Office of Utility Regulation

Accounting Separation

Regulatory Accounting Guidelines to Cable & Wireless Guernsey Limited

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1. Introduction

The regulatory framework in Guernsey is designed, amongst other things, to prevent dominant players in the Guernsey telecommunications market from abusing their position by adopting anti-competitive practices such as predatory pricing and unfair cross subsidising strategies. The regime also focuses on the need to foster and promote competition in the telecommunications markets in Guernsey.

In order for the Director General of Utility Regulation to carry out her functions, the Office of Utility Regulation ("OUR") requires a significant amount of financial information and a key source of such information is the set of separated Regulatory Accounts that a dominant operator may be required to keep.

Cable & Wireless Guernsey Limited ("C&W Guernsey") has been found by the OUR to be dominant in Guernsey's fixed and mobile telecommunications markets[1] and has been required to prepare Regulatory Accounts, submit these to the OUR and publish them.

To assist in this process, in March 2002[2] the Director General published Regulatory Accounting Guidelines ("The Guidelines") on how to prepare separated Regulatory Accounts. The Guidelines comprise a living document which is subject to change and have been updated to take into account developments within the Guernsey telecommunications market as well as wider international markets, C&W Guernsey's progress in developing its Regulatory Accounts and accounting system and developments in international practice. This is the second version of the Guidelines to be published by OUR. The Guidelines are likely to continue to develop over time and they should not be considered as immutable.

These revised Guidelines are specific to C&W Guernsey and accommodate the company's network design and set of services. The principles within the document are generic and will be applied to other operators deemed to be dominant in a relevant market, in which case similar Guidelines will be drawn up for any such operator and will be tailored to that operator accordingly.

Separated Regulatory Accounts provide the licensee with a framework within which to collect, assess and evaluate information, reducing ad hoc requests for information and allowing for the more staged planning of the workload involved in their production. They provide the Director General with predictable and valuable information to carry out her functions. However, notwithstanding this, the submission of separated Regulatory Accounts by C&W Guernsey does not prejudice the Director General's right to seek and obtain any information she requires in order to carry out her functions.

[1] OUR 01/14 "Decisions Under the Telecommunications (Bailiwick of Guernsey) Law, 2001 – Decision Notice and Report on Consultation." In July 2004 the OUR published a consultation paper with the purpose of reviewing this original finding of dominance.
[2] Document OUR 02/12 Accounting Separation – Regulatory Accounting Guidelines to Guernsey Telecoms, March 2002

2. Background

The telecommunications sector within the Bailiwick is open to competitive entry and the Director General has issued fixed telecommunications licences to Wave Telecom Limited and Newtel (Guernsey) Limited and has also issued mobile 2G and 3G licences to Wave Telecom Limited.

A feature of the new market structure is that C&W Guernsey, as the dominant incumbent operator, is required to offer interconnection and access on a cost-oriented and non-discriminatory basis to other licensed operators ("OLOs") and to its own downstream arm. In addition C&W Guernsey is subject to a price control regime on its retail prices where it holds a dominant position. That price control came into effect from 1 April 2002[3] and is being reviewed and consulted upon by the OUR with a view to introducing a new price control in 2005.

These developments within the market require regulatory oversight and scrutiny by the Director General in a number of areas for which reliable and accurate financial data will be needed.

2.1. Role of Accounting Separation

Separated Regulatory Accounts are prepared in order to provide financial information about regulated businesses for use by the regulator, the industry, consumers and other stakeholders. They provide information that is more focused than that contained in statutory accounts as they relate to the regulated businesses or activities, whereas statutory accounts relate to the regulated company as a whole and are more focused on the requirements of investors.

Accounting separation has a proven track record and is the most common tool used worldwide to address regulators' concerns about potential abuses of dominant positions. Under this approach the operator's activities are split for accounting purposes into separate businesses. Accounting separation does not impose on the operator a set of rules about how its activities should be organised, but rather how financial accounting information should be collected and reported. This allows for the transfer charges from one business to another within the organisation to be explicitly identified, allowing non-discrimination to be enforced, the profitability of particular businesses or services to be monitored, and cross subsidies to be identified.

Accounting separation can also ensure a systematic division of costs between retail and network, and ensure that the cost base for interconnection and access charges includes only relevant costs. It also provides a sound basis for the production of robust cost information on the main retail services to inform future decisions on retail price controls.

Regulatory Accounts may assist regulation in a variety of ways, depending on the market structure and regulatory emphasis, including inter alia:

- Monitoring performance against the assumptions underlying a current price control for retail and wholesale services;
- Informing future price controls for both retail and wholesale services;

[3] Price Regulation of Fixed Telecommunications Services: Report on the Consultation Paper and Decision Notice, Document OUR 02/11.

- Informing decisions regarding the level of interconnection rates; and
- Assisting in the detection (or verification of the absence) of certain anti-competitive behaviour such as unfair cross subsidisation and undue discrimination at levels of disaggregation appropriate to the relevant retail and wholesale markets.

2.2. Relevant Licence Conditions

C&W Guernsey's fixed and mobile licences include requirements for C&W Guernsey, as the dominant operator in the fixed and mobile markets, to keep separate financial accounts in such form and at such a level to enable the Director General to assess whether C&W Guernsey is complying with its licence conditions with respect to, for example, interconnection and fair competition.

Condition 27.1 of C&W Guernsey's Fixed Telecommunications Licence[4] states that "Within six months of the Licence Commencement Date[5], the Licensee shall prepare and maintain accounting records in a form that enables the activities specified in any direction given by the Director General to be separately identifiable, and which the Director General considers to be sufficient to show and explain the transactions of each of those activities. The Director General may direct the Licensee as to the basis and timing of such reports as the Director General may require."

A similar requirement is included in Condition 24.1 of C&W Guernsey's Mobile Telecommunication's Licence[6].

To assist C&W Guernsey, the OUR's Guidelines set out the Director General's current detailed requirements for the preparation of separated accounts for regulatory scrutiny. These Guidelines are subject to review and may be revised by the Director General from time to time. The submission of separated Regulatory Accounts by C&W Guernsey does not prejudice the Director General's right to seek and obtain any other information she requires to fulfil her statutory duties.

2.3. International Practice

The OUR's Guidelines to C&W Guernsey are based on best practice and benefit from a considerable amount of international experience and research in the development of separated accounts while at the same time taking account of local circumstances.

In 1998 the European Commission published a comprehensive set of guidelines and recommendations on accounting separation (Commission Recommendation 98/322/EC)[7] and this document was considered by OUR when drawing up the first set of Guidelines in March 2002. At the time of preparation of these revised Guidelines, proposed updates and changes to the Commission Recommendation are open for consultation in the form of a Draft Opinion of the European Regulator's Group (ERG)[8].

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[4] OUR Document No OUR 01/18 September 2001
[5] Licence commencement date being 1 October 2001, therefore within six months means by 1 April 2002.
[6] OUR Document No OUR 01/19 September 2001
[7] Commission of the European Communities Recommendation of 8 April 1998 on interconnection in a liberalised telecommunications market, Part 2 – Accounting separation and cost accounting Brussels, 8.04.1998 C(1998) 960 final.
[8] For details and references to the ERG and Commission Documents, please see Document OUR 04/15: Update of OUR's Regulatory Accounting Guidelines to C&W Guernsey: Consultation Document

While this consultation on the draft ERG opinion, and indeed any subsequent changes that may be made to the Commission Recommendation, are still outstanding at the time of the OUR revision of these draft Guidelines, the OUR has considered the changes proposed in international practice and this document takes account of those proposed changes insofar as they are considered appropriate to Guernsey. The OUR will keep further international developments under review and will propose further changes if that is considered necessary.

2.4. Structure of these Guidelines

Section 3 of the Guidelines sets out the OUR's Regulatory Accounting Principles which must be applied by C&W Guernsey in preparing its Regulatory Accounts and discusses the application of these principles to the various elements of the Regulatory Accounts including methodologies, Accounting Principles and the underlying Regulatory Accounting data.

Section 4 sets out the format and scope of C&W Guernsey's Regulatory Accounts including the format of the financial statements, the level of disaggregation and the definitions of the main businesses to be separated. It also includes publication and submission requirements.

Section 5 concludes the paper and sets out an updated Direction to C&W Guernsey in relation to annual submission and publication of its Regulatory Accounts.

Annex 1 provides detailed guidance on the development of cost accounting systems.

Annex 2 provides guidance on the application of the principle of Cost Causality to operating costs, the cost of capital and capital employed, transfer charging and revenues.

Annex 3 contains the definition of the disaggregated services that make up the Retail Business.

Annex 4 sets out pro forma reporting formats for the financial statements and reports on transfer charging and

Annex 5 provides some information on the use of current cost accounting.

3. Regulatory Accounting Principles

The submission of Regulatory Accounts requires C&WG to develop accounting systems that are suitable to produce the accounts in the first place. Indeed, the financial statements produced by the accounting system are often perceived to be the Regulatory Accounts. In fact, the Regulatory Accounts comprise a number of documents including the financial statements produced by the accounting systems but also including detailed descriptions of methodologies, accounting policies, transfer charges etc. A particularly important component of the accounts is a clear explanation of the methodologies used in preparing the Regulatory Accounts including the assumptions applied and the reasons and justifications for those assumptions.

Without this supporting documentation, the financial statements will not be transparent and their usefulness to the regulator and other stakeholders (including C&W Guernsey) will be greatly reduced. Therefore it is essential that the accounting systems, the financial statements and the supporting documentation are treated as an integral whole.

Section 3.1 below sets out the Regulatory Accounting Principles that should be followed by C&WG in allocating costs and revenues for the purposes of cost accounting and accounting separation and these apply to all parts of the Regulatory Accounts.

In addition, in the light of experience in the development of Regulatory Accounts in Guernsey, sections 3.3 and 3.4 expand on the application of these principles to key aspects of the Accounts including the supporting documentation and the underlying data. Section 3.5 comments on the audit of the Regulatory Accounts – something that is essential to ensure that they comply with the Regulatory Accounting Principles - and Section 3.6 provides a summary of the Guidelines.

3.1. Regulatory Accounting Principles

This section sets out the principles that should be followed in order to allocate costs, capital employed and revenues for the purposes of cost accounting and accounting separation.

C&W Guernsey should adopt the following Regulatory Accounting Principles ("Principles") when preparing the separated Regulatory Accounts.

