

# ACCOUNTING DOCUMENTS FOR REGULATORY ACCOUNTS (DRAFT)

# Introduction

As per the Regulatory Accounting Rules (Telecommunications) Determination Notice issued by the Office of Utilities Regulation on 24 May 2006, these Accounting Documents set out the following:

- 1. "The Applicable Accounting Documents" comprised of
- a) Regulatory Principles, which include Regulatory Accounting Guidelines (RAG) stating the general rules by which the Regulatory Statements should be prepared, for example that all balances should be attributed with reference to cost causality, and the Business and Service Categories which provides an overview of the high level Service grouping for which Regulatory Statements are prepared.
- b) Attribution Methods, which explain how revenue, costs, assets and liabilities are attributed to the businesses--and network components and activities within those businesses--following the Regulatory Accounting Guidelines, on a fully allocated basis.
- c) Transfer Charging System, which explains how charges are raised from the Fixed Network and Fixed Access Businesses to the Retail Business for its use of the respective networks.
- d) Accounting Policies, which detail the accounting policies adopted in preparing the underlying financial information. This section also details the mechanics and logic of the CCA adjustments
- e) Costing Methodologies, which explains the principles methods and modelling process applied when preparing the Regulatory Financial Statements and supporting notes.
- 2. "The Detailed Attribution Methods", which are described in template form in the body of this document, but produced in full as a separate appendices in redacted and confidential forms.
- 3. "The Detailed Valuation Methodology", which details the mechanisms through which historic cost asset values have been brought to current cost equivalents.
- 4. "Costing Model: Relationships and Parameters", which provide an overview of the Cost Separation model including both model design and methodology.

# The Applicable Accounting Documents

# 1. Regulatory Principles

# Regulatory Accounting Guidelines

The following Regulatory Accounting Guidelines (RAG) are applied in the production of the Regulatory Current Cost Statements, Regulatory Historical Cost Statements, in the application of the Cost Attribution Methods, of the Transfer Charging system, and of the Accounting Policies.

#### **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&WJ's licences.

#### **Priority**

Within the Regulatory Accounting Guidelines, 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.

# Causality

Revenue, costs, 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.

#### **Objectivity**

The attribution shall be objective and not intended to benefit C&WJ 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 Principles, the attribution methods, or the accounting policies that have a material effect on the information reported in the Regulatory Statements of the Businesses, the parts of the previous year's Regulatory Statements affected by the changes shall be restated.

#### 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.

# Sampling

Due the size and complexity of a telecommunications operation a sampling approach is sometimes necessary to determine the drivers to attribute cost, revenue, etc. Where sampling is used to derive the attribution of costs, revenue, etc. it shall be based either on generally accepted statistical techniques or other methods that should result in the accurate attribution of revenue, costs, assets and liabilities.

# **Businesses and Service Categories**

In accordance with the OUR Guidelines, Regulatory Statements are produced for the following Businesses and, where applicable, Service Categories within those Businesses:

Main Businesses & Disaggregated Service Categories

Main Business Areas	Disaggregated Service Categories
Fixed Access Business	-
Fixed Network Business	-
Fixed Retail Services] Business	Domestic Calls
	Fixed to Mobile Calls
	Public Payphones
	International Outgoing Calls
	International Incoming Calls
	Directory Enquiries (DQ)
	Data Communication Services
	Internet service provision (dial-up, and ADSL)
	Supplemental Retail
	Remaining Services
Mobile Business	-

#### Fixed Access Business

Business containing all the revenues (installation, rental, relocation, reconnection, etc) as well as the costs, assets and liabilities associated with supplying connections and maintenance of ordinary business and residential exchange lines, including the low user tariff or any special tariff plan, domestic and international toll free lines, foreign exchange lines, and direct inward dialing lines and other access line technologies such as Integrated Services Digital Network (ISDN).

Costs cover the non-traffic sensitive, i.e., the line sensitive cost including the cost of the local loop, and line card, and maintenance expenses incurred in providing access to customers up to the Network Termination Point (NTP). Other elements of costs are billing, bad debt, and a reasonable apportionment of common costs.

