a greater proportion of underground cables than is actually evident in the network and is more focused on urban areas. Accordingly, an LFI of 8% may be considered too aggressive for the purposes of an efficiency adjustment for the actual network and therefore, ComReg considers that it is more reasonable to use the LFI targets set out in ComReg Decision No. D02/08 (or as amended). A maximum fault rate of 14.5 line faults per 100 lines (i.e. 14.5%) is provided for in ComReg Decision No. D02/08 for the period 1 July 2009 to 30 June 2010.[55] Furthermore, in order to inform the level of efficiency adjustment required, as part of its assessment of the USO funding application, ComReg will take a sample of “uneconomic” areas and measure the LFI of those areas to determine if the levels of faults are causing a significant cost in those areas. If the LFI of a particular uneconomic area is high, a further efficiency adjustment may be necessary to reflect the poor condition of the network (which may be indicative of inefficient network investment over previous years). The annual efficient cost of such a network will be calculated on the basis of an LFI as set out in ComReg Decision No. D02/08 (or as amended), where the actual LFI is significantly above this.

3.80 Some respondents suggested that using the LFI of 14.5% was in effect, too lenient to eircom. However, ComReg considers that this cannot be viewed in isolation from the potential financial liability also arising from a failure to achieve the LFI targets, as provided for by Regulation 32 of the Regulations. Therefore, ComReg considers that the efficiency adjustment, based on the LFI target for the corresponding year of assessment, is proportionate and reasonable.

3.81 For clarification, the Consultation issue on the issue of “catch-up” investment is one of regulatory principle and therefore, would apply to any operator if designated as USP.

[55] ComReg Consultation Document No. 08/37. Decision Notice D02/08 - Response to Consultation on eircom's Universal Service Obligation - Quality of Service Performance Targets, published 28 May 2008. See also ComReg, Information Notice Document No. 10/80.

ComReg considers that two issues arise from the possibility of "catch-up"; namely CAPEX and OPEX.

3.82 ComReg considers that in relation to CAPEX, the issue is relatively straight-forward, with one caveat. ComReg notes that irrespective of when the "catch-up" investment was made over a given period of time, the depreciation charge after the investment actually occurred, would be the same over the short to medium-term in the financial statements. The caveat relates to CAPEX on assets with short asset lives which should have taken place in the past and which might by now be fully written off. In this case, there would be no depreciation charge. ComReg proposed to review any application with this in mind and will reserve the right to disallow CAPEX on this basis.[56] This issue would be further assessed as part of the verification process, as discussed in paragraph 3.110.

3.83 However, if the related expenditure of installation or upgrade is not capitalised and charged as OPEX in the regulatory accounts, then this could lead to a significantly large OPEX charge and potentially an excessive net cost for a particular financial year (which would not be reflective of an efficient investment profile). Therefore, ComReg considers, as a potential indicator of "catch-up" investment, that it will be necessary to provide an investment profile (since the original first year of its USP designation), between CAPEX and OPEX relevant to the USO.

3.84 ComReg proposes that as part of its assessment of the USO funding application the depreciation / capitalisation policy of the USP will be verified for consistency with international accounting standards, in particular installation and upgrades (e.g. labour cost, replacement of life expired poles, cables etc.). ComReg notes that there may be differences between statutory accounts from a financial perspective and the regulatory accounts relevant to a USO net cost calculation. For example, a prudent accounting policy for statutory accounts may dictate that asset lives are written-off over a shorter period of time, when compared to regulatory accounts which may dictate a longer useful asset life. Similarly, OPEX which may be written-off in a particular year may be acceptable from a prudent accounting perspective; however, a regulatory view may be different.

3.85 Furthermore, where extra OPEX has been incurred as a consequence of past under-investment, this should normally be disallowed, as OPEX should relate to an efficiently provisioned network. Otherwise, the USP has little incentive to invest efficiently for the long term. (This approach is consistent with the treatment of LFI above).

3.86 With respect to a delayed payment scheme or sinking fund, ComReg would like to clarify that it considers the issue of the ECAS and USO designation periods to be separate and distinct. The ECAS contract was entered into by the Department of Communications, Energy and Natural Resources ("DCENR") and BT Ireland. BT Ireland was required to construct a fit for purpose emergency call handling service in green-field sites nominated by the DCENR. Therefore, in order to avoid the possible stranding of assets (which could occur should it be determined that these sites are either no longer required or better located elsewhere) it was considered prudent, in line with general accounting practice, that BT Ireland should write-off its investment over the designation period (in that case 5 years).

3.87 With regard to eircom's suggestion that it would be left with stranded assets if it lost its USO designation, ComReg is guided by the principle of efficiency in the Regulations and

[56] ComReg considers that the WACC creates, amongst others, an appropriate incentive for timely investment by the USP. Where the investment profile by the USP indicates that this has not occurred, ComReg considers that the efficiency adjustment provides a safe-guard that the USP is not compensated for inefficient life-cycle management of assets.

the Directive, which emphasise that the USO should be met in a cost efficient manner. Therefore, should eircom or any operator lose its USP obligation, ComReg considers that it would be inefficient to suggest that the *entire* network would need to be re-built. Equally, ComReg would consider it inefficient for any new USO to be met using an entirely new duplicate network which would add excessively to the net cost. Furthermore, ComReg considers that the efficiency adjustment in calculating net costs will provide a mechanism to determine whether the technology used at the time was indeed the most cost efficient: where it is demonstrated that this was not the case; then the net cost would not take account of the "inefficient" expenditure, meaning the operator would not be compensated regardless of the USP designation being retained or not.

3.88 ComReg considers that the appropriateness of a delayed payment scheme arises only where (a) an unfair burden is established and (b) where the current USO is not re-designated in full or there is a material change in the nature of the USO. Therefore, ComReg proposes that this issue will be addressed, when and if these circumstances arise. This issue is discussed further in section 1.

3.89 In *ComReg Response to Consultation Document No. 09/11 and Final Decision - Review of the Regulatory Asset Lives of Eircom Limited*, ComReg considered it appropriate that eircom should extend its regulatory asset lives for a number of specified assets. Therefore, in accordance with international accounting standards, the financial statements should reflect the higher asset life for the year ended 30 June 2010. For clarity, a change in the asset life does not reflect a change in accounting policy and therefore, does not require an adjustment for the prior year. For the purposes of the net cost calculation, ComReg considers it would be inappropriate to write-back a portion of NBV — such that the asset base would reflect the depreciation policy as if it had been implemented from original purchase, as the higher depreciation charge in previous financial years has already incurred a rate of return (as these costs were taken into consideration when setting the respective regulated prices over the years).

ComReg's Draft Decision(s)[57]

3.90 The avoidable costs included in the net cost calculation, will 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 will relate to avoidable CAPEX, OPEX, and overheads.

3.91 ComReg will 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 not be 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;
- an appropriately adjusted LFI target for the financial year in question;
- independent survey report regarding the USP's efficiency;
- overseas regulatory decisions providing relevant precedents and benchmarks; and

[57] See Appendix G for a full list of all the draft Decisions

- the development of an independent cost model where adequate and reliable accounting information is not available from the USP.

Principles and methodologies for cost identification and allocation

The Consultation issue

3.92 The Consultation noted that the USO consists of the provision of a defined set of services to end-users or groups of end-users at an affordable price.[58]

3.93 The principle corner-stones of the net cost calculation are based on the premise that the costs of the USO services can be identified to end-users or groups of end-users, that these services are "loss-making", would not have been ordinarily served by a commercial operator, that these costs are incurred efficiently, and that these allocated costs could have been avoided if the USO provision to service these end-users or groups of end-users did not exist.

3.94 Therefore, it is important to be able to identify how costs and associated revenues vary on an area-by-area basis, or on a customer-by-customer basis. As highlighted in paragraph 3.13, it would therefore be important to develop a means of allocation / modelling tool to identify "uneconomic" USO services. For clarity, ComReg's suggestion to use the independent efficient operator BU-LRAIC model (or "Copper Access Model") for the purposes of identifying network elements attributable to various end users was on the basis of being able to identify potential uneconomic areas;[59] a separate analysis of HCA, efficiency adjustment and profitability analysis would be required, in addition to this modelling exercise, to calculate a net cost position.

3.95 The Consultation discussed that the question of whether a USO service is "loss-making", is one that requires due attention, as the end-user or groups of end-user may become profitable over-time, or may represent a end-user or groups of end-users which a commercial operator would have chosen to service (i.e. may have been considered economic upon original installation). ComReg also noted that due attention is to be given to engineering rules and that best practice may dictate that it would be cost effective to incur certain costs, irrespective of the "viability" of the customer or area. Furthermore, due attention is to be given to the attainment of certain end-users or groups of end-users through successful competitive tenders. Schedule 2 of the Regulations 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*." Therefore, in determining if identified costs could have been avoided for the provision of USO services to end-users or groups of end-users it is important to determine if these services would have been provided by a commercial operator.

3.96 ComReg's preliminary view was that uneconomic areas could be determined by identifying local exchange areas / Main Distribution Frames ("MDFs") where avoidable costs are greater than total revenues foregone. ComReg noted that the Copper Access Model could be used to allocate the determined avoidable costs (adjusted for efficiencies as appropriate) to calculate access costs in circumstances where the underlying financial data is accurate and reliable to a sufficient level of granularity. ComReg was of the preliminary view that the core network costs comprise the call related (per call) conveyance costs and the duration related (per minute) conveyance and non-conveyance retail service costs.

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[58] ComReg, supra n 1, pgs. 5-6.

[59] But not to estimate their cost, as this is to be done on a HCA basis.

3.97 ComReg's preliminary view with respect to uneconomic customers in economic areas was that the USP could identify such customers based on the universal account number ("UANs"). A similar approach to identifying the net cost calculation is undertaken to that outlined above for "uneconomic areas". ComReg also noted that, previously identified uneconomic areas would need to be removed from the analysis to avoid double counting. Furthermore, a net present value ("NPV") analysis would be required to demonstrate that these customers would not have been provided by a commercial operator.

3.98 ComReg was of the preliminary view that where a net cost is determined for uneconomic customers in economic areas that a further assessment of aggregate profitability per local exchange / MDF area must be determined. Where an aggregate profitability is determined, these customers are to be excluded from the net cost calculation. However, where clear identifiable evidence of costs incurred on lines in economic areas that would not otherwise be served is made available the costs of these lines may be considered.

Summary of Respondents' views

3.99 Vodafone notes that: *"extracting the access cost per area from the Copper Access Model is a practical approach to deriving the necessary granularity from the HCA data to deliver the required cost drivers in relation to both economic customers and lines in economic areas."*[60] ALTO and BT note that while they consider the use of the Copper Access Model useful to identify uneconomic areas, that a further demographic analysis is required to ensure that a major industrial park or business unit in a rural area is not discounted (i.e. that the MDF may be in fact be economically viable as a result of their presence). eircom submission noted that it: *"generally agrees with ComReg's approach as set out in ¶ 4.80 to ¶ 4.98. However, we note that ComReg must be reasonable regarding the granularity demanded in their assessment of eircom's USO funding submission."*[61] eircom also stated that the Copper Access Model was developed in 2009 and had focused on urban areas, whereas the USO fund would concentrate on rural and isolated areas, and would therefore require adjustment and updating.

3.100 eircom agreed with ComReg's preliminary view that uneconomic areas could be determined at the MDF level. eircom proposes that: *"[i]f the totality of an exchange is found uneconomic, then all the costs of that exchange… should be designated as avoidable."*[62] eircom also notes that there may be uneconomic areas below a profitable exchange area due to remote hamlets and that therefore, the specific cost associated with servicing this customer / area should also be considered avoidable.

3.101 O2 agreed with ComReg's view that it would be inappropriate to include the avoidable costs of customers who were originally considered "uneconomic" but who have since become viable customers.

3.102 eircom notes that a number of housing estates constructed during the building boom have become "ghost estates" and suggests that the: *"cost of this work required by the USO will never be recovered from by paying customers."*[63] eircom also notes that engineering rules may have a role in calculating the costs of uneconomic customers in economic areas, but that in their view, it is important to distinguish: *"between the engineering rules which*

[60] Vodafone, supra n 7, pg. 4.

[61] eircom, supra n 9, pg. 13.

[62] ibid.

[63] ibid, pg. 14.

apply in the context of the USO, and the different engineering rules that might apply if eircom did not have the USO."[64] eircom says that: *"[t]he fact that cable TV operators often decline to serve many such new housing areas indicates that there is a very real possibility that revenues may be less than costs."*[65] eircom also notes that: *"if a particular customer in a housing area is uneconomic…a rational operator would not serve this customer."* [66]

3.103 eircom disagrees with ComReg's preliminary view that if a net cost is determined for uneconomic customers in economic areas that a further assessment of aggregate profitability per local exchange is required. eircom argues that: *"there is no need to reassess each exchange area in aggregate, as these areas have already been found to be economic earlier in the process."*[67]

3.104 eircom suggested that: *"the issue of NPV of uneconomic customers potentially adds a layer of complexity, and consequent delay, to the overall process for no apparent gain…we believe that it is reasonable to take a single-year view of costs and revenues in order to calculate the annual net cost of the USO."*[68]

ComReg's Position

3.105 ComReg considers that in determining the net cost of a USO obligation, it remains appropriate to consider:

- whether costs can be accurately attributed to end-users or groups of end-users;
- whether these end-user or groups of end-users are "loss-making" and would not have been ordinarily served by a commercial operator;
- whether costs have been efficiently incurred; and
- whether those allocated costs could have been avoided (i.e. that economic customers may be served using the infrastructure which was incurred for the provision of USO services to "non-viable customers" — in which case, costs may become common, or in the case of fixed costs related to physical infrastructure in part economic).

Uneconomic areas

3.106 ComReg maintains its view that it is appropriate to identify uneconomic areas at an MDF level (i.e. based on network structure) where avoidable costs are greater than total revenues foregone, since the principle of avoidable costs is largely determined by the ability to remove parts of the network that the USP would have chosen not to build or continue to serve in the absence of the USO.

3.107 As set out in paragraph 3.15, one of the regulatory objectives is to ensure that the net cost calculation does not over or under-compensate the USP for the provision of the USO.

3.108 One approach to calculate this net cost (taking account of the principle of avoidable costs as set out in paragraphs 3.24-3.35) is to identify all the assets at the relevant exchanges

[64] eircom, supra n 9, pg. 14.

[65] ibid.

[66] ibid, pg. 15.

[67] ibid.

[68] ibid.

(taking account of the relevant depreciation charge with respect to the assets' age) and relevant OPEX cost for each exchange and comparing the sum of these actual avoidable costs to the revenue (both direct and indirect) of that exchange. A similar approach is undertaken by AGCOM (Italy). ComReg notes, that while revenue can be determined accurately at an exchange level, such detail on costs (in particular asset depreciation) may not be available on an exchange level and it may represent a significantly large exercise (and cost) to determine such costs. This is a global issue, typically faced by large utility companies, where fixed assets registers do not record depreciation incurred by individual assets mapped to any particular geographic location (e.g. where fixed asset records, in particular legacy assets, have transitioned from written ledgers to computerised systems and such data was either deemed unnecessary at the time of original recording or lost through the passage of time).