Priority and Proportionality

Within the Regulatory Accounting Principles, insofar as there is conflict between the requirements of any or all of these Principles, the Principles are to be applied in the same order of priority in which they appear in this document, while at the same time ensuring that a balance is struck between the Principles that is proportional and appropriate. The OUR will provide guidance on a case by case basis in response to any specific queries that C&WG may have on the application of the Principles.

Definitions

Any word or expression used in the accounting documents shall, unless the context otherwise requires, have the same meaning as it has in C&W Guernsey's licences.

Cost Causality

Revenue (including transfer charges), costs (including transfer charges), assets and liabilities shall be attributed to cost components, services and businesses or disaggregated businesses in accordance with the activities which cause the revenues to be earned or costs to be incurred or the assets to be acquired or liabilities to be incurred.

Transparency:

The attribution methods used should be transparent. Costs and revenues, which are allocated to businesses or activities, shall be separately distinguished from those that are apportioned.

Objectivity:

The attribution shall be objective and not intended to benefit C&W Guernsey or any other operator, product, service, component, business or disaggregated business.

Consistency of treatment:

There shall be consistency of treatment from year to year. Where there are material changes to the Regulatory Accounting Principles, the attribution methods, or the accounting policies that have a material effect on the information reported in the financial statements of the businesses, the parts of the previous year's financial statements affected by the changes shall be restated.

3.2. Cost Allocation Principles

All of the Principles are important and should be fully applied. However, the Principle of cost causality is particularly complex and drives the development of the cost allocation methodologies and systems.

Therefore some detailed guidance is given in Annex 1 on the development of cost accounting systems. Annex 2 provides some further detail on the treatment of costs including operating costs, cost of capital and capital employed and the treatment of transfer charges (costs and revenues).

An important issue in considering what costs will be allocated in the Regulatory Accounts is the decision on what costing method should be used to determine what level of costs of assets should be attributed to services and products. Methodologies range from Fully Allocated Historical Costs (FAHC) to Current Costs (CC) or Foreword Looking Long Run Average Incremental Costs (FL-LRAIC). The use of Current Cost Accounting (CCA) for Regulatory Accounting purposes and in particular as a basis for setting interconnection and access charges, is widely accepted as providing more correct economic signals than the use of FAHC. The use of FL-LRAIC in certain circumstances is considered to be even more economically appropriate and this methodology has been applied in a number of EU member states including the UK and Ireland.

In order to ensure that economic regulatory decisions can be made on the most appropriate basis, C&W Guernsey is required to prepare its Regulatory Accounts on a CCA basis. Further guidance on CCA is provided in annex 5.

3.3. Regulatory Accounting Documentation

Methodologies

In developing the Regulatory Accounts in line with the above principles, it is essential that the methodologies employed by C&W Guernsey are fully and transparently documented. Without this, the Regulatory Accounts will not comply with the principle of transparency and their usefulness will be reduced.

The first area that must be documented is the description of the attribution methodologies used to allocate revenues, costs, assets, liabilities and capital employed. This description should be prepared in accordance with the detailed guidance and requirements set out in the Annexes to these Guidelines.

As part of this process, a description of the basis used to set transfer charges between disaggregated regulatory services should also be prepared. Typically this will prescribe methodologies for ensuring that C&W Guernsey charges itself on the same basis as other operators offering similar services where there is a regulatory requirement to do so. Further guidance on this is given in Annex 2 and Annex 4 provides a pro forma template for the reporting of transfer charges.

In addition, a description of the methodologies used to prepare costs must be provided, including reference to cost base and standards, allocation methodologies, identification and treatment of shared and common costs.

Accounting Policies

These policies follow the form used for the preparation of standard statutory accounts and should include, for example, details of fixed asset depreciation periods and the treatment of relevant research and development costs. The basis on which assets are valued (e.g. asset lives and depreciation methods) will be included as accounting policies. Transparency of these policies is essential to an understanding of the Regulatory Accounts and to the audit of the accounts.

3.4. Quality of Regulatory Accounting Data

For the Regulatory Accounts to be fit for purpose, the data contained in all of the documentation must not only be transparent, but should also be relevant, comparable with previous reporting periods and reliable. It is also essential that a suitable audit trail of information is maintained to ensure the integrity of the data over a period of time. While this is clearly necessary to enable the audit of the Regulatory Accounts to be carried out, it is also essential because the OUR may need to obtain more detailed financial information over a time series than that included in the Regulatory Accounts.

Relevance

Information is relevant if it has the ability to influence the economic decisions of users and is provided in time to influence those decisions. Relevant information has predictive value (if it helps users to evaluate or assess present and future events) or confirmatory value (if it helps users to confirm or correct their past evaluations and assessments) or both. In order for the Regulatory Accounts to be relevant, they must, *inter alia*, be presented in a timely fashion and be transparent and comply with the principles in section 3.1.

Comparability over Periods

Information in C&W Guernsey's regulatory financial statements gains greatly in usefulness if it can be compared with similar information for other reporting periods in order to identify trends and differences. This aspect is particularly valuable to the OUR where comparable information is used to assess the impact of competition or establish cost trends for price control purposes.

Comparability is usually achieved through a combination of consistency and disclosure of accounting policies. In a regulatory environment this would include regulatory accounting treatments such as cost attribution methodologies. Full transparency of these policies and other methodologies used to prepare regulatory financial statements is therefore important.

In line with the principle of consistency of treatment expressed in Section 3.1, material changes should lead to a restatement of previous years results on a comparable basis.

Reliability

The OUR and other stakeholders (including C&W Guernsey) must be able to rely on the information in the Regulatory Accounts. There are a number of criteria that can be applied to test if information is reliable such as:

- can it be depended upon by users to represent faithfully what it purports to represent;
- is it free from deliberate or systematic bias;
- is it free from material error;
- is it complete (subject to materiality tests);
- it has a degree of caution (i.e. prudence) been applied in exercising judgement and making the necessary estimates;

It is the responsibility of C&W Guernsey to ensure that the information underpinning and contained in the Regulatory Accounts is reliable. If the company has adequately validated the reliability of the Regulatory Accounts, its confidence in the data can be demonstrated by having them formally approved as such by a legal representative of the company.

Reliability is also an issue for consideration by the auditors to the Regulatory Accounts and this is considered further in section 3.5 below.

Data Retention

The OUR may require financial information over a time series in order to carry out its statutory functions. Therefore financial information should be kept for a period of 5 years, making it possible to trace significant evolutions of costs, revenues and outputs and evaluate the effects on costs of applying possible different criteria and methods. This will also be important in relation to the audit of the Regulatory Accounts.

3.5. Audit of the Regulatory Accounts

In order for the OUR to have confidence in C&W Guernsey's Regulatory Accounts they must be subject to independent audit in accordance with the relevant rules of Guernsey's legislation and in accordance with international best practice. The auditor may use sampling techniques where appropriate, but these need to be documented and justified. The audit opinion should state that the Regulatory Accounts have been fairly presented.

It is also important that data used for regulatory statements responds to integrity requirements, i.e. they must be demonstrably the data originally presented in the information systems of the audited firm, when the first "company audit" was performed for the same fiscal year of application. Data integrity must also be proven by the availability of electronic support or paper that enables the auditor to perform tests and verifications and allow him to begin the audit with confidence in the audited data.

Elements to be covered in the audit

The main elements that the OUR requires to be covered in the audit are listed below:

- the scope of costs included in the model and the scope of costs allocated to regulated products;
- the reconciliation between C&W Guernsey's cost model and its statutory accounts;
- correctness of figures, including operational data e.g. volumes, technological parameters;
- appropriateness of methodologies used regarding amortization, cost capitalization, allocation and for the evaluation of the assets (e.g. current costs); and
- transfer charges in separated accounts.

While the initial set up of the Regulatory Accounting systems might take some additional effort, and the first audit of those accounts might involve work associated with establishing the best form and systems for that audit, over time, the work required is expected to reduce.

3.6. Summary of Guiding Principles

The preparation of the Regulated Accounts should follow the set of guiding principles set out below:-

a) The separated accounts shall be based on a transparent cost apportionment methodology and should reflect the current cost accounting convention.

b) The separated accounts shall include transfer charges between the main business areas and the disaggregated activities for services the organisation provides to itself. All accounts should, therefore make explicit any transfer charges to or from other businesses[9]. They shall also disclose the equivalent transactions with competing operators.

c) The separated accounts shall be prepared in accordance with accepted accounting standards insofar as they are relevant.

d) The separated accounts shall be prepared in accordance with the Regulatory Accounting Principles, which set out the general rules by which the financial statements are prepared. These principles are set out in Section 3.1.

e) Details of significant changes that impact on the financial statements and prior year restatements shall be given.

f) Separated accounts shall be submitted annually to the OUR and contain comparative information. Where there are material changes to Regulatory Accounting Principles, Cost Allocation Methodology, Attribution Methods, the Transfer Charging System Principles, or to Accounting Policies that have a material effect on the information reported in the separated accounts of a main business area or a disaggregated activity, the parts of the previous year's separated accounts affected by the changes shall be restated.

g) The separated accounts shall make explicit, any differences between costs allocated to different activities by the operator and the costs that the OUR allowed for the purpose of determining charges.

h) The separated accounts shall be subject to an audit, in accordance with the relevant rules of the States of Guernsey legislation and international best practice demonstrating that the accounts have been fairly presented.

[9] For example, charges paid by C&W Guernsey's own Retail activity for interconnection services should be clearly shown as a cost in the Retail accounts and as a revenue item in the Core Network accounts.

4. C&W Guernsey's Regulatory Accounts

4.1. Level of Accounting Separation

This section sets out the level of disaggregation that is required for C&W Guernsey's Regulatory Accounts**.** Based on consideration of best practice and the EU recommendations, whilst taking into account the size of both C&W Guernsey and the Guernsey market, the Director General will require C&W Guernsey to prepare separate accounting information for the following main business areas[10]:-

a) Core Network

b) Local Access Network

c) Retail

d) Mobile

e) Other Activities

It should be noted that this requirement identifies the main categories that the Director General considers appropriate at this time, but she reserves the right to require C&W Guernsey to separate out any of its activities as may be designated from time to time.

