Commission for Communications Regulation

REVIEW OF THE REGULATORY ASSET LIVES OF EIRCOM LIMITED

Document No:	09/11
Date:	17 February 2009

All responses to this consultation should be clearly marked:-
"Reference: Submission re ComReg 09/11" as indicated above, and sent by post, facsimile, e-mail or on-line at www.comreg.ie (current consultations), to arrive on or before 5pm on 20 March 2009, to:

Liam Burke,
Wholesale Division
Commission for Communications Regulation
Irish Life Centre
Abbey Street
Freepost
Dublin 1
Ireland

Ph: +353-1-8049600   Fax: +353-1-804 9680   Email:
wholesaleconsult@comreg.ie
Please note ComReg will publish all respondents submissions with the Response to this Consultation,   subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24

Contents

1   Executive Summary

1.1   The Commission for Communications Regulation ("ComReg") is responsible for the regulation of the electronic communication sector in Ireland. Part of ComReg's remit is the review of the regulatory asset lives of fixed line telecommunications operators in Ireland.

1.2   The provision of fixed line telecommunication services involves significant deployment of capital across the country. When recording these assets in the Balance Sheet of the company, a decision must be made on the expected useful economic life that would be considered appropriate to the type of asset being deployed. The calculation and application of the related depreciation charge is relevant for all regulated wholesale prices. These wholesale prices ultimately feed into retail prices charged by operators, both Eircom and others, to end users.

1.3   ComReg initiated a review of the Eircom fixed asset lives for a number of reasons, namely the length of time since the previous review, significant changes that have taken place in the telecommunications market over the past ten years and observations made that some of the current lives attached to assets appear to be materially inconsistent with similar fixed line operators in other member states together with possible implications inaccurate lives could have on regulatory pricing.

1.4   The last review of regulatory fixed assets in Ireland took place in 1999[1]. This review does not extend to a review of statutory asset lives as these are determined by the company and subject to review by its company auditors.

1.5   ComReg, with the assistance of it advisors RGL Forensics ("RGL"), in conducting its review, has carried out detailed analysis and review of Eircom's fixed asset register, has made enquiries of fixed line telecommunications operators in Ireland and also other European national regulatory agencies ("NRA's") as well as carrying out its own research.

1.6   The preliminary conclusions of this review indicate that a material change in the length of regulatory asset lives is required for a number of assets types.   The main type of assets which would be subject to material proposed changes are as follows:

Asset type	Existing regulatory asset life	Proposed regulatory asset life
Duct, roadway and footway boxes	20 years	40 years
Poles	15 years	30 years
Underground cables and fibre	14 years	20 years
Overhead cables and fibre	8 to 10 years	15 years

1.7   This consultation document is a summary of the analysis and preliminary conclusions of RGL. The full report from RGL is attached in ComReg Document 09/11A.

---

[1] Costing Methodologies for use in Accounting Separation – Decision Notice 8/99 & Consultation report (Document No. ODTR99/43)

[3] ComReg Document ODTR 99/26 – "Costing Methodologies for use in Accounting Separation"

2 Introduction

Reasons for undertaking consultation

2.1 ComReg believes that a formal review of the length of regulatory asset lives is appropriate at this time for the following reasons:

2.1.1 The last formal review was undertaken by ComReg's predecessor the Office of the Director of Telecommunication Regulation ("ODTR") in 1999[3]. A further consultation in 2001[4] confirmed the use of the asset lives as disclosed in the 1997/98 Eircom Limited statutory financial statements to be the most suitable for regulatory purposes at that time. These were the regulatory asset lives that would have applied to Eircom (or Bord Telecom Eireann) pre privatisation in 1999. A specific review was undertaken on carrier billing systems in 2004[5]. This resulted in the regulatory asset lives of carrier billing systems being increased from 4 years to 6 years.

2.1.2 There have been significant changes in technology in the intervening period and new forms of technology have been introduced while others are no longer used. For example, advances in Digital Subscriber Line ("DSL") technology have increased the capabilities of copper to deliver telecommunication services whereas telex, which was extensively used in business, has since been replaced by more advanced forms of technology.

2.1.3 A number of other European jurisdictions have, in recent years, reviewed all or part of the regulatory asset lives of local fixed line operators and in many cases changes have been made to these. ComReg, in order to keep up with best practice applied elsewhere, believes it appropriate to consider whether any of the underlying reasons for these changes may also apply to Ireland.

2.1.4 One of the obligations of Eircom, having been designated with Significant Market Power ("SMP") is the obligation of cost orientation. In order to ensure Eircom's ongoing compliance with this obligation ComReg has deemed a review of regulatory asset lives to be appropriate.

2.2 ComReg is not consulting on the asset lives applied in the statutory financial statements of Eircom Limited as these are beyond its remit.

> **Q. 1. Do you agree or disagree that it is appropriate for ComReg to undertake this review at this time? Please explain in detail your response.**

---

[4] Eircom's Reference Interconnection Offer & Accounting Separation and Publication of Financial Information for Telecommunications Operators - Response to the Consultation & Decision Notice D7/01 (Document No. ODTR01/24)

[5] ComReg document 04/69 – Consultation and draft decision "Finalisation of 2002/03 and revision of 2003/04 Interim Interconnection Conveyance rates".

Background

2.3 Fixed assets are a key component of a telecommunications operator's infrastructure and can account for a significant proportion of its asset base. Part of these assets is consumed annually, in the production of goods and services, and this consumption is recorded as a deprecation charge in a company's income statement. In Eircoms statutory financial statements this depreciation charge[6] can account for approximately 18% of consolidated operating costs and is the next largest operating cost after staff costs (c. 25%) and payments to telecommunications operators (c. 22%).

2.4 The fixed assets are subdivided into different asset categories normally in a note entitled "Property, Plant, & Equipment". To these asset categories, whose classifications are often broadly similar for both statutory and regulatory financial statements, deprecation accounting policies are applied. These accounting policies, which are also disclosed by way of a note to financial statements, determine the method by which an asset is depreciated. This method is then applied using the estimated useful economic life of assets. While a company may have numerous assets they are normally grouped for disclosure purposes into significant categories.

2.5 There may however be a difference between regulatory and statutory asset lives for these asset categories as reporting requirements can differ. Regulatory asset lives are used predominantly for regulatory pricing purposes whereas statutory asset lives are predominantly used in the reporting of historical trading results to shareholders.

2.6 Unlike the statutory financial statements depreciation is not disclosed separately in Eircoms Historical Cost Accounts ("HCAs"). However, despite this, depreciation continues to form a significant operating cost element within these accounts. If the accounting policies applied to assets for statutory and regulatory purposes differ the resulting depreciation charge can also differ. A reconciling entry is disclosed in the notes to Eircoms HCAs in the "Profit and Loss" and "Mean Capital Employed" reconciliation statements as "Impact of change to asset lives". Appendix D lists Eircoms current regulatory and statutory asset lives at 30 June 2008. ComReg does not review the statutory asset lives of Eircom Limited as these are beyond its remit. Nor does it assess the reconciliation of the impact to the change in asset lives between statutory and regulatory financial statements.

---

[6] Average over 4 financial periods 2005 – 2008 (and includes Meteor from 2007)

Approach undertaken in this consultation

2.7 When undertaking this consultation ComReg has carried out detailed analysis of the Eircom fixed asset register, discussed this with Eircom staff, and made enquiries of a number of European regulators as to the regulatory asset lives that they have adopted. Questionnaires were also sent to a number of Irish telecommunications operators' enquiring as to the asset lives that they deem to be most appropriate. Various articles, technical documents, and supplier websites were also researched to gain further understanding and insight into the service of life of assets. ComReg, when assessing the useful economic life of Eircom's assets has also been cognisant of the following influencing factors:

Company specific factors: These are issues which will relate exclusively to Eircom and to no other operator in Ireland or abroad. Significant information on company specific factors has been reviewed and meetings have been held.

Technical issues: These are issues of changing technologies (i.e. the introduction of Next Generation Networks ("NGN") or technical obsolescence.

Market developments: These are any potential changes in market requirements in Ireland.

Benchmarks: These are the asset lives applied in other jurisdictions to similar asset categories employed by Eircom. ComReg is extremely aware that the application of benchmarks without significant analysis can be problematic. With this in mind the review has examined what similarities and/or differences are there between Eircom and other fixed line operators. It has also examined what asset lives other operators, both in Ireland and abroad, has applied to similar types of assets. Where direct evidence of factors specific to Ireland was not available benchmarks were considered as part of a reasonableness check.

2.8 Of particular note to ComReg are the regulatory asset lives adopted by BT Group plc. BT Group plc operate throughout the whole of the United Kingdom. Many parts of the United Kingdom, including Northern Ireland, and significant parts of Scotland and Wales have topography and climate very similar to Ireland. These are some of the reasons why ComReg considers that a comparison with BT Group plc is reasonable and possible. ComReg further notes that the both BT's statutory and regulatory financial statements have broadly the same accounting policies for "Property, plant and equipment". Appendix E lists the accounting policies of BT Group plc.

Structure of consultation

2.9   The consultation is structured as follows:

   Section 3 – Depreciation - theory and practice

   Section 4 – Assessment of regulatory asset lives

   Section 5 – Implementation of any proposed changes

   Section 6 –Next Generation Networks ("NGN")

   Section 7 – Regulatory impact assessment ("RIA")

   Section 8 – Submitting comments

   Section 9 – Legal basis

   Section 10 – Draft direction

   Appendices

3   Depreciation – theory and practice

3.1   This section should be read in conjunction with Section 3 of the RGL report on "Depreciation – theory and practice".

Depreciation in telecoms

3.2   The provision of telecommunication services is a capital intensive exercise requiring significant levels of investment, upon which operators will seek to earn an economic return. An annual depreciation charge relating to the usage of assets is applied in a company's income statement.

3.3   Economic regulation also seeks to allow companies to earn an economic return on their investment. Regulators apply this return through the weighted average cost of capital ("WACC")[7]. While this may not equal a company's own anticipated rate of return the WACC will still provide an operator with a means to make an adequate return on its investment. It is through the application of the WACC, among other things, that an operator may decide on its investment plans and future investment strategies.

3.4   As the WACC is beyond the scope of this consultation it is not discussed further. A review of Eircom's WACC was carried out in 2007 by ComReg and resulted in Decision D01/08.

Economic versus accounting depreciation.

3.5   The calculation of economic depreciation is not straightforward and requires the use of subjective data on demand, technology, and costs. As a result, a more straightforward accounting approach to calculating depreciation is typically applied in both statutory and regulatory financial statements.

3.6   In some circumstances accounting depreciation can also yield reliable approximations to economic depreciation. However, rather than using economic modelling to calculate depreciation on an annual basis, accounting depreciation is often based on widely recognised accounting policies such as "straight line" or "reducing balance".

3.7   With accounting depreciation the cost of an asset is allocated over its estimated useful economic life in a relatively straightforward manner (for example using a 'straight-line' approach writing off the asset in equal annual instalments over its expected life). With economic depreciation an exercise is undertaken to estimate, amongst other things, future demand and operating costs and then to allocate the cost of the asset in a manner that optimally allocates all costs associated with the asset to the revenues through the assets life.

---

[7] ComReg Document 08/35 – Response to Consultation & Decision Notice "Eircom's cost of capital" – Decision D01/08

Calculating economic depreciation in European telecommunications

3.8 The setting of telecoms prices is not normally an annual event and therefore their calculation normally involves an element of economic modelling. Prices will often be set for a period of between 3 and 5 years. As a result consideration is given to economic factors such as future demand, technological change, or periods of fluctuating costs.

3.9 The European Commission and most national regulatory agencies ("NRAs") recommend the use of forward looking long run incremental ("FL-LRIC") cost models as the basis for setting regulated prices. Two types of model are available (i) bottom up models which are generally built to represent the construction of an efficient network and (ii) top down models whereby the actual costs of an operator are used.

3.10 "Forward looking costs" should only reflect costs for maintaining real asset values in a competitive market, while "long run" means that all costs are considered variable. Top down models, which are initially based on the historic/actual data of an operator, are often adjusted to reflect an adjustment for efficiency and also current asset values. These current asset values are often referred to as "Modern Equivalent Assets" whereby an historic asset included in a top down model is replaced (and depreciated) by its modern equivalent.

3.11 Both bottom up and top down models have been applied to the calculation of Eircoms regulated prices which are supplied to both Eircom retail and Other Authorised Operators ("OAOs").

3.12 The prices for many of these regulated services are constructed through the use of bottom up cost models. Examples of regulated prices which are currently set through the construction of bottom up models include:

- o Local loop unbundling ("LLU")
- o Line Share ("LS")
- o Sub-loop unbundling ("SLU")
- o Ancillary charges through Eircom's Access Reference Offer ("ARO")

3.13 Other wholesale prices are subject to a "retail minus" regime or are constructed on the basis of top down models. Services subject to retail minus or top down costing models would include:

- o Wholesale Line Rental ("WLR")
- o Bitstream
- o Leased lines and Partial Private Circuits ("PPC's")
- o Interconnection

3.14 Wholesale services currently set using the Eircom Top Down model include Call origination, call termination and call transit and any ancillary services associated with interconnection.

3.15 Therefore the calculation and application of depreciation is relevant for all regulated wholesale prices. These wholesale prices ultimately feed into retail prices charged by operators, both Eircom and others, to end users. This is analysed further in the regulatory impact assessment in section 7.

Depreciation in bottom-up LRIC models

3.16 The Independent Regulators Group ("IRG") recommends in its guidelines that the use of forward looking cost models should include:

"*an annualised cost for consumption of capital assets*"

and that these annualised costs should be calculated on the basis of economic depreciation.

3.17 Factors which influence economic depreciation are, amongst other things;

3.17.1 Changes in operating costs relating to an asset. If operating costs increase over the life of the asset the deprecation charge needs to be brought forward;

3.17.2 Future changes in asset prices. If asset prices are expected to fall the deprecation charge has to be brought forward to enable the operator compete in the future; and

3.17.3 Asset utilisation where:

(a) the incumbent and a new entrant invest over the same period. New entrants entering a market have to build up a network and win customers. The incumbent already has an established presence in the market place. The incumbent, however, is already receiving high usage from its assets and therefore cannot defer depreciation;

or

(b) where the new entrant invests in a period after the incumbent. If new entrants enter the market in a period after the initial incumbent investment the incumbent will bring forward its depreciation charge in order to be able to compete in later periods.

3.18 Top down and bottom up models should, in theory, yield similar results but in practice differences can occur. These differences can arise from the following features:

3.18.1 The cost standard (LRIC; fully allocated costs; stand-alone costs);

3.18.2 The cost base (historic; current; forward looking);

3.18.3 The depreciation methodology (economic; accounting); and

3.18.4 Other issues such as efficiency adjustments or the introduction of modern equivalent assets.

3.19 Bottom up models tend to use an "annuities approach" which annualises costs. Included in these costs is both the depreciation charge as well as a capital charge relating to the weighted average cost of capital.

Depreciation in regulatory accounting and top-down LRIC modelling

3.20 Regulatory accounts are designed to support the regulatory regime and may differ in the level of detail to statutory or management accounts. A number of different accounting methods can be used to apply depreciation in regulatory accounts and a number of these can provide a close approximation to economic depreciation. Within these there can be variations.