#### Fixed Network Business

Business containing the revenues, costs, assets and liabilities associated with the provision of network services to other operators and downstream Businesses provided by C&WJ.

Revenues are the amounts due from interconnected operators and the transfer charges from C&WJ's downstream Businesses for use of C&WJ's fixed network. Costs are capital and operating costs for switching, transmission and other apparatus and system used in supplying services. Costs should be built up from network component costs such as local switching, tandem switching, and transport.

#### **Mobile Business**

Business containing the revenues, costs, assets and liabilities associated with the provision of mobile network services to other operators and C&WJ's own downstream Businesses and mobile retail services. The service categories making up Mobile Business are interconnection services (such as call termination), connection charges, roaming, subscription charges, rental, lease and sale of equipment and handsets calls originated on mobile network but terminating overseas, or to a fixed (mobile to fixed calls) or mobile subscriber in Jamaica (mobile to mobile calls). It also contains revenues and costs associated with incoming calls to mobile subscribers

#### **Fixed Retail Services Business**

Business containing the revenues, costs, assets, and liabilities associated with the provision of retail calls over the fixed network, i.e. calls originating from a connection to the fixed network but terminating either on the fixed or mobile network. Revenues are payments to the company by users of plain old telephone service (POTS) including revenues from calls made from a fixed connection to mobile customers. Costs are the non-access line related switching costs, and transmission links between switches (transfer charges from Network Business). Added to these costs are retail costs and a reasonable apportionment of common or joint costs.

Below are the disaggregated service categories making up the Fixed Retail Services Business:

#### **Domestic Calls**

This service category consists of calls from a connection to the fixed network originating in Jamaica to a connection to the fixed network in Jamaica.

#### Fixed to Mobile Calls

This service category consists of calls originating from a connection to the fixed network but terminating on any mobile network

#### **Public Payphones**

This category includes calls originating from a public telephone to a telephone connected to the fixed network within Jamaica or to a mobile network and that are charged at a published standard tariff.

#### **Data Communications**

Business containing the revenues, costs, assets, and liabilities associated with the provision of circuits and packet switched services. Revenues are the one-time installation charges, monthly rental and payments for domestic and international usage. This category also includes the rental, maintenance, installation and relocation of domestic and international leased circuits.

The Data Communications service category also captures the rental, maintenance, installation and relocation of domestic and international connectivity to database and other high volume applications such as radio broadcasts, electronic file transfer, electronic mail, video conferencing, etc. At present CWJ offers two categories of service: National Packet Switch Services (NDAS), and International Packet Switch Services (IDAS)

# **Directory Enquiries (DQ)**

Directory Enquiries (DQ) consists of Domestic calls placed with C&WJ's operator to obtain information about Jamaican and overseas telephone numbers, whether made from business or residential exchange lines or from public payphones and includes calls made to the Directory Enquiry database.

#### **International Calls**

The International Calls service category captures calls originating from a connection to the fixed network and mobile network connection in Jamaica to a connection outside of Jamaica, [as well as wholesale minutes (including sale to mobile service providers) to a connection outside of Jamaica. It also includes calls originating from a connection overseas to a connection within Jamaica. The revenues, cost, assets and liabilities relating to international call origination should be separate from international call termination. This service category can be further segmented into international call termination and origination. These sub-categories are defined as follows:

International Outgoing Call (origination): The service of originating a telephone, fax or other telecommunication call from the calling party to a called party outside of Jamaica.

International Incoming Call (termination): The service of terminating a telephone, fax or other telecommunication call from the calling party outside of Jamaica to a called party in Jamaica.

# **Internet service provision** (dial-up, and ADSL)

Internet service is provided by dial-up access via the local loop (telephone line) or ADSL High Speed Internet Service that converts the existing local loop into a high speed Internet connection.

# Supplemental Retail Services

Business containing the revenues, costs, assets, and liabilities associated with the provision of value-added access and non-charged basic services not covered in Retail Services Business. The retail services are Magic Touch (call waiting, three way calling, call forwarding), Teleclass (caller identification, automatic busy redial, priority ring, automatic callback, selective call rejection, selective call forwarding), emergency calls and national & international freephone, etc.