3.109 Although the methodology outlined above would be the desired approach for many NRAs, due to the short-comings of the accounting data, an alternative approach is used in a number of overseas jurisdictions. This alternative approach utilises a nationally-averaged asset life and depreciation profile (per the HCA accounts) for each category of asset and a modelling tool to identify potentially uneconomic areas — i.e. to allocate these costs as determined by an appropriate model (e.g. the model determines the number of poles required based on distance from exchange and the depreciation charge in the HCA accounts is allocated pro-rata to the exchange area based on this requirement). One of the drawbacks to this approach is that it does not take into account where investment actually occurred and therefore, it could allocate a depreciation charge to an area which would not be reflective of the region-specific investment profile. Therefore, the USP could be potentially be over-compensated for the provision of the USO and could, in theory, compensate / reward the USP for investing in economic areas at the expense of the uneconomic areas.

3.110 ComReg considers that a hybrid approach to the methodologies outlined in paragraphs 3.108 and 3.109 would be more pragmatic. ComReg proposes that an average depreciation charge for each class of network element (based on an average cost and asset age), be developed by geo-types (e.g. urban, sub-urban, rural etc.). The USP can then allocate the relevant depreciation charge (as reconcilable to the HCA accounts and taking account of the principle of avoidable costs[69]) for each exchange area based on the asset requirements as determined by the Copper Access Model (as updated or similar modelling tool). The calculation would need to 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 with, its investment profile / decision making, works-orders etc., so as to ensure that the allocation is appropriate (e.g. the allocation of the average depreciation charge should be reflective of the USP's investment profile in the exchange area and not seek to allocate large average depreciation charges to areas that are nearly fully depreciated or fully-written-off). For clarity, this methodology implies that while an appropriate version of an average HCA approach (i.e. one which takes account of different geo-types and different depreciation profiles for different classes of assets) is allowed, the USP's "sense-check", based on its investment decisions and operational practices, should not over compensate the net cost of geographic areas. In the course of ComReg's assessment of a USO funding application a number of sample "reality" checks will be undertaken. If and where material discrepancies are found,

[69] As set out in paragraphs 3.24-3.35.

ComReg has the discretion to require a full assessment for those exchange areas deemed "un-viable" by the USO (similar to the exercise outline in paragraph 3.108); to apply a proportionate adjustment to the net cost calculation (pre-intangibles) *or* to reject the entire USO funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose). ComReg considers that this pragmatic approach would properly reflect the practical realities associated with the available accounting data while also providing a sufficient level of granularity and testing to ensure that the net cost is reflective of the "true" avoidable cost in the absence of the USO.

3.111 ComReg maintains the view that a similar modelling tool to the Copper Access Model would be useful in allocating costs as set out in paragraph 3.110. While a further geographic analysis may be useful to determine if there are large industrial parks or business units in the area as a sense-check, ComReg considers that the revenue generated from such possible sites would be captured through the revenue foregone analysis undertaken to determine if it is indeed an "uneconomic" area (i.e. the avoidable costs are greater than the total revenues foregone).

Uneconomic customers in economic areas

3.112 ComReg maintains its view that it is appropriate that uneconomic customers in economic areas are identified based on the universal account number ("UANs"). Similar to the issues identified for uneconomic areas, while revenues can be identified to individual customers, costs cannot be determined with certainty. In other jurisdictions this issue is commonly overcome by allowing the USP to use a probability analysis, which calculates the likelihood of each line being unprofitable given a distribution of costs and revenues. If the USP is unable to identify all the assets in each exchange area (as discussed in paragraph 3.108), ComReg considers that it would be reasonable for the USP to calculate uneconomic customers in economic areas using such a probability analysis. However, the identification and allocation of these costs is to be consistent with the approach outlined in paragraph 3.110. During the course of ComReg's assessment of a USO funding application, a number of sample "reality" checks will be undertaken.

3.113 ComReg considers that all uneconomic areas identified must be removed from the calculation of uneconomic customers in economic areas in order to avoid double counting. ComReg maintains the view that it would be inappropriate to include those customers who were originally considered "uneconomic" but who have now become profitable in the net cost calculation. ComReg also maintains the view that it would be inappropriate to include those customers attained by commercial tender (which are deemed "uneconomic") in the net cost calculation. ComReg considers that customers obtained through a voluntary commercial tender are by their nature avoidable. Furthermore, ComReg considers that such commercial contracts do not represent the intended customers envisaged by the Regulations and that furthermore, to include such "customers" would allow an unfair tendering advantage to the USP (i.e. the USP knowing that they would be compensated irrespective of their profitability could potentially decrease their tendering bids to attain these customers).

3.114 ComReg has reviewed its position in relation to "ghost-estates". ComReg considers that it may be appropriate, subject to paragraph 3.113, to include such "customers" in the net cost calculation as they represent end-user or group of end-users which would not have been served by other operators. ComReg considers that in circumstances where the constructor, as part of the site development, bears the costs associated with fixed line connections (e.g. trenching and ducting may be completed by the constructor) that such costs should be excluded by the USP as they do not represent actual costs incurred by the operator in serving those "un-viable" customers. For clarity, ComReg considers that it is only those costs which are incurred and avoidable which should be included in the net cost calculation. Furthermore, consistent with the principle that customers may become profitable over time, ComReg considers that the net cost of "ghost-estates" should only reflect those "annual" costs of meeting the USO (i.e. it would be inappropriate to recover the full cost in a particular financial year, as these "customers" may become profitable over time).

3.115 ComReg has reviewed its position for the requirement for an aggregate profitability assessment where a net cost is determined for uneconomic customers in economic areas. ComReg considers that the methodologies outlined in paragraph 3.110 and 3.112 are sufficient to ensure that the net cost calculation is reflective of the "true" avoidable costs in the absence of the USO.

3.116 With the exception of the circumstances outlined in paragraph 3.113, ComReg considers that a static assessment of costs and revenues may be appropriate for the purposes of net cost calculation.

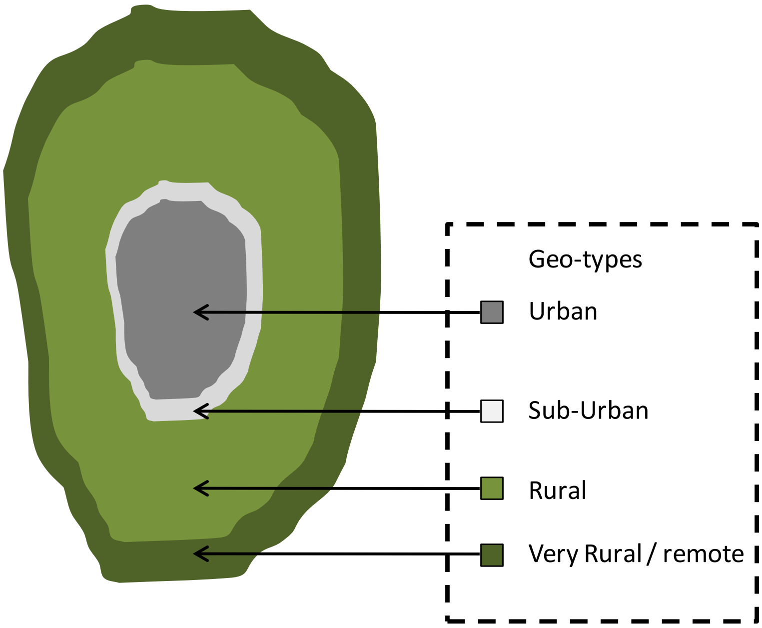
3.117 However, ComReg notes that the decision to cease serving certain customers by a commercial operator is not based on a static assessment of costs and revenues. A single-year view does not, in isolation, give the commercial operator sufficient information to make the decision to stop serving that customer. In many industries, such as: financial; utilities; and telecommunications, commercial operators make a conscious decision to serve currently unprofitable customers with low-value, as they do not wish to forfeit potential future revenues or lose market share to competitors. This is particularly important in a fixed communications network setting, when cutting off a customer is actually cutting off an address and hence, access to all potential future customers at that address. In the telecommunications sector, certain "uneconomic" customer relationships are maintained in the hope that in the future the potential to earn increased revenues (e.g. through up-selling of services, bundles, life-cycle effects, movement to post-pay contracts in the mobile sector etc.) are preserved by the operator. Within this paper this concept is referred to as the "customer lifetime value".

3.118 Annex IV of the Directive states that the net cost calculation includes those *"end-users or groups of end-users which would not be served by a commercial operator which did not have an obligation to provide universal service".* As such, ComReg considers the customer lifetime value poses an important question for the purposes of the USP — whether a commercial operator (absent a USO) would choose to maintain those elements of the network which serve "non-viable customers". The decision by a commercial operator to cease serving a line, is in affect a decision by the operator to forego any future potential revenue from that line. Therefore, the "hope" value that these lines may become profitable over time and the potential additional benefits of maintaining a line (e.g. the potential future location of additional houses / commercial premises may be in close proximity to the existing line and therefore the marginal cost of additional lines is reduced) is lost to the operator.

3.119 ComReg recognises that there are customers in every industry which will never become profitable in virtually all states of probability, but also that fundamentally there is potentially a quantum of these customers or areas that a commercial operator would very likely never cut-off despite their current loss making status.

3.120 ComReg considers that it would be inappropriate for the net cost calculation to include those customers which a commercial operator would continue to serve absent a USO. Therefore, ComReg considers that as part of a USO funding application, the USP should clearly identify those customers or groups of customers (i.e. area), that in the absence of the USO, the provision of the services would not be provided. The application should provide sufficient information to support the hypothetical business decision that in the absence of the USO these customers are clearly and materially "non-viable" and would not be served by a commercial operator.

Illustrative example of geo-types and customer lifetime value



3.121 As set out in paragraph 3.126, ComReg's draft decision is that based on the HCA accounts an average depreciation charge for each class of network element (based on an average cost and asset age), is developed by geo-types (e.g. urban, sub-urban, rural etc.) and allocated to an MDF (based on the asset requirements as determined by the Copper Access Model (as updated or similar modelling tool)) with reference to the USP's investment profile as a sense check. Where avoidable costs are greater than total revenues forgone these are considered to be "uneconomic" customers. However, with reference to a customer lifetime value, there may be lines that a commercial operator would choose to continue to serve — irrespective of their current profitability.

3.122 Without prejudice to ComReg's view as outlined in paragraph 3.119, ComReg considers that:

Urban Areas: (high densely populated areas, quite possible that revenues are greater than the avoidable costs for these areas). If faced by a net cost in an urban area it is unlikely that a commercial operator, acting as the USP, would choose *not* to serve those customers / areas as the maintenance cost of serving those customers is potentially marginal; the ability to up-sell products to those customer is lost; all future revenues would be foregone; and market share in the most eagerly contested segment is potentially lost to competitors.

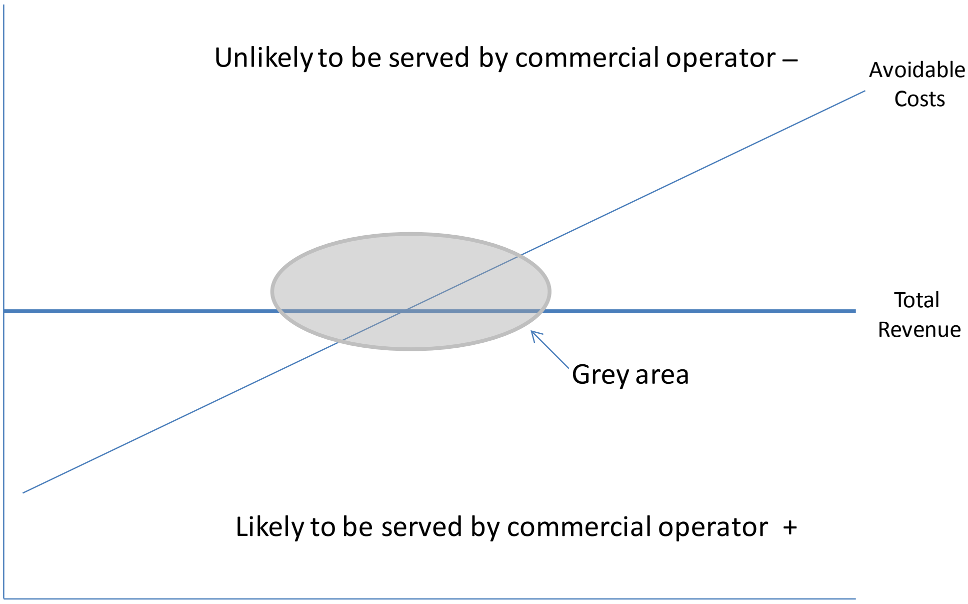
Sub-Urban Areas: (medium to high populated areas, quite possible that revenues are greater than the avoidable costs for these areas). If faced by a net cost in a sub-urban area, ComReg recognises that the issue of whether a commercial operator, acting as the USP, would choose to serve those customers / areas is not as straight-forward as urban or rural areas. There are a range of potential factors and considerations present in such a decision (i.e. to continue to serve or not). However, as stated in paragraph 3.120, the net cost calculation should only include those customers that absent a USO those customers would not be served by a commercial operator and the USP in making its application should declare / demonstrate those customers as such.

Rural Areas: (medium to low populated areas, quite possible that revenues are less than the avoidable costs for these areas). If faced by a net cost of serving customers in a rural area, it is unlikely that any commercial operator, acting as the USP, would continue to serve those customers. However, this is only relevant where the business case / assessment does not indicate any profitability for those customers in all states of future probability and where serving those customers does not represent a strategic position / advantage by the operator to continue serving those customers (e.g. where registered planning permission has indicated that commercial or residential housing will expand in the area and therefore the marginal cost of adding those customers may be lower). Furthermore, the maintenance cost (as a result of technology used) of serving those customers would need to be considered — if for example the maintenance cost is high the probability of a customer/area where revenues are less than the avoidable costs is considered to be potentially higher than in urban areas. The net cost calculation will be subject to an efficiency adjustment to determine if the technology used was the most appropriate (upon original instalment and subsequent upgrades, as appropriate).

Very Rural/remote Areas: (low and sporadically populated areas, quite possible that revenues are less than the avoidable costs for these areas). If faced by a net cost of serving customers in a very rural/remote area, it is unlikely that any commercial operator, acting as the USP, would continue to serve those customers. However, this would be subject to the same business case / assessment as outlined above for rural areas. Furthermore, the maintenance cost (as a result of technology used) of serving those customers would need to be considered. ComReg understands that in a number of instances, due to certain factors such as topography and geographic location, the current USP has availed of wireless technology (e.g. the Achill Island); in such circumstances it is quite possible that revenues are greater than the avoidable costs. The net cost calculation for very rural / remote areas will be subject to an efficiency adjustment to determine if the technology used was the most appropriate (upon original instalment and subsequent upgrades, as appropriate).