3.20.1 Straight line plus a return on capital employed;

3.20.2 An annuity which equates the depreciation charge with the allowable return; or

3.20.3 A "tilted annuity" whereby cost recovery is brought forward in a period of declining real asset costs.

3.21 Straight line depreciation in a period of stable prices is the most straight forward to implement. As the age of the asset increases the depreciation charge falls. However rapid technological changes have meant the risk of obsolescence is of greater importance that physical deterioration. As a result, depreciation charges are often accelerated and the following are the most common methods used:

3.22 Declining balance method over an equi-proportionate straight line basis. The cost of the asset is never fully written off. It is appropriate where new assets are efficient and repair costs are increased as the asset gets older. Other methods of calculating depreciation on a declining balance basis include:

3.22.1 Double-declining balance method uses the method applied above but doubles the depreciation charge;

3.22.2 The sum of the digits method; or

3.22.3 Constant percentage method, which is used when depreciation is greatest in the earlier years.

3.23 The use of annuities in calculating depreciation involves the following:

3.23.1 It integrates the opportunity cost of the capital tied up in an asset as well as the cost of the asset itself;

3.23.2 Depreciation is back-loaded which takes into account technological and competitive risks;

3.23.3 The addition of a "tilt" brings forward depreciation as future asset prices tend to decline. This would mean that new entrants could purchase the equivalent assets at a lower cost.

Reconciling bottom up and top down approaches to depreciation

3.24 In theory bottom up and top down models should produce the same depreciation charge if they are constructed under the same methodological assumptions. In practice they can produce very different results as (a) top down models are normally based upon historical data and an operator's accounts and (b) bottom up models are usually constructed using modern equivalent assets.

3.25 If current costs are applied to top down models the historical cost of the assets is replaced. These assets, however, may have been purchased over many years and the current costs will reflect the possibility of different prices for these. The operating costs in these models are the actual costs in place. An adjustment will also be made to operating costs to reflect efficiency.

3.26 Bottom up models, and the implied efficiencies associated with them, will require the estimating of operating costs for a new and efficient network. Bottom up models will also have assets as if they were all acquired in year one.

3.27 As a result bottom up and top down models can produce different results.

Eircom's depreciation policy – regulatory accounts

3.28 Note 2.1 "Basis of preparation" of Eircom Limited statutory financial statements for the year ended 30 June 2008 states that:

"*These financial statements have been prepared in accordance with IFRS*".

3.29 Note 5.1 of Eircom's regulatory accounting policies state that the regulatory financial statements for the year ended 30 June 2008 are prepared as follows:

"*The 2008 regulatory financial statements have been prepared based on the statutory accounts prepared in accordance with IFRS*"

3.30 As a result this review ComReg now deems it necessary to propose amendments to the regulatory assets lives to ensure the regulatory accounts are in accordance with the relevant accounting standards. This may give rise to significant variances between regulatory and statutory assets lives where a review of statutory assets lives by Eircom does not conclude on similar amendments. A full list of asset lives is provided in Appendix C "*Recommended regulatory useful economic lives for Eircom*". These are divided as follows:

3.30.1 Current useful economic life – regulatory accounts

3.30.2 Current useful economic life – statutory accounts

3.30.3 Recommended useful economic life - for regulatory purposes

Preliminary Conclusions

3.31 The calculation of economic depreciation is the theoretical optimum means of calculating depreciation. However this method is not straightforward and requires the use of data which is sometimes difficult to obtain and subject to forecasting error and judgement. ComReg considers accounting depreciation data on the other hand, is less burdensome on all parties to produce and consider, but it can still generate a reliable and acceptable approximation to economic depreciation. In principle the asset lives for economic and accounting depreciation should be the same. ComReg is of the view that for regulatory accounting purposes the calculation of an economic depreciation charge is not feasible and requires too great an investment in information and computation. Therefore an accounting approach is normally applied and is recommended here as a preliminary conclusion. For one-off price reviews it may be more appropriate to use economic depreciation but this should be assessed on a case by case basis.

Q. 2. Do you agree or disagree with ComRegs preliminary conclusion above taking into account the views of RGL? Please explain in detail your response.

Assessing Asset lives in practice

3.32 As part of this consultation process ComReg undertook a review of Eircom's fixed asset register relating to its fixed line business. Through this review ComReg obtained an understanding of the age profile of Eircom's current fixed asset register.

3.33 ComReg considers that in order to enhance transparency it should obtain the fixed asset register (in an equivalent form to that received as part of this consultation process) on an annual basis when Eircom is submitting the Historical Cost Separated Accounts to it. By reviewing the fixed asset register ComReg will gain further insight and visibility into the ongoing investment in the fixed line telecommunications network nationally. This will help identify and track the type of assets which are being invested in, or re-invested in the core and access network which is necessary for regulatory pricing purposes now and into the future. It will also provide ComReg with necessary information on the ongoing investment in the networks and the assurance that the integrity of the network is maintained over the long term. In relation to future developments, which are key to Ireland's economy, the planned rollout of Next Generation Networks will also form a significant part of investment. These are changes to the fixed asset profile of Eircom which ComReg will need to have visibility of to ensure it is aware of ongoing versus new investment.

> **Q. 3. Do you agree or disagree with ComRegs preliminary conclusion that the Eircom's fixed asset register (in an equivalent form to that received as part of this consultation process) should be submitted annually to ComReg at the same time as the due date for submission of the HCAs to ComReg? Please explain in detail your response.**

4   Assessment of regulatory asset lives

4.1   This section summaries the preliminary conclusions of ComReg, and also takes into consideration the main findings of RGL (see ComReg Document 09/11A), in relation to the length of regulatory asset lives and with which ComReg is in preliminary agreement.

Individual asset categories

4.2   The following 13 asset categories are those which ComReg considers represent the key categories of a modern telecommunications network.   The individual assets within these 13 categories are drawn substantially from information provided by Eircom from its fixed asset register received as part of a data request for the purposes of this consultation.   Where possible, and where appropriate, assets of a similar nature or function have been grouped.   ComReg considers these categories to be an appropriate revision based on the review carried out.

Asset categories

1. Customer Sited Equipment

2. Access Network – Physical

3. Access Network – Equipment

4. Core Network – Physical

5. Core Network – Transmission Equipment

6. Core Network - Data, Ethernet and IP Equipment

7. *Core Network - Application Capability Equipment*

8. Network Management Equipment and Network Operations

9. Land, Buildings, Mechanical and Electrical Equipment

10. Vehicles

11. IT systems

12. Office equipment

13. Licences & Intellectual Property Rights

4.3   Each of these 13 categories is discussed below and has been further subdivided into the underlying significant type of assets. A full list of recommended regulatory asset lives is contained in Appendix C of this consultation.

4.4   ComReg will provide Eircom with a full detailed list of all assets on its fixed asset register showing each specific proposed change to its regulatory asset lives. If new asset types have been created which are not on Eircoms current fixed asset register it will also be provided with these. As the detail of this list contains commercially sensitive information ComReg will not include this list as part of this consultation. However all material changes proposed have been included in this consultation.

4.5 The remaining part of this section of the consultation will review each of the 13 categories and their underlying subcategories. A brief description of the assets included is given together with any influencing factors such as the possibility of technological obsolescence, company specific factors, or market developments. For each subcategory the existing regulatory asset life or lives is listed, together with proposed changes, if any.

4.6 A question on the proposed regulatory asset life/lives of the subcategories is included and respondents are asked to provide detailed responses.

4.7 Finally, respondents are asked to submit comments on any issues or other assets which they believe should be taken into consideration as part of this review.

Customer sited equipment

4.8 Customer sited equipment refers to equipment situated at a customers property and used to terminate various services. ComReg understands it is more likely to relate to business services rather than residential services. In residential services customers will more than likely own their own equipment (i.e. modems and handsets)

4.9 ComReg is of the view much of the equipment associated with "customer sited equipment" is produced for the mass market where cost of production rather than long term reliability is the important factor. The provider of this equipment is not normally in a position to control how it is used or the environment that it is stored and operated in.

4.10 This equipment is common amongst all fixed line operators. It is also subject to rapid changes in technology. For example "dial up" broadband is being replaced by "always on" broadband and internet access speeds are constantly increasing. The technical capability of modems has advanced to meet these changes.

4.11 ComRegs preliminary conclusions are that much of the equipment for the residential mass market is subject to a relatively short asset life. The reasons for this include:

4.11.1 Customer churn;

4.11.2 Change in customer expectations of their equipment; and

4.11.3 Improvements in speeds and the planned introduction of fibre may require some equipment to be upgraded.

4.12 Specialist business equipment will more likely have longer asset lives than residential customer equipment.

4.13 **Customer sited DSL equipment**

4.13.1 This relates mainly to DSL modems and related filters. It can include Voice over IP ("VOIP"), (over DSL), equipment in some applications.

4.13.2 The existing regulatory asset life for customer sited DSL equipment is 6 years. Given the fact that this equipment is:

4.13.2.1 subject to constant technological change;

4.13.2.2 is produced for the mass market; and

4.13.2.3 as it is sited on customer premises it is not under the direct control of Eircom;

4.13.3 ComReg is of the preliminary conclusion that the current assumed useful economic life of 6 years is too long.

4.13.3.1 ComReg therefore recommends, as a preliminary view, a regulatory asset life of 4 years for customer sited DSL equipment as the more appropriate asset life in this instance, given as stated that, the equipment is subject to constant technological change. ComReg considers this effectively means that with the rate of technological change the existing technology will have been superceded within at least 5 years.

4.13.4 Secondly as stated the equipment is produced for the mass market. ComReg is of the view that this effectively means that, while the equipment delivers the required service, its competitive costs of production are more important than reliability. The reliability of this equipment may, therefore, not last beyond 4 or 5 years.

4.13.5 Finally given that it is sited on customer premises it is not under the direct control of Eircom. This in effect renders Eircom unable to control the environmental conditions within which it is kept. Examples of environmental conditions adverse to the appropriate maintenance of this equipment might include exposure to dust or vibration, fluctuations in temperature, and inappropriate storage. Accordingly and for these reasons ComReg considers, as a preliminary conclusion, that a regulatory asset life of less than 6 years is more appropriate than that of 6 years and that specifically 4 years is more correct and best strikes a balance/reflects the reality that the term must also be more than 2 or 3 years.

> **Q. 4. Do you agree or disagree with a regulatory asset life of 4 years for customer sited DSL equipment? Please explain in detail your response.**

4.14 Customer sited Data, Ethernet and IP terminating equipment

4.14.1 ComReg considers this is mainly business services equipment consisting primarily of Ethernet data equipment and Ethernet switches as well as IP bridges and routers. This type of equipment is more prevalent in commercial organisations than the residential mass market. It too is subject to many of the factors influencing customer sited DSL equipment. For example the rapid change in technological deployment seen in the residential market has also been replicated in the commercial market.

4.14.2 Much of this equipment, while also being customer sited like DSL equipment mentioned above, can be controlled by Eircom. ComReg is of the view, therefore, that it is not subject to the same environmental influences as the residential mass market.

4.14.3 The existing regulatory asset lives for customer sited Data, Ethernet and IP terminating equipment is between 6 and 12 years. ComReg is of the opinion that the current assumed useful economic life of 6 years is too short given that much of the equipment can be controlled by Eircom. Eircom may, therefore, be able to ensure that the equipment is housed in suitable conditions where adverse environmental impacts can be lessened. Furthermore as this equipment is more prevalent in the commercial market ongoing reliability and business needs are important factors. Replacing this equipment within 6 years may prove disruptive to a commercial organisation.

4.14.4 However, as mentioned above this equipment is also subject to technological advances. It is for this reason that ComReg considers that 12 years is too long as technological advances may make some of the equipment obsolete.

4.14.5 ComRegs preliminary conclusion is that a regulatory asset life of 8 years for customer sited Data, Ethernet and IP terminating equipment is more appropriate. ComReg considers that 6 years is too low given the possible level of disruption replacing the equipment whereas 12 years may be too high due to the risk of technological obsolescence. ComReg considers that 8 years strikes an appropriate balance between the two.

> **Q. 5. Do you agree or disagree with a regulatory asset life of 8 years for customer sited Data, Ethernet and IP terminating equipment? Please explain in detail your response.**

4.15 **Customer sited transmission terminating equipment**

4.15.1 ComReg considers this is mainly business services equipment consisting mainly of Plesiochronous Digital Hierarchy ("PDH") or Synchronous Digital Hierarchy ("SDH") for leased circuits and Coarse and Dense Wavelength Division Multiplexing ("C/DWDM") for specialist applications.

4.15.2 The existing regulatory asset life for customer sited transmission terminating equipment is 11 years. ComReg is of the opinion that the current assumed useful economic life of 11 years is too long given recent technological changes. However, as this equipment is "customer sited" and not designed for the mass market, a similar life could be expected as that for "customer sited Data, Ethernet and IP terminating equipment".

4.15.3 ComReg 's preliminary conclusion is that a regulatory asset life of 8 years for customer sited transmission terminating equipment is more appropriate. The reasons for this include the fact that Eircom may be able to influence where this equipment is housed (similar to Customer sited Data, Ethernet and IP terminating equipment) but that there is a risk of technological obsolescence before the expiration of 11 years.

> **Q. 6. Do you agree or disagree with a regulatory asset life of 8 years for customer sited transmission terminating equipment? Please explain in detail your response.**

4.16 **Customer sited application capability equipment**

4.16.1 ComReg considers where managed services are provided there is likely to be equipment and/or software providing a particular service or application. This may include, for example, equipment and software associated with call servers for voice over IP applications, messaging applications, internet security or user authentication capability.

4.16.2 The existing regulatory asset life for customer sited application capability equipment is 12 years. ComReg is of the opinion that the current assumed useful economic life of 12 years is too long. Much of this subcategory consists of IT software which has a shorter life than 12 years. However, as this equipment is "customer sited" and it is not designed for the mass market, a similar life could be expected as that for "customer sited Data, Ethernet and IP terminating equipment".

4.16.3 ComReg's preliminary conclusion is that a regulatory asset life of 8 years for customer sited application capability equipment is more appropriate. The reasons for this include the fact that Eircom may be able to influence where this equipment is housed (similar to Customer sited Data, Ethernet and IP terminating equipment) but that there is a risk of technological obsolescence before the expiration of 12 years.

> **Q. 7. Do you agree or disagree with a regulatory asset life of 8 years for customer sited application capability equipment? Please explain in detail your response.**

Access Network – Physical

4.17 Access Network – Physical refers to the part of the network between the exchange and a customer premises. ComReg considers it includes:

    4.17.1 over ground transport (i.e. poles and associated cables)

    4.17.2 underground transport (i.e. ducts, roadway and footway boxes and associated underground cables.) Roadway and footway boxes include manholes and chambers in streets and pavements.

    4.17.3 wireless transport (i.e. towers)

    4.17.4 Cables (both underground and overhead) include copper, fibre and co-axial.

4.18 The core physical network can be distinguished from access physical network as both elements of the physical networks are subject to, amongst other things, different market conditions and regulation. As discussed in the section "Core - physical network" below many of the assets, in both networks, have the same if not similar asset lives. Within the networks ComReg considers it can be difficult to differentiate between assets. For example duct can be used in both the core and access networks.