# Remaining Services

Business containing the revenues, costs, assets, and liabilities not covered under the other six Businesses. These include the activities of, and dividends received from INTELSAT, prepaid calling cards (domestic & international), and Voicemail (In Touch Personal, In Touch Family, In Touch Extended Family, and In Touch Executive)

#### 2. Attribution Methods

#### 2.1 Introduction

This document describes the attribution methodologies used to fully allocate C&WJ's revenue, costs, assets and liabilities to its Businesses (and Service Categories) and, where applicable, their disaggregated Activities and Network Components. It gives an explanation of the different methods used for attributing revenue, costs and capital employed. Cost types and the processes involved in their allocation, or apportionment, are described showing how costs are treated from their initial appearance in C&WJ's accounting records to their ultimate attribution to Businesses. It explains both the system used to produce the Regulatory Statements and the methodologies employed in that system.

The purpose of Accounting Separation is to provide an analysis of information derived from financial records to reflect as closely as possible the performance of parts of a business as if they were operating as separate businesses. It is necessary for competing operators to have confidence that C&WJ is not unduly discriminating between its own Retail Activities and competing operators or between one competitor and another when providing similar services.

Accounting Separation assists in ensuring that charges are cost-based, transparent and non-discriminatory. This in turn promotes a competitive environment in a number of ways, including: -

- a) The publication of accounts that are transparent and allow interested parties, where appropriate, to understand how C&WJ's revenues relate to costs,
- b) The demonstration within C&WJ's Regulatory Statements that interconnection arrangements are equitable.

The fundamental feature of this approach to attribution is the principle of causality. Each item of income, cost, asset and liability recorded in the C&WJ group accounts is attributed to the Activities and Network Components which make up the separate Businesses defined under Accounting Separation.

Methodologies are regularly reviewed and enhancements introduced to reflect, for example, changing technologies, while the apportionment bases, which are the practical application of these methods to actual values, are reviewed at least annually.

# 2.2 Attribution Methodologies

#### 2.2.1 Overview

C&WJ's approach to attribution is firstly to identify the income and costs that can be directly attributed to Businesses, Activities or Network Components. For other income and costs that cannot be directly attributed, C&WJ identifies the appropriate driver for each item, and, as far as possible, uses objective operational and/or financial data relevant to that driver to generate apportionment bases.

This approach to the attribution of financial information to Businesses, Activities and Network Components can be summarized as follows:

- Review each balance
- Establish the cost/revenue driver, i.e. the process that caused the cost to be incurred or the revenue to be earned
- Use the driver to apportion the balance to the relevant Business, Activity or Network Component
- Apportion revenue to the relevant Activity or Business

The general methods for the attribution of revenue, cost and mean capital employed, are set out below.

#### 2.2.2 Revenue

Revenue is recorded in the accounting records in such a manner that it is usually possible to allocate it directly to the relevant Activity or Business. Where this is not possible appropriate revenue drivers are used.

#### 2.2.3 Costs

Costs are drawn from the accounting records. The methodologies applied to the costs, which vary according to the nature of the costs and the way in which they are recorded, are set out below.

# 2.2.3.1 Direct and directly attributable costs

Certain costs can be allocated to specific Businesses, Activities or Network Components and therefore do not require apportionment. These costs include most of the costs directly related to customer-facing activities, such as maintenance of customer premises equipment.

#### 2.2.3.2 Indirectly attributable costs

Other costs cannot be directly associated with particular Businesses, Activities or Network Components and require indirect apportionment. These costs include general costs of C&WJ's departments that service various Businesses, Activities and Network Components, which are recorded on a cost centre basis using the Activity Based Costing process outlined in Section 3.4, where a specific apportionment base can be identified and measured.

The above cost type will also include other costs, such as the costs of transmission equipment, which are used to provide a number of network services. These costs are grouped and then apportioned to Network Components using network statistics, route factors, surveys or other methods of analyses (see Section 3.6).