C&W Guernsey is required for the time being by the Director General to present the disaggregation of its business activities in the following format:

Consolidated Separated Accounts

a) Core Network
b) Local Access Network
c) Retail
   - i) Retail – Exchange line rental and connection
   - ii) Retail - Local calls
   - ii) Retail – Local internet calls
   - iii) Retail - Jersey calls
   - iv) Retail - National calls
   - v) Retail – International Calls
   - vi) Retail – Calls to Guernsey Mobiles
   - vii) Retail – Non-geographic calls free to calling customer
   - viii) Retail – Non-geographic calls charged at local rate
   - ix) Retail – Non-geographic calls charged at national rate
   - x) Retail – Non-geographic calls charged at Premium Rate
   - xi) Retail - Internet
   - xii) Retail – Directory Enquiry
   - xiii) Retail – Public Payphones
   - xiv) Retail – Leased lines (private circuits)
   - xv) Retail – Remaining activities

[10] Definitions of each of these business areas are provided in Section 4.2. These definitions are based on those set out in the EU Commission Recommendation of 8th April 1998 on interconnection in a liberalised telecommunications market Part 2 – Accounting separation and cost accounting.

d) Mobile
e) Other Activities

Annex 3 provides full definitions for the disaggregated Retail activities specified above.

In accordance with best practice and the ERG's Draft Opinion to the Commission, reconciliations between the separated accounts and the statutory accounts should be provided. C&W Guernsey will need to consolidate the accounts of the main business areas into a summarised set of accounts (the Consolidated Separated Accounts) and to submit reconciliation statements in conjunction with the accounts.

C&W Guernsey will need to prepare reconciliations[11] between:

- C&W Guernsey's statutory accounts and the Consolidated Separated Accounts of the main business areas.
- the Consolidated Separated Accounts and the Accounts of the main business areas (i.e. Core Network, Local Access Network, Retail, Mobile and other activities).
- the Accounts of the main business areas and their disaggregated activities where applicable (i.e. at present this only relates to the Retail business and, therefore, these 15 retail services will need to be reconciled back to the Retail main business accounts).

4.2. Definitions of Main Business Areas

The main business areas specified in section 4.1 are defined in detail below.

Core Network

The Core Network business provides a range of wholesale interconnection and access services internally to C&W Guernsey itself and externally to other operators in order to allow the customers of one operator to communicate with customers of the same or another operator, or to access services provided by another operator. These services include the switching and conveyance of calls. In addition, the Core Network business may provide other services to operators, such as engineering services related to the development and maintenance of private networks and to the development of competition (e.g. number portability and carrier selection).

The accounts for the Core Network business will include the costs, revenues and capital employed associated with the provision of these services. The revenues of the Core Network business will derive principally from the sale of interconnection and access services to the Retail business and to other operators. With respect to the wholesale provision of transmission circuits, the associated revenues should be booked to the Core Network business.

Local Access-Network

Local Access-Network provides connections to the core network. The accounts for the Local Access-Network business will include the costs and capital employed associated with providing and maintaining these connections. For accounting

[11] The reconciliations will need to be independently verified and the role of auditors in the preparation of C&W Guernsey's Regulated Accounts is set out in Section 3.5.

separation, the Local Access-Network business will include all the customer-dedicated components of the network including, for example, the line cards and customer facing ports located at concentrators and/or exchanges. The Core Network business will include all other network components.

Customer line rental will be a service provided by the Retail business. The revenue from line rental provided to end users will therefore be recorded against Retail. However, line rental revenue from unbundled local loops where these are made available to other market players would to be assigned to Local Access-Network business if this service were introduced in Guernsey.

Thus, the cost of providing customer lines will initially be recorded against the Local Access-Network business and there will need to be a transfer of costs to Retail in order to match revenues with their associated costs. The costs transferred to Retail should be net of any possible local access revenue such as line rental revenue from other market players.

Retail

The Retail business includes all those activities involving the selling of telephony services to end-users, including line rental, leased lines, calls, payphones and the provision of directory information. The accounts for the Retail business will include the costs, revenues and capital employed associated with the provision of these services to end users. The costs allocated to Retail will include transfer charges related to the use of network resources or services provided by Local Access-Network and the Core Network businesses, and the marketing and billing costs associated with the provision of end user services.

The Retail accounts shall be further disaggregated to distinguish between the costs and revenues of individual services as specified in the Annexes to this paper.

Mobile

The Mobile business includes all those activities involving the provision of mobile telephony services. The accounts for the Mobile business will include the costs, revenues and capital employed associated with the provision of these services to end users as well as the costs of network provision.

If C&W Guernsey does not operate its mobile activities as a separate entity it is appropriate for C&W Guernsey to prepare separated accounts for this particular business. It is, however, not necessary at this moment in time to have a set of detailed disaggregated accounts for the mobile business. However the OUR retains the option of directing C&W Guernsey to produce detailed disaggregated accounts for it's mobile business, should it be deemed necessary for the effective regulation of C&W Guernsey's mobile business or the market generally.

Other activities

Incumbent operators typically provide a wide range of other services including the rental, repair and maintenance of customer equipment. In addition, they may have interests in non-telecommunications activities. For the purposes of accounting separation, the costs, revenues and capital employed associated with activities not included in the main business areas will need to be separately identified.

4.3. Documentation to be Provided by C&W Guernsey

Pursuant to the guidance set out in this document, cost accounting systems must produce financial information with the degree of detail necessary to demonstrate compliance with the principle of non-discrimination and transparency, adequately identifying and attributing revenues, costs and volumes for the several activities performed by C&W Guernsey. Such accounting information should be made available in a prompt manner to the OUR.

Good presentation of regulatory accounts ensures that the essential messages of the financial statements are communicated clearly and effectively and in as simple and straightforward a manner as possible. The presentation of information in financial statements involves some degree of abstraction and aggregation. If this process is carried out in an orderly manner, greater knowledge will result because such a presentation will satisfy the various regulatory objectives such as demonstrating that charges are cost-orientated or the absence of undue discrimination.

In this context accounting reports comprise supporting notes that amplify and explain the financial statements and both the financial statements and the supporting notes form an integrated whole.

Financial Statements

C&W Guernsey should prepare and publish the following information:

- Profit and Loss statement;
- Capital employed statement (namely, detailing form of calculating and value of parameters used);
- Consolidation and reconciliation with statutory accounts or other source of costing information;
- Non-discrimination notes (namely, detailing transfer charges);
- Audit opinion; and
- Description of accounting principles, policies methodologies and procedures used, namely regarding the cost allocation methodologies.

C&W Guernsey will need to prepare separate accounts for the businesses specified in section 4.1. Proforma financial statements are shown in Annex 4.

At this time, the Director General does not believe it appropriate to require C&W Guernsey to reveal detailed financial information about its unregulated activities that it would not otherwise be required to reveal for statutory reporting purposes. Such information may be regarded as commercially confidential and does not need to be submitted to OUR at this time. Information relating to such activities should instead be shown in total and reported as “Other activities”.

The Director General does, however, reserve her right to request financial and other information regarding these unregulated businesses as and when she considers this necessary to exercise her duties with regard to safeguarding fair and open competition in the Guernsey telecoms markets. In particular the Director General may require information on previously unregulated activities if there is any need to investigate the behaviour of the company given its dominant position in the market.

C&W Guernsey's separated Regulatory Accounts should be prepared on a Current Cost Accounting ("CCA") basis subject to any adjustments required by the Director General. Further guidance on current cost accounting principles are provided in Annex 5 of these Guidelines.

The accounts should also make explicit any differences between the costs allocated to different activities by C&W Guernsey and the costs that the OUR allowed for the purpose of determining charges. This will provide transparency about the extent of costs excluded by the OUR for charging purposes and about the reasons for their exclusion.

These Regulatory Accounts should include a statement in writing from at least one Director of the company confirming that they are verified and accurate and should also include an audit opinion that the accounts have been fairly presented.

Submission of Other Information

Financial Statements on their own at too consolidated a level, fail to enable the OUR to fulfil its obligations and fail to satisfy the requirements of transparency and aid competition. Additional detailed information on the costs incurred by C&W Guernsey and its relationship with its own retail arm is essential to deliver the required transparency for effective competition. The additional information to be submitted will include:

a) a statement of the accounting policies used in the preparation of the accounts (including assumptions and methodologies used to convert historic costs to current costs);
b) a matrix summarising the total transfer charges between the different Accounts (see proforma in Annex 4);
c) a statement describing the basis on which unattributable costs have been allocated between different accounts;
d) information about the cost allocation methodologies employed in order to prepare the separated Regulatory Accounts. This should be at a level of detail that makes clear the relationship between costs and interconnection and access charges; and
e) a statement showing the average cost of network components[12] (see proformas in Annex 4). The statement of average cost of network components should be sufficiently detailed to show that C&W Guernsey's own downstream arm is not treated more or less favourably than other operators. This is particularly important at the current stage of the market development within Guernsey. The level of traffic C&W Guernsey generates is also required by the OUR in connection with monitoring and regulating interconnect and access agreements.
f) C&W Guernsey should also provide the OUR with a copy of the auditor's report upon which the fairly presented audit opinion is based.

4.4. Reporting Period

For C&W Guernsey's Regulatory Accounts to be effective, the information submitted to the OUR should be timely and any unnecessary delay in the submission of the accounts and the additional financial information would reduce the positive effects of accounting separation.

[12] A detailed statement of the costs of all network components is an essential element of ensuring transparency and promoting competition.

C&W Guernsey is required to publish its regulatory accounts on an annual basis, and as soon as possible after the end of the accounting year and no later than within six months of the end of the company's financial year end[13].

C&W Guernsey may facilitate compliance with this timetable be submitting a detailed set of documents to its auditor in advance of actual verification procedures, so that the auditor can become familiar with the accounting separation procedures and documentation.

However C&W Guernsey should be capable of reporting on-demand or within a stricter timeframe, when required by the OUR for specific circumstances, in particular for investigations regarding compliance with specific licence conditions.

4.5. Publication of Information

Regulatory accounting information is an important element in enabling the OUR to carry out its statutory functions. Others that may be affected by regulatory decisions based on that information, such as competitors, investors and consumers will also have an interest in C&W Guernsey's Regulatory Accounts. Publication of this information will contribute to an open and competitive market whilst also making the regulatory regime transparent.