4.19 **Poles**

    4.19.1 ComReg considers poles include poles to carry overhead copper, co-axial or fibre cables.

    4.19.2 Poles are constructed to accommodate different types of aerial cable and cable technologies over time. This enables them to be reused.

    4.19.3 ComReg understands that many timber poles, which are the predominant type of pole in Eircoms network, can have a useful life in excess of 50 years, if properly maintained.

    4.19.4 P.D.M. Limited of Kill, Co. Kildare, which supply poles to telecommunication companies state on their website[8] that:

    "There are many instances of Creosoted Timber structures and Wood Poles still giving good service after 100 years in ground contact. In Ireland, the E.S.B. have used 1,250,000 pressure creosoted Transmission Poles in the Rural Electrification Scheme since 1947 and replacement has hardly commenced: Over 100,000 poles erected prior to 1947 are still in use. Eircom have over 1,000,000 Creosoted Telegraph Poles standing in Ireland and of these more than 100,000 installed prior to 1930 are still giving good service. "

    4.19.5 A reference from the North American Wood Pole Council[9] article "*Wood Poles: How long do they last*" states that:

    "Currently, most utilities assume a 30 to 40 year life expectancy for wood poles but utility experience indicates that actual life of properly produced and maintained wood poles is significantly longer – certainly approaching 75 or more years service"

---

[8] www.pdm.ie (extracted 13 February 2009)

[9] www.woodpoles.org (extracted 13 February 2009)

4.19.6 However given the climatic conditions in Ireland and the increased tendency to replace overhead infrastructure (i.e. poles) with underground infrastructure (i.e. ducts and trenches), ComReg considers, the service life of a pole in Ireland could be less.

4.19.7 The existing regulatory asset life for poles in the access network is 15 years. An investigation of Eircoms fixed asset register would indicate the presence of poles which were installed pre 1993, are now fully depreciated but are still recorded. ComReg is of the opinion that the current assumed useful economic life of 15 years is too short.

4.19.8 ComReg's preliminary conclusion recommends a regulatory asset life of 30 years for poles, a doubling of the length of the current regulatory asset life. As described above timber poles can have a useful life in excess of 50 years. ComReg is of the opinion that given Irelands climatic conditions that 50 years would be excessive. It is of the view that 30 years strikes an appropriate balance between the existing regulatory life of 15 years and 50 years.

> **Q. 8. Do you agree or disagree with a regulatory asset life of 30 years for poles? Please explain in detail your response.**

4.20 **Towers**

4.20.1 ComReg understands towers are used for wireless access including microwave radio and mobile systems.

4.20.2 While the design life for many towers is typically 20 years it can in practice be used for longer.

4.20.3 It is noted that, in September 2007, Eircom sold its portfolio of radio masts while retaining the long term access rights. To the extent that assets in this category relate to leased assets the useful economic life should equal the remaining period of the lease. ComReg understands that typical asset lives for towers can be 35 years.

4.20.4 The existing regulatory asset life for towers is 35 years.

4.20.5 It is ComReg preliminary conclusion to maintain a regulatory asset life of 35 years for towers. As towers are designed to last longer than 20 years ComReg is of the opinion that 35 years represents an appropriate useful life.

> **Q. 9. Do you agree or disagree with a regulatory asset life of 35 years for towers? Please explain in detail your response.**

4.21 **Duct, roadway & footway boxes**

4.21.1 ComReg considers duct houses the duct/conduit pipes used for underground cables. Roadway and footway boxes are the associated manhole, boxes and chambers providing access to these ducts.

4.21.2 ComReg understands that many ducts are made of plastic which, if left undisturbed, can last in excess of 50 years.

4.21.3 Emtelle[10], a duct manufacturer states on its website in relation to ducts that:

"*They are expected to last for 25 or 50 years without serious deterioration*"

4.21.4 The Plastic Pipes Institute[11], a US trade association states on its website that, in relation to pipes:

"*There is considerable supporting justification for assuming a 100-year or greater design service life for corrugated polyethylene pipe, when properly used and reasonably well installed*"

4.21.5 The life of ducts will often depend upon features relating to roadwork's and the construction of roads and the accidental damage or commercial decisions relating to these. Resurfacing of roads should not normally impact upon ducts as these are placed well below the surface of the road. Resurfacing can affect the lids of boxes and chambers some of which may need to be replaced.

4.21.6 Data from the UK[12] would indicate that roads are designed to have an expected life in excess of 40 years before they require major reconstruction work. The Annual Local Authority Road Maintenance (ALARM) Survey from 2000 found that:

"*[…] half of Britain's roads have had no, or only minor repairs in the last 40 years and four percent have been unrepaired for 100 years.*"

4.21.7 Damage to duct and chambers can occur due to third party disturbance. This is often caused by utility providers excavating adjacent to the telecoms infrastructure or where the original infrastructure was imperfectly documented or mapped. Where this occurs the resulting damage is often localised and can be repaired within a matter of days. Associated costs are often reflected in operating costs in an operator's income statement rather than being capitalised.

4.21.8 Technological obsolescence could occur if the requirement for ducts and associated civil works ceased to exist or if the ducts were no longer suitable for the accommodation of cables. Throughout the development of the telecoms network ducts have been used for copper, co-axial and fibre cables. It is ComReg's preliminary conclusion that it is likely that the rollout of Next Generation Networks ("NGN") will also use the same ducts to provide services extending the lives of ducts, and associated civil works even further.

---

[10] www.emtelle.com (extracted 13 February 2009)

[11] www.hancor.com (extracted 13 February 2009)

[12] Source: Asphalt Industry Alliance (AIA) www.asphaltindustryalliance.com/why-longevityfacts.asp

4.21.9 The existing regulatory asset life for ducts, roadway and footway boxes is 20 years. An investigation of Eircoms fixed asset register indicates the presence of ducts which were installed pre 1988, are now fully depreciated but are still recorded. ComReg is of the opinion that 20 years is too short.

4.21.10 ComReg's preliminary conclusion is that a regulatory asset life of 40 years for duct, roadway and footway boxes is more appropriate. This represents a doubling of the current regulatory asset life. ComReg considers that 20 years is too short for the following reasons: (a) the UK ALARM survey from 2000 indicates that roads will not normally require major repairs before the expiration of 40 years and (b) where localised damage is incurred it is often repaired in a matter of days.

4.21.11 ComReg is of the view that conditions are similar between the UK and Ireland and therefore considers as a preliminary conclusion that 40 years reflects an appropriate life for these assets.

> **Q. 10.   Do you agree or disagree with a regulatory asset life of 40 years for duct, roadway, and footway boxes? Please explain in detail your response.**

> **Q. 11.   Do you agree or disagree with ComReg's preliminary conclusion that it is likely that the rollout of NGN will also use the same ducts to provide services extending the lives of ducts, and associated civil works even further? Please explain in detail your response.**

4.22 **Overhead and underground cables and fibre**

4.22.1 The access network connects the network to the customer's premises through the use of cables and fibre. The use of fibre in the access network is often referred to as NGN or Next Generation Access ("NGA"). ComReg considers that the cost of rollout of NGA to all homes will be very high and therefore only likely to be deployed over an extended period of time. (NGN is discussed further in section 6 below).

4.22.2 In the United Kingdom Ofcom has applied lives of 18 years to both underground and overhead cables. In its document "Valuing copper access, Final statement 18 August 2005", Ofcom commented that:

"BT has also informed Ofcom that the design life of copper cables is around 20 years under ideal conditions; and that typical service life is likely to be between 15 and 20 years although precise empirical data is not available".

4.22.3 A US cable manufacturer "Superior Essex[13]" indicates a useful economic life of 30 years for its copper cables and states:

"Outside plant (OSP) copper cables are designed based on a life expectancy of 30 years. Raw materials and finished cables are tested using life-cycle test procedures. OSP cable designs are available with many shielding options to accommodate a variety of installation environments. Choosing the appropriate shielding system for your environment will provide the greatest chance for 30+ years of trouble free service"

4.22.4 ComReg considers overall that Irish climatic conditions would suggest that the useful economic life of overhead cable would be less than that for underground cables.

4.22.5 The current assumed useful economic lives for overhead cables and fibre is between 8 and 10 years. A review of Eircoms fixed asset register shows the presence of overhead cables from pre-1999. ComReg is of the opinion that the lives are too short.

4.22.6 ComReg's preliminary conclusion is to recommend a regulatory asset life of 15 years for overhead cables and fibre. ComReg considers that the range of 8 to 10 years is too short given that both Ofcom[14] has extended the regulatory asset life of cables to 18 years and that a US cable manufacturer states that its cables have a design life of 30 years. ComReg considers that a regulatory life of 15 years is more appropriate for overhead cables and fibres as this will also take into account Irish climatic conditions.

> **Q. 12.   Do you agree or disagree with a regulatory asset life of 15 years for overhead cables and fibre? Please explain in detail your response.**

4.22.7 The current assumed useful economic life of underground cables and fibre is 14 years. The research data applied to overhead cables above could also be applied to underground cables. However, as mentioned above underground cables would be expected to have longer asset lives than overhead cables. A review of Eircoms fixed asset register shows the presence of underground cables from pre 1995. ComReg is of the opinion 14 years is too short.

4.22.8 It is ComReg's preliminary conclusion that a regulatory asset life of 20 years for underground cables and fibre is more appropriate. As mentioned above BT (UK) considers that the design life of cables is 20 years under ideal conditions and that the typical service life will be between 15 and 20 years.   As also mentioned above a US cable manufacturer considers that the design life of its cables is 30 years. However ComReg considers 20 years to be an appropriate useful life for underground cables.

---

[13] www.superioressex.com (extracted 13 February 2009)

[14] Ofcom: Valuing copper access: Final Statement 18 August 2005

> **Q. 13.   Do you agree or disagree with a regulatory asset life of 20 years for both underground cables and fibre? Please explain in detail your response.**

4.23 The current assumed useful economic life of equipment associated with the maintenance of cables and fibres (i.e. line conditioning, lightening protection, and network pressurisation) are between 8 and 22 years.

4.24 The asset lives of this equipment should be related to the cables and fibres associated with it. A review of Eircoms fixed asset register indicates that the majority of equipment associated with the maintenance of cables and fibres relates to network pressurisation equipment. This is mainly used for underground cables and fibres.

4.25 ComReg, as a preliminary conclusion, recommends a regulatory asset life of 20 years for line conditioning, lightening protection, and network pressurisation equipment. The reasons for a 20 year asset life include relating the asset life of the maintenance equipment to the associated cables and fibres, which are mainly those deployed in the underground network. It is ComReg's preliminary view that a 20 year useful life for underground cables and fibres is more appropriate.

> **Q. 14.   Do you agree or disagree with a regulatory asset life of 20 years for equipment associated with the maintenance of cables? Please explain in detail your response.**

<u>Access Network – Equipment</u>

4.26 Access network equipment is equipment working directly on the access network. It can be copper, fibre, co-axial, or wireless based. ComReg understands much of this equipment is standard equipment amongst incumbent operators and is situated either in exchange buildings or in conditioned street cabinets.

4.27 Much of the technology behind equipment associated with the residential and small and medium enterprise ("SME") market had remained stable for many years until the introduction of Digital Subscriber Lines ("DSL"). Its introduction saw major technological changes and with the convergence of the telecoms and computer industries further changes are likely. ComReg considers assets which were common in the pre-DSL era and used by the larger business community and are now most likely fully depreciated. Many physical switches are being replaced by soft switches. The combination of these factors has meant that traditional services are being progressively replaced by IP and Ethernet based equipment. However given the cost and extended roll out period required for NGN it is likely that the current access network will continue to be used.

4.28 **Active equipment including DSLAMs, MSAN's in Exchanges or other conditioned areas**

4.28.1 ComReg considers this equipment includes "DSLAMs" (Digital subscriber line access multiplexer) and "MSANs" (Multiservice access node) in modern copper networks as well as a wide variety of equipment supporting transmission, data and Internet Protocol ("IP") services for business customers. This equipment may be using a variety of methods of access including copper, fibre, wireless and co-axial.

4.28.2 The current assumed useful economic lives of active equipment including DSLAMs, MSAN's in Exchanges or other conditioned area is between 6 and 14 years. The majority of equipment has a current regulatory asset life of 11 years. A review of Eircom's fixed asset register indicates the presence of assets pre 1998. There have been significant advances in DSL technology in recent years which have shortened the traditional lives of DSL assets.

4.28.3 ComReg considers that while 6 years is too short an asset life it also considers that 14 years is too long. ComReg recommends, as a preliminary conclusion, a regulatory asset life of 8 years for active equipment including DSLAMs, MSAN's in exchanges or other conditioned areas. A review of Eircom's fixed asset register indicates the presence of equipment which while fully depreciated after 6 years may be still in use. However technological advances may also mean that equipment may become obsolete before the expiration of 14 years. It is for these reasons that ComReg considers as a preliminary view that 8 years is an appropriate asset life and that it strikes a balance between the existing regulatory lives of 6 to 14 years.

> **Q. 15.** Do you agree or disagree with a regulatory asset life of 8 years for active equipment including DSLAMs, MSAN's in exchanges or other conditioned areas? Please explain in detail your response.

4.29 Switching – line terminals

4.29.1 ComReg considers this subcategory includes remote concentrators, and equivalent items (with varied names & terminologies in use from supplier to supplier) serving customers over copper access networks.

4.29.2 The current assumed useful economic life of Switching – line terminals is 8 years.

4.29.3 It is ComReg's preliminary view that the maintenance of a regulatory asset life of 8 years for switching: Line terminals, is more appropriate. This is consistent with the recommended lives for active equipment.

> **Q. 16.** Do you agree or disagree with the maintenance of a regulatory asset life of 8 years for switching: line terminals? Please explain in detail your response.

4.30 Active street cabinets and similar external equipment

4.30.1 This sub category includes equipment located outdoors rather than in exchange buildings or conditioned street cabinets. This will include the infrastructure of street cabinets themselves, but not equipment within them if it is also used indoors unmodified. Radio [microwave] access systems with external components and antennas are a part of this sub category.

4.30.2 The current assumed useful economic lives of active street cabinets and similar external equipment is between 11 and 22 years. This subcategory could be broadly subdivided into the following:

  4.30.2.1 Pair Gains systems

  4.30.2.2 Radio Access

  4.30.2.3 Antennae

4.30.3 It is ComReg's preliminary view that a regulatory asset life of 20 years for pair gains systems, which is in line with the recommended lives for underground cables and fibres, is appropriate. It is also ComRegs preliminary view that 10 years for radio access and 8 years for antennae, which are consistent with the recommended life of 8 years for active equipment within the cabinets, are appropriate. As pair gains systems have traditionally been made from copper ComReg considers that they should also reflect the useful life of underground copper cables. Pair gains systems, like underground copper cables are not subject to the same environmental and climatic conditions as overhead copper cables. It is ComReg's preliminary conclusion above that a regulatory asset life of 20 years underground copper cables is more appropriate. It is for this reason that ComReg considers that 22 years is too long for pair gains systems.

4.30.4 ComReg considers that 22 years is too long for radio access. As some of this equipment is external to street cabinets it can be exposed to climatic conditions. A review of Eircom's fixed asset register indicates the presence of radio access equipment pre 1999. It is for these reasons that ComReg considers that 10 years is an appropriate asset life, as a preliminary view.