#### 2.2.3.3 Unattributable Costs

As stated above C&WJ utilizes, wherever possible, objective data relating to cost drivers. There is, however, some expenditure for which no specific apportionment bases can be readily derived—common costs. This cost is therefore apportioned to Businesses, Activities and Network Components using the equal proportionate mark-ups method, i.e. any individual Business will receive a proportionate apportionment of unattributable costs equal to its proportionate allocation/apportionment of attributable costs.

#### 2.2.4 Mean Capital Employed

Mean capital employed is defined by C&WJ as mean total assets, less current liabilities, less finance lease liabilities and provisions (other than those for deferred taxation), corporate taxes and dividends payable and the short-term element of long-term liabilities (other than those for finance leases). The mean is calculated from the start and end values for the period. The apportionment of capital employed follows a similar approach to that used for operating costs.

Fixed assets are recorded by asset class and can be segmented into three categories:

1) Those assets that can be directly allocated to Businesses, Activities or Network Components;

- 2) Assets relating to a group of Businesses, Activities and Network Components which are apportioned on the basis of cost drivers, e.g. concentrator asset classes, which provide both line and traffic related functions and are thus apportioned both to the Fixed Network Business and various switching Network Components; and
- 3) Assets of a general nature supporting, for example, general mainframe computers or motor vehicles, where an appropriate apportionment base, derived from the attribution of the operating costs of that element, is applied.

For current assets and liabilities, those elements that can be directly attributed to Businesses, Activities and Network Components (specific debtors and creditors, stocks and provisions) are directly allocated; for the remainder appropriate apportionment bases are derived for each element. For instance, trade debtors are attributed on the basis of an analysis of the revenue those debtors relate to.

Cash balances are attributed to Businesses, Activities and Network Components on the basis of an analysis of operational requirements. Operating expenditure and capital employed are measured for each product and network component of the ABC Model and cash is then apportioned on a prorated basis.

Provisions are either allocated specifically to Businesses, Activities and Network Components or are apportioned using a base appropriate to the particular provision.

#### 2.2.5 Non-Financial Data

Wherever costs cannot be directly allocated to Businesses, Activities or Network Components, an apportionment is required. Depending on the cost involved, the appropriate basis of apportionment may be of a non-financial nature. In these instances the relevant data may be extracted from non-financial data sources, such as operational systems recording core transmission and usage, or may be collected through activity analysis.

By way of example, the apportionment to Businesses, Activities and Network Components of the salary costs that relate to a department identified by the Accounting Separation process may be apportioned on the basis of a survey of the time spent by the staff whose salaries are being apportioned. Such surveys will typically involve the analysis of the tasks undertaken by staff and the percentage of time spent on those tasks. These tasks will then be linked to Activities. These surveys are re-performed regularly.

#### 2.2.6 Current Cost

The OUR has proposed (via Accounting Separation for Cable & Wireless Jamaica Supplementary Consultative Document), that C&WJ prepare its Regulatory Statements on a current cost basis. The methods of attribution used are compatible with the basis on which the current cost values have been derived, reflecting cost causalities in the same manner as the historic cost attributions. The current cost adjustments to the historical cost profit and loss account and mean capital employed i.e. supplementary depreciation and holding gains / losses, are attributed to activities and components, which make up the separate Businesses

defined under Accounting Separation, on the same basis as historical cost depreciation and capital employed. The attribution in the current cost Regulatory Statements is therefore consistent with that in the preparation of the underlying historical cost based information. The OUR has also proposed the production and submission of a Statement of Reconciliation outlining and explaining any difference between Statutory Accounts created on historical cost basis and the Regulatory Accounts created on the current cost basis.

#### 2.3 Revenue

#### 2.3.1 Overview

The revenue of Cable & Wireless, Jamaica is based on the invoiced value of all products/services and equipment sales. A detailed review of revenue is possible via examination of the individual products offered by the company. Revenue sources of the company can be categorized into the following major groups: revenue from calls, product rentals, connection charges, equipment sales and other activities which include network monitoring and managed services.

#### 2.3.2 Fixed Access Business

The Fixed Access Business generates revenues (installation, rental, relocation, reconnection, etc) from access which includes income received for supplying connections and maintenance of ordinary business and residential exchange lines, including the low user tariff or any special tariff plan, domestic and international toll free lines, foreign exchange lines, and direct inward dialing lines and other access line technologies such as Integrated Services Digital Network (ISDN).