Publication of C&W Guernsey's Regulatory Accounts should be in a form easily accessible by interested parties, such as paper form and on C&W Guernsey's website. C&W Guernsey is required to issue a notice in the Gazette Officielle informing the market of the publication of its Regulatory Accounts and alerting interested parties on how to obtain copies of the documentation. The Cost Attribution Methodology document submitted to the OUR[14] will contain the actual data used for deriving apportionment percentages for the drivers. This version of the Cost Attribution Methodology does not need to be made available to third parties.

The Director General may request detailed financial information at any time from C&W Guernsey and this information may be published if it would contribute to an open and competitive market subject to the consideration of its commercial confidentiality.

[13] C&W Guernsey's 2003/04 Regulatory Accounts are to be submitted by 31st March 2004 as directed by the Director General in Document OUR 04/12.

[14] C&W Guernsey will also need to provide the OUR with the Visio Report which contains the actual costs assigned to codes within the OROS model to which the Cost Attribution Methodology document refers to.

5. Conclusion

5.1. Direction on Production of Regulatory Accounts

These Guidelines provide C&W Guernsey with a set of Principles that should be applied in the preparation and submission of Regulatory Accounts. The Guidelines also contain much detailed guidance on technical aspects of separated Regulatory Accounts including issues such as costing systems, costing methodologies and cost allocation methods.

> **Direction by the Director General of Utility Regulation to Cable & Wireless Guernsey Ltd.**
>
> In accordance with Condition 27.1 of Cable & Wireless Guernsey's Fixed Telecommunications Licence and Condition 24.1 of Cable & Wireless Guernsey's Mobile Telecommunications Licence, Cable & Wireless Guernsey is directed to prepare, submit and publish Regulatory Accounts each year as soon as possible after the end of the accounting year and no later than within six months of the end of the company's financial year in accordance with these Guidelines and any amendments to these Guidelines.
>
> This Direction is without prejudice to the Direction set out in Document OUR 04/12R in relation to Regulatory Accounts for 2003/4.

5.2. Related Consultations

As already noted, these Guidelines are a living document and may be subject to change from time to time. At the time of publication of these Guidelines the OUR is engaged in a number of consultations that may affect these Guidelines and the Guidelines are without prejudice to any decisions that the Director General may make arising from those consultations or otherwise in the course of carrying out her statutory functions.

Annex 1: Cost Accounting Systems

This section provides generic guidance on the development of cost accounting separation systems.

A1.1 Steps in Developing an Accounting Separation System

A cost accounting system is essence a set of rules to ensure the attribution and allocation of revenues, costs, assets, liabilities and capital employed to individual activities and services. This involves particular emphasis in considering direct and indirect operating costs of services as well as past and future expenses.

More precisely, a cost accounting system will involve establishing a record-keeping mechanism, keeping track of costs and identifying operational expenditures such as equipment maintenance. The principal benefit of this system should be a transparent illustration of the relationship between costs and prices, as the system should be able to disaggregate costs to ensure that costs allocated to regulated services do not result in cross subsidies, excessive prices and that prices reflect efficiently incurred costs.

Development of a cost accounting system will involve the following steps:

- Identification of the directly attributable costs;
- Identification of indirectly attributable costs;
- Evaluation of capital employed;
- Development of rules of allocation of common and joint cost to services; and
- Definition of transfer charges.

The distinction between direct and indirect cost is well established in the accounting practice. These concepts were also mentioned in the regulatory framework of 1998[15] and in a respected recent cost study[16] which clearly states a distinction between directly attributable, indirectly attributable, and unattributable costs along the following lines:

Identification of Directly Attributable Costs

Directly attributable costs are those costs that can be directly and unambiguously related to a product or service without the need for apportionment. These costs can include the following:

- (annualised) costs of equipment specific to the service and directly related costs such as installation; and
- network related operating costs (such as maintenance).

[15] See for example Directive 98/10/EC of the European Parliament and of the Council, Article 18; Commission Recommendation of 8 April 1998 on interconnection in a liberalised environment (Part 2 – Accounting separation and cost accounting.

[16] Study on the preparation of an adaptable bottom-up costing model for interconnection and access pricing in European Union countries – A final report for Information Society Directorate-General of the European Commission by Europe Economics, April 2000.

Identification of Indirectly Attributable Costs

Indirectly attributable costs are those costs that can be apportioned to products or services on a measured non-arbitrary basis reflecting the relationship of the costs with directly attributable costs. They include many network costs such as transmission equipment which will be shared by services using cost-building parameters, like the appropriate routing factors.

Both directly and indirectly attributable costs can fall into one of two categories. First, costs of inputs that vary with the level of output, so that even if the output of more than one service requires this input, the extent to which a single service causes the costs can be calculated. Second, there are assets and operating costs which are fixed with respect to the level of output but which are service specific.

Residual costs (that are not clearly directly or indirectly attributable) are known as “unattributable costs” and comprise those costs which can only be attributed on an arbitrary basis.

Evaluation of Capital Employed

The evaluation of capital employed should be done at current costs. Further guidance on current cost accounting is provided in Annex 5. At the time of publication of these Guidelines, the OUR is consulting separately on the issue of C&WG’s cost of capital in the context of setting retail price control.

Rules for Cost Allocation of Common/Joint Costs

A clear methodology must be used for allocating costs between regulated activities and “other” (non-regulated) activities of the notified operator and to allocate costs to each activity in a proportionate and objective way. Typically, costs which cannot be directly assigned to specific services within either regulated or non regulated activities will be described as common costs.

Common costs shall be grouped into homogeneous cost categories designed to facilitate the proper allocation of costs to specific services between an operator's regulated and non-regulated activities. Each cost category should be allocated between regulated and non regulated activities in accordance with the following hierarchy:

(i) Whenever possible, common cost categories shall be allocated based upon direct analysis of the origin of the cost themselves.

(ii) When direct analysis is not possible, common cost categories shall be allocated based upon an indirect, cost-causative linkage to another cost category (or group of cost categories) for which a direct assignment or allocation is available.

(iii) When neither direct nor indirect measures of cost allocation can be found, the cost category shall be allocated based upon a cost driver computed by using the ratio of all expenses directly assigned or attributed to regulated and non-regulated activities (i.e. Equi Proportional Mark Up).

Definition of Transfer Charges

The methodologies applied by C&W Guernsey to take into account the costs of products or services used internally should be transparent and satisfactory. A system of transfer charges should be applied to services and products provided from one business (for example, in the fixed network, Local Access-Network, Core Network and Retail) to another. The transfer charges for internal usage should be determined as the product of usage and unit charges. The charge for internal usage should be equivalent to the charge that would be levied if the product or service were sold externally rather than internally.

For accounting separation purposes, it should be assumed that C&W Guernsey's Retail business pays the same charge for the same service. There should be a clear rationale for the transfer charges used and each charge should be justifiable. Charges should be non-discriminatory and there should be transparency of transfer charges in the separate accounts. There shall be consistency of treatment of transfer charges from year to year and any change in methodology should be transparent and satisfactory to the OUR.

Annex 2 provides further more detailed information on how transfer charges should be treated.

A1.2 Cost Allocation Process

This section sets out the process, based on best practice, which C&W Guernsey should follow in order to allocate costs, capital employed and revenues for the purposes of preparing separate accounts.

Figure 1.1 illustrates a typical cost allocation process. It should be noted that actual allocation processes may vary depending on the entity's organisational structure and the way(s) in which financial/operating data are captured, and may be more complex and involved than Figure 1.1 implies. It is important to note, however, that in order to ensure that the OUR has confidence that the company's regulatory accounts are fit for purpose that the costs are allocated in a transparent manner and that the supporting documentation and assumptions are both comprehensive and auditable.

The process starts from information and data captured by the general ledger or other costing or financial systems operated by the company. Regardless of the source, a key factor, which will influence the ultimate usefulness of the costing information, is the level of detail at which costs are initially captured. A high level of disaggregated detail, without prejudice to principles of transparency, proportionality and materiality, should be applied. The initial costing information should also refer to all relevant services / products provided by C&W Guernsey. The costing information held by these systems may be divided between operating costs, capital costs and accounting entries such as depreciation.

Costs may be attributed either directly to services or to cost pools called network components, related functions or other functions. These are defined as follows:

Services

These are the costs that can be directly identified with a particular service. For these purposes, the term "service" refers both to end-user services (e.g. the provision of pay-phones) and intermediate services (e.g. network services).

Network components

This pool contains the costs relating to the various components of transmission, switching and other network plant and systems. The costs will be in respect of network components that cannot be attributed directly to a particular service as they are utilised in the provision of a number of services.

Related functions

This pool contains the costs of functions necessary for the provision of services to the customer such as billing, maintenance, and customer services.

Other functions

This pool contains the costs of functions that are not related to the provision of particular services but are an important part of the operations of the company. Examples of such costs include planning, personnel and general finance.

As noted, there are a series of steps which allocate cost pools in a tiered approach to eventually allocate costs to services. These step allocations are performed using appropriate drivers. Each step is summarised below:

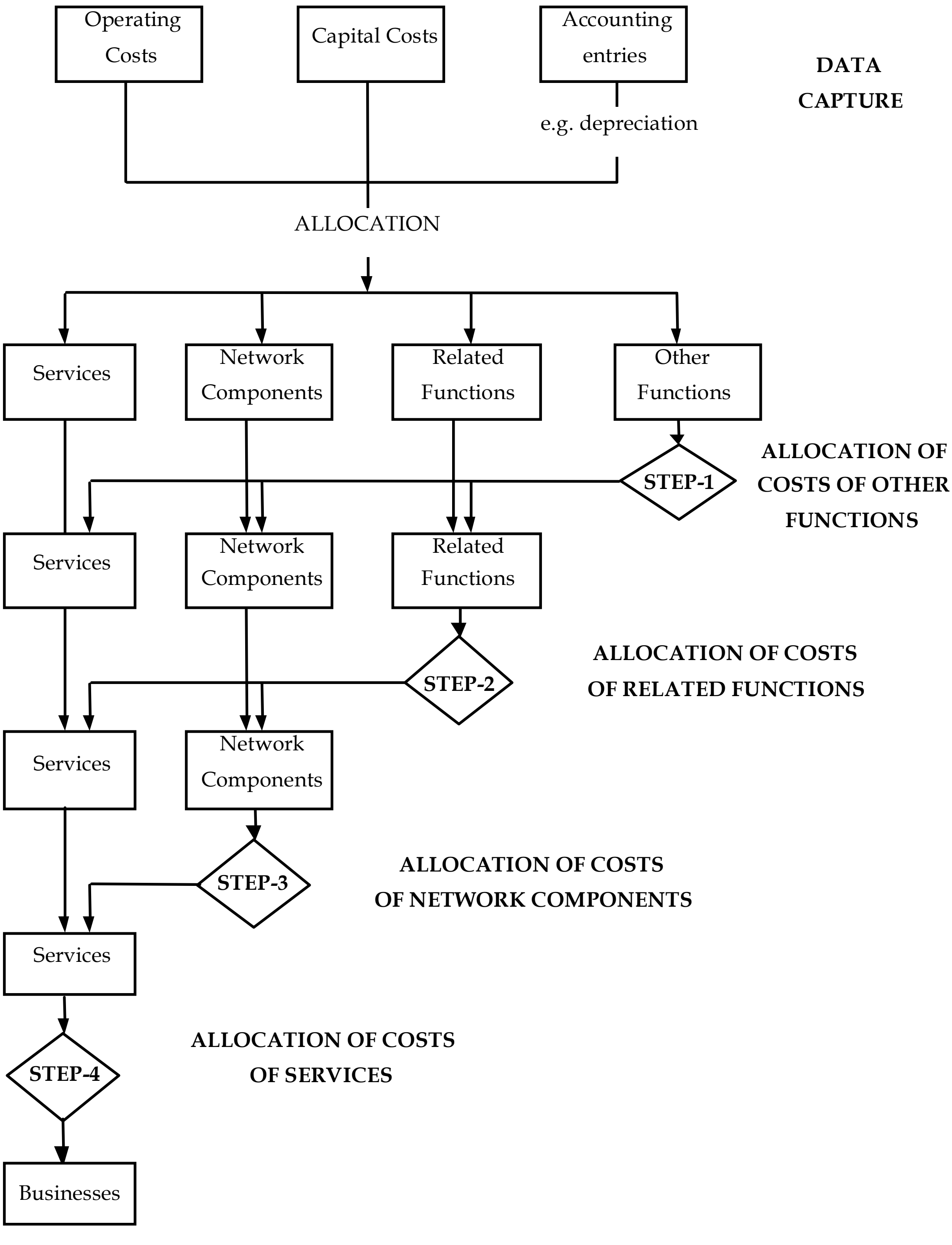
Step 1: The allocation of other functions across related functions, network elements and services.
Step 2: The allocation of the related function costs to services and the network elements.
Step 3: The allocation of network components to services.
Step 4: The grouping of services into businesses (as defined for the purposes of accounting separation).

Each of the allocation steps illustrated above could involve a number of detailed sub-steps, particularly if the initial capture of cost information is at an aggregated level. Where it is possible to perform an allocation via a number of direct or indirect attributions this is preferable to allocation through a single arbitrary step. It is important to emphasise that the attribution methodologies should be comprehensively documented with underlying data so as to be transparent to the OUR and a description of the attribution methodologies should also be published by C&W Guernsey to provide transparency to interested parties.

It is anticipated that C&W Guernsey will need to use sampling techniques and periodic activity reviews in order to allocate costs (including capital costs) to the services that they provide and, subsequently to the businesses defined for the purposes of accounting separation. For example, periodic analysis of the tasks undertaken by staff in customer call centres may be used to determine the amount of time spent by those staff on different tasks. This information may then be used to allocate - either directly or indirectly - the costs associated with the staff to the services provided. Cost drivers definitions and calculations must be subject to review by the OUR, and the methodology used for survey and sampling techniques should be made available to the OUR.

In summary the fundamental objective of this process is to arrive at an appropriate basis of attribution to comply with the principle of causation.

Figure 1.1: Typical Cost Allocation Process



Annex 2: Principle of Cost Causality

Identifying different types of costs and attributing these cost to individual services is an essential and complex issue. It is believed that allocations should be based on cost causality, transparency, objectivity and consistency.

A2.1 Introduction

The principle of causality implies that costs and revenues are allocated, directly or indirectly, to the services that "cause" the costs (and revenues) to arise. This requires the implementation of appropriate cost allocation methodologies. In practice, this requires that C&W Guernsey:

- Reviews and justifies each item of cost, capital employed and revenue;
- Establishes the driver that caused each item to arise;
- Uses the driver to allocate each item to individual businesses /activities/ network components or services; and
- Clearly and transparently documents the process and rationale used.

All allocations may be subject to review by the OUR and to allow this a detailed list of the cost drivers should be delivered to the OUR for assessment in a timely fashion in advance of the financial statement preparation.

Each item of cost and revenue must be allocated to the products and services provided by C&W Guernsey. In the case of revenues, the OUR would expect that most of them can be thoroughly allocated directly to those products or services to which they are related. This is not the case for costs, however, because a relatively high proportion of the costs are shared between different products and services.

Allocation methodologies, such as activity-based costing (ABC), allow the explicit establishment of stronger causal relations between costs and services or products. ABC views the services and products as a series of activities, each of which consumes resources and therefore generates costs. This methodology, based on the cause of costs (cost drivers), traces and allocates costs through the activities performed and establishes a clear cause-and-effect relation between activities, their associated costs and the resulting output from those activities.

ABC introduces an intermediate stage of activities, enabling some costs - that would otherwise be allocated in a less direct way - to be attributed to the services that cause them to occur. This enables a higher proportion of indirect costs to be allocated in an objective fashion to outputs. Nevertheless, with ABC it will generally not be possible to allocate all costs to services via activities, and hence some costs will remain to be apportioned to outputs in a relative arbitrary manner.

Once direct and indirectly attributable costs have been allocated to particular services on the basis of causality, the remaining costs might be allocated based using several approaches, namely EPMUs or apportionment based on revenues /other costs / input - output share where costs are not assigned to activities to the extent to which they "cause" the cost, although for specific objectives some may be more appropriate than others. In a well-defined costing system these remaining costs should be kept to a minimum, ideally not exceeding 10% of the total costs.

A2.2 Operating Costs

The cost allocation process outlined in the Guidelines relates, in principle, to both operating and capital costs. Table 2.1 provides a summary of possible allocation and attribution methods for operating costs under the following headings:

- Depreciation of network elements;
- Provision, installation and maintenance costs;
- Network planning and development costs;
- Network management costs;
- Marketing and sales costs;
- Billing and collection costs;
- Operator services costs;
- Directory services costs;
- Payments to other operators; and
- Support costs.

These headings are purely illustrative and are not intended to reflect the way in which C&W Guernsey is expected to record costs. They are intended to provide high-level guidance only. C&W Guernsey will need to develop cost allocation procedures specific to the way in which they currently capture and record costs, and to refine these over time, as appropriate.

The final column of Table 2.1 provides an indication of the principal businesses to which it might be expected that the majority of the operating costs in question would be allocated.

Table 2.1 Methods of allocating operating costs*

Category of Operating cost	Description	Method of Allocation	Principal Businesses
Depreciation	Depreciation	The allocation of depreciation should follow the allocation of the fixed assets to which it relates.	All
Provision and installation of equipment	Payroll costs	Direct to network components/other plant where possible; otherwise allocate based on the time spent carrying out installation work.	Core Network, Local Access-Network, Mobile
	Installation, contract and maintenance costs	Direct to network components/other plant on the basis of the plant installed or maintained where possible.	Core Network, Local Access-Network, Mobile
Maintenance and repair costs	Payroll costs	Direct to network components/other plant where possible; otherwise allocate based on the time spent carrying out maintenance and repair work.	Core Network, Local Access-Network, Mobile
	Other costs	Direct to network components/other plant where possible.	Core Network, Local Access-Network, Mobile
Network planning and developments costs	Payroll and external costs	Direct to network components/other plant where possible.	Core Network, Local Access-Network, Mobile
Network management costs	Payroll costs	Allocate to network components/other plant on the basis of the time spent by staff to manage each type of plant.	Core Network, Local Access-Network, Mobile
	Other costs	Allocate to network components/other plant on the basis of the plant managed, where possible.	Core Network, Local Access-Network, Mobile
Marketing and sales costs	Payroll	Direct to products and services where possible; otherwise allocate between products based on labour time.	Retail
	Cost of sales of equipment	Allocate to customer equipment services within "Other activities".	Other Activities
	Publicity Promotions Market research Distributors fees Other costs	Direct to products and services where possible. Otherwise, for those costs where multiple services are being marketed or promoted, cost should be attributed to the related services on a reasonable basis.	Retail

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment will be considered separately by the OUR.

Table 2.1 Methods of allocating operating costs (cont.)*

Category of Operating cost	Description	Method of Allocation	Principal Businesses
Billing and collection costs	Payroll costs	Direct to products and services where possible; otherwise allocate between products based on labour time.	Retail (some costs to Core Network)
	Other billing costs (incl. Bad debts)	Direct to products and services where possible; otherwise allocate between products based on usage (e.g. number of bills produced).	Retail (some costs to Core Network)
Operator services costs	Payroll costs	Direct to services where possible. The costs of staff that carry out tasks for several operator services should be allocated to the related operator services based on time spent on different tasks.	Retail
Directory services costs	Payroll and other costs	Direct to products and services.	Retail
Payments to other operators	Out-payments for outgoing international traffic	Direct to products and services.	Retail
	Payments for interconnection agreements	Direct to products and services.	Retail
Support costs	Human resources function costs	HR function costs should be allocated to the staff that are overseen by the HR function and allocated using the same basis as the payroll costs of HR staff.	All
	Finance and other head office support functions	If related specifically to a product, service or business allocate accordingly.	All
	Building costs and rent	Costs should be allocated in the same way as land and buildings (see Section A2.4).	All
	General computing/IT costs	Allocate to the applications run by the operator on the basis of the use of the computers to support each application. Costs allocated to applications can then be attributed to those products and services that they support.	All

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment will be considered separately by the OUR.

A2.3 The Cost of Capital and Capital Employed

The Telecommunications Law 2001 and C&W Guernsey's licence conditions require that charges for C&W Guernsey wholesale and retail services should be cost-oriented, whilst allowing for a reasonable return on investment. The determinants of the level of this return are the cost of capital and a capital value.

The calculation and setting of a cost of capital for the purpose of setting interconnection charges and retail prices is outside the scope of these guidelines. However, there should be consistency between the measure of capital employed on which the cost of capital is based and the measure of capital employed reported in the regulatory accounts.