4.30.5 ComReg considers that 11 years is too long for antennae. As this equipment may be exposed to climatic conditions ComReg considers that 8 years is a more appropriate asset life, as a preliminary view.

> **Q. 17.** **Do you agree or disagree with regulatory asset lives of 20 years for pair gains systems, 10 years for radio access and 8 years for antennae? Please explain in detail your response.**

Core Network – Physical

4.31 As mentioned in the section "Access Network – Physical" above the physical factors affecting assets within the Core Network – Physical category will be similar to those affecting assets in the Access Network – Physical category.

4.32 Developments within the core network normally take place before those in the access network. For example core networks are often upgraded to fibre while access networks often remain predominantly copper based. However, much of the infrastructure used in both networks is common.

4.33 The preliminary conclusions of ComReg are that the regulatory asset lives of the physical assets, common between both the core and access networks should be the same.

> **Q. 18.   Do you agree or disagree with ComRegs preliminary conclusions that the regulatory asset lives of the physical assets, common between both the core and access networks should be the same? Please explain in detail your response.**

4.34 **Poles**

4.34.1 The current assumed useful economic life of poles in the Core network is 8 years, as compared to 15 years in the Access network. ComReg considers 8 years to be too short. A review of Eircom's fixed asset register shows the presence of poles from pre 2000.

4.34.2 ComReg recommends a regulatory asset life of 30 years for poles.

4.34.3 As mentioned in the section "Access Network – Physical" timber poles can have a useful life in excess of 50 years. ComReg is of the opinion that given Irelands climatic conditions 50 years would be excessive. Furthermore ComReg is of the opinion that poles can carry both Core and Access network equipment and that they should therefore reflect similar asset lives. ComReg is of the preliminary view therefore that 30 years strikes an appropriate balance between the existing regulatory life of 8 years and 50 years.

> **Q. 19.   Do you agree or disagree with a regulatory asset life of 30 years for poles? Please explain in detail your response.**

4.35 **Towers**

4.35.1 The current assumed useful economic life of towers is 35 years.

4.35.2 ComReg recommends the maintenance of the regulatory asset life of 35 years for towers. As mentioned in the section "Access Network – Physical" towers are designed to last longer than 20 years. Furthermore ComReg is of the opinion that towers can carry both Core and Access network equipment and that they should therefore reflect similar asset lives ComReg is of the preliminary opinion that 35 years represents an appropriate useful life.

> **Q. 20.   Do you agree or disagree with a regulatory asset life of 35 years for towers? Please explain in detail your response.**

4.36 **Duct, roadway & footway boxes**

4.36.1 Core and Access networks often share the same ducts. At times the differentiation between both networks can be difficult. Should one network no longer require the use of ducts these same ducts could be utilised by the other network.

4.36.2 The current assumed useful economic life of duct, roadway, and footway boxes is 20 years. A review of Eircom's fixed asset register indicates the presence of ducts from pre 1988.

4.36.3 ComReg recommends a regulatory asset life of 40 years for duct, roadway and footway boxes. This represents a doubling of the current regulatory asset life. As mentioned in the section "Access Network – Physical" ducts it is ComReg's view that ducts can last significantly longer than 20 years for the following reasons (a) the UK ALARM survey from 2000 indicates that roads will not normally require major repairs before the expiration of 40 years and (b) where localised damage is incurred it is often repaired in a matter of days.

4.36.4 Furthermore ComReg is of the preliminary conclusion that ducts can carry both Core and Access network equipment and that they should therefore reflect similar asset lives.

4.36.5 ComReg considers as a preliminary conclusion that 40 years reflects an appropriate life for duct, roadway, and footway boxes.

> **Q. 21.   Do you agree or disagree with a regulatory asset life of 40 years for duct, roadway, and footway boxes? Please explain in detail your response.**

4.37 **Overhead cables and fibre**

4.37.1 The current assumed useful economic lives of overhead cables and fibres are between 8 and 10 years. ComReg is of the opinion that this period is too short. A review of Eircom's fixed asset register indicates the presence of overhead cables and fibres from pre 1998.

4.37.2 ComReg recommends a regulatory asset life of 15 years for overhead cables and fibre. As mentioned in the section "Access Network – Physical" ComReg considers that the range of 8 to 10 years is too short and notes in this regard that both Ofcom has extended the regulatory asset life of cables to 18 years and that a US cable manufacturer states that its cables have a design life of 30 years. However ComReg considers as a preliminary conclusion that a regulatory life of 15 years is appropriate for overhead cables and fibres as this will also take into account Irish climatic conditions.

> **Q. 22.** **Do you agree or disagree with a regulatory asset life of 15 years for overhead cables and fibre? Please explain in detail your response.**

4.38 **Underground cables and fibre**

4.38.1 The current assumed useful economic life of underground cables and fibres is 14 years. ComReg is of the opinion that this is too short. A review of Eircom's fixed asset register indicates the presence of underground cables and fibres from pre 1994.

4.38.2 It is ComReg's preliminary conclusion that a regulatory asset life of 20 years for underground cables and fibre is more appropriate. As mentioned in the section "Access Network – Physical" BT (UK) considers that the design life of cables is 20 years under ideal conditions and that the typical service life will be between 15 and 20 years. As also mentioned in "Access Network – Physical" a US cable manufacturer considers that the design life of its cables is 30 years. However ComReg considers 20 years to be an appropriate useful life for underground cables.

> **Q. 23.** **Do you agree or disagree with a regulatory asset life of 20 years for underground cables and fibre? Please explain in detail your response.**

Core Network - Transmission equipment

4.39 This category includes all core transmission from older analogue systems (if any remain in service), through radio links to Plesiochronous Digital Hierarchy ("PDH"), Synchronous Digital Hierarchy ("SDH") and Dense Wavelength Division Multiplexing ("DWDM") fibre systems.

4.40 Some data and Ethernet equipment could be placed in either this category or the next, "Core Network – Data, Ethernet and IP equipment". An example of this type of equipment would be resilient packet ring ("RPR"). It is recommended that this type of equipment is placed in the Core Network – Data, Ethernet and IP equipment category as by their nature they are specific to one technology and not normally able to transport others easily.

4.41 At the same time there is a shift from pure transport such as SDH to Ethernet based transport systems which are running on fibre, radio or for higher capacity fibre systems (Wavelength-division multiplexing ("WDM")). ComReg considers therefore operators operating on WDM systems are less affected by market and technology changes.

4.42 **Transmission equipment less than 155 M/bits**

4.42.1 This sub category includes transmission equipment capable of transporting less than 155Mbit/s or equivalent capacity.

4.42.2 The current assumed useful economic lives of transmission equipment less than 155 M/bits is between 3 and 11 years. The majority of this equipment has a regulatory asset life of 11 years. A review of Eircom's fixed asset register indicates the presence of assets pre 1998.

4.42.3 It is ComReg's preliminary conclusion that regulatory asset lives of 11 years for transmission equipment less than 155 M/bits are more appropriate.

4.42.4 ComReg considers that 3 years is too short. A review of Eircom's fixed asset register indicates, for this particular asset, the presence of equipment from pre 2005. As mentioned above the review of Eircom's fixed asset register has indicated the presence of equipment from pre 1998 which would suggest that some of it is still in use. It is for these reasons that ComReg considers as a preliminary conclusion that 11 years is an appropriate useful life for these assets.

> **Q. 24. Do you agree or disagree with regulatory asset lives of 11 years for transmission equipment less than 155 M/bits? Please explain in detail your response.**

4.43 **Transmission equipment greater than or equal to 155 M/bits**

4.43.1 The current assumed useful economic lives of transmission equipment greater than or equal to 155 M/bits is between 6 and 11 years.

4.43.2 ComReg considers that advances are being made in the capabilities of transmission equipment in this subcategory such as various WDM. Much of these advances are aimed at the non-residential market where higher speeds are required. However, current technology would indicate that an asset life of 11 years is not unreasonable.

4.43.3 ComReg considers that 6 years is too short. A review of Eircom's fixed asset register for this particular asset indicates the presence of equipment from pre 2002. This would suggest that some equipment purchased pre 2002 is still in use.

4.43.4 it is ComReg's preliminary conclusion that a regulatory asset life of 11 years for transmission equipment greater than or equal to 155 M/bits as an appropriate asset life for this equipment.

> **Q. 25.** **Do you agree or disagree with a regulatory asset life of 11 years for transmission equipment greater than or equal to 155 M/bits? Please explain in detail your response.**

4.44 **International Satellite Equipment**

4.44.1 International satellite technology is under constant pressure from newer larger capacity submarine systems.

4.44.2 The current assumed useful economic life of international satellite equipment is 9 years. A review of Eircom's fixed asset register indicates that much of this equipment is fully depreciated.

4.44.3 It is ComReg's preliminary view that the maintenance of a regulatory asset life of 9 years for international satellite equipment is appropriate.

> **Q. 26.** **Do you agree or disagree with a regulatory asset life of 9 years for international satellite equipment? Please explain in detail your response.**

4.45 **Submarine cable equipment**

4.45.1 Submarine cables can have a range of asset lives. Those run over relatively short distances, such as the Irish Sea, do not need repeaters and can be used for at least 20 years. Those with repeaters may only last 10 years.

4.45.2 The current assumed useful economic lives of submarine cable equipment is between 8 and 9 years. ComReg recommends the maintenance of 9 years for submarine cable transmission equipment. ComReg considers that 8 years is too short for submarine cables. A review of Eircoms fixed asset register indicates the presence of submarine cable transmission equipment from pre 2001.

4.45.2.1 ComReg recommends regulatory asset lives of 9 years for transmission equipment (existing life) and 15 years for cable equipment. As mentioned above submarine cables run over short distances (such as the Irish Sea) generally do not need repeaters and can last for longer than 20 years. It is ComReg's preliminary conclusion that 15 years is an appropriate asset life for submarine cable equipment.

> **Q. 27.** **Do you agree or disagree with regulatory asset lives of 9 years for submarine transmission equipment and 15 years for submarine cable? Please explain in detail your response.**

Core Network – Data, Ethernet and IP equipment

4.46 The equipment in this category is used in levels 2 and 3 of the OSI model (see Appendix F). These are the data link and transport layers respectively and they transport data within the network.

4.47 IP routers represent the main assets within this category. ComReg considers they tend to have major software elements and at times have differing software on the same hardware. This equipment can be subdivided into the following:

4.47.1 IP & Internet Router hardware (typically layer 3)

4.47.2 Ethernet transport and switch equipment (typically layer 2)

4.48 ComReg is of the view that there has been significant technological change in technology in the core part of fixed telecoms networks. Data services have gone from low speeds, such as Switched Multi-megabit Data Services ("SMDS"), to the current technologies of Ethernet and IP. As technology in this area continues to evolve it can be expected that relatively short useful economic lives will apply. However it does include significant software components developed to support the equipment. While this software may be upgraded from time to time it is generally not replaced frequently.

4.49 **IP and Internet router hardware**

4.49.1 This is data equipment using the internet protocol.

4.49.2 The current assumed useful economic life of IP and internet router hardware is 6 years.

4.49.3 It is ComReg's preliminary conclusion to maintain the existing regulatory asset life of 6 years for IP and Internet router hardware.

> **Q. 28.** **Do you agree or disagree with the maintenance of the existing regulatory asset life of 6 years for IP and Internet router hardware? Please explain in detail your response.**

4.50 **Ethernet: Transport and switch equipment**

4.50.1 This data equipment uses Ethernet Protocol.

4.50.2 The current assumed useful economic lives of Ethernet switching and transport equipment is 9 years. ComReg considers there has been, and there continues to be, significant advances in Ethernet technology such as developments towards Carrier Class Ethernet[15]. While a review of Eircom's fixed asset register indicates the presence of equipment from pre 1999 ComReg is of the opinion that advances in technology means that a period of 9 years is too long.

4.50.2.1 It is ComReg's preliminary opinion that a regulatory asset life of 6 years for Ethernet: Transport and switch equipment, in consideration of the advances in technology, remains appropriate.

---

[15] MEF (Metro Ethernet Forum) is a global industry alliance comprising more than 145 organizations including telecommunications service providers, which is developing agreed standards for Ethernet service definition, technical specifications and interoperability

> **Q. 29.** **Do you agree or disagree with a regulatory asset life of 6 years for Ethernet: Transport and switch equipment? Please explain in detail your response.**

4.51 **ATM Frame relay equipment**

4.51.1 This is data equipment using ATM and/or Frame Relay Protocols (typically layer 2).

4.51.2 The current assumed useful economic lives of ATM Frame relay equipment are between 6 and 12 years. Given the advances in data, Ethernet and IP technology ComReg considers that the upper bound of 12 years is too high and that an upper bound of 6 years is more appropriate.

4.51.3 ComReg recommends regulatory asset lives of 6 years for ATM Frame relay equipment, as a preliminary conclusion. ComReg considers that given the advances in technology 6 years is an appropriate asset life for ATM Frame relay equipment.

> **Q. 30.** **Do you agree or disagree with regulatory asset lives of 6 years for ATM Frame relay equipment? Please explain in detail your response.**

4.52 **Other data equipment**

4.53 Other data equipment includes older systems and less common protocols.

4.54 The current assumed useful economic lives of other data equipment is between 9 and 12 years. ComReg considers that the range 9 to 12 years is too long. It is of the opinion that a range of 6 to 9 years is more appropriate. 6 years would encompass much of the older systems and less common protocols. A review of Eircom's fixed asset register indicates that much of this equipment is fully depreciated. 9 years would encompass Eircom's "MARTIS" system. ComReg understands this system is designed to provide enhanced sub structure management capability which will ensure secure proactive monitoring.

4.54.1 ComReg recommends regulatory asset lives of 9 years (the existing asset life) for the "MARTIS" system and 6 years for other data equipment, as a preliminary conclusion. ComReg considers that lives of between 9 and 12 years are too long for the "other data equipment" as much of this equipment relates to older systems and is fully depreciated. ComReg is of the opinion that 6 years reflects an appropriate asset life for "other data equipment".

> **Q. 31.** **Do you agree or disagree with regulatory asset lives of 9 years for the "MARTIS" system and 6 years for other data equipment? Please explain in detail your response.**

Core Network – Application Capability Equipment

4.55 The equipment included in this category covers higher functionality items such as voice switches, voice mail, instant messaging and presence applications. It also includes more specialist items such as Session Border Controllers.

4.56 The key equipment in this category is, however, switches. These relate to large customised hardware and software elements. There is also significant supporting software development programmes tied to the hardware vendor. There has been a move towards more independence between hardware and software. This would allow for the standardising of hardware which could then run different software elements.

4.57 Core networks have experienced rapid change through, amongst other things, the advent of NGN voice. This has been coupled with application capabilities replacing conventional voice switches. These conventional switches were designed for one specific function and not integrated with other parts of the network.

4.58 ComReg considers there has been a somewhat cautious approach in the adoption of new technologies. Much of this is predicated on a desire to ensure that they are robust and operationally proven. Much of this NGN technology is overlaid on existing networks or run on a trial basis. As a result the existing technology has not been significantly replaced.

4.59 **Class 4 / 5 switch hardware (excluding line terminals)**

4.59.1 This sub category includes trunk/toll and local voice switch hardware. Class 4 represents tandem switches while class 5 represents switches within an exchange.