3.123 ComReg considers that, as the above example demonstrates and illustrated in Figure 1 below, there are clearly a set of customers that would potentially either be served by a commercial operator (e.g. urban customers) or not (e.g. very remote customers). However, there is likely to be a “grey area” — where the customers are only marginally loss-making and which may or may not be served by a commercial operator based on its long-term strategy / investment decision. Given the relative finality of a decision to disconnect a customer, even a commercial operator could be expected to take somewhat conservative view. In conclusion, for the avoidance of doubt, the net cost calculation should *only* include those customers which the USP considers would *not* be served by a commercial operator and *must* as part of its application process identify with reasoning as to why in its view those uneconomic areas / customers would not clearly and materially be served absent a USO provision.

Figure 1: Illustrative example of commercial operator decision matrix



ComReg's Draft Decision(s)[70]

3.124 The net cost calculation should not include those customers who were originally considered "uneconomic" but who have now become profitable, nor those customers attained by commercial tender (which are deemed "uneconomic").

3.125 Uneconomic areas will be identified at an MDF level.

3.126 An average depreciation charge for each class of network element (based on an average cost and asset age) will be developed by geo-types (e.g. urban, sub-urban, rural etc.). The USP can 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 with, its investment profile / decision making, works-orders etc., so as to ensure that the allocation is appropriate (i.e. it does not allocate costs to an MDF which are not reflective of the USP's investment profile). In the course of ComReg's assessment of a USO funding application, a number of sample "reality" checks will be undertaken. If material discrepancies are found, ComReg may require a full assessment for those exchange areas claimed to be "un-viable" by the USO; to apply a proportionate adjustment to the net cost calculation (pre-intangibles); *or* to reject the entire USO funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

3.127 Uneconomic customers in economic areas will be identified based on the universal account number ("UANs") of these customers.

[70] See Appendix G for a full list of all the draft Decisions

3.128 The USP can calculate uneconomic customers in economic areas using a probability analysis. However, the identification and allocation of these costs must be consistent with ComReg's draft decision outlined in paragraph 3.126. During the course of ComReg's assessment of a USO funding application, a number of sample "reality" checks will be undertaken; and where material discrepancies are found, ComReg may require a full assessment for those exchange areas claimed to be "un-viable" by the USO; to apply a proportionate adjustment to the net cost calculation (pre-intangibles); *or* to reject the entire USO funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

Principles and methodologies for cost identification and allocation: uneconomic payphones and other USO costs

The Consultation issue

3.129 The USO consists of the provision of a defined set of services to end-users at an affordable price. As well as provision of access at fixed locations and telephone services (as discussed above) these services include: provision of payphones, directory enquiry services and directories[71] ("Directories") and specific services for disabled users. Where these services can only be provided at a loss and where it would not be provided by a commercial operator, ComReg considered it appropriate to include the costs and associated revenues in a net cost calculation.

3.130 For the avoidance of doubt, the USO only covers those payphones that are available on the street, and in other public areas available to the public at all times (i.e. unrestricted access).[72]

3.131 ComReg's preliminary view was that the net cost in relation to payphones and Directories could be calculated as the total avoidable cost minus total revenues of this service. ComReg also noted that with respect to uneconomic payphones that access costs associated with public payphones within uneconomic areas should be excluded to avoid a double count.

3.132 ComReg was of the preliminary view that financial net cost of the provision of specific services for disabled users, as a result of the USO designation which are in addition to the cost associated with the standard minimum level of service to disabled users (which are incurred by all operators), should be determined by calculating total avoidable cost minus total revenues foregone. ComReg also noted that the avoidable cost should include the cost associated with the provision of special services and specialised equipment.

Summary of Respondents' views

3.133 eircom made the only submission which considered uneconomic payphones and Other USO Costs in their response. In relation to uneconomic payphones, eircom notes in their submission that ComReg's concern regarding the potential double count of access costs does not arise, as it is captured already in the methodology of calculating uneconomic areas and uneconomic lines within economic areas. eircom also notes that it does not agree that total revenues foregone should be included in the net cost calculation for specific services for disabled users and instead: *"the revenue figure which should be deducted is the revenue that comes directly from the USO element of the service. In other words, the revenue associated with the "standard minimum level of service to disabled users" should not be deducted."* [73]

3.134 eircom noted that: *"potential revenues from directories services as being appropriate to net off against USO costs…as the directory business is competitive with many competing directory services. Therefore, the benefits, if any, accruing to eircom are commercial*

[71] The USP must provide end-users with a comprehensive printed directory of subscribers, free-of-charge, and updated at least once a year. In addition, the USP must keep a record in the national directory database ("the NDD") 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 must allow access to any information contained in such a record to any such other undertaking, or any person, in accordance with such terms and conditions to be approved by ComReg.

[72] ComReg Document 06/14.

[73] eircom, supra n 9, pg. 15.

benefits rather than benefits arising from eircom's designation as the USP of directory services."[74]

ComReg's Position

3.135 ComReg agrees with eircom's submission that these access costs would already be captured in the analysis of net cost for uneconomic areas and was highlighted by ComReg merely for the purposes of clarity. ComReg has revised its position in relation to appropriate revenues and avoidable costs for specific services for disabled users to be considered in the net cost calculation. ComReg considers it appropriate and consistent that only those revenues which are in addition to the revenues the USP earns from the standard minimum level of service to disabled users be considered in the net cost calculation. Similarly, ComReg considers that it is appropriate that avoidable costs only include those avoidable costs which are in addition to the standard minimum level of service which could have been avoided if the USO provision of specific services to disabled users were not required. ComReg considers that this is consistent with the avoidable cost and revenue foregone principles, as the revenues and costs associated with the standard minimum level of service to disabled users is faced by all operators and are not generated specifically as a result of the USO.

3.136 During the course of ComReg's assessment of uneconomic public payphones, it will consider the reasonableness of the number of payphones in a geographic coverage area. Where the number of uneconomic payphones is considered excessive and unreasonable, ComReg will adjust the net cost calculation to reflect appropriate payphone coverage (in areas where they are mandatory). ComReg considers that it would be inappropriate to include in the net cost calculation duplicate or unnecessary payphones in areas where there is already a provision of a payphone which provides geographical coverage to that uneconomic area.

3.137 ComReg believes eircom's submission concerning the inclusion of potential revenues from directories services is in relation to its "11811" service. For the purposes of clarity, ComReg considers that such revenues will be included in the net cost calculation in the same manner as other third party non-geographic numbers as outlined on paragraph 3.54 (i.e. because this service does not form part of the USO, for the purposes of the net cost calculation, such revenues will be considered to be at arm's length and therefore, the same methodology used for the inclusion of revenues from other non-geographic numbers will be applied to this service).

ComReg's Draft Decision(s)[75]

3.138 In respect of mandatory public payphone provision, the net cost calculation will be based on the total avoidable cost, minus the total revenues foregone. Furthermore, that 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 will 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 will adjust the net cost calculation to reflect appropriate payphone coverage (in areas where they are mandatory).

[74] eircom, supra n 9, pg. 10.

[75] See Appendix G for a full list of all the draft Decisions

3.139 For Directories, the net cost calculation uses the total avoidable cost, minus total revenues of this service.

3.140 The net cost for the provision of specific USO services for disabled users, will be calculated using the total avoidable cost minus the associated total revenues foregone. The avoidable cost will 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).

Format and timing of applications for USO funding requests by USPs

The Consultation issue

3.141 A request for USO funding must accord with the Regulations, the Directive, and the decisions made by ComReg as a result of this consultation process. The Consultation set out a number of requirements regarding the form and quality of information necessary to be included in a USO funding application.

Summary of Respondents' views

3.142 eircom was the only respondent that gave views on this matter. eircom considered the requirement for a request to be signed off by eircom's board of directors as excessive, arguing: *"ComReg's Decision D08/10, both eircom's separated accounts and eircom's "Additional Financial Information" statements will be covered by associated compliance statements which will already be signed off by eircom's Board of Directors."*[76]

3.143 eircom also notes that some cells in the worksheet will need to be hardcoded, but that it will: *"endeavour to maintain all formulae where necessary."*[77]

ComReg's Position

3.144 ComReg notes that ComReg's Decision No. D08/10 only takes effect for the financial year 2010/2011 and that therefore, this proposed new requirement provides for the appropriate sign-off by eircom's board of directors if a USO funding application is made for 2009/2010. Furthermore, ComReg considers the requirement for sign-off by the board of directors as being a standard / requirement, recognised internationally as best practice and consistent with corporate governance practices.

3.145 ComReg accepts that there may be a requirement of some hard-coded cells, however, ComReg considers that in these circumstances, an audit trail and reasoning must be provided.

3.146 The purpose of requesting the year-on-year investment profile is to provide an indicator whether the investment profile of the USP has been efficient and whether there was a once-off or "catch-up" investment required by the USP to meet its USO. As eircom has been designated USP for a number of years, ComReg considers that a 10 year investment profile would be sufficient if eircom were to submit a USO funding application.

ComReg's Draft Decision(s)[78]

3.147 USO funding applications must be consistent with the decisions, methodologies and principles published by ComReg.

3.148 USO funding applications must be fit for purpose.

3.149 USO funding applications must be based on annual information which coincides with the USP's financial year.

3.150 USO funding applications must contain information which, to the best knowledge of the directors, represents a true and fair view. An independent declaration must 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 must be provided with an

[76] eircom, supra n 9, pg. 16.

[77] ibid.

[78] See Appendix G for a full list of all the draft Decisions

appropriate audit opinion, where the Auditor[79] (as approved by ComReg) has in no way assisted with the preparation of the USO funding application, or provided advice or opinions (other than in relation to audit reports) on the methodologies or processes used in preparation of same.

3.151 USO funding applications must be supported by calculations in an MS Excel, or MS Access format.

3.152 Any models submitted in support of a USO funding application must 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 must be set out in a clear and transparent manner, showing the separate calculations for each component (i.e. 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.

3.153 Applications must, with reference to the supporting model, clearly identify with reasoning those customers or groups of customers (i.e. area), that in the absence of the USO, the provision of the service would not have been provided to that customer or groups of customers (i.e. area) by a commercial operator. Furthermore, applications must not include those customers attained through commercial contracts, or those customers which have now become viable, but who were previously considered uneconomic.

3.154 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.

3.155 With respect to the provision of public payphones which are "uneconomic", sufficient detail on their geographic location and proximity of other public payphones operated by the USP (irrespective of their profitability).

3.156 The model provided must 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.

3.157 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. Any application of a sampling methodology by the USP must accord with ComReg Decision D07/10.[80]

3.158 Where a USP has been designated as the USP for consecutive periods, a year-on-year investment profile (since the original first year of its USP designation) by geographic area (where available), between CAPEX and OPEX relevant to the USO differentiating

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

[80] ComReg Decision D07/10, Document 10/67. Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of eircom Limited, published 31 August 2010.

between installations and upgrades, must be provided. (In circumstances where eircom has been designated as the USP, a 10 year investment profile would be considered sufficient).

3.159 USP funding applications must, where otherwise relevant, accord with ComReg Decision No. D07/10 on accounting separation.

3.160 The calculation of the benefits of the USO must be completed by an external expert, independent of the USP.

Timing of applications for USO funding request by USPs

The Consultation issue

3.161 The Regulations do not specify when a USP must submit a request for funding. ComReg 07/39 determined that, in the event that the USP wished to make a request for USO funding, any such request should be submitted on an annual basis, within one month of the publication of relevant audited separated accounts, but no later than six months following the end of the USP's financial period.

Summary of Respondents' views

3.162 Some respondents to Consultation 10/94 agreed with the timeframe by which an application should be submitted. However, O2 responded by saying that it felt the timeframe was too long in that it would be approximately 3 years between the applicable timeframe for assessing the application and when the costs were so incurred. O2 also responded by saying that given the complexities involved, most affected telecoms providers would be unsure how and when the appropriate accounting accrual should be made.

ComReg's Position

3.163 ComReg maintains its view that it is appropriate for a USP to be able to make (if it so desired) a USO funding application on an annual basis, subject to such an application being received within one month of the publication of relevant audited separated accounts, but no later than six months following the end of the USP's financial period.

ComReg's Draft Decision(s)[81]

Request for USO funding by Eircom in respect of its financial period 1 July 2009 to 30 June 2010

3.164 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 date of this Decision, but ComReg may extend this deadline where it considers that there are exceptional reasons for doing so.

Subsequent requests for USO funding by USP(s)

3.165 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 6 months following the end of the financial year in

[81] See Appendix G for a full list of all the draft Decisions

respect of which the request is intended to be made, but ComReg may extend this deadline where it considers that there are exceptional reasons for doing so.

Provisional statement of a net cost

3.166 Without prejudice to paragraph 3.165, the USP shall, no later than 6 months prior to the end of the financial year for which the USP intends to make a request for USO funding, submit a provisional statement to ComReg with the claimed net cost figure (if any) arising from the USO. The provisional statement will not constitute the request referred to in paragraph 3.165, and ComReg will not be obliged to formally assess it. To bring some degree of certainty, ComReg may publish any claimed net cost figure as it sees fit, so that undertakings[82] that are obliged to contribute to such a USO Fund can make the relevant provision for any potential accruals in their accounts in respect of their corresponding financial year. Any such accruals made by undertakings based on the provisional statement made by the USP to ComReg with the claimed net cost arising from the USO may be an over or under estimate of any eventual determination made by ComReg for the actual financial year.

[82] Those undertakings that are obliged to contribute to such a USO Fund and their respective portion will be determined by ComReg in a separate consultation later this year.

4 Principles and methodologies for calculating the benefits of the USO

Overview

4.1 This section identifies the different benefits of being the USP and sets out ComReg's draft guidance and draft decisions for quantifying their value.

4.2 Quantifying the value of the benefits of being the USP is not a straightforward matter. There are various methodologies that can be used, depending on the types and quality of data presented by the USP in support of its application for USO funding.

4.3 At this remove, prior to the receipt of a comprehensive application for USO funding, it is not possible to say with absolute certainty which methodologies will be used by ComReg to quantify the value of the benefits of being the USP. However, this should become clearer once a comprehensive application for USO funding is received. In the meantime, ComReg will identify some of the possible methodologies that could be used and will comment on these.

Benefits resulting from the universal service provision

The Consultation issue

4.4 In the Consultation, ComReg explained that a USP may benefit in certain ways from its USO. ComReg explained that the Directive and Regulations did not prescribe a methodology for identifying, or attributing values to intangible benefits. The Regulations, including Schedule 2, Part A, provide only that the net cost calculation must take account of the benefits accruing to the USP. ComReg explained that it has discretion in how it identifies the relevant market benefits, and how it should treat them.

4.5 ComReg identified four key categories of benefits which it believes can be associated with being a USP, namely:

- Brand Recognition.
- Ubiquity.
- Life-cycle.
- Marketing.

4.6 ComReg examined each of these benefits in detail and discussed how these have been identified and calculated in other European countries. ComReg recognised that the benefits accruing to a USP may be approached in various ways and that there can be some overlap between the categories of benefits. For example, there may be overlap between the benefits that are captured within brand recognition and marketing, as well as the benefits captured by ubiquity and life-cycle effects. In addition, ComReg suggested that benefits represent the effects on a USP of providing the USO which have not been accounted for in the USO costing assessment.