Consistency will enable comparison of the actual percentage returns earned by C&W Guernsey from its regulated activities such as interconnection with the cost of capital allowed by the OUR when reviewing charges for these activities. The focus of this annex is the need for consistency and its implications for the allocation of items of capital employed.

Cost of Capital

C&W Guernsey's cost of capital should reflect the opportunity cost of funds invested in network components and other related assets. It conventionally reflects the following:

- The (weighted) average cost of debt for the different forms of debt held by each operator;
- The cost of equity as measured by the returns that shareholders require in order to invest in the network given the associated risks; and
- The values of debt and equity.

This information can then be used to determine the weighted average cost of capital (WACC) using the following formula:

$$WACC = re \,.\, E/(D+E) + rd \,.\, D/(D+E) \,.\, (1-T)$$

where re is the cost of equity, rd is the cost of debt, E is the total value of equity, D is the total value of interest-bearing debt and T is the corporate tax rate. This calculation gives the post tax WACC which needs to be converted to the pretax rate (i.e. WACC post tax divided by (1-T)).

The OUR may take into account that different risks premiums normally apply to different activities, which could be reflected in different costs of equity 're' [17], even if

[17] Financial economics, and actual investor behaviour, teach that the cost of equity' re ' is equal to the cost of risk-free debt plus a risk premium depending on the underlying activity and on the financial market used. Activities with higher competition usually carry higher risk. The cost of debt 'rd' also varies between activities between companies, but - for a given financial market - not as much as the cost of equity 're'. As for the capital structure (E and D), it should also reflect the balance sheet of each main activity. Where there is only one main balance sheet for several activities, it is acceptable to assume the same capital structure for these activities. In this context, the cost of debt

the financial structure is the same. If so, there could be a different WACC for each business line or disaggregated activity such as mobile for example.

The WACC and capital value

The WACC must be applied to a capital value for network components and other related assets in order to determine the return that needs to be recovered. While it may be easy to identify the values of debt and equity for C&W Guernsey as a whole, it is not easy to do so for each of its constituent activities. This is because decisions about debt finance are largely corporate decisions determined by a number of factors, such as historical borrowing facilities and tax planning considerations. Hence, the debt position of the corporate organisation may not relate specifically to the funding requirements of individual activities. An alternative approach to determining the capital value for regulated activities (such as interconnection) is therefore required.

One approach is provided by the following balance sheet identity:

Shareholders' funds (i.e. equity) + Debt = Net Assets excluding debt[18]

It follows that the capital values of regulated activities can be determined by apportioning net assets or capital employed. This apportionment should be carried out on a causal basis and under current valuation methodologies.

Capital employed

Table 2.2 provides a summary of possible allocation methods for different items of capital employed, together with an indication of the principal businesses to which it might be expected that the majority of each item would be allocated. The application of these and, as appropriate, other methods will determine the capital values of different regulated activities.

The table is not intended to be an exhaustive list of items that might be classified as capital employed nor of the methods for allocating them to different activities.

The table proposes one approach to the treatment of working capital in the calculation of capital employed. There are however, other approaches which may be equally valid. In practice, there are two principles that ought to be applied when considering the treatment of individual items of working capital for the purposes of separate accounting:

- There should be consistency between the treatment of assets and their associated costs and revenues; and
- Inclusion or exclusion of individual items ought, in principle, to have a corresponding impact on the WACC. The decision to include or exclude items and the corresponding adjustment to the WACC offset each other in terms of their overall effect on the absolute return required by C&W Guernsey.

'rd 'can normally be assumed the same for all activities, unless they have markedly different balance sheets.

[18] i.e. fixed assets + current assets – creditors (excluding debt) - provisions.

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Table 2.2 Methods of allocating capital employed*

Category of assets and liabilities	Description	Method of Allocation	Principal Businesses
Tangible assets ***Primary Plant-***			
Switching equipment	Local switching equipment	Direct to access or network components where possible. Otherwise allocate to Local Access-Network services and to network components on the basis of the relevant cost of the equipment dedicated to provide customer lines and of the parts dedicated to switch traffic, respectively. Local switch network components can be allocated to products and services based on seconds of use.	Core Network (some costs to Local Access-Network), Mobile
	Tandem switching equipment	Direct to network components where possible, otherwise allocate based on seconds of use.	Core Network
	International switching equipment	Direct to network components where possible, otherwise allocate based on seconds of use.	Core Network
	Switching equipment for special services networks	Direct to core network components where appropriate/required by regulation or to the specific services provided by other networks – e.g. data transmission switching equipment should be allocated directly to data transmission services.	Core Network, Other activities
	Other switching equipment	Direct to network services where possible, otherwise allocate to other switching network components on the basis of the use of the equipment.	Core Network

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment will be considered separately by the OUR.

Table 2.2 Methods of allocating capital employed (cont.)*

Category of assets and liabilities	Description	Method of Allocation	Principal Businesses
Transmission equipment	Traffic-sensitive transmission equipment	Direct to network components where possible, otherwise allocate based on the usage of circuits.	Core Network
	Cable and wire	Direct to access or network components where possible, otherwise allocate to components based on the amount of cable used to provide different services.	Local Access-Network, Core Network, Mobile
	Local loop equipment	Direct to products where possible (e.g. separately identifiable ISDN access equipment), otherwise allocate between access services based on line usage.	Local Access-Network
	Radio and satellite equipment	Direct to network components where possible, otherwise allocate based on the usage of channels.	Core Network, Mobile
	Transmission equipment for special services networks	Direct to the specific non-PSTN/non-ISDN services provided by the network – e.g. data transmission equipment directly allocated to data transmission services.	Core Network
	International/submarine cable	Direct to network components where possible, otherwise allocate based on usage.	Core Network
Other primary network assets	Special network plant	Plant and equipment that is used solely to provide one specific service should be allocated directly to the relevant services. Examples may include: • Intelligent networks equipment; • Data transmission equipment; • Multimedia equipment.	Core Network Other activities
	Customer premises equipment	Direct to products and services.	Other activities
	Public payphones and related equipment	Direct to service.	Retail

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment will be considered separately by the OUR.

Table 2.2 Methods of allocating capital employed (cont.)*

Category of assets and liabilities	Description	Method of Allocation	Principal Businesses
Support Plant	Ducting	Ducting can be allocated to the cable and wire that it supports and allocated to products in the same way as cable and wire.	Local Access-Network, Core Network, Mobile
	Power equipment	Allocate to primary plant groups on the basis of the use of power equipment to support each plant– e.g. kilowatts per hour. Assets should then be allocated to products in the same way as the relevant primary plant groups.	Local Access-Network, Core Network, Mobile
	Network management systems	Allocate to primary plant of the different networks provided on the basis of the use of the systems to support each plant – e.g. time spent to control local exchanges, tandem exchanges and international exchanges. Costs should be attributed to products and services in the same way as the related primary plant group.	Core Network
Non-network fixed assets	Land and buildings	Allocate to products, services and network components on the basis of the space occupied (i.e. floor space) to support each product, service or network component.	All
	General computers	Allocate to the applications run by the operator on the basis of the use of the computers to support each application. Costs allocated to applications can then be attributed to those products and services that they support.	All
	Motor vehicles	Allocate to the products and network components based on usage.	All
	Furniture and office equipment	Allocate to the products and network components based on usage.	All

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment considered separately by the OUR.

Table 2.2 Methods of allocating capital employed (cont.)*

Category of assets and liabilities	Description	Method of Allocation	Principal Businesses
Intangible fixed assets	Intangible fixed assets	Direct to products where possible. Any residual or unattributable assets will need to be allocated on an arbitrary basis, to be agreed with the NRA.	All
Working capital	Fixed asset investments:		
	Pure financial investments	Direct to "Other activities".	Other activities
	Investments in unrelated activities	Direct to "Other activities".	Other activities
	Other investments	Direct to the services to which the investments are related, otherwise allocate based on usage.	All
	Short-term investments (including cash at bank and in hand)	Direct to businesses where possible, otherwise allocate based on the operational requirements of each business.	All
	Stocks	Stocks should be allocated directly to products and services.	All
	Trade debtors/receivables	Trade debtors may be allocated to products and services based on billing system information where possible. Unattributable balances will need to be allocated on an arbitrary basis, to be agreed with the NRA.	All
	Other debtors/receivables	Other debtors/receivables should be apportioned to products and services if possible. Unattributable balances will need to be allocated on an arbitrary basis, to be agreed with the NRA.	All
	Trade creditors	Trade creditors should be allocated directly to products and services if possible. Unattributable trade creditors will need to be allocated on an arbitrary basis, to be agreed with the NRA.	All
	Long term provisions	Direct to the activities that give rise to the provisions in question.	All
	Liabilities for taxation and dividends	No allocation required. Instead average liabilities should be taken into account when considering the operational cash requirements of each business (see "Short-term investments")	All

* Residual unattributable costs should be specifically identified by C&W Guernsey and their treatment will be considered separately by the OUR.

A2.3 Transfer Charging

This section of the Guidelines sets out the approach to be applied in order to take account of the costs of products or services that are used internally by C&W Guernsey. This involves the establishment of a system of transfer charges to services and products provided from one business (for example, Local Access-Network, Core Network and Retail) to another.

Transfer charges can be seen as a cost to one part of the business and a revenue to another part of the business of C&W Guernsey.

For accounting separation purposes, it should be assumed that C&W Guernsey's Retail business pays the same interconnection or access charge for the same service as would apply to wholesale customers.

The approach to transfer charging is set out below:

- Transfer charges (revenues and costs) shall be attributed to cost components, services and main business areas or disaggregated businesses in accordance with the activities, which cause the revenues to be earned, or costs to be incurred.
- The attribution shall be objective in accordance with the principles set out in section 3.1 and not intended to benefit any business or disaggregated business.
- There shall be consistency of treatment of transfer charges from year to year.
- The transfer charging methods used should be transparent. There should be a clear rationale for the transfer charges used and each charge should be supportable.
- The transfer charges for internal usage should be determined as the product of usage and unit charges.
- The charge for internal usage should be equivalent to the charge that would be levied if the product or service were sold externally rather than internally. For accounting separation purposes, it should be assumed that the Retail business pays the same interconnection or access charge for the same service as set out in the Reference Offer, if different this charge must be appropriately justified.
- The separated accounts shall disclose the transfer charges between businesses and disaggregated businesses.