4.59.2 The current assumed useful economic lives of trunk/toll and local voice switch hardware (excluding line terminals) are between 6 and 9 years. ComReg considers that the range 6 to 9 years is too short. As mentioned above as hardware becomes standardised it can run different software elements. A review of Eircom's fixed asset register indicates the presence of equipment from pre 1998.

4.59.3 It is ComReg's preliminary view that a regulatory asset life of 10 years for class 4 / 5 switch hardware (excluding line terminals) is appropriate. ComReg considers that as hardware become standardised it can run different software elements thereby extending its useful life. ComReg is of the opinion that 10 years is an appropriate asset life for this type of equipment.

> **Q. 32.** **Do you agree or disagree with a regulatory asset life of 10 years for class 4 / 5 switch hardware (excluding line terminals)? Please explain in detail your response.**

4.60 **Class 4 / 5 switch software**

4.60.1 This sub category includes trunk/toll and local voice switch software.

4.60.2 The current assumed useful economic lives of trunk/toll and local voice switch software are between 4 and 6 years. While a review of Eircom's fixed asset register indicates the presence of Class 4 / 5 switch software from pre 2002 ComReg is of the opinion that 6 years is too long. While the hardware may continue to support software for 6 years this same software is subject to change and advances. However as this software is often tied to a hardware developer ComReg considers that a life of 4 years is too short.

4.60.3 ComReg recommends a regulatory asset life of 5 years for class 4 / 5 switch software. ComReg considers that 4 years is too short. While it is subject to technological change it is often tied to hardware developers and that this should be reflected in the asset life. As mentioned above ComReg is of the opinion that Class 4 / 5 switch hardware (excluding line terminals) should have an asset life of 6 years. However, as software is upgraded the related hardware should be able to run it for a longer period of time. Therefore it is ComReg's preliminary opinion that 5 years is an appropriate asset life for Class 4 / 5 switch software as it reflects the fact that software may change more frequently than the related hardware.

> **Q. 33.   Do you agree or disagree with a regulatory asset life of 5 years for class 4 / 5 switch software? Please explain in detail your response.**

4.61 **Custom hardware and applications**

4.61.1 This subcategory includes specialist functional elements with custom hardware and software such as Broadband Remote Access Servers (BRAS), Session border controllers and media gateways.

4.61.2 The current assumed useful economic lives of custom hardware and applications are between 6 and 20 years. ComReg considers that asset lives beyond 6 years are too long. A review of Eircom's fixed asset register indicates that much of the equipment within this category is fully depreciated.

4.61.3 It is ComReg's preliminary view that a regulatory asset life of 6 years for custom hardware and applications is appropriate. This is consistent with ComRegs view that other hardware within the category "Core Network – Application capability equipment" has a recommended life of 6 years. ComReg considers that 20 years is too long as again, this is inconsistent with its view that hardware within this category (Core Network – Application Capability Equipment) should have a life of 6 years.

> **Q. 34.   Do you agree or disagree with a regulatory asset life of 6 years for custom hardware and applications? Please explain in detail your response.**

4.62 **Server hardware**

4.62.1 This subcategory includes general purpose servers, such as Windows, Sun or HP devices.

4.62.2 No regulatory asset lives were previously given for this subcategory.

4.62.3 It is ComReg's preliminary view that a regulatory asset lives of 5 years for server hardware would be appropriate. ComReg is of the view that 5 years is an appropriate for this asset category. While less than the recommended asset lives of other hardware in this category it takes account of possible technological changes which may cause obsolescence on more general server hardware.

> **Q. 35.**   **Do you agree or disagree with regulatory asset lives of 5 years for server hardware?   Please explain in detail your response.**

4.63 **Applications and OS**

4.63.1 This subcategory includes software applications which are largely server independent but providing an application capability within the network.

4.63.2 The current assumed useful economic life of applications and OS is 6 years. ComReg is of the opinion that 6 years is too long and that this subcategory should be in line with other software applications.

4.63.3 It is ComReg's preliminary view that a regulatory asset life of 5 years for Applications and OS would be appropriate. This is consistent with ComRegs view that software in this category has a useful life of 5 years. ComReg is of the view, therefore, that 5 years is an appropriate asset life for applications and OS.

> **Q. 36.**   **Do you agree or disagree with a regulatory asset life of 5 years for Applications and OS?   Please explain in detail your response.**

Network Management Equipment and Network Operations

4.64 Network Management equipment is the software, and associated servers / hardware, used to manage the network equipment listed in the following:

4.64.1 Network management systems

4.64.2 Fixed and exchange based test equipment

4.65 The equipment within these subcategories is the software, and associated servers / hardware, used to manage the network equipment. In addition it covers test equipment used for operational purposes. While much of this equipment is related to non-network IT they do have their own drivers.

4.66 Where the equipment is directly linked to the network elements it supports both would be subject to the same factors (i.e. obsolescence or technological changes). Therefore ComReg considers that the asset lives applied to both categories should be similar.

4.67 Where systems supporting networks are independent and not dedicated there can be different and conflicting pressures.

4.67.1 Enhancement can lead to obsolescence

4.67.2 Proprietary systems supporting a number of different elements can be difficult to replace without causing disruption.

4.68 **Network management systems**

4.68.1 This sub category includes software, and associated servers / hardware, used to manage the network equipment.

4.68.2 The current assumed useful economic lives of network management systems are between 4 and 9 years.

4.68.3 It is ComReg's preliminary conclusion that the existing regulatory asset lives of between 4 and 9 years for network management systems be maintained. These could be broadly subdivided into the following:

4.68.3.1 Network management (4 years)

4.68.3.2 Data and traffic management (5 years)

4.68.3.3 OPS Support systems (9 years)

> **Q. 37.   Do you agree or disagree with the maintenance of the existing regulatory asset lives for network management systems of 4 years, data and traffic management systems of 5 years and OPS support systems of 9 years? Please explain in detail your response.**

4.69 **Fixed and Exchange based test equipment**

4.69.1 This subcategory includes non portable test equipment that is placed in exchanges and used for dedicated tasks.

4.69.2 The current assumed useful economic lives of fixed and exchange based test equipment are between 5 and 22 years.

4.69.3 ComReg is of the preliminary view that the regulatory asset lives for fixed and exchange based test equipment of between 5 and 20 years. These could be broadly subdivided into the following:

4.69.3.1 Specific test equipment (5 years) – existing asset life

4.69.3.2 Miscellaneous test equipment (11 years) – existing asset life

4.69.3.3 Line testing equipment (20 years).

4.69.4 It is ComReg's preliminary conclusion that the current asset life of 22 years is too long for line testing equipment and that 20 years reflects a more appropriate asset life.

> **Q. 38.   Do you agree or disagree with regulatory asset lives for specific test equipment of 5 years, miscellaneous test equipment of 11 years and line testing equipment of 20 years? Please explain in detail your response.**

Land, Buildings, Mechanical and Electrical Equipment

4.70 This category includes land, exchange and other buildings with associated mechanical and electrical equipment, fixtures and fittings.

4.71 While there may be one off exchange closures or disposals it is unlikely that any changes to the current PSTN networks would necessitate a significant change to the existing exchange buildings.

4.72 **Land freehold / land leasehold**

4.72.1 Neither land freehold nor land leasehold are depreciated for regulatory purposes.

4.72.2 ComReg recommends the continuation of the non-depreciation of both land freehold and land leasehold for regulatory purposes.

> **Q. 39.   Do you agree or disagree with the maintenance of the non depreciation for land freehold and land leasehold for regulatory purposes? Please explain in detail your response.**

4.73 **Exchange buildings**

4.73.1 Exchange buildings are used to house voice switches, transmission and data equipment. They are normally owned or leased over a long period of time. The current assumed useful economic life of exchange buildings is 40 years.

4.73.2 It is ComReg's preliminary conclusion that the existing regulatory asset life for exchange buildings of 40 years be maintained.

> **Q. 40.   Do you agree or disagree with the maintenance of the existing regulatory asset lives for exchange buildings of 40 years? Please explain in detail your response.**

4.74 **Buildings fixtures and fittings and security equipment**

4.74.1 The current assumed useful economic life of buildings fixtures and fittings and security equipment is 5 years.

4.74.2 It is ComReg's preliminary opinion that the existing regulatory asset life for buildings fixtures and fittings and security equipment of 5 years be maintained.

> **Q. 41.   Do you agree or disagree with the maintenance of the existing regulatory asset lives for buildings fixtures and fittings and security equipment of 5 years? Please explain in detail your response.**

4.75 **Phone and Internet Kiosks**

4.75.1 This subcategory includes public phone boxes and similar public-use street internet kiosks.

4.75.2 The current assumed useful economic life of phone and internet kiosks is 8 years. Recent public announcements by Eircom indicate the removal of a number of phone boxes nationwide. However a significant number will remain in place and ComReg considers that the existing life of 8 years is appropriate.

4.75.3 It is ComReg's preliminary opinion that the existing regulatory asset life for phone and internet kiosks of 8 years be maintained.

> **Q. 42.** **Do you agree or disagree with the maintenance of the existing regulatory asset lives for phone and internet kiosks of 8 years? Please explain in detail your response.**

4.76 **AC/DC power equipment and air conditioning**

4.76.1 This subcategory includes systems used to manage, smooth and distribute the public and backup power supply to network equipment.

4.76.2 The current assumed useful economic lives of AC/DC power equipment and air conditioning is between 5 and 22 years. These could be broadly split into the following categories:

4.76.2.1 Fixtures and fittings (5 years)

4.76.2.2 Electrical equipment (17 years)

4.76.2.3 Power (22 years)

4.76.3 It is ComReg's preliminary opinion that the existing regulatory asset lives for AC/DC power equipment and air conditioning is between 5 and 22 years be maintained.

> **Q. 43.** **Do you agree or disagree with the maintenance of the existing regulatory asset lives AC/DC power equipment and air conditioning of 5 years for fixtures and fittings, 17 years for electrical equipment and 22 years for power? Please explain in detail your response.**

4.77 **Generators**

4.77.1 This subcategory includes diesel generators used to maintain network operational when there is a failure of the public power supply.

4.77.2 The current assumed useful economic life of generators is 25 years.

4.77.3 It is ComReg's preliminary opinion the existing regulatory asset life for generators of 25 years be maintained.

> **Q. 44.** **Do you agree or disagree with the maintenance of the existing regulatory asset lives for generators of 25 years? Please explain in detail your response.**

<u>Vehicles</u>

4.78 Vehicles can be divided into vans, and trucks of a standard nature and specialist vehicles. Eircom no longer maintains a fleet of cars.

4.79 **Standard vehicles**

4.79.1 Standard vehicles typically have a useful life of a minimum of 5 years. Many however remain in use beyond the expiration of 5 years.

4.79.2 The current assumed useful economic life of standard vehicles (vans and trucks) is 5 years. ComReg considers this period to be too short. A review of Eircom's fixed asset register indicates the presence of standard vans and trucks from pre 2004.

4.79.3 It is ComReg's preliminary view that a regulatory asset life for standard vehicles (cars, vans and trucks) of 6 years is appropriate. ComReg considers that 5 years is too short as Eircom's fixed asset register indicates the presence of standard vehicles from pre 2004. ComReg considers that 6 years is a more appropriate asset life for standard vehicles.

> **Q. 45.** **Do you agree or disagree with a regulatory asset life for standard vehicles (cars, vans and trucks) of 6 years? Please explain in detail your response.**

4.80 **Specially fitted out vehicles**

4.80.1 Specialist vehicles include vehicles which have been fitted out for specific telecom purposes, such as for installing poles and overhead cables.

4.80.2 The current assumed useful economic life of specially fitted out vehicles is 5 years. ComReg considers this period to be too short. A review of Eircom's fixed asset register indicates the presence of specially fitted out vans and trucks from pre 2004.

4.80.3 It is ComReg's preliminary opinion that a regulatory asset life for specially fitted out vehicles (vans and trucks) of 6 years would be appropriate. ComReg considers that 5 years is too short as Eircom's fixed asset register indicates the presence of specially fitted out vehicles from pre 2004. ComReg considers that 6 years is a more appropriate asset life.

> **Q. 46.** **Do you agree or disagree with a regulatory asset life for specially fitted out vehicles of 6 years? Please explain in detail your response.**

IT Systems

4.81 IT systems in this category refer to the systems supporting the internal business functions of a telephone operator rather than specific network elements. Functions that would be included in the internal business functions include HR, finance and billing.

4.82 While telephone companies usually require significant IT capabilities to run these systems normally these are not unique to the telecoms industry and can be found (in varying forms) in other industries.

4.83 ComReg understands that often expenditure on these large IT systems consists of an initial outlay with subsequent and regular expenditure on upgrades and modifications. The initial systems, generally, are not frequently replaced due to the cost involved and the risks inherent in implementation.

4.84 The upgrades and modifications acquired can often have a relatively short useful life. Some relate to the introduction of new services or functions. Others relate to the purchasing of generic software.

4.85 In 2004 ComReg reviewed, as part of a consultation on Interconnect Conveyance Rates[16] the *carrier billing system depreciation period*. Carrier billing systems fall within the IT subcategory *"IT applications/software"*. At that time ComReg directed[17] that the regulatory asset life of the carrier billing system be changed from 4 years to 6 years.

4.86 **IT Hardware**

    4.86.1 This subcategory includes IT hardware including servers, storage systems etc. used for IT applications (as opposed to network management).

    4.86.2 The current assumed useful economic life of IT hardware is 4 years. A review of Eircom's fixed asset register indicates the presence of IT hardware from pre 2004. As mentioned above these systems are unlikely to be replaced frequently and would be more likely subject to upgrades.

    4.86.3 It is ComReg's preliminary conclusion that a regulatory asset life of 4 years (existing asset life) for P.C.'s and miscellaneous hardware is appropriate. ComReg is of the view that 4 years is too short for ancillary equipment relating to IT hardware. Much of this equipment is not subject to the same wear and tear as P.C.s and miscellaneous hardware. Nor is it likely to be upgraded as frequently. It is for these reasons that ComReg considers that 5 years for ancillary equipment such as CPU's and storage equipment is an appropriate asset life.

---

[16] ComReg document 04/69 – Consultation and Draft Decision "Finalisation of 2002/03 and revision of 2003/04 Interim Interconnect Conveyance Rates"

[17] ComReg decision notice D14/04 – Document No. 04/101 "Response to consultation 04/69 and Decision Notice".

> **Q. 47.**   **Do you agree or disagree with a regulatory asset life of 4 years for P.C.'s and miscellaneous hardware and 5 years for ancillary equipment? Please explain in detail your response.**

4.87 **IT Networking equipment**

4.87.1 This subcategory includes data, Ethernet & IP equipment used within the IT network & office environments.

4.87.2 The current assumed useful economic life of IT networking equipment is 4 years. ComReg considers 4 years to be too short. This equipment would have a similar life to the hardware that it supports.

4.87.3 It is ComReg's preliminary conclusion that a regulatory asset life of 5 years for IT networking equipment would be appropriate. ComReg is of the view that 4 years is too short for IT networking equipment. In a similar fashion to ancillary hardware much of this equipment is not subject to the same wear and tear as P.C.s and miscellaneous hardware. Nor is it likely to be upgraded as frequently. It is for these reasons that ComReg considers that 5 years for IT networking equipment is an appropriate asset life.