4.7 ComReg explained that it is important to distinguish between benefits which arise due to the large scale of the operator and those which arise from the imposition of USO — because only the benefits arising directly from the USO can be included in a net cost calculation.

Summary of Respondents' views

4.8 All respondents (except one) agreed that there are benefits associated with being the USP and that the categories identified by ComReg captured these. eircom believed that the benefits are either non-existent or immaterial in the context of the current USO. eircom said that it is important to distinguish clearly between the net cost and the benefits of being the USO provider, compared to the net cost and the benefits of being a large commercial operator without a USO.

4.9 Vodafone however, believes there are a number of additional benefits to a provider of USO services, and identified a number of categories which it considered relevant, including: customer life cycle; potential future sales of services; brand recognition, marketing; operational benefits; payphones; network effects; and volume discounts. Vodafone believes these benefits should be evaluated to determine their materiality for the net cost calculation. While Vodafone acknowledges ComReg's intention to evaluate a subset of these potential benefits, it urges ComReg to undertake, at a minimum, a preliminary analysis of the remaining benefits, and to provide reasons why they do not warrant inclusion in the net cost calculations.

4.10 ALTO considers that benefits gained by eircom in providing the USO far outweigh the cost.

ComReg's Position

4.11 ComReg is of the opinion that the following are key benefits of being the USP and are relevant to a USO costing assessment:

- Brand Recognition.
- Ubiquity.
- Life-cycle.
- Marketing.

Brand Recognition

4.12 The USP's brand and customer perception is enhanced through the provision of the USO. Brand recognition also encompasses corporate reputation and goodwill. The USP benefits from the prominence of its logo, which is widely displayed (telephone bills and telephone directories)[83] and from the positive reputation it has among its various stakeholders from being a USP. It is likely that a USP gains and retains more customers than it would in the absence of a USO. Brand loyalty may also translate into a degree of market power, which an operator might not have, if it were not the USP. In addition, brand loyalty may reduce the advertising and marketing costs that the USP would otherwise have to incur to achieve the same effect, because customers are more likely to be aware of the USP.

Marketing benefit

4.13 Marketing benefit arises from, for example, potential commercial benefits relating to usage data and benefits from advertising and logo display on public payphones and WiFi hotspots. Data protection laws in Ireland require the USP not to sell data to marketing companies and therefore, they cannot benefit from access to this data. ComReg's view is

[83] The logo display on public payphones is considered by ComReg to be a marketing benefit.

that the benefit of advertising and the eircom logo display on uneconomic call boxes and WiFi hotspots is relevant to include in the net cost calculation. However, to the extent that this benefit is taken into account in any valuation of brand recognition, it would not be accounted for separately as a potential benefit accruing to the USP.

Ubiquity

4.14 Normally, the USP has a nationwide presence. The advantage conferred by ubiquity is that all customers know that the USP provides services nationwide. The USP has, therefore, the potential to leverage this universal coverage in dealings with customers. A key feature of ubiquity is that when a customer moves, for example, from an uneconomic area to an economic one, the customer is more likely to remain a customer of the USP – even with alternative providers in the area. Therefore, the benefit is enhanced where customers move into an area where there is competition between suppliers (as a proportion of customers will not be aware of the existence of competing suppliers).

4.15 Taking account of the potential for double-counting of ubiquity and life cycle benefits, ComReg's view is that ubiquity benefits are the potential gains that arise from spatial changes of the consumer base (e.g., due to movement of customers from uneconomic to economic areas) whereas life cycle benefits mainly arise from changes of consumption patterns over time. This distinction between ubiquity and life cycle is discussed further below.

Life-cycle

4.16 This benefit arises from the idea that a proportion of lines which are currently uneconomic (whether in uneconomic areas or serving uneconomic customers) may eventually become profitable in the future. The benefit mainly arises from changes in consumption patterns or in the monthly fee over time. For life-cycle to be a potential commercial benefit to a USP, there needs to be a likelihood that the USP will continue to serve these areas/customers when they become profitable (due to either increased revenues or decreased costs).

Potential additional benefits

4.17 ComReg has also considered the possible additional benefits raised by some of the respondents and whether or not they are relevant to the USO net cost calculation.

4.18 **Potential future sales of services:** ComReg considers that the benefit of being able to provide non-USO services in areas because of the infrastructure put in place as a result of USO, would be captured in the net cost calculation. The net cost calculation takes account of all the current revenues foregone, should the provision of the USO not be required, which includes the revenues generated using USO infrastructure. Therefore, to avoid potential double counting of those costs and revenues, they would not be accounted for separately as a potential benefit accruing to the USP.

4.19 **Operational benefit:** It is probable that this benefit, which may arise, for example, from the retention of the telephone directory, which contains eircom's operational contact information, would be encompassed either in the brand or marketing benefits. Again, it would be important to ensure that there was no double counting. ComReg considers the USP's brand and customer perception is enhanced through the provision of the telephone directory and may lead to brand recognition through the prominence of the USP's logo on the directory.

4.20 **Network effects:** are not a benefit that directly accrues to an operator through being the USP.

4.21 In telecommunications there are network effects: the more people who join a particular network, the more valuable membership becomes, because people on the network are able to contact, and be contacted by, more people than they were before. The connection of consumers to the same network (or networks perfectly interconnected) creates additional value for providers and users. For example, the benefits from using the same network increase customers' willingness to pay for services. This network effect is not a benefit that directly accrues to an operator through being the USP. It is a benefit shared amongst all interconnected networks and their subscribers. The prices (interconnection and the valuation placed by consumers on joining that particular network) reflect this effect. For these reasons, this type of effect is not typically emphasised in the context of potential USO benefits. However, ComReg considers that this effect is captured to a certain extent by the USO's profitability which is considered under the unfair burden assessment.

4.22 A customers' decision to join a network takes into account its own utility and not the potential wider social benefit flowing to all subscribers. Clearly, it is socially desirable to ensure that basic telephony services are available at an affordable price to all end-users in the State. The Directive highlights the importance of such services in social and economic cohesion. Implementation of a USO and inclusion of a service in that USO arises because it encompasses a 'network externality'. In particular, absent a USO, there may be certain areas or groups of customers (i.e. uneconomic areas or uneconomic customers in profitable areas) which the USP operator might not otherwise serve. This externality is addressed through social schemes, such as, the Department of Social Protection's (DSP) Telephone Allowance and indeed, by the fundamental structure of the universal service.

4.23 In ComReg's view, there are no 'network effects' or 'network externalities' that need to be separately accounted for as part of the USO costing assessment.

4.24 **Volume discounts:** ComReg considers that it would be inappropriate to include this element in a net cost calculation. Volume discounts arise due to the fact the incumbent is a large, well established operator, and this benefit would not cease in absence of the USO provision.

ComReg's Draft Decision(s)

4.25 The net cost calculation must assess the benefits, including intangible benefits, to the USP. ComReg will consider, at a minimum, the following benefits (as a result of the USO) for a USO net cost calculation:

- Brand Recognition.
- Ubiquity.
- Life-cycle.
- Marketing.

4.26 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 (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 direct or indirect 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).

Methodologies and data requirements for calculating benefits

The Consultation issue

4.27 The Consultation set out the factors that would need to be considered when calculating the intangible benefits derived from the USO provision. ComReg recognised that the definition and estimation of the benefits accruing to a USP may be approached in various ways, and through a range of alternative methodologies. ComReg noted that there was a heterogeneous approach in other jurisdictions to the evaluation of the benefits of the USO. ComReg suggested that market benefits are the positive effects on a USP of providing the USO, which have not been accounted for in the direct costing of the USO

4.28 The Consultation suggested different approaches to determine the value of the benefits of being the USP. ComReg proposed that it could use one or, a combination of approaches to estimate the value these benefits. While all the benefits of being a USP may not be precisely quantifiable, it should be possible to arrive at reasonably precise estimates.

4.29 Other jurisdictions calculate and define these benefits in different ways. For example, payphone advertising benefits are included as a brand benefit in France and Italy, whereas in the UK, it is considered a marketing benefit. While the benefits also vary in magnitude across EU countries, brand recognition is often recognised as the most important benefit.

4.30 ComReg considered that only the benefits resulting from the designation as a USP should be included in the net cost calculation (i.e. any benefits rising from the fact the USP is a large player in the market should be excluded from the calculations).

4.31 The Consultation explained that care must also be given to avoid double-counting as some of the benefits may overlap.

4.32 In order to estimate the value of these benefits arising from USO, ComReg needs accurate and up-to-date data. The Consultation sought views as to what method (or combination of methods) for calculating the individual benefits, were most appropriate, and what data (and from what sources) would be required to best estimate these benefits.

Summary of Respondents' views

4.33 Some respondents suggested that an approach similar to that used by Ofcom to estimate the categories of benefits would be reasonable.

4.34 eircom submitted that the benefits would be immaterial.

4.35 eircom submitted that only the incremental value of the brand which arises specifically because of the USO is a benefit of the USO and argues that the USO carries an inherent risk to the USP's brand.

4.36 eircom believes it would be impossible to measure ubiquity benefit with any degree of objectivity or accuracy, and that the benefit will, in any case, be immaterial or non-existent.

4.37 Furthermore, in eircom's view, the issue of NPV of uneconomic customers potentially adds a layer of complexity, and consequent delay, to the overall process for no apparent gain. eircom does not accept that only future profits should be considered and is in favour of taking a single-tier approach to costs and revenues.

4.38 In relation to marketing benefit, eircom argues that many unprofitable payphones are in locations that would not confer any marketing benefit. eircom believes that possible benefits of marketing at such locations must be compared with the value of alternative marketing options (e.g. billboards) in the same locations (and not with alternatives in urban locations). With regard to WiFi hotspots, eircom says that WiFi hotspots at otherwise uneconomic payphones would in fact have little value.

4.39 eircom suggested that ComReg could adopt a 'first principles' approach and conduct market research where required, backed up by data provided by eircom, in order to assess the benefits. eircom notes that care is needed to avoid double counting of benefits.

4.40 eircom and Vodafone note that eircom (as the current USP) would be the chief source of data. Vodafone believes that secondary data sources, such as ComReg's own survey data, other NRA information, and established business valuation practice, may also be required.

4.41 BT suggested that ComReg should commission appropriate independent experts with experience in valuing marketing, goodwill etc., and engage in a programme of research including conducting independent surveys to determine methods to calculate the individual benefits.

ComReg's Position

4.42 ComReg expects that the USP will be the main source of data when determining the benefits of the universal service (e.g., surveys). One approach would be for the USP to first provide estimates of the benefits for ComReg to review and verify subsequently. However, there may be incentives to minimise the value of the benefits. Therefore, ComReg will exercise caution when using any methodology which relies solely on USP supplied data.

4.43 An alternative approach would be for ComReg to develop a specific methodology to estimate the benefits. To this end, ComReg can in addition to primary sources of data (and hence surveys) use secondary data sources to verify any calculations. As suggested by one respondent, it is open to ComReg to commission independent experts (with experience in valuing marketing, goodwill etc.) and a programme of research, including, conducting independent surveys to determine methods to calculate the individual benefits.

4.44 ComReg's overall approach to assessing the value of benefits will be based on a combination of methodologies and data sources, as appropriate, with a view to proving reasonable estimates across approaches. This is because of, amongst others, the following factors:

- In general, estimating the benefits from the USO is complex.
- Data sources which may be used to determine the value of the benefit are likely to be predominantly those of the USP. However, in advance of receiving an application for USO funding from the USP, the type and quality of data that the USP is able to provide, and the manner in which they will be presented by the USP, are not currently known.
- A heterogeneous approach in other jurisdictions to the evaluation of the benefits. Thus, estimation of the benefits accruing to a USP may be approached in various ways, and through a range of alternative methodologies. There are pros and cons to all of the methodologies (as detailed in the Consultation).

- The potential issue of the double-counting of benefits, and that only those benefits arising from the USO are included.

4.45 Notwithstanding the above, ComReg sets out an approach in principle, to each of the key benefits in turn below.

Brand Recognition

4.46 ComReg' view is that the USP has a brand benefit through providing the USO and that this affects the customer's perception (of its own and other operators' brands), thereby impacting on the provider's overall current and future profitability. This benefit arises predominantly from a USP's ability to gain and retain more customers than it would in the absence of a USO (e.g. customers of the Department of Social Protection's (DSP) Telephone Allowance scheme).

4.47 ComReg' view is that it is relevant to evaluate brand recognition related to standard telephone line provision. As brand recognition is likely to be the largest benefit arising from the USO in Ireland, ComReg will need to ensure any proposal is rigorous and provides a reliable estimate of the value of the benefit.

4.48 ComReg expects that the USP will be the main source of data (e.g., surveys) when determining a value for this category of benefit consistent with the regulatory best practice principles of proportionality and practicality. However, to assess the benefit of brand recognition various approaches could be followed:

- Estimating brand recognition through valuation multiples implicit in a USP's transaction price.
- Identification of cash flows generated by brand recognition, corporate reputation and goodwill.
- Depreciated replacement cost (DCR) approach.
- Primary research/survey data.
- Regression techniques.

4.49 Therefore, ComReg may use one or a combination of approaches to determine a potential range of brand value. For example, by comparing research/survey data to a valuation approach to ensure a robust estimate. An additional approach would be to adopt a marketing spend approach. Ofcom have quantified this benefit as 20 percent of the USP's overall advertising expenditure.

4.50 In principle, the brand value is estimated on the whole non-USO market since the eircom brand is likely to be very closely associated in the minds of consumers with the universal service. Once the total brand benefit value is determined, ComReg will then need to determine the proportion of this value that would be attributable to the operator because of the USO. For the above reasons, ComReg would first review the appropriateness of the methodologies used by the USP to assess the value of this benefit, and then determine whether or not to specify in more detail a particular methodology.

Marketing

4.51 ComReg agrees with eircom that the benefit of marketing at unprofitable payphones must be determined by comparing similar marketing options in the same (or similar) locations.

The value of the benefit of WiFi hotspots cannot be discounted until such time as an accurate valuation has been made on this benefit.

4.52 In the Consultation, ComReg proposed using a similar approach to that used by Ofcom to determine the marketing benefit. The Ofcom approach took two potential elements into account when assessing the marketing benefit of each uneconomic payphone. Firstly, Ofcom considers corporate branding or logo display to be a form of advertising benefit. Secondly, Ofcom considers that the value of income from advertisements on kiosks should be included in the profitability of a payphone (which are provided as a result of the USO). Ofcom assumed only 50% of uneconomic payphones were suitable for advertising because of location and vandalism.