At such times when interconnection and access rates are set by the OUR with reference to benchmarks, then these market rates should be used in C&WG's Regulatory Accounts until such time as the rates are based on C&WG's own cost data. Whilst the rates are based on OUR figures C&WG should produce two sets of Regulatory Accounts: one using the OUR's set rates; and the other based on C&WG's own cost based rates.

A2.4 Revenue

This annex considers the application of the Principles to revenue other than transfer charging which is considered in Annex 3.

Revenue from core telephony activities

It is expected that revenues from the provision of core telephony products and services can be directly allocated to the products and services to which they relate based on accounting records and billing system information. In those cases where direct allocation based on accounting records or billing system data is not possible, revenues should be attributed on the basis of causation.

The allocation of revenues from core telephony services between Local Access-Network, Core Network and Retail for a fixed telephone network is summarised below[19].

Connection charges
Charges for establishing new connections to the fixed telephone network (other than for establishing a Point of Interconnect – see Interconnection charges below) should be assigned to Retail.

Customer line rental charges
Line rental charges should be assigned to Retail.

Revenues from leased lines
Revenue from leased lines should be allocated to Retail.

Revenues from line rental to other operators
Where provided to other market players, revenue from line rental of unbundled local loops should be assigned to Local Access-Network.

Interconnection charges
Interconnection charges, including the one-off costs of establishing a Point of Interconnect and volume-related charges should be allocated to Core Network.

Call charges
Revenue from call charges should be allocated to the appropriate service within the Retail business.

Equipment rentals and sales
Revenue from the rental and sale of equipment such as telephones and facsimile machines should be allocated to the appropriate services within "Other activities".

Revenue from advertising in directories
Revenue received from advertising in directories should be allocated to a directory services account in "Other activities".

[19] The same principles can be applied by analogy to other networks.

Engineering services/consultancy
Revenue from engineering services/consultancy other than for interconnection should be allocated to "Other activities".

Revenue from Mobile

Revenue received from all mobile services should be recorded within the mobile accounts.

Other Revenue

Operators may also generate income from non-telephony services. In accordance with the principle of causation these should be allocated to the activities to which they relate.

One example would be revenue from sub-letting parts of properties used by the core telephony businesses, the revenue from which could be treated in a number of ways. Options include:

- treating the revenue as revenue for the business sub-letting the accommodation; and
- recording the revenue under "Other activities".

No one approach is necessarily better than the others that may be available. However, it is important that the revenues from non-core activities and the costs associated with them are treated consistently. Failure to do so would lead to the profits of one business being understated and the profits of another overstated.

Income from fixed asset investments should be allocated in the same way as the investments to which they relate. Given the approach adopted to the allocation of pure financial investments and investments in unrelated activities the income from these investments would be allocated to "Other activities". Income from fixed asset investments should only be allocated to Local Access-Network, Core Network or Retail if the related investments are allocated in this way.

The same principles apply to income received from short-term investments. The income should be allocated to the business to which the associated investment is allocated.

Annex 3: Definitions of Disaggregated Retail Services

Retail – Exchange Line Rental and Connection

Connection charges and monthly or quarterly rental of fixed exchange lines (costs and revenues for Star Services rental, remote call forwarding, CLI, admin reconnection fees and other minor related services to be included in Retail – Remaining Activities).

Retail – Local Calls

Local dialled calls originating from ordinary and ISDN exchange lines including untimed and timed local calls, timed shortcalls and ISDN local calls.

Retail – Local Internet Calls

Local internet dialled calls originating from ordinary and ISDN exchange lines to specific 0800 and 0845 number ranges allocated to local ISPs.

Retail – Jersey Calls

Jersey dialled calls to fixed and mobile networks (excluding non geographic numbers) originating from ordinary and ISDN exchange lines.

Retail – National Calls

Dialled calls to fixed geographic and mobile networks originating from ordinary and ISDN exchange lines.

Retail – International Calls

International calls (to fixed and mobile networks) originating from ordinary and ISDN exchange lines including international call termination revenue.

Retail – Calls To Guernsey Mobile

Local dialled calls originating on ordinary and ISDN lines that terminate on a Guernsey mobile, not fixed, network.

Retail – Non-Geographic calls Free to calling customer

Dialled calls to non-geographic numbers (including voice and internet calls) where the calling party does not pay any charge for the call originating from ordinary and ISDN exchange lines

Retail – Non-Geographic calls charged at local rate

Dialled calls to non geographic numbers (excluding local ISPs) where the calling party is charged at a local rate.

Retail – Non-Geographic calls charged at national call rate

Dialled calls to non geographic numbers where the calling party is charged at the same rate as a national dialled call.

Retail – Non-Geographic calls charged at Premium Rate

Dialled calls to non geographic numbers where the calling party pays a premium rate for value added services.

Retail – Internet

ISP and other non-calls-based Internet revenues

Retail – Directory Enquiry

Local, national and international calls placed with the operator to obtain information about Guernsey and overseas telephone numbers, whether made from business or residential telephone exchange lines or from public payphones and includes calls made to the Directory Enquiry database.

Retail – Public Payphones

Local, national, international and mobile dialled calls, originating from public payphones, using cash, phone cards or credit cards. This includes managed and restricted access payphones but not private payphones.

Retail – Leased Lines (private circuits)

Rental, maintenance, connection and change of local, national and international leased lines beyond customers' premises and which have access to the public network, not including wiring of buildings or other wiring that does not have access to the public network.

Retail – Remaining Activities

All other telecommunications services (including calls from private payphones and circuits which are within curtilage and without access to the public network) that are within the Retail Business.

Annex 4: Proforma Reporting Formats

Figure 4.1 –Proforma reporting formats for the Core Network business

(a) Profit and Loss

	Current Year	Prior Year	
Turnover			
From Retail			
From other operators			
Total turnover			①
Operating costs			
CCA adjustments			
Total operating costs			②
Return			③ = ① - ②

The calculation of the return must be consistent with the basis on which the cost of capital is calculated. Therefore, if - as envisaged in the main body of the guidelines – a pre-tax and pre-interest WACC is used, the return shown in the accounts should be equivalent to profit before interest and tax.

Figure 4.1 (cont.) – Proforma reporting formats for the Core Network business

(b) Balance sheet information

	Current Year	**Prior Year**	
Fixed assets			
Tangible fixed assets			
Intangible fixed assets			
Investments			
Total fixed assets			①
Current assets			
Stocks			
Debtors			
Investments			
Cash at bank & in hand			
Total current assets			②
Creditors			③
Provisions for liabilities and charges			④
Mean capital employed			⑤ = ①+② - ③ - ④

All entries in the "balance sheet" should be prepared on a current cost basis. They should be average values for the year to which they relate. Where possible and material the average values shown should be weighted averages. If information is not available, a simple average of opening and closing balances may initially be used.

(c) Return on capital employed

	Current Year	**Prior Year**	
Return			①
Mean capital employed			②
Return on mean capital employed (%)			③ = ①/②

Figure 4.2 – Proforma reporting formats for the Local Access-Network business

(a) Profit and Loss

	Current Year	Prior Year	
Turnover			
Transfer charges to Retail			
From other operators (if any)			
Total turnover			①
Operating costs			
CCA adjustments			
Total operating costs			②
Return			③ = ① - ②

(b) Balance sheet information

As for Core Network.

(c) Return on capital employed

As for Core Network.

Figure 4.3 – Proforma reporting formats for the Retail business

(a) Profit and Loss

	Current Year	Prior Year	
Turnover:			
Connection charges			
Rental charges			
Call charges			
Other turnover			
Total turnover			①
Operating costs:			
Operating costs specific to Retail			
Transfer charges from Core Network			
Transfer charge from Local Access-Network			
CCA adjustments			
Total operating costs			②
Return			③ = ① - ②

The same formats would apply to separate regulated activities within Retail.

(b) Balance sheet information

As for Core Network.

(c) Return on capital employed

As for Core Network.

Figure 4.4 – Proforma reporting formats for the Mobile business

(a) Profit and Loss

	Current Year	Prior Year	
Turnover:			
Total turnover			①
Operating costs:			
Operating costs specific to Mobile			
Transfer charges from Core Network			
Transfer charge from Local Access-Network			
CCA adjustments			
Total operating costs			②
Return			③ = ① - ②

(b) Balance sheet information

As for Core Network.

(c) Return on capital employed

As for Core Network.

Figure 4.5 – Proforma reporting formats for "Other activities"

(a) Profit and Loss

	Current Year	Prior Year	
Turnover			①
Operating costs			②
	________	________	
Return			③ = ① - ②

As discussed in the main body of the guidelines there may be a case for disaggregating "Other activities" in order to provide greater transparency of the performance of specific activities. It will be up the OUR to specify the extent to which separate accounts for these activities will be prepared.

(b) Balance sheet information

As for Core Network.

(c) Return on capital employed

As for Core Network.

Table 4.6 Statement of Costs of Network Services

The Statement of Costs of Network Services presented here is an example of the table that C&W Guernsey might use for the purpose of fulfilling the requirements set out in the document.

This should be interpreted as an illustrative example and should be modified in accordance with the particular characteristics of C&W Guernsey's network and its components.

Both Eircom and British Telecom have their regulatory financial statements published on their respective web-sites, and these might also be used as a reference for these statement of costs of network services.