> **Q. 48.**   **Do you agree or disagree with a regulatory asset life of 5 years for IT networking equipment? Please explain in detail your response.**

4.88 **IT Applications / Software**

4.88.1 This subcategory includes software applications used for IT applications (as opposed to network management).

4.88.2 The current assumed useful economic life of IT applications/software is 4 years. ComReg considers 4 years to be too short. This equipment would, at a minimum, have a similar life to the hardware that it supports.

4.88.3 As mentioned above ComReg in 2004 introduced a regulatory asset life for carrier billing systems of 6 years. Carrier billing systems and other bespoke, specialised or in-house developed software is not subject to frequent replacement. Normally upgrades, modifications, or the addition of new features are made to the basic software. Much of these are expensed directly in the year they are incurred.

4.88.4 "Off the shelf" software packages normally have relatively short lives and their replacements can render the original obsolete and incompatible.

4.88.5 A review of Eircom's fixed asset register indicates the presence of software from pre 2004.

4.88.6 ComReg recommends a regulatory asset life of 6 years for bespoke, specialised or in-house developed software. ComReg, in its review of asset lives relating to carrier billing systems in 2004, recommended an asset life of 6 years. ComReg is of the view that other bespoke, specialised or in-house developed systems would have similar asset lives to carrier billing systems. It is for this reason that it is ComReg's preliminary opinion that 4 years is too short and that 6 years is more appropriate.

4.88.7 ComReg is of the view that 4 years is too long for "off the shelf" packages. These can be subject to relatively frequent upgrades which can make the original package obsolete and at times incompatible. ComReg is of the preliminary view therefore that 3 years reflects a more appropriate asset life for off the shelf computer packages.

> **Q. 49.   Do you agree or disagree with a regulatory asset life of 6 years for bespoke, specialised or in-house developed software and 3 years for "off the shelf" packages? Please explain in detail your response.**

Office Equipment

4.89 Furniture

4.89.1 No specific regulatory asset life was previously applied to furniture.

4.89.2 It is ComReg's preliminary opinion that a regulatory asset life of 4 years for furniture is appropriate because it will be subject to wear and tear, through environmental conditions (i.e. general usage). ComReg is of the preliminary conclusion that 4 years is an appropriate asset life.

> **Q. 50.** **Do you agree or disagree with a regulatory asset life of 4 years for furniture? Please explain in detail your response.**

4.90 PCs and server hardware

4.90.1 The current assumed useful economic life of PCs and server hardware is 4 years.

4.90.2 It is ComReg's preliminary opinion that recommends the maintenance of the regulatory asset life of 4 years for PCs and server hardware is appropriate because and consistent with the recommendation of 4 years in "IT hardware" discussed above.

> **Q. 51.** **Do you agree or disagree with a regulatory asset life of 4 years for PCs and server hardware? Please explain in detail your response.**

4.91 PCs and server software

4.91.1 No specific regulatory asset life was previously applied to PCs and server software.

4.91.2 It is ComReg's preliminary opinion that a regulatory asset life of 4 years for PCs and server software is appropriate. A life of 4 years is consistent with the recommendation of 4 years in "IT hardware" discussed above. It is ComRegs preliminary conclusion that server software will most likely have a longer life than off the shelf software packages which it recommends have a useful economic life of 3 years. However ComReg also considers that server software is subject to more upgrades and technological change than bespoke packages and that 6 years would therefore be too long. It considers that 4 years is an appropriate asset life.

> **Q. 52.** **Do you agree or disagree with a regulatory asset life of 4 years for PCs and server software? Please explain in detail your response.**

4.92 **Other electrical equipment**

4.92.1 This subcategory includes all non-IT related items from coffee machines to photocopiers, fax machines etc.

4.92.2 The current assumed useful economic life of other electrical equipment is 4 years.

4.92.3 It is ComReg's preliminary opinion that the regulatory asset life of 4 years for other electrical equipment be maintained because much of this equipment will be subject to the same wear and tear as office furniture discussed above.

> **Q. 53.** **Do you agree or disagree with the maintenance of the regulatory asset life of 4 years for other electrical equipment? Please explain in detail your response.**

Licences and intellectual property rights

4.93 Included in this category are

4.93.1 Radio frequency licences

4.93.2 Operator regulatory licences

4.93.3 Intellectual Property Rights ("IPR")

4.94 No specific regulatory asset life has been previously applied to licences and intellectual property rights.

4.95 It is ComReg's preliminary conclusion that that the regulatory asset lives of licences and intellectual property rights should be for the duration of licences, copyrights, or agreements.

Q. 54.   Do you agree or disagree that the regulatory asset lives of licences and intellectual property rights should be for the duration of licences, copyrights, or agreements? Please explain in detail your response.

Any other issues / assets

Q. 55.   Are there any other issues or assets which should be taken into consideration when assessing the regulatory asset lives of a fixed line telecommunications operator? Please explain in detail your response.

---

5   Implementation of any proposed changes

5.1 ComReg is not proposing to backdate any amendments to fixed asset lives relevant to current wholesale pricing models in place up to the date of any decision. However relevant asset lives will be used for current regulated wholesale pricing from the date of any decision and will reflect adjustments to any asset lives as outlined in Appendix C of this consultation. It is intended that any new regulated asset lives will be applied to all relevant Eircom Wholesale regulated price calculations concluded post publication, of any decision.

5.2 It is ComReg's preliminary view that any proposed regulatory asset lives changes be adopted with immediate effect from the date the decision.

5.3 An alternative to the above would be to make the changes by a glide path approach. ComReg would suggest that any such proposal for a glide path would be for a maximum of one to two years.

> **Q. 56.   Do you agree or disagree with ComReg's proposal that all amended regulatory asset lives be implemented with immediate effect from the date of a ComReg decision? Please explain in detail your response.**

> **Q. 57.   If you do not agree with the above preliminary view of ComReg, do you agree or disagree that any proposed changes to regulatory asset lives are implemented by a "glide path" rather than immediate implementation from the date of the direction? If such an approach were adopted do you believe one to two years is a reasonable period? Please explain in detail your response.**

6 Next Generation Networks

6.1 This section summarises ComRegs preliminary views on the possible impact of NGN on regulatory asset lives.

6.2 ComReg notes that NGN in Ireland is still only at an early stage of development. ComReg has discussed the likely development of NGN/A position statement "*Regulatory Aspects of Next Generation Networks*"[18].

6.3 It is ComReg's stated intention that there is regulatory predictability with the introduction of NGN. Within current products ComReg is keen to ensure that investment made to date is not undermined. It further notes in its position statement that:

> *"[…] eircom has indicated that it does not propose to remove either exchanges or copper and have described their plan as an "overlay" network."*

6.4 ComReg therefore considers that while NGN will be introduced the following must be considered:

> (a) It is only slowly being introduced;
>
> (b) Traditional assets are being overlaid and not replaced;
>
> (c) Existing services will continue to be offered over the existing asset base;
>
> (d) Consideration will need to be given to future assets and what future services they might provide.

6.5 Eircom is currently trialling NGA equipment at a number of locations. It has not initiated a nationwide full scale implementation of NGA nor indicated when this might commence.

6.6 As noted above Eircom's NGN plans involve the overlaying of NGN onto existing networks rather than their direct replacement. This would indicate that the likelihood of existing Eircom assets being rapidly replaced by NGN assets is remote.

6.7 It is likely that NGN assets will potentially enhance existing services and may also deliver different services with different revenue streams to the existing asset base of Eircom. ComReg's preliminary conclusion would be that the existing asset base will continue in use for some time to come.

6.8 When Eircom's NGN plans become clearer it is ComReg's preliminary view that NGN assets should be accounted for separately. ComReg is also of the preliminary view that the related accounting policies should be disclosed separately. This will provide for greater transparency as NGN develops.

6.9 ComRegs preliminary conclusions, therefore, are that the impact of the introduction of NGN, from an Irish regulatory asset life context, is greatly reduced.

---

[18] ComReg Document 07/40 – Position Statement "Regulatory aspects of Next Generation Networks"

> **Q. 58.** **Do you agree or disagree with ComRegs preliminary conclusions that the impact of the introduction of NGN, from an Irish regulatory asset life context, is greatly reduced? Please explain in detail your response.**

> **Q. 59.** **Do you agree or disagree with the proposal that NGN assets be accounted for separately and that the related accounting policies should be disclosed separately? Please explain in detail your response.**

> **Q. 60.** **Do you believe that once the movement and extent of NGN becomes clearer that ComReg should review the regulatory asset lives of those assets separate to this consultation? Please explain in detail your response.**

7   Regulatory Impact Assessment

Introduction

7.1   According to ComReg's Approach to Regulatory Impact Assessment ('RIA'), ComReg Document 07/56 & 07/56a, the purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. ComReg's proposed approach to the RIA is that in the future it will continue to conduct RIAs in respect of any proposed statutory instruments which would impose regulatory obligations, or in respect of any market analyses which propose to impose, amend or withdraw obligations, through the finding of SMP or effective competition. Appropriate use of the RIA should ensure the most effective approach to regulation is adopted.

7.2   In conducting the RIA ComReg will take into account the RIA Guidelines[19], adopted under the Government's Better Regulation programme. The RIA Guidelines are not legally binding upon ComReg, however, in conducting the RIA ComReg will have regard to them, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation may be different to regulation exclusively by way of enacting primary or secondary legislation. In conducting a RIA ComReg will take into account the six principles of Better Regulation that is, necessity, effectiveness, proportionality, transparency, accountability and consistency. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards RIA. As decisions are likely to vary in terms of their impact, if after initial investigation a decision appears to have relatively low impact, then ComReg would expect to carry out a lighter RIA in respect of those decisions.

7.3   In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost benefit analysis would only arise where it would be proportionate or in exceptional cases where robust, detailed and independently verifiable data is available. Such comprehensive review will be taken when necessary.

7.4   ComReg would like to point out that as it is not imposing a new regulatory obligation on an undertaking, it is not mandatory for it to provide a RIA. However it has decided to do so in order to demonstrate that it has considered and evaluated the alternative options available. The main objectives of this review are:

   7.4.1   Consider if a review is appropriate at this time (Section 2)

   7.4.2   To review of the appropriateness of existing regulatory asset lives (Section 4);

   7.4.3   Make recommendations for any necessary changes (Section 4);

   7.4.4   Consider the impact of IFRS and NGN (Section 3 and Section 6 respectively).

---

[19] See "RIA Guidelines: How to conduct a Regulatory Impact Analysis", October 2005, www.betterregulation.ie

Description of Policy Issues and Objectives

7.5   This consultation has the following purposes:

    7.5.1 To detail ComReg's review of the regulatory asset lives of a fixed line telecommunications operator; and

    7.5.2 to make recommendations, if any, on the most appropriate regulated asset lives.

Identify and Describe the Regulatory Options

Option 1 – Further to ComReg's review of regulatory asset lives of a fixed line telecommunications operator allow the incumbent to determine its own asset lives for regulatory purposes.

7.6   Option 1 available to ComReg would have been to allow the incumbent operator to determine the asset lives to be applied for regulatory purposes. However, given that regulatory asset lives impact upon a wide range of services (both wholesale and retail) ComReg did not consider this option to be optimal. It lacked transparency, and may lead to an over or under recovery of costs contrary to the cost orientation principle.

Option 2 – Further to ComReg's review of regulatory asset lives of a fixed line telecommunications operator ComReg would determine the appropriate regulatory asset lives.

7.7   ComReg considered that Option 2 was the most appropriate. It was fully transparent and also ensured that the principle of cost orientation was maintained.

Impact on Stakeholders

7.8 In determining the impact on stakeholders, in relation to the regulatory options above, ComReg considered the following:

Option 1 – Incumbent determines asset lives for regulatory purposes		
Impact on incumbent	Impact on OAOs	Impact on consumer
Minimal impact as many of the significant asset lives are currently in line with statutory asset lives	Lack of transparency in the determination of asset lives. The incumbent therefore over recovers and margin squeeze occurs resulting in reduced competition from OAOs. Significantly reduced incentives to enter and expand.	Higher prices, less innovation and poorer service across a range of markets.
Incumbent may not comply with cost orientation principle	OAOs investment incentives will be distorted with the potential that some may be stranded once access prices cover the proper depreciation amount.	
No additional impact upon the HCAs	Wholesale prices being charged may be in excess of those appropriate under the cost orientation principle	

Impact on Stakeholders (continued)

Option 2 – ComReg determines asset lives for regulatory purposes		
Impact on incumbent	Impact on OAOs	Impact on consumer
Reduction in wholesale prices to reflect the over-recovery of depreciation charge. Intensity of competition at retail level increases across a range of markets.	OAOs will see a range of access prices fall. This will lead them to compete more vigorously on the downstream retail markets. Any surplus will likely be invested in their business	Existing consumers may see reductions across the board on the services in the long term that are built up using regulated access.
Difference in depreciation charged per the HCAs and the statutory financial statements may diverge further	Wholesale prices being charged will conform with the cost orientation principle	New consumers will be encouraged to purchase additional services (particularly broadband)
No impact upon investment in relation to NGN as it is proposed to incentivise this through the WACC	Wholesale prices more geared to cost and competitive pricing. This will encourage efficient entry by OAOs.	If entry occurs there is a higher possibility of a greater plurality in business models, which will benefit consumers.
Continuation with best accounting practice.		
Assurance of compliance with cost orientation principle		

ComReg's proposed conclusion

7.9 As ComReg is not imposing a new regulatory obligation on an undertaking it is not mandatory for it to provide a RIA. However it has decided to do so in order to consider and evaluate the alternative options available and to inform the decision making process.

7.10 ComReg is of the view that the preferred approach would ensure that there is complete transparency in the setting of regulatory asset lives and that the price control obligations are met.

> **Q. 61.   Respondents are requested to provide views on whether the proposed direction is proportionate and justified and also to offer views on other factors (if any) ComReg should consider in completing its Regulatory Impact Assessment?   Please explain in detail your response**

8   Submitting Comments

8.1   All comments are welcome. It would, however, make the task of analysing responses easier if comments were referenced to the relevant question numbers from this document.

8.2   The consultation period will run from 17 February 2009 to 20 March 2009 during which the Commission welcomes written comments on any of the issues raised in this paper.

8.3   Having analysed and considered the comments received, ComReg will publish a response to consultation and final decision. This document will, in effect, summarise the responses to the consultation.

8.4   In order to promote further openness and transparency ComReg will publish all respondents' submissions to this consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24. We would request that electronic submissions be submitted in an-unprotected format so that they can be appended into the ComReg submissions document for publishing electronically.

8.5   **Please note**
ComReg appreciates that many of the issues raised in this paper may require respondents to provide confidential information if their comments are to be meaningful.

8.6   As it is ComReg's policy to make all responses available on its web-site and for inspection generally, respondents to consultations are requested to clearly identify confidential material and place confidential material in a separate annex to their response

8.7   Such Information will be treated subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24

9 Legal Basis

The legal basis allowing for the review of the regulatory asset lives of Eircom is set out as follows:

Regulation 14 of the Access Regulations includes obligations relating to cost recovery and price controls and the obligation for cost oriented prices. It also provides for obligations concerning cost accounting systems.