4.53 Using a similar approach to Ofcom's would entail determining the income from advertisements on uneconomic public payphones, and using this to estimate the benefit gained from the logo display and any advertising on such public payphones. However, estimating the marketing benefit for uneconomic payphones involves establishing the number of uneconomic payphones which have an advertising value. ComReg would need to determine which of the uneconomic payphones were suitable for inclusion in the calculation. ComReg would expect that the USP would be able to supply the relevant information. ComReg would first review the appropriateness of the methodologies used by the USP to assess the value of this benefit, and would then determine whether or not to specify in more detail a particular methodology.

Life Cycle

4.54 ComReg recognises that, in principle, a proportion of lines which are currently uneconomic (whether in uneconomic areas or serving uneconomic customers) may eventually become profitable in the future. For commercial reasons, an operator might choose to retain a proportion of currently unprofitable customers in the expectation of future profit. However, there are a number of factors that may impact the expectation regarding the future profit of currently uneconomic customers. For example:

- The difference in revenues and costs for these particular set of USO customers – it is probable that this difference is sufficiently large, loss making subscribers today would not be expected to become profitable over time.
- The proportion of such subscribers who the USP would keep – factors might alter the likelihood that customers would continue to be served by the USP. These factors include: latency and loyalty effects; *when* an area could become economic (if ever); and the range of service providers that a customer might have (through, for example, pre-selection capabilities).
- Macroeconomic expectations
- Competitive expectations
- Technology and product expectations

4.55 The customer life time value is considered in the net cost calculation above in section 3.117 to 3.124. ComReg's view is that the additional value of the life cycle benefit in relation to the proportion of customers that the USP as a commercial operator would not serve with the USO is likely to be insignificant and, therefore, could be excluded from the valuation of the benefits.

Ubiquity

4.56 ComReg understands that a particular value from the ubiquity benefit is that which arises as a result of customers, who are not aware of the existence of alternative suppliers when moving to an area, continuing to use services offered by the USP because they know that the USP is available to offer service. Ubiquity benefits, therefore, are the potential gains that arise from spatial changes of the consumer base (and hence distinct from the potential life-cycle benefit which arises from changes of consumption patterns over time).

4.57 In that regard, there are a number of cases differentiated according to which types of areas may be involved when customers and/or households are moving. Therefore, the analysis of migration flows would, at a minimum, consider:

- The percentage of customers moving from uneconomic to economic areas; and
- The percentage of profitable customers moving into uneconomic areas.

4.58 One approach to evaluate ubiquity is to compare the proportion of customers that move to an economic area and retain the USP relative to the market share of the USP. Another method could assess the number of households that would have chosen an alternative operator, had they been aware of the alternatives.

4.59 ComReg's view is that potential ubiquity effects are to be accounted for when calculating benefits and, therefore, excluded from the direct cost calculation. If the value of the life cycle benefit in relation to uneconomic customers is excluded from the USO net cost calculation, there can be no double count of these effects with ubiquity.

4.60 ComReg expects that the USO would be one source of data to evaluating this benefit. However, there are a range of potential other data sources, including, publically available data, such as, the Central Statistics Office. ComReg would first review the appropriateness of the methodologies and data sources used by the USP to assess the value of this benefit, and then determine whether or not to specify in more detail a particular methodology.

ComReg's Draft Decision(s)

4.61 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. If an application for a USO fund is received, ComReg would first review the appropriateness of the methodologies used by the USP to assess the value of the benefits. From a review of the valuation of the benefits provided by the USP, ComReg will then determine whether or not to specify in more detail a particular methodology to assess the value of each benefit consistent with best regulatory practice, proportionality, and practicality. 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.

5 Principles and methodologies in relation to an unfair burden

Overview

5.1 This section sets out ComReg's draft guidance and decisions on how it will determine the existence or not of an unfair burden. It sets out a number of methodological steps to provide a structured, transparent, and robust framework in this regard.

The Consultation issue

5.2 In the Consultation, ComReg explained that a decision to establish a sharing mechanism would firstly require a finding of a positive net cost for the USO, and, secondly, that this net cost constitutes an unfair burden to the USP. ComReg explained that under the Directive (and as confirmed by recent cases before the European Court of Justice ("the ECJ") NRAs have a margin of discretion in determining what an unfair burden is.[84]

5.3 ComReg suggested that a positive net cost does not assume that there is also an *unfair* burden: a loss making situation may be a burden, but it is not necessarily an *unfair* one.[85] Whether a burden is unfair, depends not only on there being a positive net cost, but also whether this impedes the USP from competing fairly with the rest of the industry.

5.4 ComReg suggested that, in principle, there is an unfair burden when a USO results in a positive net cost for a USP, that is not relatively small compared to the administrative costs of a sharing mechanism, and, when it significantly modifies market equilibrium and leads to deterioration in a USP's market position.

5.5 ComReg proposed that three conditions are necessary for an unfair burden:

1. There must be a verifiable direct net cost for the USP.
2. The benefits accrued by the USP must not outweigh the net cost (i.e. a positive net cost for the USP exists).
3. The positive net cost is material, compared to the administrative costs of a sharing mechanism and causes a significant competitive disadvantage for a USP.

Summary of Respondents' views

5.6 Only eircom commented in relation to this issue. It was of the view that any positive net cost is an unfair burden because of the unusually high access costs in Ireland, and the individual circumstances of the USP. At the same time, eircom also suggested that the legislation makes it explicit that the existence of a net cost is insufficient to justify establishing a sharing mechanism, and that a finding by ComReg of an unfair burden is a prerequisite for sharing a USO net cost. eircom suggested that, ComReg must set out the general and objective criteria, against which to assess the existence or not of an unfair burden.

5.7 According to eircom, it is not necessary to analyse the competitive position of the USP on the market concerned.

[84] *Commission v Belgium*, paragraph 44, Case C-222/08 (judgment of the Court of 6 October 2010).

[85] ibid, paragraph 42.

ComReg's Position

5.8 ComReg will determine if there is an unfair burden, if there is a positive net cost of providing the USO. ComReg will do this on a case by case basis.[86]

5.9 A necessary (but insufficient) condition for an unfair burden is a verified direct net cost that is greater than zero. However, a positive net cost cannot and does not, *a priori* represent an unfair burden. For there to be an unfair burden, 3 cumulative conditions must be met:

1. There must be a verifiable direct net cost.
2. The benefits of the USO must not outweigh the net cost (i.e. there is a positive net cost).
3. The positive net cost is (a) material compared to administrative costs of a sharing mechanism; and (b) causes a significant competitive disadvantage for the USP.

ComReg's Draft Decision(s)

5.10 For a net cost to be an unfair burden on a USP, 3 cumulative conditions must be met:

1. There must be a verifiable, direct net cost.
2. The benefits of the USO must not outweigh the net cost (i.e. there is a positive net cost).
3. This positive net cost is (a) material compared to administrative costs of a sharing mechanism; and (b) causes a significant competitive disadvantage for the USP.

Thresholds and criteria to determine unfair burden

The Consultation issue

5.11 ComReg proposed three stages of analysis to assess the existence or not of an unfair burden on a USP:

1. If the positive net cost is relatively small, assess whether or not the cost of establishing a sharing mechanism would be disproportionate to the net transfers to a USP.
2. If the positive net cost is not relatively small, assess whether or not this net cost materially undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed.
3. If the positive net cost undermines a USP's profitability, assess whether or not such a net cost materially impacts a USP's ability to compete on equal terms with competitors going forward.

Administrative costs

The Consultation issue

5.12 In the Consultation, ComReg suggested that there will be regulatory costs of establishing a USO fund, and that these may be significant. In addition, it may be that the positive net

[86] Regulation 11 (3) of the Regulations provides that: *"The Regulator shall, on the basis of such information, including information supplied pursuant to paragraph (2), as it considers sufficient to enable a determination under this paragraph to be made, determine whether an obligation referred to in paragraph (1) may represent an unfair burden on the undertaking concerned."*

cost is relatively small, and that the cost of establishing a sharing mechanism would be disproportionate to any net transfers to the USP.

Summary of Respondents' views

5.13 All respondents agreed that the first test regarding the administrative costs outweighing a positive net cost was appropriate. Most respondents believed that where a positive net cost is relatively small, it would not justify a sharing mechanism — in particular, where the burden of the net cost would not pose a significant competitive disadvantage for a USP. eircom said that sharing the net cost of USO may not be justified where that net cost and the administrative cost of the sharing mechanism are of comparable amounts. However, it expected these costs to be small, because only the costs of running such a scheme are relevant to consider, and not the set up costs. eircom also said that there are a number of ways that administrative costs could be reduced, for example, when shared with the regulatory levy.

5.14 In relation to the potential materiality of administrative costs, eircom said that where the net cost exceeds the administrative costs by at least 5%, then the net cost could be considered sufficiently material. Vodafone believed that it cannot be that any positive net cost, no matter how insignificant, would require further analysis by ComReg. Vodafone said that ComReg could consider implementing a threshold point, or range, below which no further assessment is required. Vodafone foresees a range of interpretations as to what qualifies as "relatively small" in determining a material, positive net cost.

ComReg's Position

5.15 ComReg will determine, on the basis of audited costs of the USO, whether USO financing is not required or unjustified, taking into account the administrative costs of establishing and operating a sharing mechanism, compared to the net cost of the USO. The administrative costs will include operational costs. They may include establishment costs of a USO fund. However this would depend on the type of funding mechanism that might be established. ComReg's view is that it would also be relevant to compare the administrative costs to the percentage contributions made by the USP and other operators to a sharing mechanism, if any.

ComReg's Draft Decision(s)[87]

5.16 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 (if any) to a USP.

The USP's financial position and competitive conditions

The Consultation issue

5.17 In the Consultation, ComReg proposed to assess the USP's financial position against whether or not a net cost materially undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed. In particular, where the positive net cost is *not* relatively small, ComReg proposed to assess the significance of a positive net cost compared to the USP's revenues and profits/profitability. ComReg suggested that profit

[87] See Appendix G for a full list of all the draft Decisions.

thresholds (for example) could be used to assess the materiality of a positive net cost relative to a USP's profits/profitability.

5.18 However, ComReg suggested that a static impression of a USP's revenues and profitability alone may not provide a full view on whether a positive net cost can be borne by a USP, in a generally liberalised sector. In addition to the information on a USP's revenue and profits/profitability, there are other dynamic indicators which may, or may not, indicate the USP's ability to sustain a USO in the foreseeable future. A holistic impression, using both the static and dynamic criteria proposed by ComReg, might better indicate the extent to which a positive net cost could be an unfair burden.

5.19 ComReg suggested that if a USP's positive net cost is not likely to be accommodated within a USP's profitability, and there are sufficient markets on which there is effective competition,[88] there could be an unfair burden. This is because the USP is impeded in its ability to fairly compete in the market. For this reason, a profitability analysis could be complemented by an assessment of potential competitive distortions.

5.20 Therefore, ComReg also proposed to also evaluate whether or not a net cost materially impacts a USP's ability to compete, dynamically, with its competitors.

Summary of Respondents' views

5.21 All but one respondent agreed with ComReg's proposed approach.

5.22 eircom suggested that, having regard to recent ECJ case-law, what must be assessed by ComReg is whether the USO net cost constitutes an unfair burden in light of eircom's ability to bear it, having regard of the USP's individual circumstances: *"... a burden which, for each undertaking concerned, is excessive in view of the undertaking's ability to bear it, account being taken of all the undertaking's own characteristics, in particular the quality of its equipment, its economic and financial situation and its market share*."[89]

5.23 eircom argued that market share is not the most significant of the criteria discussed by the ECJ case-law, but that it is relevant only to the extent that it may give an indication of the USP's financial and economic strength. Therefore, eircom believes that an analysis of an unfair burden would not need an analysis of the competitive position on the market, as proposed by ComReg. According to eircom, dynamic criteria are inappropriate as they consider market/competitive issues, rather than the USP's own ability to bear the USO cost.

5.24 Therefore, eircom suggests that an unfair burden should be determined only by looking at the USP's financial position and its ability to bear the burden. For an assessment of a USP's financial position eircom suggested that:

- ComReg must take into account a USP's level of indebtedness, the USP's profitability is but one element of such analysis.
- A USP's revenues are an insufficient comparator for the purpose of determining the USP's financial position.
- The test should not be conducted by reference to the profits of a reasonably efficient operator, but to its actual profits.

[88] Or competition that is sufficiently widespread to suggest a real risk of "cherry picking."

[89] *Commission v Belgium,* Case C-222/08 (judgment of the Court of 6 October 2010).

5.25 BT and ALTO agreed to evaluating a USP's profits/profitability and revenues for the following reasons:

- To conduct such a check would likely establish the magnitude and proportion of the USO costs to the USP's overall business and help assess the overall impact of the USO on the USP's business.
- This will also supply trend information to indicate, over time, whether the burden is growing or declining and thus, providing signs such as whether ComReg should consider other options, such as, tendering for the USO.

5.26 BT and ALTO also considered that an efficiency test should be included in the assessment of the burden, and that it is fundamental to assess whether the USP has gained value for money.

ComReg's Position

5.27 At paragraph 49 of *Base & Others v Ministerraad*, the ECJ also ruled that a burden is unfair if it: *"….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."*

5.28 eircom does not believe that it is necessary to analyse the competitive position of the USP in the market, having regard to *Base & Others v Ministerraad*. However, ComReg differs with eircom in relation to the implications of *Base & Others v Ministerraad.*

5.29 *Base & Others v Ministerraad* confirms that NRAs have significant discretion in this area:*"…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."*[90]

5.30 It is necessarily implicit in the ECJ's ruling that the particular characteristics of the USP cannot be assessed in isolation – as if the USP were the only firm operating in the market. In the liberalised market the USP faces competitors. The reason for a USO in the first place is because of the existence of a liberalised and competitive market, and, that absent a legal obligation to serve certain uneconomic customers; they might not be served at all. The possibility of a net cost then arises, partly because the USO's ability to internally finance (cross subsidise) the uneconomic part of the USO, may decrease as competition intensifies in the economic areas (and as the USP loses customers). The reference to the USP's market share and its economic position in particular, in *Base & Others v Ministerraad* is perfectly consistent with this, and indicates that some attention at least, must be paid to the competitive situation on the market.

5.31 Accordingly, ComReg believes that it is relevant and necessary to take into account the competitive position of the USP in the market.

The USP's financial position

5.32 An analysis of an unfair burden does require an assessment of the relative importance of a positive net cost of the USO, compared to a USP's profits/profitability and revenue base. In principle, the impact of a USO can undermine the profitability of a USP or endanger its financial viability. If, for example, there is a positive net cost, it is probable that a cross-

[90] See paragraph 45.

subsidy would be required, meaning there would be a call on a USP's profits.[91] However, a negative profit impact does not necessarily imply an unfair burden. Therefore, an analysis of a USP's financial position seeks to answer the question of whether or not a positive net cost materially undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed in the prevailing market circumstances (and hence, whether it would constitute an unfair burden). This analysis would take account of a USP's ability to bear a positive net cost (i.e. a USP's ability to fund a USO today through cross-subsidy revenues).

5.33 ComReg also considered whether or not the analysis of the USP's financial position, should take account of a company's level of indebtedness.