#### 2.3.3 Fixed Network Business

The revenue of this Business arises from the provision of network services to other operators and downstream Businesses provided by C&WJ. Revenues are chiefly the amount due from interconnected operators for use of C&WJ's fixed network and the transfer charges from C&WJ's other Businesses.

# 2.3.4 Mobile Business

The Mobile Business contains revenues associated with the provision of C&WJ's own mobile retail services and mobile network services to other operators. The revenue generated in this Business results from connection charges, roaming, subscription charges, rental, lease and sale of equipment and handsets calls originated on mobile network but terminating overseas, or to a fixed (mobile to fixed calls) or mobile subscriber in Jamaica (mobile to mobile calls). Another source of revenue for the Mobile Business are the interconnection charges such as domestic call termination and the charge for the termination of international incoming calls on the mobile network.

#### 2.3.5 Fixed Retail Services Business

The revenues in this Business are generated from the provision of retail calls over the fixed network, i.e. calls originating from a connection to the fixed network but terminating either on the fixed or mobile network. Revenues are payments to the company by users of plain

old telephone service (POTS) including revenues from calls made from a fixed connection to mobile customers.

# 2.3.6 Retail exchange line rental and connection

Fixed Access Business revenue, arises from the connections and rental income related to the provision of narrowband lines to retail customers.

#### 2.3.7 Calls

Calls revenue relates to the customer's calls that are accounted for on an accrual basis. The billing system of C&WJ identifies customer calling data i.e. duration and volume by different call types. The Customer Information System (CIS), which includes the billing system, identifies revenues by call types namely local calls, international calls, calls to Internet Service Providers (ISPs) as well as calls to mobile operators. This identification function facilitates the direct allocation of revenue to the relevant retail services.

# 2.3.8 Public Payphones

C&WJ no longer generate revenues from these facilities.

#### 2.3.9 Data Communications

The revenue for Data Communications is associated with the provision of circuits and packet switched services. Revenues are the one-time installation charges, the monthly rental and payments for domestic and international usage.

# 2.3.10 Supplemental Retail and Remaining Services

Supplemental retail revenues result from the provision of retail services that are not categorized under any other grouping in the Fixed Retail Services Business. These revenues are generated via Magic Touch and Teleclass products. The Remaining Services Revenue is balancing revenue category used to reflect all other revenues that are not captured by the other Businesses outlined.

#### *2.4 COST*

As previously stated in this document, all costs are driven to products and services via appropriate attribution mechanisms as well as relevant allocation bases. This consists of a two-stage process comprising apportionment of costs to defined Activity Based Costing activities and a mapping of these activities to, Activities and Network Components and products and services as defined by Accounting Separation.

# 2.4.1 Apportionment to Activity Based Costing activities

# Department costs

C&WJ has segmented its business operations into several departments such as Network Planning, Switching and Mobile Sales. The business operations also include a number of support departments such as Finance, Human Resources and Information Technology (IT) Support. The departments hold all General Ledger costs related to each department including salaries, printing and stationery etc.

Activity Analyses are conducted by Departments or Cost Centres to establish the percentage effort required to perform the numerous functions of each Department. Each department performs an analysis of the time spent on the activities that it undertakes. The support departments' costs, (e.g. Human Resources costs, IT costs) are apportioned across the relevant departments that they support.

A system of exhaustion of the cost of support costs centers is used to remove unnecessary iteration in the model. The system is based on the level of support provided by each cost center to other cost centers or the materiality of cost of these support cost centers. Regarding materiality of cost, the cost centers with greater cost are exhausted before those with less cost and once a support cost center is exhausted, no other cost center will send cost to the exhausted cost center. Outlined below is the order of exhaustion of the support cost centers as well the rationale for the basis for exhaustion used:

- Human Resources (HR) cost center activity costs are driven to Information
  Technology (IT) cost centers but IT costs are not driven back to HR. Therefore 08
  activities (HR) are reallocated to cost centers including IT cost centers (CC310,
  311,312,313). 07 activities (IT) are reallocated to cost centres excluding HR cost
  centres (CC451, 452)
- IT costs are driven to Finance (FIN) but Finance costs are not driven to IT and HR. Therefore 07 activities (IT) are allocated to cost centers including Finance (CC500, 501) but excluding HR cost centres (CC451, 452). 06 activities (FIN) are reallocated to cost centres excluding IT and HR cost centres (CC310, 312,313,451,452)
- HR costs are driven to FIN but FIN costs are not driven to HR, IT, Purchasing & Supply Chain (P&SC), and Building Services (BS). Therefore 08 activities (HR) are reallocated to cost centres including FIN and IT cost centres (CC500, 501,310,311,312,313). 06 activities (FIN) are reallocated to cost centres excluding HR, IT, P&SC and BS cost centres (CC451, 452,310,312,313,503 and 374).
- IT costs are driven to BS but BS costs are not driven to IT. Therefore 07 activities (IT) are reallocated to cost centres including BS (CC374) but excluding HR cost centres (CC451, 452). 14 activities (BS) are reallocated to cost centres excluding IT, HR and P&SC cost centres (CC310, 312,313,451,452,503)

- HR costs are driven to BS but BS costs are not driven to HR, IT and P&SC. Therefore 08 activities (HR) are reallocated to cost centres including FIN and IT cost centres (CC500, 501,310,311,312,313). 06 activities (FIN) are reallocated to cost centres excluding HR, IT, P&SC and BS cost centres (CC451, 452,310,312,313,503 and 374).
- P&SC costs are driven to BS but BS costs are not driven to P&SC, HR and IT. Therefore 13 activities (P&SC) are reallocated to all cost centres excluding IT and HR cost centres (CC310, 311,312,313,451,452) but includes FIN and BS (CC 500,501,374).
- BS costs are driven to FIN but FIN costs are not driven to BS. Therefore 14 activities (BS) are reallocated to cost centres including FIN and IT cost centres (CC500, 501,310,311,312,313). 06 activities (FIN) are reallocated to cost centres excluding HR, IT, P&SC and BS cost centres (CC451, 452,310,312,313,503 and 374).

# Non-departmental accounts

A large portion of General Ledger costs may not be directly associated with any department. These costs are apportioned to the products and services that caused the sums to be expended. The apportionment mechanism used in each case is the most appropriate driver that relates to the products and services.

# 2.4.2 Mapping of Activity Based Costing activities to / Activities / Network Components and products

A further apportionment process is required to produce allocations as the Activity Based Costing activities do not always directly map to the, Activities and Network Components defined under Accounting Separation.

This apportionment can take any of the following forms:

- An activity may be wholly attributable to a, Activity or Network Component;
- Some activities may be attributed to different products and services, Activities or Network Components depending upon the area in which the cost falls,
- Some activities may not be wholly attributable to a single, Activity or Network Component. In this case an appropriate apportionment base has been created to apportion the costs within the Activity Based Costing activity to Businesses, Activities and Network Components. For example the activities under the billing process have been apportioned to Activities and Network Components by identifying the cost driver relevant to each activity.

# 2.5 Mean Capital Employed

#### 2.5.1 Overview

For the purposes of Accounting Separation, Mean Capital Employed (MCE) is defined in Section 3.2.4. The apportionment of MCE is done on a basis similar to that of operating costs.

# 2.5.2 Tangible fixed assets

Network equipment assets are allocated directly to Network Components on the basis of the asset class recorded in the general ledger, or apportioned to Network Components on the basis of network studies. These include the following categories of plant:

- Local Access lines cable
- Exchange equipment
- Domestic Transmission cable & duct
- International transmission facilities
- Mobile base station equipment (e.g. controllers, towers, radios, etc.)
- Service specific platforms (voicemail, prepaid mobile calling)

Motor vehicles, computers, land and buildings are apportioned across cost centres and Network Components on the basis as their relevant operating costs, thereby ensuring consistency. The fixed assets of specialist operating units are directly allocated to the appropriate Business, Network Component or Activity by virtue of the operations undertaken by those specialist units. Where direct allocation is not possible the apportionment of the relevant assets between activities uses an appropriate cost driver specifically selected to reflect the operations concerned.