"14. (1) The Regulator may in accordance with Regulation 9 impose on an operator obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of interconnection, access or both such interconnection and access in situations where a market analysis indicates that a lack of effective competition means that the operator concerned might sustain prices at an excessively high level, or apply a price squeeze to the detriment of end-users.

(2) When considering the imposition of obligations under paragraph (1), the Regulator shall, take into account any investment made by the operator in electronic communications networks or services or associated facilities which the Regulator considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account the risks involved.

(3) The Regulator shall ensure that any cost recovery mechanism or pricing methodology that it imposes under this Regulation serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard, the Regulator may also take account of prices available in comparable competitive markets.

(4) Where an operator has an obligation under this Regulation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs, including a reasonable rate of return on investment shall lie with the operator concerned. For the purpose of calculating the cost of efficient provision of services, the Regulator may use cost accounting methods independent of those used by the operator. The Regulator may issue directions requiring an operator to provide full justification for its prices, and may, where appropriate require prices to be adjusted.

(5) The Regulator shall ensure that, where implementation of a cost accounting system is imposed under this Regulation in order to support price controls, a description of the cost accounting system is made publicly available, showing at least the main categories under which costs are grouped and the rules used for the allocation of costs. Compliance with the cost accounting system shall, at the choice of the Regulator, be verified by the Regulator or by a suitably qualified independent body.

(6) The Regulator shall cause to be published annually a statement concerning compliance with any cost accounting system imposed under this Regulation."

Under Regulation 17 of the Access Regulations ComReg may issue directions to Eircom to do or refrain from doing anything which ComReg specifies in the direction. It is proposed that ComReg will use this legal basis for the purposes of further specifying requirements to be complied with by Eircom in relation to its obligations under Regulation 14 of the Access Regulations which pertain to cost accounting and in particular to asset lives for the purposes of the preparation of regulatory accounts.

Eircom has been designated with significant market power (SMP) on various markets and has had various SMP obligations, including the obligation of cost accounting imposed in the following SMP decisions and related pricing decisions which will be affected by the proposed variation in asset lives which lives are relevant for the purposes of the preparation of regulatory accounts and the calculation of costs:

- *Wholesale unbundled access (including shared access) to metallic loops and sub-loops; Decision D8/04, ComReg Document Number 04/70;*
- *Wholesale Terminating Segments of Leased Lines; Decision D06/08 ComReg Document Number 08/103[20];*
- *Wholesale Fixed Wholesale Call Termination, Decision D06/07, ComReg Document Number 07/109;*
- *Wholesale Call Origination [& Transit] Services, Decision D 04/07, ComReg Document Number 07/80;*
- *Retail minus wholesale price control for the WBA market Decision D01/06, ComReg Document Number 06/01;*
- *Wholesale Broadband Access Decision D03/05, ComReg Document Number 03/05 05/11r;*
- *Retail Price Cap Remedy Fixed Narrowband Access Markets. Decision D 03/07, ComReg Document Number 07/76; and*
- *Market Analysis: Retail Fixed Narrowband Access Markets, Decision D07/61, ComReg Document Number 07/61.*

Decisions should also be noted including;
- *Accounting Separation and Publication of Financial Information for Telecommunication Operators D5/99,* ODTR Document Number 99/35;
- *Costing Methodology for use in Accounting Separation, Decision D8/99,* ODTR Document Number 99/43;
- *Accounting Separation and Publication of Financial Information for Telecommunications Operators, Decision D10/99,* ODTR Document Number 99/52;
- *Accounting Separation and Publication of Financial Information for Telecommunications Operators, Decision D9/00,* ODTR Document Number 00/59;
- *Accounting Separation and Publication of Financial Information for Telecommunications Operators, Supplemental Information referring to Decision Notice D9/00, Decision D10/00,* ODTR Document Number 00/72;

---

[20] Please note however this Decision is currently under appeal.

- *Accounting Separation for Internet Service provision and Report on Investigation into Indigo and eircom.net, Decision D2/01,* ODTR Document Number 01/10;
- Letter containing Direction issued to Eircom by the ODTR dated 17 April 2001 entitled *"RIO Submission";*
- *Eircom's Reference Interconnection Offer & Accounting Separation and Publication of Financial Information for Telecommunications Operators, Decision D 7/01,* ODTR Document Number 01/24;
- *Revision of Timetable for Publication of Separated Accounts and Financial Information by Eircom, Decision D12/01,* ODTR Document Number 01/61*;* and
- *Response to Consultation 04/69 and Decision Notice- Finalisation of the 2002/03 Interim Interconnect Conveyance Rates, Decision D14/04,* ComReg Document Number 04/101.

10 Draft Direction

NOTE: This Draft Decision Instrument is for information purposes only and is not the final Decision Instrument. Respondents to consultation are asked to provide their detailed views from a commercial, practical and legal perspective in relation to the Draft Decision Instrument.

1. Statutory and legal powers

2. Pursuant to Regulation 17 of the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003[21];

3. Having regard to the Significant Market Power (SMP) designation on Eircom which found Eircom to have SMP under the provisions of Regulations 25, 26 and 27 of the Framework Regulations[22] and the cost accounting and price control obligation imposed on Eircom further to Regulation 14 of the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003 including as contained in:

- *Wholesale unbundled access (including shared access) to metallic loops and sub-loops; Decision D8/04, ComReg Document Number 04/70;*
- *Wholesale Terminating Segments of Leased Lines; Decision D06/08 ComReg Document Number 08/103[23];*
- *Wholesale Fixed Wholesale Call Termination, Decision D06/07, ComReg Document Number 07/109;*
- *Wholesale Call Origination [& Transit] Services, Decision D 04/07, ComReg Document Number 07/80;*
- *Retail minus wholesale price control for the WBA market Decision D01/06, ComReg Document Number 06/01;*
- *Wholesale Broadband Access Decision D03/05, ComReg Document Number 03/05 05/11r;*
- *Retail Price Cap Remedy Fixed Narrowband Access Markets. Decision D 03/07, ComReg Document Number 07/76; and*
- *Market Analysis: Retail Fixed Narrowband Access Markets, Decision D07/61, ComReg Document Number 07/61.*

4. Having, where appropriate, complied with Policy Directions made by the Minister[24];

5. Having taken account of the submissions received in relation to Document No.[]

6. Having had regard to the analysis and reasoning set out in ComReg Document No. [] which shall, where necessary, be construed together with this Direction; and

---

[21] S.I. No. 305 of 2003 the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003.
[22] S.I. No. 307 of 2003 the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003.
[23] Please note however this Decision is currently under appeal.

[24] Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

7. Having regard to its functions and objectives under sections 10 and 12 respectively of the Communications Regulation Act, 2002.

2. Definitions and Interpretation

2.1   In this direction:

"Access Regulations" means European Communities (Electronic Communications and Network Services) (Access) Regulations, 2003, S.I, No. 305 pf 2003;

"ComReg" means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Act, 2002;

"ODTR" means the Office of the Director of Telecommunications Regulation, which was dissolved under Section 8 of the Communications Regulation Act, 2002

"SMP Decisions" mean ComReg Decisions which found Eircom to have SMP under the provisions of Regulations 25, 26 and 27 of the Framework Regulations and imposed an obligation in relation to price control and cost accounting pursuant to Regulation 14 of the Access Regulations and include:

- *Wholesale unbundled access (including shared access) to metallic loops and sub-loops; Decision D8/04, ComReg Document Number 04/70;*
- *Wholesale Terminating Segments of Leased Lines; Decision D06/08 ComReg Document Number 08/103[25];*
- *Wholesale Fixed Wholesale Call Termination, Decision D06/07, ComReg Document Number 07/109;*
- *Wholesale Call Origination [& Transit] Services, Decision D 04/07, ComReg Document Number 07/80;*
- *Retail minus wholesale price control for the WBA market Decision D01/06, ComReg Document Number 06/01;*
- *Wholesale Broadband Access Decision D03/05, ComReg Document Number 03/05 05/11r;*
- *Retail Price Cap Remedy Fixed Narrowband Access Markets. Decision D 03/07, ComReg Document Number 07/76; and*
- *Market Analysis: Retail Fixed Narrowband Access Markets, Decision D07/61, ComReg Document Number 07/61.*

2.2   The provisions of ComReg Decision No.[…] and the individual decisions in the Response to Consultation and Division in ComReg Document No. […] (Decision No. […]) shall where necessary be construed as forming part of this direction.

---

[25] Please note however this Decision is currently under appeal.

3. Scope and applications

3.1   This direction applies to Eircom Limited and its subsidiaries, its successors and assigns ("Eircom").

3.2   This direction is binding upon Eircom and Eircom shall comply with it in all respects.

4. Price Control and Cost Accounting

4.1   The SMP Decisions imposed *inter alia ex ante* regulatory obligations pursuant to Regulation 14 of the Access Regulations. The obligations imposed on Eircom under Regulation 14 of the Access Regulations include obligations relating to price control, cost orientation of prices and cost accounting.

4.2   Under Regulation 17 of the Access Regulations, ComReg may issue directions to Eircom to do or refrain from doing anything which ComReg specifies in the direction, for the purpose of further specifying requirements to be complied with by Eircom relating to its obligations under the Access Regulations.

4.3   This Direction is issued pursuant to Regulation 17 of the Access Regulations, for the purpose of further specifying requirements to be complied with by Eircom relating to obligations imposed on Eircom, under Regulation 14 of the Access Regulations and Section 9 of the SMP Decision.

4.4   Eircom is hereby directed to apply the asset lives set out in Appendix A to this Decision Instrument for the purposes of the preparation of Eircom's regulatory accounts and for the purposes of its obligations under Regulation 14 of the Access Regulations.

4.5   Any previous decision on asset lives either adopted by ComReg or the ODTR, including:

- Eircom's Reference Interconnection Offer & Accounting Separation and Publication of Financial Information for Telecommunications Operators, Decision D7/01, ODTR Document Number 01/24*;*

– Costing Methodology for use in Accounting Separation, Decision *D8/99,* ODTR Document Number 99/43*;*

- Letter containing Direction issued to Eircom by the ODTR dated 17 April 2001 entitled *"RIO Submission";* and

-Response to Consultation 04/69 and Decision Notice- Finalisation of the 2002/03 Interim Interconnect Conveyance Rates, Decision D14/04, ComReg Document Number 04/101

are hereby superseded in respect of asset lives and Section 4.4 (and Appendix A) of this Decision Instrument applies.

4.6   Section 4.4 shall apply 30 days after the effective date.

5 STATUTORY POWERS NOT AFFECTED

5.1 Nothing in this Direction shall operate to limit ComReg in the exercise and performance of its statutory powers or duties under any primary or secondary legislation (in force prior to or after the effective date of this Direction) from time to time as the occasion requires.

6 EFFECTIVE DATE

6.1 This Direction shall be effective from the date of its publication and shall remain in force until further notice by ComReg.

JOHN DOHERTY
CHAIRPERSON
THE COMMISSION FOR COMMUNICATIONS REGULATION
THE [] DAY OF [] 2009

> **Q. 62.** **Respondents are request to provide their detailed views from a commercial, practical and legal perspective in relation to the Draft Decision Instrument.**

Appendix A - Draft Direction for useful economic lives

The following asset lives shall be deemed to apply:

Main Category	Subcategory	Asset Life to be applied:
1	**Customer Sited Equipment**	
1.1	Customer Sited DSL Equipment	4 years
1.2	Customer Sited Data, Ethernet & IP Terminating Equipment	8 years
1.3	Customer Sited Transmission Terminating Equipment	8 years
1.4	Customer Sited Application Capability Equipment	8 years
2	**Access Network – Physical**	
2.1	Poles	30 years
2.2	Towers	35 years
2.3	Duct, roadway & footway boxes	40 years
2.4	Overhead cables & fibre	15 years
2.5 (a)	Underground cables & fibre	20 years
2.5 (b)	Underground cables & fibre – maintenance equipment	20 years
3	**Access Network – Equipment**	
3.1	Active equipment incl. DSLAMs, MSANs in COs or other conditioned areas.	8 years
3.2	Switching: Line terminals	8 years
3.3 (a)	Active street cabinets & similar external equipment – pair gains systems	20 years
3.3 (b)	Active street cabinets & similar external equipment – radio access	10 years
3.3 (c)	Active street cabinets & similar external equipment - antennae	8 years
4	**Core Network – Physical**	
4.1	Poles	30 years
4.2	Towers	35 years
4.3	Duct, roadway & footway boxes	40 years
4.4	Overhead cables & fibre	15 years
4.5	Underground cables & fibre	20 years
5	**Core Network Transmission Equipment**	
5.1	Transmission equipment < 155Mbit/s	11 years
5.2	Transmission equipment >= 155Mbit/s	11 years
5.3	International Satellite Equipment	9 years
5.4 (a)	Submarine cable equipment – transmission equipment	9 years
5.4 (b)	Submarine cable equipment	15 years

Main Category	Subcategory	Asset Life to be applied:
6	**Data, Ethernet & IP Equipment**	
6.1	IP & Internet Router hardware	6 years
6.2	Ethernet Transport & Switch Equipment	6 years
6.3	ATM, Frame Relay equipment	6 years
6.4 (a)	Other data equipment – "MARTIS"	9 years
6.4 (b)	Other data equipment	6 years
7	**Core Network Capability Equipment**	
7.1	Class 4 / 5 switch hardware (excl. line terminals)	10 years
7.2	Class 4 / 5 switch software	5 years
7.3	Custom hardware & applications	6 years
7.4	Server hardware	5 years
7.5	Applications & OS	5 years
8	**Network Management Equipment & Network Operations**	
8.1 (a)	Network management systems – network management	4 years
8.1 (b)	Network management systems – data and traffic management	5 years
8.1 (c)	Network management systems – OPS support systems	9 years
8.2 (a)	Fixed & Exchange Based Test Equipment – specific test equipment	5 years
8.2 (b)	Fixed & Exchange Based Test Equipment – miscellaneous test equipment	11 years
8.2 (c)	Fixed & Exchange Based Test Equipment – line testing equipment	20 years
9	**Buildings, Mechanical & Electrical Equipment**	
9.1	Land – freehold	Not depreciated
9.2	Land - leasehold	Not depreciated
9.3	Exchange buildings	40 years
9.4	Building fixtures & fittings, security equipment	5 years
9.5	Phone / Internet kiosks	8 years
9.6 (a)	AC & DC power equipment, air conditioning – fixtures and fittings	5 years
9.6 (b)	AC & DC power equipment, air conditioning – electrical equipment	17 years
9.6 (c)	AC & DC power equipment, air conditioning - power	22 years
9.7	Generators	25 years

Main Category	Subcategory	Asset Life to be applied:
10	**Vehicles**	
10.1	Cars	6 years
10.2	Vans	6 years
10.3	Trucks	6 years
10.4	Specially fitted-out vehicles	6 years
11	**IT Systems**	
11.1 (a)	IT Hardware – P.C.'s and miscellaneous hardware	4 years
11.1 (b)	IT Hardware – ancillary equipment	5 years
11.2	IT Networking equipment	5 years
11.3 (a)	IT Applications / software – bespoke, specialised, in-house developed	6 years
11.3 (b)	IT Applications / software – "off the shelf"	3 years
12	**Office Equipment**	
12.1	Furniture	4 years
12.2	Phones	3 years
12.3	PCs & server hardware	4 years
12.4	PCs & server software	4 years
12.5	Other electrical equipment	4 years
13	**Licences & IPR -**	
13.1	Radio Frequency Licences	Duration of licence
13.2	Operator regulatory Licences	Duration of licence
13.3	IPR	Duration of copyright etc