5.34 The USP's level of indebtedness is not driven by the USO in particular, or necessarily at all.

5.35 The particulars of a company's financial structure, including levels of debt, are not directly relevant to a calculation of USO net costs and are not relevant to a consideration of whether or not any positive net cost constitutes an unfair burden. In particular, under Schedule 2, Part A of the Regulations,[92] the net cost of USO is to be calculated as the difference between the net cost for a designated undertaking of operating with the USO, and operating without the USO. Schedule 2 of the Regulations provides that due attention is to be given to correctly assessing the costs that any designated undertaking would have chosen not to incur, had there been no USO.

5.36 The current USP, eircom, is already allowed a sufficient rate of return on its investments. Some account should be taken of incentives already given to the USP through other regulatory measures e.g. setting the WACC and regulatory pricing measures. Furthermore, capital structure is a financing decision based on a company's own commercial interests, and therefore, independent of regulatory intervention. Notwithstanding this, the associated implications on the USP's incentives and ability to invest have already been examined by ComReg. For example, the objective for setting the WACC is to allow a sufficient return to investors that provides incentives for adequate investment. The current WACC of 10.21% is a sufficient allowed cost of capital. In addition, the WACC of 10.21% takes account of the impact of financial volatility on eircom's cost of capital.[93]

5.37 A USP may experience cash flow constraints which may or may not impact a USP's ability to pay back a level of indebtedness. In that regard, it may be appropriate to examine, amongst other financial ratios, a USP's cash flow. However, there may be other commercial factors that impact cash flow, and there is the possibility that levels of indebtedness may change over time. An examination of this issue would need to be supported with a detailed analysis of a USP's financial accounts.

5.38 On balance therefore, ComReg's view is that it would not be appropriate to take account of the implications of a company's commercial financial strategy, including its level of indebtedness, in examining the question of an unfair burden. Such risk has been factored

[91] On the other hand, if there is no positive net cost, taking into account the benefits, no USO cross-subsidy would be required.

[92] Reflects Annex IV of the Directive.

[93] The cost of capital represents the forward looking rate of return required by investors to commit capital and bear future financial and business risk. The full Decision document – ComReg 08/35 is available on the ComReg website www.comreg.ie.

into other regulatory decisions, including, a sufficient allowed cost of capital. An approach to analysis of unfair burden should ensure appropriate incentives by a USP.[94]

5.39 ComReg believes that an appreciation of a USP's profitability and efficiency is relevant to determine its ability to fund a USO today (a static approach). However, it may not be sufficient to find that a USP's profitability is not undermined and that it earns a fair rate of return on capital employed. If the USP has a positive net cost, and it is financially viable, the USP may nonetheless be impeded in its ability to fairly compete in the market. Whether there is an unfair burden should involve a consideration of the dynamic impact that the USO may have on the USP. (The USP's market share and economic position for example, will also be relevant in this regard).

The USP's market share

5.40 *Base & Others v Ministerraad* expressly refers to the USP's market share as a characteristic to take account of in relation to an unfair burden. Market share is relevant in a USO context in order to understand whether the degree of competition faced by a USP in access markets, in particular, is such that its ability to bear the USO is undermined and, therefore, whether there is an unfair burden. This seems to be the obvious implication of the reference to the USP's market share in *Base & Others v Ministerraad,* if it is to have any real bearing on the issue of unfair burden.

5.41 ComReg's view is that this would imply taking into account the competitive conditions generally and the market position of a USP, in order to assess its ability to bear a USO net cost. For example, if a USP were operating under a monopoly position, any funding of a positive net cost could be sustained through cross-subsidies from profitable customers to unprofitable customers (who would not be served if there were no USO). A monopoly position can protect a USP's financial stability and enable it to provide the USO over the fixed telephone network. If the USP enjoys a monopoly position in the relevant markets and/or closely related markets, this ought to enable a USP to fund its USO. Indeed, liberalisation of the electronic communications sector may originally have been delayed in the late 90s, partly to allow USPs to maintain their monopoly positions for long enough to prepare for fulfilling their USO in a liberalised, market that was expected to become more competitive.

5.42 If a USP is facing competition in the most profitable segments of the market, its ability to cross-subsidise USO customers would be undermined and could eventually lead to a USP being unable to bear any positive USO net cost – for example, if competition is sufficiently widespread to suggest "cherry picking." Hence, it is likely that the burden of a positive net cost is unfair if the USP's market power (market share being one element of such analysis) is still insufficient for it to maintain a reasonable profit. In these circumstances, it is more likely that a USP would not be able to bear a significant positive net cost (i.e. internally cross subsidise from economic to uneconomic areas or cross-subsidises within the product or service) without potentially damaging its market position.

5.43 For these reasons, a USP's financial position depends also on the degree of competition in the relevant market. It may therefore be necessary to complement a profitability assessment with an overall market analysis assessment, including, the issue of market share, to show whether or not the burden would be unfair.

[94] According to Recital 24 of the Directive, a USP has an incentive to overestimate the net cost of USO.

5.44 ComReg notes the view of one respondent that market share is not the most significant of the criteria and that the relevant market share to consider is that of electronic markets generally. However, ComReg's view is that it is a very important issue when assessing whether a USP would be able to bear a positive net cost — with the result that the burden of that positive net cost could be considered unfair. In that regard, the more narrowly defined relevant access markets are the relevant starting point, as local loop access is the main driver of costs associated with the USO.

The USP's economic position

5.45 In addition to market share, the net cost calculation is affected by the level of prices allowed by the regulator, and by any objectives to promote competition. If a USP is pricing to generate profits to cover any USO cross subsidies, operators may compete away these profits (i.e. "cherry picking"). In those circumstances, a USP may be "at a competitive disadvantage" and, hence, there may be a risk that the universal service cannot continue to be borne by a USP alone, even though a USP is financially viable. Therefore, some assessment of how the range of USO rules, other electronic communications rules, pricing policies, and evolving competition, affect each other – at least in so far as they impact on the issue of universal service — is relevant to the ultimate question of whether the burden of a net cost is actually unfair. Taking into account pricing obligations (wholesale and retail) on a USP can inform its ability to bear the USO. Such an analysis is not interdependent of market share and the market position of the USP, which are also relevant factors to consider in relation to its ability to bear a USO.

Static versus dynamic approach

5.46 Profitability can indicate a USP's ability to bear a USO in the short term. However, a static view of a USP's revenues and profitability may only provide a weak indicator of a USP's ability to continue paying cross-subsidy revenues into the future. It is also unlikely to provide a complete understanding of "cherry picking", and the ability of the USP to bear a positive net cost.

5.47 A number of dynamic criteria can inform the USP's ability to sustain a USO positive net cost, in particular, market share. ComReg will evaluate profitability and economic criterion statically and dynamically. A holistic analysis using static and dynamic criteria, would better indicate the extent to which a positive net cost, if any, might be an unfair burden. The timeframe of the dynamic analysis will not exceed approximately 3 years.

ComReg's Draft Decision(s)[95]

5.48 In relation to determining the existence or not of an unfair burden, ComReg will carry out, at a minimum, the following analysis:

- If the positive net cost is not relatively small, ComReg will assess whether or not this net cost materially undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed; and

[95] See Appendix G for a full list of all the draft Decisions

- If the positive net cost undermines a USP's profitability, assess whether or not such a net cost materially impacts a USP's ability *to compete on equal terms* with competitors going forward.

5.49 ComReg will use the following criteria , statically and dynamically, to determine whether or not a net cost burden is actually unfair:

- Changes in profitability, including an understanding of where a USP generates most of its profits over time.
- Changes in accounting profits and related financial measures e.g. earnings before interest, tax, depreciation and amortisation ("EBITDA") analysis.
- Changes in direct USO net cost, if any, over time.
- Estimates of average level of cross-subsidy between classes of more or less separately accounted for services, and changes in these over time.
- Changes in prices over time.
- Changes in market share and/or changes in related markets.
- Market entry barriers.

6 Treatment of confidential information

The Consultation issue

6.1 ComReg's policy with respect to the treatment of confidential or commercially sensitive information is set out in ComReg 05/24. ComReg is of the view that the USO Regulations place a premium on accuracy of records, transparency and submission of detail and that this affects confidentiality claims also.

6.2 Clearly there is a requirement to have all the necessary supporting documentation made available to ComReg to allow it to establish the principles and methodologies for assessing the possibility of an unfair burden on a USP. There is also the recognition that all of the interested and affected stakeholders will require access to information and data that may or may not have been confidentially supplied to ComReg or sought by ComReg.

6.3 ComReg does have a legal obligation to recognise and maintain the confidentiality of information that it receives from stakeholders when such information is designated by them as confidential or commercially sensitive. At the same time there is a duty to provide as much transparency as possible to affected stakeholders whilst also recognising the stakeholder's right to reply in accordance with fair procedures and the need for ComReg to provide intelligible reasons for the views formed.

Summary of Respondents' views

6.4 Both ALTO and BT stated that there is a need to address the transparency issue and provide the required information whilst eircom stated that the current process was sufficient and no exceptional arrangements are required to be put in place.

6.5 Both ALTO and BT stated that the existing confidentiality rules should continue where possible. In general, Vodafone endorses ComReg's approach on the confidential status of legal or regulatory policy argument or data input supplied by stakeholders. However, in cases where the outcome could entail the imposition of a funding mechanism on stakeholders and in the interest of fairness and equity, Vodafone believes that ComReg should set a very high threshold before it considers information to be confidential and withheld from those for whom there could be a serious financial impact. In the event of a ComReg finding that a USO funding mechanism is required, Vodafone would expect to be in a position to review any ComReg models, with its related inputs and assumptions which were used to support the establishment of the sharing fund. Eircom stated that the current process was sufficient and there no need for any exceptional arrangements.

6.6 In terms of the establishment of a confidentiality ring, O2 said that there was no merit in the proposal and some undertakings may not have the external consultant resources available and thus be placed at a significant disadvantage. Both ALTO and BT stated that in general the establishment of the confidentiality ring is welcome but only if there is a genuine need to do so. Vodafone agreed that in certain circumstances there may be a need to establish a confidentiality ring and that such mechanisms should only be used where there is a clear case that the supplier of the data may suffer a competitive disadvantage if the information was made more widely available.

ComReg's Position

6.7 ComReg has previously published guidelines on the treatment of confidential information, and believes that these adequately address the requirements of USO funding applications. However, there may be exceptional cases where ComReg may need to depart from its guidelines and where it should consider the merits and practicalities of establishing confidentiality rings. ComReg will consider these on an “as needs” basis.

7 Submitting comments

ComReg welcomes written comments on any of the draft Decisions made in this paper and it is requested that comments be referenced to the corresponding sections and/or paragraphs.

Such comments should be received by 5pm on Monday 4 April 2011 and further information on how to submit those comments is on the covering page of this paper.

Having analysed and considered the comments received, ComReg will publish a Final Decision.

Appendix A – Review of Consultation Responses

7.1 As outlined in the paragraph 1.8, the views of respondents that ComReg consider to be material are dealt with within each respective section. Other views that ComReg deem to be not as crucial to the process are dealt with in this appendix.

USO revenue calculation

Respondents Views

7.2 eircom in its submission noted that not all leased lines are identifiable to a particular telephone number or customer and that therefore: *"it may be necessary to allocate revenue across an exchange area and then make a judgement regarding how much of such revenue is relevant to the USO calculations."*[96]

7.3 BT noted in its submission that: *"the 7k line provision allowance is too generous and does not align with other European states and should thus be reduced and this will further reduce the cost burden."*[97]

ComReg's Position

7.4 As outlined in paragraph 3.110, ComReg as part of the assessment of a USO funding application will undertake a number of "reality" checks to assess the reasonableness of any allocation both from a revenue and cost perspective and where material discrepancies are found ComReg has outlined a number of potential remedial actions.

7.5 A decision on the appropriateness of the Reasonable Access Threshold, €7,000, is considered to be outside the scope of this paper. The issue was considered in a separate consultation[98] and stakeholders were requested to submit their views. ComReg considers that at this time the threshold remains appropriate for the purposes of the net cost calculation. Should the threshold change in conjunction with a future USP designation, ComReg considers that the respective net cost calculation for that designation period should be reflective of the amount specified.

Efficiency Adjustment

Respondents Views

7.6 Vodafone in its submission noted that: *"[i]n the absence of (more efficient) wireless technologies being incorporated in the proposed HCA model, ComReg could consider applying an optimisation discount until such technologies are able to be included in the cost model"*.[99]

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[96] eircom, supra n 9, pg. 9.

[97] BT, supra n 43, pg. 2.

[98] ComReg 10/35: The Provision of Telephony Services under Universal Service Obligations.

[99] Vodafone, supra n 7, pg. 2.

ComReg's Position

7.7 As outlined in paragraph 3.91, ComReg has identified a number of potential sources of information which could help inform the decision on an appropriate efficiency adjustment. Therefore, ComReg does not discount the possibility of utilising an optimisation or adjustment factor if deemed relevant and appropriate in the assessment of a USO funding application.

"Catch-up" investment

Respondents Views

7.8 eircom note in their submission that: *"ComReg's reference in the bullets contained in ¶ 4.74 to depreciating this OPEX over an asset's EUL appears inconsistent"*[100] with accounting rules.

ComReg's Position

7.9 The issue of depreciating OPEX over an asset's EUL was raised in conjunction with a number of other potential approaches for the treatment of additional OPEX associated with the issue of "catch-up" investment. A number of potential approaches were explored and ComReg requested stakeholders' views on the most appropriate treatment for the purposes of a net cost calculation. ComReg's position regarding the treatment of OPEX in relation to catch-up investment is outlined in paragraphs 3.83-3.85.

Identification and calculation of USO costs

Respondents Views

7.10 eircom note in their submission that ComReg appears to be separating the issue of USO funding from the setting of the LLU monthly rental price in 2010 and note that in their view: *"[a]t the time of the setting of the LLU monthly rental price, ComReg accepted that eircom could not recover all of their legitimate costs based on the Directed LLU price…and that it would be reasonable to expect that the shortfall would be made up by means of a USO fund."*[101]

ComReg's Position

7.11 As set out in the Consultation Paper, ComReg Decision D01/10 stated that it was of the view that the issues regarding USO funding must be addressed separately and a decision on LLU pricing was not the appropriate forum for conducting such a review. ComReg also concluded that the issue of USO funding was outside of the scope of the LLU pricing review and would be reviewed by ComReg as part of a separate work-stream. ComReg remains of the view that there is no relationship between *the treatment of LLU pricing and the provision of USO*; both have to be assessed independently, on their own merits.

[100] eircom, supra n 9, pg. 11.

[101] ibid, pg. 15.

Methodologies and data requirements

7.12 ComReg set out that there are a number of possible approaches to determining the value of the benefits of being the USP. ComReg could use one or a combination of approaches to estimate the value of a USP's benefit.

Respondents Views

7.13 Vodafone believe that for many of the benefits, a lack of information as to the extent and nature of the data that will be provided by the USP limits its ability to suggest what would prove to be a practical assessment methodology. However Vodafone agrees valuations have been carried out in other jurisdictions using a variety of methods on the various categories of benefit and that one or more of these methods should be applied in the case of each of the benefits. The additional cost associated with the use of multiple methods may be justified more in the case of benefits (such as brand value) where there is common NRA agreement that they represent the highest proportion of total additional benefit from a USO obligation.