Table 4.6 (C&W Guernsey to amend and supply a completed table that reflects the C&W Guernsey network, the table below is illustrative)

STATEMENT OF COSTS OF NETWORK SERVICES

	TRAFFIC SENSITIVE			NON-LENGTH DEPENDANT				LENGTH DEPENDANT			
	Subscriber unit	Primary Switch	Secondary Switch	RSU to Primary/ Secondary Link	Primary to Primary Link	Primary to Secondary Link	Secondary to Secondary Link	RSU to Primary/ Secondary Link	Primary to Primary Link	Primary to Secondary Link	Secondary to Secondary Link
Average costs (pence/min.)	x	x	x	x	x	x	x	x	x	x	x
Total costs	x	x	x	x	x	x	x	x	x	x	x
Usage Factors (routing or percentages)											
Retail Services											
Local calls	x	x	x	x	x	x	x	x	x	x	x
Local internet calls	x	x	x	x	x	x	x	x	x	x	x
Jersey calls	x	x	x	x	x	x	x	x	x	x	x
National calls	x	x	x	x	x	x	x	x	x	x	x
…	x	x	x	x	x	x	x	x	x	x	x
…	x	x	x	x	x	x	x	x	x	x	x
RO services											
Call termination	x	x	x	x	x	x	x	x	x	x	x
Call origination	x	x	x	x	x	x	x	x	x	x	x
…	x	x	x	x	x	x	x	x	x	x	x
…	x	x	x	x	x	x	x	x	x	x	x

Table 4.6 cont STATEMENT OF COSTS OF NETWORK SERVICES (conveyance element) (C&W Guernsey to amend and supply a completed table that reflects the C&W Guernsey network, the table below is illustrative)

	TRAFFIC SENSITIVE			NON-LENGTH DEPENDANT				LENGTH DEPENDANT								
	Subscriber unit	Primary Switch	Secondary Switch	RSU to Primary/ Secondary Link	Primary to Primary Link	Primary to Secondary Link	Secondary to Secondary Link	RSU to Primary/ Secondary Link	Primary to Primary Link	Primary to Secondary Link	Secondary to Secondary Link	Gradient - Peak	Gradient - Off-Peak	Gradient - Weekend	Call conveyance cost per minute - peak	Call conveyance cost per minute - off-peak
Average costs (cent/min.)	X	x	x	x	x	x	x	x	x	x	x					
Average cost per minute (1)																
Retail Services																
Local calls	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Local internet calls	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Jersey calls	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
National calls	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
…	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
…	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
RO services																
Call termination	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Call origination	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
…	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
…	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

(1) Those costs are obtained from multiplying the average cost per minute by the usage factors, both of which are shown in the table of previous page. These costs reflect the conveyance element of the service only

Table 4.7 Transfer Charge Statement (£)

Services / Costs	Network	Local Access	Other Operating	Total Transfer Charges
Exchange Line rental and connection				
Local calls				
Local internet calls				
National internet calls				
Jersey calls				
National calls				
International calls				
Calls to Guernsey mobiles				
Non-geographic calls free to calling customer				
Non-geographic calls charged at local call rate				
Non-geographic calls charged at national call rate				
Non-geographic calls charged at premium rate				
Internet				
Directory Enquiry				
Public payphones				
Lease lines				
Remaining Activities				

Table 4.8 Inter Business Costs Summary (£)

	TO	Access	Network	Retail	Mobile	Other	Total
FROM							
Access			X	X	X	X	**X**
Network		X		X	X	X	**X**
Retail		X	X		X	X	**X**
Mobile		X	X	X		X	**X**
Other		X	X	X	X		**X**
Total		**X**	**X**	**X**	**X**	**X**	**X**

Annex 5: Current Cost Accounting

A5.1 Calculation of current cost asset values

A key element of the current cost methodology is the valuation of assets. Assets could be valued according to the following considerations and decision rules:

Net Replacement Cost

The Net Replacement Cost is the cost of replacing the asset with another asset of similar characteristics and age.

A key element of this formula is the calculation of the replacement cost of the asset. Replacement cost can simply be the cost today of replacing the asset with an identical one. However, when technology is changing rapidly, the existing asset may no longer be replaceable (e.g. it is no longer manufactured). In this case it is necessary to calculate the modern equivalent asset ("MEA") value which is the value of an asset with the same level of capacity and functionality as the existing asset. The issues relating to the calculation of MEA values for telecommunications operators are considered further below.

Deprival Value

Deprival Value ("DV") represents the recoverable value of the asset to the organisation; that is, the higher of the economic value the asset is likely to generate or the net realisable value ("NRV") of the asset if it were sold.

Economic Value

Economic Value ("EV") is a measure of the value of an asset based on the net present value of future cash flows.

The valuation rules can be summarised as follows:

- If EV > NRV, the company will keep the asset in its current use.
- If NRV > EV, the company will sell the asset now as the proceeds from the sale would exceed the economic value that it would be expected to generate from its continued use.

Therefore the deprival value or recoverable amount of the asset is the higher of EV and NRV. The current cost therefore is the lower of its deprival value and the net replacement cost. That is, the lower of the amount the company could recover from the asset and the cost to the company to replace the asset with an identical one.

A5.2 Modern Equivalent Asset valuation issues

The adoption of CCA methodologies in telecommunications is complicated by the rate of technological change in the industry. This has implications in both identifying suitable replacement costs for old technology assets and ensuring the assets exhibit the same levels of functionality and capability.

Examples of technological issues for telecommunications operators include:

- Copper versus fibre cables;
- Analogue versus digital switches; and
- PDH transmission technology versus SDH technology.

The new technologies are usually far superior to the old technologies in terms of functionality and efficiency. However, since MEA values are required to reflect assets of equivalent capacity and functionality, it is necessary to make adjustments to the current purchase price and also the related operating costs - for example, the new asset may require less maintenance.

A5.3 Current Cost Accounting Adjustments

There are two alternative approaches to CCA. The approaches differ in their approach to “capital maintenance”. That is, the manner in which the capital of the company is viewed when determining profit.

Capital can either be viewed in operational terms (i.e. as the company’s capacity to produce goods and services) or in financial terms (i.e. as the value of shareholder’s equity interest). These are known as operating capital maintenance and financial capital maintenance concepts respectively:

- Operating Capital Maintenance (“OCM”) considers the operating capability of the company. Proponents of OCM assert that capital maintenance under this approach requires the company to have as much operating capability – or productive capacity – at the end of the period as at the beginning[20].

- Financial Capital Maintenance (“FCM”) considers the financial capital of the company is maintained in current price terms. Capital is assumed to be maintained if shareholders’ funds at the end of the period are maintained in real terms at the same level as at the beginning of the period[21.]

As set out above, this concept is concerned with the maintenance of the productive capacity of the operator. One of the significant adjustments relates to the revaluation of fixed assets to current cost. Due to this revaluation additional adjustments are then required to restate depreciation amounts. These are identified below.

Revaluation of fixed assets

Under OCM the gross book value of assets is revalued to take account of specific price changes in the price of assets and changes in technology.

One way of calculating the current cost of assets is to apply specific price indices to the existing gross book value of assets. These may be derived from the company’s procurement department. Alternatively, Modern Equivalent Asset (“MEA”) valuation methods may be used. These base the value of assets on the current cost of modern equivalent assets subject to cost “abatements”. These abatements are discussed further below.

[20] In efficient terms and in a long-run approach.
[21] For the capital as employed by an efficient operator.

Supplementary depreciation

The depreciation charge for the year is calculated on the basis of the new asset valuations. This ensures that the current cost of fixed assets consumed during the year is charged against revenue. For each asset, or group of assets, the OCM depreciation charge - assuming straight line depreciation - can be derived by dividing the gross replacement cost by asset life.

Supplementary depreciation is the difference between historical cost depreciation and current cost depreciation charge. It may be positive or negative depending on whether the value of assets is rising or falling. It is a charge against profits in the P&L account.

Illustration of these concepts

The tables below illustrate the above concepts for an asset purchased for £10,000. The assumed life of the asset is 4 years. For simplicity, it is assumed that the asset is depreciated on a straight line basis. In Table 5.1 it is assumed that the cost of replacing the asset falls by 10% per annum. Table 5.2, on the other hand, assumes that the cost of replacement increases by 5% per annum.

Table 5.1 Replacement cost falling by 10% per annum

Year	Current Cost	Depreciation					
		Current cost	Historical	Supple-mentary	Cumulative	"Required"	Backlog
0	10,000						
1	9,000	2,250.00	2,500.00	(250.00)	2,250.00	2,250.00	Nil
2	8,100	2,025.00	2,500.00	(475.00)	4,275.00	4,050.00	(225.00)
3	7,290	1,822.50	2,500.00	(677.50)	5,872.50	5,467.50	(405.00)
4	6,561	1,640.25	2,500.00	(859.75)	7,107.75	6,561.00	(546.75)

Table 5.2 Replacement cost rising by 5% per annum

Year	Current Cost	Depreciation					
		Current cost	Historical	Supplementary	Cumulative	"Required"	Backlog
0	10,000.00						
1	10,500.00	2,625.00	2,500.00	125.00	2,625.00	2,625.00	Nil
2	11,025.00	2,756.25	2,500.00	256.25	5,381.25	5,512.50	131.25
3	11,576.25	2,894.06	2,500.00	394.06	8,406.56	8,682.19	275,63
4	12,155.06	3,038.77	2,500.00	538.77	11,720.96	12,155.06	434.10

Derivation/explanation:

- Current cost is the gross replacement cost of the asset;
- Current cost depreciation is derived as the gross replacement cost divided by the asset life;
- Historical cost depreciation is the original acquisition cost divided by the asset life;
- Supplementary depreciation is the additional depreciation charged as a result of revaluing the asset (it can also be derived as current cost depreciation less historical cost depreciation);
- Cumulative depreciation is the sum of cumulative current cost depreciation as at the end of the previous period, backlog depreciation for the previous period and current cost depreciation for the current period. This is equivalent to required depreciation at the end of the previous plus current cost depreciation for the current period.
- "Required" depreciation is the cumulative depreciation that would have been charged given the current cost of the asset – put another way, it is the difference between the gross and net replacement cost of the asset; and
- Backlog depreciation is the difference between required depreciation and cumulative depreciation.

Under FCM there are similar adjustments to be made as in the OCM concept concerning the revaluation of fixed assets and supplementary depreciation. However, under FCM some of the treatments in terms of P&L need to be further adjusted to take into account of holding gains or losses that arise due to the effect of asset-specific inflation on the current cost value of assets and the effect of general inflation on shareholders' funds.

A5.4 Which Capital Maintenance Concept?

The above discussion has set out the main adjustments required to historical cost accounts in order to derive current cost information using OCM and FCM. It has been included to reflect the fact that the transition to LRAIC from fully allocated historical costs as the basis for determining interconnection charges requires that assets are valued at their market value (or current cost). The use of current cost information is therefore a key aspect in helping to determine appropriate interconnection charges and special attention should be provided to the choice of capital maintenance as employed by an efficient operator. [22]

If OCM was used to determine charges, the revenue requirement[23] would be derived as the sum of operating costs, historical cost depreciation, supplementary depreciation and a return on net assets. Under FCM, the revenue requirement would be the sum of operating costs, historical cost depreciation, supplementary depreciation and a return on net assets less holding gains/losses plus the adjustment to shareholders' funds. Required revenue therefore differs depending on the capital maintenance concept used.

[22] Subject to the level of investment in assets being efficient.
[23] Defined as the level of revenue required in order to earn a reasonable return.