Appendix B – Consultation Questions

Appendix C - Recommended Regulatory useful economic lives for Eircom

The recommended regulatory useful economic lives for Eircom for key asset categories are set out below

Main Category	Subcategory	Current Useful Economic life - Regulatory Accounts	Current Useful Economic life - Statutory Accounts	Recommended Useful Life – Regulatory purposes
1	**Customer Sited Equipment**			
1.1	Customer Sited DSL Equipment	6 years	6 years	4 years
1.2	Customer Sited Data, Ethernet & IP Terminating Equipment	6 to 12 years	6 years	8 years
1.3	Customer Sited Transmission Terminating Equipment	11 years	6 years	8 years
1.4	Customer Sited Application Capability Equipment	12 years	4 years	8 years
2	**Access Network – Physical**			
2.1	Poles	15 years	15 years	30 years
2.2	Towers	35 years	35 years	35 years
2.3	Duct, roadway & footway boxes	20 years	20 years	40 years
2.4	Overhead cables & fibre	8 to 10 years	7 to 10 years	15 years
2.5	Underground cables & fibre	8 to 22 years	12 to 15 years	20 years
3	**Access Network – Equipment**			
3.1	Active equipment incl. DSLAMs, MSANs in COs or other conditioned areas.	6 to 14 years	6 to 12 years	8 years
3.2	Switching: Line terminals	8 years	8 years	8 years
3.3	Active street cabinets & similar external equipment	11 to 22 years	6 to 8 years	8 to 20 years

Main Category	Subcategory	Current Useful Economic life - Regulatory Accounts	Current Useful Economic life - Statutory Accounts	Recommended Useful Life – Regulatory purposes
4	**Core Network – Physical**			
4.1	Poles	8 years	8 years	30 years
4.2	Towers	35 years	35 years	35 years
4.3	Duct, roadway & footway boxes	20 years	20 years	40 years
4.4	Overhead cables & fibre	8 to 10 years	7 to 10 years	15 years
4.5	Underground cables & fibre	14 years	12 to 14 years	20 years
5	**Core Network Transmission Equipment**			
5.1	Transmission equipment < 155Mbit/s	3 to 11 years	3 to 7 years	11 years
5.2	Transmission equipment >= 155Mbit/s	6 to 11 years	6 years	11 years
5.3	International Satellite Equipment	9 years	7 years	9 years
5.4	Submarine cable equipment	8 to 9 years	7 years	9 to 15 years
6	**Data, Ethernet & IP Equipment**			
6.1	IP & Internet Router hardware	6 years	6 years	6 years
6.2	Ethernet Transport & Switch Equipment	9 years	6 years	6 years
6.3	ATM, Frame Relay equipment	6 to 12 years	6 years	6 years
6.4	Other data equipment	9 to 12 years	6 to 7 years	6 to 9 years
7	**Core Network Capability Equipment**			
7.1	Class 4 / 5 switch hardware (excl. line terminals)	6 to 9 years	6 to 7 years	10 years
7.2	Class 4 / 5 switch software	4 to 6 years	4 years	5 years
7.3	Custom hardware & applications	6 to 20 years	6 to 14 years	6 years
7.4	Server hardware	-	-	5 years
7.5	Applications & OS	6 years	5 years	5 years

Main Category	Subcategory	Current Useful Economic life - Regulatory Accounts	Current Useful Economic life - Statutory Accounts	Recommended Useful Life – Regulatory purposes
8	**Network Management Equipment & Network Operations**			
8.1	Network management systems	4 to 9 years	4 to 6 years	4 to 9 years
8.2	Fixed & Exchange Based Test Equipment	5 to 22 years	4 to 8 years	5 to 20 years

Main Category	Subcategory	Current Useful Economic life - Regulatory Accounts	Current Useful Economic life - Statutory Accounts	Recommended Useful Life – Regulatory purposes
9	**Buildings, Mechanical & Electrical Equipment**			
9.1	Land – freehold	Not depreciated	Not depreciated	Not depreciated
9.2	Land - leasehold	Not depreciated	Not depreciated	Not depreciated
9.3	Exchange buildings	40 years	40 years	40 years
9.4	Building fixtures & fittings, security equipment	5 years	5 years	5 years
9.5	Phone / Internet kiosks	8 years	7 years	8 years
9.6	AC & DC power equipment, air conditioning	5 to 22 years	5 to 16 years	5 to 22 years
9.7	Generators	25 years	20 years	25 years
10	**Vehicles**			
10.1	Cars	4 years	4 years	6 years
10.2	Vans	5 years	5 years	6 years
10.3	Trucks	5 years	5 years	6 years
10.4	Specially fitted-out vehicles	5 years	5 years	6 years
11	**IT Systems**			
11.1	IT Hardware	3 to 4 years	4 years	4 to 5 years
11.2	IT Networking equipment	4 years	3 to 4 years	5 years
11.3	IT Applications / software	4 years	4 years	3 to 6 years
12	**Office Equipment**			
12.1	Furniture	Not used	Not used	4 years
12.2	Phones	3 years	3 years	3 years
12.3	PCs & server hardware	4 years	3 years	4 years
12.4	PCs & server software	Not used	Not used	4 years
12.5	Other electrical equipment	4 years	4 years	4 years

Main Category	Subcategory	Current Useful Economic life - Regulatory Accounts	Current Useful Economic life - Statutory Accounts	Recommended Useful Life – Regulatory purposes
13	**Licences & IPR -**			
13.1	Radio Frequency Licences	n/a	25	Duration of licence
13.2	Operator regulatory Licences	n/a	n/a	Duration of licence
13.3	IPR	n/a	n/a	Duration of copyright etc

Appendix D – Eircom Limited Accounting Policies

Year ended 30 June 2008 (statutory and regulated)

Asset Class	Statutory estimated economic life (years)	Regulated estimated economic life (years)
Buildings	40	40
Network Plant		
* *Transmission equipment*		
- Duct	20	20
- Overhead cable/poles	10-15	10-15
- Underground cable	14	14
- Other local network	6-15	6-8
* *Exchanges*		
- Exchange line terminations	8	8
- Core hardware/operating software	3-4	6
Other	3-14	4-9

Appendix E – BT Group PLC Accounting Policies

Year ended 31 March 2008 (statutory and regulated)

Asset Class	Statutory estimated economic life (years)	Regulated estimated economic life (years)
Buildings		
- Freehold buildings	40	40
- Leasehold Land & Buildings	Unexpired portion of lease or 40 years whichever is shorter	Unexpired portion of lease or 40 years whichever is shorter
Network Infrastructure and equipment		
* Transmission equipment		
- Duct	40	40
- Cable	3 - 25	3 - 20
- Radio & repeater equipment	2 – 25	2 - 25
- Exchange equipment	2 -13	2 -13
- Payphones and other	2 – 20	2 – 20
* Other		
- Motor vehicles	2 -9	2 - 9
- Computers and office	3-6	3 - 6

Appendix F – Diagram of OSI model
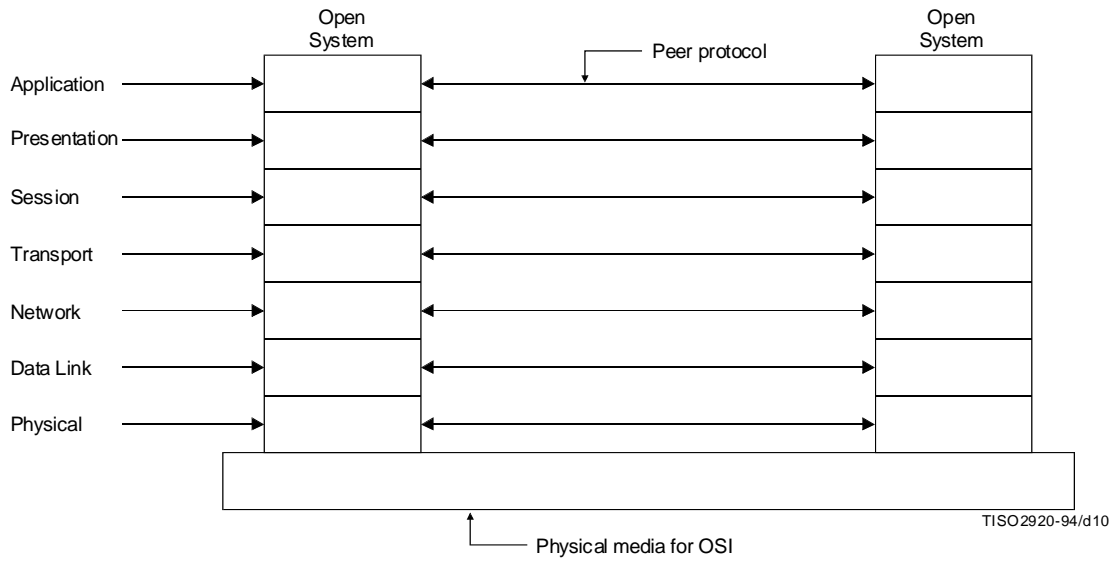
Seven layer reference model and peer protocols

Source : ITU standard X.200 for OSI model
Equivalent to: ISO/IEC 7498-1 : 1994(E)

Appendix G – Glossary of terms

Acronym	Full title	Description
ARO	Access Reference Offer	A contract containing the various prices and terms and conditions that in Ireland, Eircom offers to OAOs for access to its network
ATM	Asynchronous Transfer Mode	Encodes data traffic into small fixed-sized cells
Bakom	Bundesamt für Kommunikation	National regulatory agency for Switzerland
BRAS	Broadband Remote Access Server	The routing of traffic to and from the digital subscriber line access multiplexers (DSLAM) on an Internet service provider's network
BU model	Bottom Up Model	An analytical model that calculates the cost for an efficient operator to "rebuild" relevant infrastructure
CO	Central Office	The physical building used to house inside plant equipment including telephone switches
ComReg	Commission for Communications Regulation	National Regulatory Agency for Ireland
DSL	Digital Subscriber Line	A family of technologies that provide digital data transmission over the wires of a local telephone network.
DSLAM	Digital Subscriber Line Access Multiplexer	Allows telephone lines to make faster connections to the internet. It is a network device, located near the customers' premises, that connects multiple customer Digital Subscriber Lines ("DSL") to a high speed internet backbone line where multiple data streams are combined into one signal over a shared medium.
DWDM	Dense Wavelength Division Multiplexing	Optical signals multiplexed within the 1550-nm band
EBITDA	Earnings before interest, tax, depreciation, and amortisation	A ratio/multiple that is often applied when valuing businesses
Fixed Line	Fixed Line	A telephone line which travels through a solid medium
FRS	Financial Reporting Standard	Sets out accounting principle as developed by the Accounting Standards Board
GAAP	Generally accepted accounting principles	The standard framework of guidelines for financial accounting used in any given jurisdiction

HCA	Historical cost accounts	A system where assets are valued at their original cost, less accumulated depreciation
HCA	Historical Cost Accounts	A system where assets are valued at their original cost, less accumulated depreciation
IAS	International Accounting Standard	Standards for the preparation and presentation of financial statements created by the International Accounting Standards Board
IP	Internet protocol	Method for moving information from one network to another over the internet
Leased Line	Leased Line	Fixed, permanent telecommunication connections providing symmetric capacity between two points
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.
Local Loop	Local Loop	The physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network provider's network.
LS	Line Share	Line share provides OAOs with shared use of a metallic path between an Eircom exchange facility and a customer's premises. Eircom retains the voice-band frequency spectrum of the circuit and continues to provide voice services and the OAO is able to use the remainder of the frequency spectrum.
M&E Equipment	Mechanical and Electrical Equipment	Mainly encompasses the provision of services within buildings (i.e. lifts and escalators; to air-conditioning and controls; lighting & communications)
M/bits	Mega bits	One thousand Kilobits. A "byte" is the smallest number that computer can handle in one unit. There are 8 "bits" in a byte
MSAN	Multiservice access node	A device which connects customers' telephone lines to the core network, to provide telephony, ISDN, and broadband such as DSL all from a single platform

Narrowband	Narrowband	Telecommunication that carries voice information in a narrow band of frequencies
NGN	Next Generation Networks	The creation of an all IP enviroment (sometimes referred to as "Next Generation core networks") and the introduction of high-speed high-bandwidth access networks (often called "Next Generation access networks or NGA networks").
NITA	National IT and Telecom Agency	National regulatory agency for Denmark
NRA	National Regulatory Agencies	A state or government agency which regulates businesses in the public interest
OAO	Other Authorised Operator(s)	A fixed operator other than the incumbent, providing telecommunication services.
ODTR	Office of the Director of Telecommunications Regulation	Predecessor of ComReg
OfCom	Office of Communications	National regulatory agency for the United Kingdom
OSI	Open System Interconnection	A standard for worldwide communications that defines a framework for implementing protocols in seven layers. Control is passed from one layer to the next, starting at the application layer in one station, proceeding to the bottom layer, over the channel to the next station and back up the hierarchy.
PDH	Plesiochronous Digital Hierarchy	An older method of digital transmission used before SDH which requires each stream to be multiplexed or de-multiplexed at each network layer and does not allow for the addition or removal of individula streams from larger assemblies.
PPC's	Partial Private Circuits	An interconnect service that will allow OAOs to provide point to point data services by availing of Eircoms network, together with elements of their own infrastructure. This service is equivalent to Eircoms wholesale leased line service.

PSTN	Public switched telephone network	PSTN refers to the internartional telephone system based on copper wires and carrying analog voice data. This is in contrast to the newer telephone networks based on digital technologies such as ISDN
RPR	Resilient Packet Ring	A standard designed for the optimized transport of data traffic over optical fiber ring networks
SDH	Synchronous Digital Hierarchy	A protocol for transferring multiple digital bit streams using lasers or light-emitting diodes (LEDs) over the same optical fibre.
SLU	Sub loop unbundling.	Process by which a sub-section of part of the local loop is unbundled.
SME	Small and medium enterprises	A small enterprise has less than 50 employees while a medium enterprise has less than 250 employees.
SMP	Significant Market Power	A position which is equivalent to dominance of that market, that is to say a position of economic strength affording an undertaking the power to behave to an appreciable extent, independently of its competitors, customers, and, ultimately, consumers.
Soft switch	Soft switch	A central device in a telecommunication network which connects calls from one phone line to another, entirely by means of software running on a computer system
STM-1	Synchronous Transport Module	It is the SDH ITU-T (International Telecommunication Union) fiber optic network transmission standard with a bit rate of 155.52 Mbit/s
ULMP	Unbundled Local Metallic Path	ULMP provides OAOs with exclusive use of a metallic path between the incumbents exchange facility and a customer's premises.
VoIP	Voice over internet protocol	The transmission of voice traffic over the internet
WACC	Weighted Average Cost of Capital	The minimum return that a company must earn on existing asset base to fiannce its assets
WDM	Wavelength-division multiplexing	A technology which combines multiple messages or data streams onto a single optical fibre by using different wavelengths (colours) to carry different signals