7.14 Two respondents (O2 and Vodafone) believe Ofcom's approach to calculating benefits is appropriate.

ComReg's Position

7.15 ComReg have set out that a range of methodologies which will be considered when valuing benefits. Where appropriate, ComReg will consider an approach similar to that used by Ofcom, however ComReg will not as a matter of course adopt Ofcom's approach to valuing the benefits.

7.16 ComReg believe that by drawing upon a range of methodologies, where appropriate, the benefits will be accurately estimated.

Retrospection relating to a USO Fund Application

Respondents Views

7.17 O2 provided a comment in its submission relating to what it saw as the retrospective nature of a possible USO fund application by the USP. It states that: "*ComReg intends to make retrospective requests for funding should the case for funding be made in the final USO decision probably sometime in 2012. If this is the case O2 wishes again to make it absolutely clear that any such requests will be resolutely resisted. We also again request ComReg to now clearly state the legal basis on which any such retrospective funding request would be made.*"

Commission's position

7.18 There is nothing in the Directive or the Regulations that precludes ComReg from establishing a fund in respect of years past, and costs incurred during those years. Any compensation mechanism that might involve a contribution by industry participants, was a substantive possibility clearly foreseen in the Directive and the Regulations, since at least 2002. The substantive law giving right to a potential entitlement by the USP to USO funding has existed under the current Directive since 2002, and in the Directive which it replaced, since 1997. Therefore, this possibility was plainly foreseeable by industry participants since the relevant law was enacted, and would not involve any retroactive application of the law. Instead, ComReg is laying down a set of objective principles and methodologies and procedural rules for the implementation of a substantive obligation (namely the duty to compensate the USP if there is found to be an unfair burden as a result of a net cost for providing the USO).

7.19 Some account must inevitably be taken of costs historically incurred by the USP. There may be certain past net costs incurred by the USP in the discharge of its USOs. This *might* require payments by industry participants into a universal service fund. Such a fund would be in pursuit of a legitimate aim, namely, the provision of the USO for consumers, and the lawful compensation of the USP for any net costs incurred that were also an unfair burden on it. Such a fund would only be established in a transparent, proportionate, and non-discriminatory manner as required under Irish and EU law.

7.20 As discussed in section 1, should ComReg find that the positive net cost of meeting the USO is an unfair burden on the USP, ComReg intends to run a separate consultation in relation to the funding mechanism later this year.

Appendix B - Regulatory Impact Assessment.

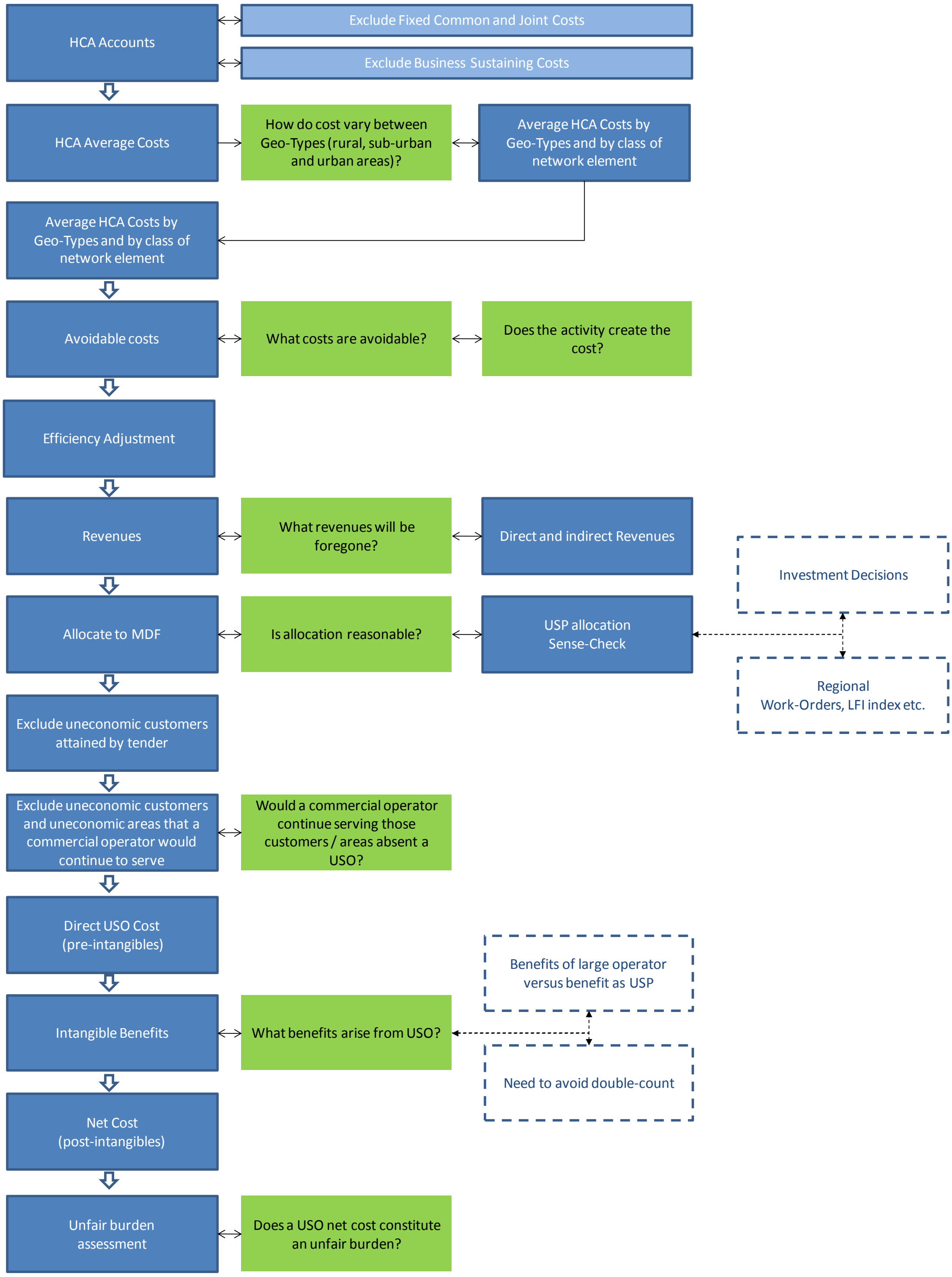
Following on from the Consultation, eircom raised the point that it felt surprised that ComReg had not considered assessing the regulatory impact of its proposals.

ComReg is of the view that there is no requirement to conduct a Regulatory Impact Assessment ("RIA") on these proposals because no obligations are being proposed.

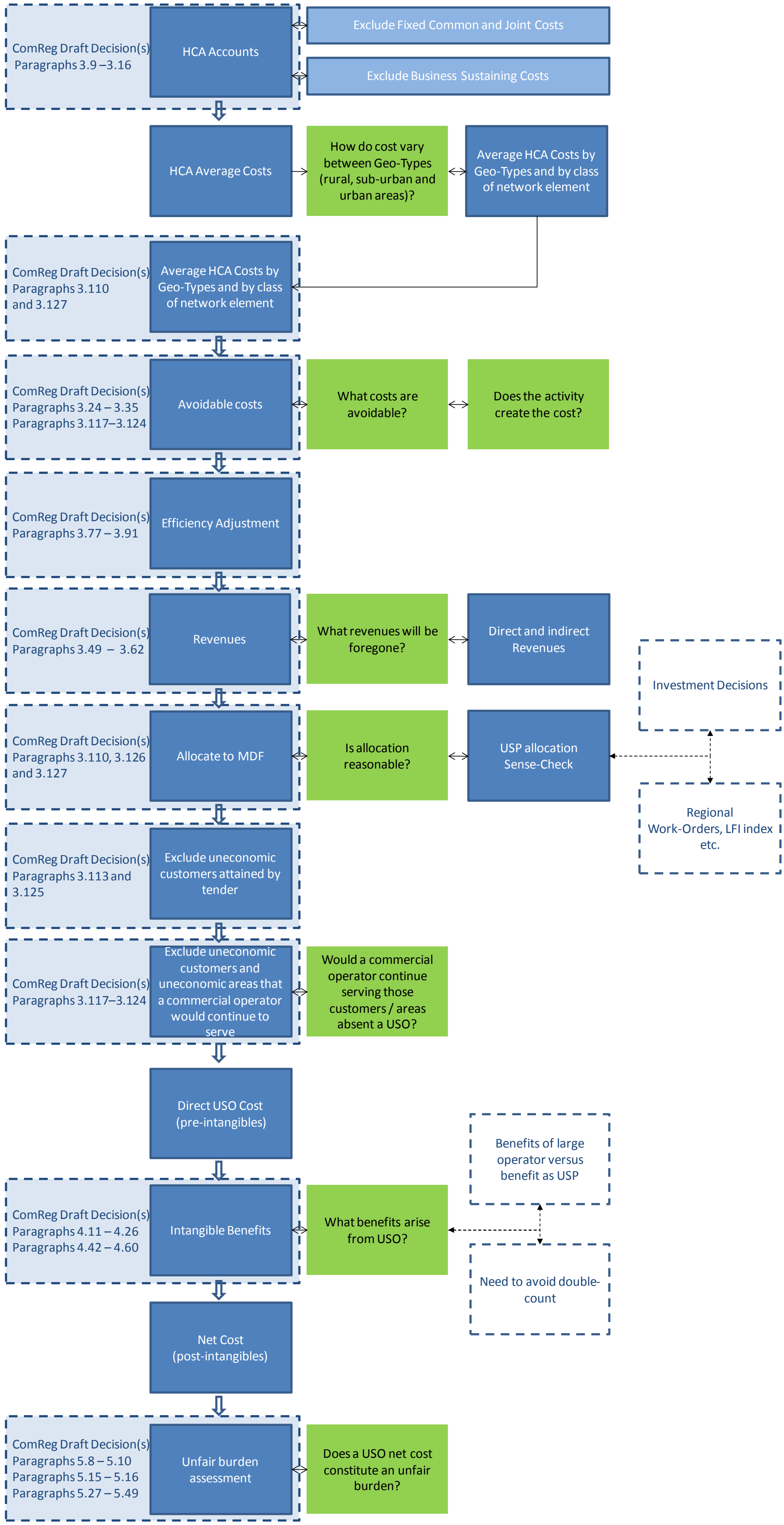
However, it is quite likely that a RIA would be appropriate once a determination is made on whether there was a positive net cost for meeting the USO and if this constitutes an unfair burden on the USP and the impact of that decision on all undertakings.

ComReg's approach to a RIA is set out in the guidelines, published in August 2007, in ComReg Document No. 07/56 & 07/56a.

Appendix C – Schematic Overview of USP's Net Cost Calculation and unfair burden assessment [102]



[102] To be read in conjunction with ComReg's Position and Draft Decisions outlined in the body of this paper. As part of its assessment of the USO funding application, ComReg will undertake its own assessment of the level of efficiency adjustments required, as well as undertaking a number of sample "reality" checks to determine if the allocation of costs to uneconomic areas and uneconomic customers in economic areas is appropriate.


ComReg Draft Decision(s) Paragraphs 3.9 – 3.16
HCA Accounts
Exclude Fixed Common and Joint Costs
Exclude Business Sustaining Costs
HCA Average Costs
How do cost vary between Geo-Types (rural, sub-urban and urban areas)?
Average HCA Costs by Geo-Types and by class of network element
ComReg Draft Decision(s) Paragraphs 3.110 and 3.127
Average HCA Costs by Geo-Types and by class of network element
ComReg Draft Decision(s) Paragraphs 3.24 – 3.35 Paragraphs 3.117–3.124
Avoidable costs
What costs are avoidable?
Does the activity create the cost?
ComReg Draft Decision(s) Paragraphs 3.77 – 3.91
Efficiency Adjustment
ComReg Draft Decision(s) Paragraphs 3.49 – 3.62
Revenues
What revenues will be foregone?
Direct and indirect Revenues
Investment Decisions
ComReg Draft Decision(s) Paragraphs 3.110, 3.126 and 3.127
Allocate to MDF
Is allocation reasonable?
USP allocation Sense-Check
Regional Work-Orders, LFI index etc.
ComReg Draft Decision(s) Paragraphs 3.113 and 3.125
Exclude uneconomic customers attained by tender
ComReg Draft Decision(s) Paragraphs 3.117–3.124
Exclude uneconomic customers and uneconomic areas that a commercial operator would continue to serve
Would a commercial operator continue serving those customers / areas absent a USO?
Direct USO Cost (pre-intangibles)
Benefits of large operator versus benefit as USP
ComReg Draft Decision(s) Paragraphs 4.11 – 4.26 Paragraphs 4.42 – 4.60
Intangible Benefits
What benefits arise from USO?
Need to avoid double-count
Net Cost (post-intangibles)
ComReg Draft Decision(s) Paragraphs 5.8 – 5.10 Paragraphs 5.15 – 5.16 Paragraphs 5.27 – 5.49
Unfair burden assessment
Does a USO net cost constitute an unfair burden?

Appendix D – Model to estimate the net cost of uneconomic areas and uneconomic customers in economic areas

	Model to estimate the net cost of USO arising from each uneconomic area (a) / uneconomic customers in economic areas (b)
	Avoidable Costs (calculated as follows)
+	Access cost, cost per line times the relevant number of lines
+	Core Network cost, costs per call/minute times the relevant numbers of calls/minutes, for each call type
+	Other Costs associated with the provision of supplementary services
	Total Revenues (calculated as follows)
-	Retail revenue from Access, Outgoing Calls and Supplementary Services
-	Wholesale revenue from Access, Outgoing Calls and Supplemetary Services
-	Revenue from incoming calls (non-geographical numbers, etc)
-	Revenue from Wholesale Interconnect Services as a result of incoming calls (termination, transit, etc)
-	Revenue from other Services (incl. Leased Lines)
=	**Net Cost of (a)/(b)**
+	Net revenue from Replacement Calls (where a net cost exists)

Appendix E –The Legislative Provisions

The principal legislation governing the area of universal service is set out in:

1. European Communities (Electronic Communications Network and Services) (Universal Service and Users' Rights) Regulations, S.I.308 of 2003.

2. Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive).

Appendix F – Glossary of Terms

Acronym	Full Title	Description
ABC	Activity Based Costing	A cost allocation methodology based on activity / cost drivers.
ALTO	Alternative Operators in the Telecoms Market	Representative body of operators entering Ireland's telecoms market across the fixed, wireless, mobile and cable sectors.
ARCEP	L'Autorité de Régulation des Communications Électronique et des Postes	National regulatory agency for France.
AGCOM	Autorità per le Garanzie nelle Comunicazioni	National regulatory agency for Italy.
BOTTOM-UP MODEL	Bottom up model	Forward looking model to estimate the cost of constructing a new efficient network.
BIPT	Belgisch Instiuut voor postdiensten en telecommunicatie	National regulatory agency for Belgium.
BU LRAIC	Bottom up long run average incremental cost	A hypothetical cost modelling methodology which considers the efficient forward looking costs of providing a product or a service by an efficient operator.
	Business Sustaining Costs	Costs which cannot be allocated to services as they are not avoidable.
CAPEX	Capital Expenditure	Amount spent to acquire or upgrade productive assets (such as buildings, machinery and equipment, vehicles) to increase the capacity or efficiency of a firm for more than one accounting period. Also called capital spending.
CCA	Current cost accounting	A system of valuing assets based on their replacement cost rather than their cost when purchased or produced.
CMT	Comisión del Mercado de las Telecomunicationes	National regulatory agency for Spain .
COMMON COSTS		Refer to costs which are common to all services/products.
	Copper Access Model	ComReg's Bottom-Up Long Run Average Incremental Cost model.
DIRECT COSTS		refer to those costs which can be directly attributable to a service/product.
EBITDA	Earnings before interest, taxation, depreciation and amortisation	This figure measures a company's annual earnings before the subtraction of interest payments, taxes, depreciation, and amortization
ECJ	European Court of Justice	

FIXED COSTS		Costs that do not vary with production or sales e.g. rent
G&A COSTS	General and administration costs	Costs typically associated with the administration tasks of running a business.
HCA	Historical Cost Accounting	A system where assets are valued at their original cost, less accumulated depreciation
INCREMENTAL COSTS		Increase or decrease in the total cost of a production-run, from making one additional unit of an item.
INDIRECT COSTS		Costs that cannot be directly attributed and therefore need to be apportioned between a number of services/products on the basis of an appropriate cost driver.
LEASED LINES		Refers to fixed, permanent telecommunications connections providing broadly symmetric capacity between two points. A leased line is permanent, in that capacity is available between the two fixed points and generally used to provide dedicated connectivity for business customers.
LFI/FRO	Line Fault Index/Fault Rate Occurrence	Line faults per 100 lines as set in ComReg D02/08
LLU	Local Loop Unbundling	The regulatory process of allowing multiple telecommunications operators use of connections from the incumbents telephone exchange's to the customer's premises.
LRAIC	Long run average incremental cost	Costing methodology. This methodology makes use of CCA accounting principles but place particular emphasis on identifying the costs of a service which are incremental to it in the long run.
MDF	Main Distribution Frames	Also known as local exchange areas.
MEA	Modern Equivalent Asset	Part of a LRAIC methodology which calculates costs based on the most modern assets / technology available.
NBV	Net Book Value	The net value of an asset, which is equal to the original cost price minus depreciation and amortisation.
NPV	Net Present Value	The difference between the present value of cash inflows and the present value of cash outflows.
NRA	National regulatory agency	A state or government agency which regulates businesses in the public interest.
OAO(S)	Other Alternative Operators	Operators, other than the incumbent, providing telecommunication services.
OFCOM	Office of Communications	National regulatory agency for the United

		Kingdom.
OPEX	Operating expenditure	A company's expenses related to the production of its goods and services.
PSTN	Public Switched Telephone Network	An electronic communications network which is used to provide publicly available telephone services; it supports the transfer between Network Termination Points of speech communications and also other forms for communication, such as facsimile and data;
SB-WLR	Single Billing-Wholesale Line Rental	Single Billing via Wholesale Line Rental enables another Authorised Operator (OAO) to issue a single bill to CPS "all calls" customers for voice services; the OAO can offer its own branded telephony service to its CPS "all calls" customers based on wholesale services provided by Eircom. Eircom provides wholesale billing details to OAOs, which then bill their customers at their retail rates.
TD-LRAIC	Top Down Long Run Average Incremental Cost	Cost modelling methodology taking data directly from the accounting system of an operator. The data is then amended to take account of forward looking costs that, hypothetically, would have been incurred by an efficient operator today.
TD	Top down Modelling	Cost modelling methodology taking data directly from the accounting system of an operator to construct an operator's network.
USO	Universal Service Obligation	A defined minimum set of services, to all end-users, at an affordable price.
USP	Universal Service Provider	An undertaking designated as having the universal service obligations.
VARIABLE COSTS		Costs that vary with production or sales e.g. repair and maintenance costs.
WIFI		A wireless-technology brand owned by the Wi-Fi Alliance, promotes standards with the aim of improving the interoperability of wireless local area network products.

Appendix G – List of draft Decisions

The list below is for illustrative purposes and reflects the draft Decisions which can be used as guidance for any telecommunications USP in submitting an application for USO Funding.

Section 3 – Principles and methodologies for calculating the USO net costs and revenues (excluding benefits of the USO

Costing Methodology

Decision 3.1: The HCA approach, properly adjusted for efficiencies, and taking account of the costs that could have been avoided by the USP absent the USO, is the cost methodology that will be used to calculate the net cost of the USO.

Avoidable Costs

Decision 3.2: USO net costs will be calculated on the basis of "all" capital costs and "all" operating costs that could have been avoided if the provision of services to "non-viable customers" by the operator was not required under a USO. It is only the portion of costs, both capital and operational expenditure, that can be directly attributed to the USO service (i.e. the service activity creates the cost) and which could have been avoided, which will be included in the net cost calculation.

Decision 3.3: Fixed common costs and joint costs, with respect to the provision of services over the access and core networks, are not avoidable costs. They will not be included in the net cost calculation.

Revenue Calculation

Decision 3.4: USO revenues will 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 "non-viable customers".

Decision 3.5: Direct revenues will 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;
- 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 3.6: Direct revenues will include those revenues from an OAO (who is indirectly providing the service to the customer) using the USP's wholesale services which will include inter alia:

- 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 3.7: Indirect revenues will 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 will 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 line can spare without making themselves uneconomic 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 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 should be estimated and added to the net cost calculation (where such a net cost is proven to exist).

Efficiency Adjustments

Decision 3.8: The avoidable costs included in the net cost calculation, will be those costs reflecting the provision of the USO which a commercial operator would have not ordinarily have provided, and which were incurred in the most efficient way. These costs will relate to avoidable CAPEX, OPEX, and overheads.

Decision 3.9: ComReg will 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 not be 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;

- an appropriately adjusted LFI target for the financial year in question;
- independent survey report regarding the USP's efficiency;
- overseas regulatory decisions providing relevant precedent s and benchmarks; and
- the development of an independent cost model where adequate and reliable accounting information is not available from the USP.

<u>Cost identification and allocation</u>

Decision 3.10: The net cost calculation should not include those customers who were originally considered "uneconomic" but who have now become profitable and those customers attained by commercial tender (which are deemed "uneconomic").

Decision 3.11: Uneconomic areas will be identified at an MDF level.

Decision 3.12: An average depreciation charge for each class of network element (based on an average cost and asset age) will be developed by geo-types (e.g. urban, sub-urban, rural etc.). The USP can 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. it does not allocate costs to an MDF which are not reflective of the USP's investment profile). In the course of ComReg's assessment of a USO funding application, a number of sample "reality" checks will be undertaken. If material discrepancies are found, ComReg may require a full assessment for those exchange areas claimed to be "un-viable" by the USO; to apply a proportionate adjustment to the net cost calculation (pre-intangibles); *or* to reject the entire USO funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

Decision 3.13: Uneconomic customers in economic areas will be identified based on the universal account number ("UANs") of these customers.

Decision 3.14: The USP can calculate uneconomic customers in economic areas using a probability analysis. However, the identification and allocation of these costs must be consistent with ComReg's draft decision outlined in paragraph 3.124. During the course of ComReg's assessment of a USO funding application, a number of sample "reality" checks will be undertaken; and where material discrepancies are found, ComReg may require a full assessment for those exchange areas claimed to be "un-viable" by the USO; to apply a proportionate adjustment to the net cost calculation (pre-intangibles); *or* to reject the entire USO funding application (on the basis that the discrepancy is of a magnitude which would render the application not fit for purpose).

<u>Uneconomic payphones and other USO costs</u>

Decision 3.15: In respect of mandatory public payphone provision, the net cost calculation will be based on the total avoidable cost, minus the total revenues foregone. Furthermore,

that 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 will 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 will adjust the net cost calculation to reflect appropriate payphone coverage (in areas where they are mandatory).

Decision 3.16: For Directories, the net cost calculation uses the total avoidable cost, minus total revenues of this service.

Decision 3.17: The net cost for the provision of specific USO services for disabled users, will be calculated using the total avoidable cost minus the associated total revenues foregone. The avoidable cost will 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 in addition to the total revenue associated with the standard minimum level of service to disabled users (which are generated by all operators).

Format and timing of Applications

Decision 3.18: USO funding applications must be consistent with the decisions, methodologies and principles, published by ComReg.

Decision 3.19: USO funding applications must be fit for purpose.

Decision 3.20: USO funding applications must be based on annual information which coincides with the USP's financial year.

Decision 3.21: USO funding applications must contain information which, to the best knowledge of the directors, represents a true and fair view. An independent declaration must 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 must be provided with an appropriate audit opinion, where the Auditor[103] (as approved by ComReg) has in no way assisted with the preparation of the USO funding application, or provided advice or opinions (other than in relation to audit reports) on the methodologies or processes used in preparation of same.

Decision 3.22: USO funding applications must be supported by calculations in an MS Excel, or MS Access format.

Decision 3.23: Any models submitted in support of a USO funding application must 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 must be set out in a clear and transparent manner, showing the separate calculations for each component (i.e. 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

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

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 3.24: Applications must, with reference to the supporting model, clearly identify with reasoning those customers or groups of customers (i.e. area), that in the absence of the USO, the provision of the service would not have been provided to that customer or groups of customers (i.e. area) by a commercial operator. Furthermore, applications must not include those customers attained through commercial contracts, or those customers which have now become viable, but who were previously considered uneconomic.

Decision 3.25: 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 3.26: With respect to the provision of public payphones which are “uneconomic”, sufficient detail on their geographic location and proximity of other public payphones operated by the USP (irrespective of their profitability).

Decision 3.27: The model provided must 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 3.28: 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. Any application of a sampling methodology by the USP must accord with ComReg Decision D07/10.[104]

Decision 3.29: Where a USP has been designated as the USP for consecutive periods, a year-on-year investment profile (since the original first year of its USP designation) by geographic area (where available), between CAPEX and OPEX relevant to the USO differentiating between installations and upgrades, must be provided. (In circumstances where eircom has been designated the USP a 10 year investment profile would be considered sufficient).

Decision 3.30: USP funding applications must, where otherwise relevant, accord with ComReg Decision No. D07/10 on accounting separation.

Decision 3.31: The calculation of the benefits of the USO must be completed by an external expert, independent of the USP.

Decision 3.32: 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 date of this Decision, but ComReg may extend this deadline where it considers that there are exceptional reasons for doing so.

Decision 3.33: 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

[104] ComReg Decision D07/10, Document 10/67. Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of eircom Limited, published 31 August 2010.

to ComReg, the USP(s) shall do so no later than 6 months following the end of the financial year in respect of which the request is intended to be made, but ComReg may extend this deadline where it considers that there are exceptional reasons for doing so.

Decision 3.34 Without prejudice to Decision 3.33, the USP shall, no later than 6 months prior to the end of the financial year for which the USP intends to make a request for USO funding, submit a provisional statement to ComReg with the claimed net cost figure (if any) arising from the USO. The provisional statement will not constitute the request referred to in Decision 3.33, and ComReg will not be obliged to formally assess it. To bring some degree of certainty, ComReg may publish any claimed net cost figure as it sees fit, so that undertakings[105] that are obliged to contribute to such a USO Fund can make the relevant provision for any potential accruals in their accounts in respect of their corresponding financial year. Any such accruals made by undertakings based on the provisional statement made by the USP to ComReg with the claimed net cost arising from the USO may be an over or under estimate of any eventual determination made by ComReg for the actual financial year.

Section 4 – Principles and methodologies for calculating benefits of the USO

Categories of Benefits

Decision 4.1: The net cost calculation must assess the benefits, including intangible benefits, to the universal service operator. ComReg will consider, at a minimum, the following benefits (as a result of the USO) for a USO net cost calculation:

- Brand Recognition;
- Ubiquity;
- Life-cycle; and
- Marketing.

Decision 4.2: 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 (any benefit 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 direct or indirect 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).

[105] Those undertakings that are obliged to contribute to such a USO Fund and their respective portion will be determined by ComReg in a separate consultation later this year.

Calculation Methodology

Decision 4.3: 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. If an application for a USO fund is received, ComReg would first review the appropriateness of the methodologies used by the USP to assess the value of the benefits. From a review of the valuation of the benefits provided by the USP, ComReg will then determine whether or not to specify in more detail a particular methodology to assess the value of each benefit consistent with regulatory best practice principles of proportionality and practicality. ComReg reserves the right to implement alternative methodologies and data sources to verify the appropriateness of the value of the benefits resulting from the universal service provision.

Section 5 – Principles and methodologies in relation to an unfair burden

Decision 5.1: For a net cost to be an unfair burden on a USP, 3 cumulative conditions must be met:

- There must be a verifiable and verified direct net cost.
- 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 5.2: 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 be disproportionate to the any net transfers to a USP.

Decision 5.3: In relation to determining the existence or not of an unfair burden, ComReg will carry out, at a minimum, the following analysis:

- If the positive net cost is not relatively small, ComReg will assess whether or not this net cost materially undermines a USP's profitability and/or ability to earn a fair rate of return on its capital employed; and
- If the positive net cost undermines a USP's profitability, assess whether or not such a net cost materially impacts a USP's ability *to compete on equal terms wi*th competitors going forward.

Decision 5.4: ComReg will use the following criteria, statically and dynamically, to determine whether or not a net cost burden is actually unfair:

- Changes in profitability, including an understanding of where a USP generates most of its profits over time.
- Changes in accounting profits and related financial measures e.g. earnings before interest, tax, depreciation and amortisation ("EBITDA") analysis.

- Changes in direct USO net cost, if any, over time.
- Estimates of average level of cross-subsidy between classes of more or less separately accounted for services, and changes in these over time.
- Changes in prices over time.
- Changes in market share and/or changes in related markets.
- Market entry barriers.

Section 6 – Treatment of confidential information

Note there is there is no amendment to ComReg's policy with respect to the treatment of confidential or commercially sensitive information as set out in ComReg Document No. 05/24. However, there may be exceptional cases where ComReg may need to depart from its guidelines and where it should consider the merits and practicalities of establishing confidentiality rings. ComReg will consider these on an "as needs" basis.

Schedule 1 – Form of Directors' Certificate on USO Funding Application

I/We, [*insert full name/s*], being director/s of [*insert name of USP*] certify that, having made all reasonable enquiry, to the best of my/our knowledge and belief, the attached USO funding application of [*insert name of USP]* for the financial period ending *[insert financial year which relates to the USO funding application]*, and related supporting information, prepared for the purposes of the calculation of a net cost are true and accurate and free of material misstatement (whether caused by fraud or other irregularities or error).

[*Signatures of Directors*]

[*Date*]