#### 2.5.3 Stock

Each line of stock has been individually reviewed to identify the relevant Network Component or product that it relates to and hence to which products and services the stock should be allocated.

#### 2.5.4 Debtors

Debtors are evaluated on a per category basis. An analysis is done to establish the product and/or service that is the source of each debtor category. An appropriate driver is then developed to drive the cost of these debtors through the OROS Model to the products/services that the debtors are associated with.

Debtors include the following categories:

- Trade debtors. These are directly allocated to products and services on the basis of relevant turnover
- Accrued income. This is directly allocated to Businesses, Activities and Network Components on the basis of relevant turnover
- Other debtors and prepayments are apportioned to Businesses, Activities and Network Components using bases appropriate to the particular debtor type

#### 2.5.5 Cash at bank and in hand

Cash at Bank and cash in hand are apportioned across all products and services on the basis of the operational cost for each product and service. The methodology in the OROS Model limits the cost sent to Network Components to costs from the Fixed Asset Register and network related cost centres. Cash at Bank and cash in hand do not impact the Network Components.

#### 2.5.6 Creditors

Creditors are evaluated on a per category basis. An analysis is done to establish the product and/or service that is the source of each creditor category. An appropriate driver is then developed to drive the cost of these creditors through the OROS Model to the products/services that the creditors are associated with. Creditors are analyzed and the appropriate apportionment bases are then applied to the following categories:

- Trade creditors are allocated to Businesses, Activities and Network Components on the basis of analysis of each balance reported
- Capital creditors have been allocated directly to the Businesses, Activities and Network Components to which they relate
- Amounts due from the Retail Business to the Network Business are attributed to the relevant Activities on the basis of the volumes and other information used to calculate the transfer charges
- Other creditors are apportioned to Businesses, Activities and Network Components using bases appropriate to the particular creditor type

#### 2.6 Apportionment of Network costs

#### 2.6.1 Overview

The costs for the Network Components of C&WJ arise from an alignment of the Fixed Asset Register with the components that each asset supports. The costs from the Fixed Asset Register are driven to Network Components using percentages established from

network studies that are updated periodically to reflect changes in the structure of the network.

# 2.6.2 Exchange equipment

The main cost drivers for exchange equipment are the number of connections and call durations. Exchange equipment costs are allocated to the appropriate drivers on the basis of an engineering study undertaken, together with the equipment suppliers, to analyse equipment functionality and the required level of maintenance support.

The apportionment approach identifies the allocation of total exchange costs between the Fixed Access Business and Fixed Network Business. The specific equipment affected by this study is exchange line terminations, trunk terminations, Fixed Network hardware, operating software and application software.

Exchange expenditure is assigned to the main cost drivers, as follows:

- Connections costs that are associated with equipment that has the function of providing access to the network
- Calls costs that are associated with equipment that has the function of holding the network path open for the duration that a link is made across the network (call duration)

#### 2.6.3 Transmission

The 'transmission network' provides the following paths;

- Links between customer premises connections and Distribution Points (DPs/cabinets)
- Links between DPs and Exchanges
- Links between Exchanges

These paths are recorded in the Fixed Asset Register as cables and associated equipment. The network is used both to carry calls on paths dedicated to the PSTN, and to route activities, such as leased circuits and frame relays, that also require dedicated paths.

The transmission equipment is allocated between PSTN and leased circuits based on analysis of the type and capacity of circuits. Cable and duct is allocated between PSTN and leased lines based on the annual average working number of lines, factored by whether, in general, the services are provided by one or two copper pairs (or equivalent).

#### 2.6.4 Outside Plant

Outside Plant refers to the C&WJ Local Access Network. This includes cables (underground and aerial), conduits, poles and other components of the Local Loop.

#### 2.6.5 Other costs

Most other network costs can be directly linked to Network Components with no further analysis.

In cases where the apportionment of these network costs is required appropriate bases are derived through reviewing the causal links of the network costs. For example the apportionment of maintenance activities to Network Components is based upon an analysis of time spent.

# 2.6.6 Call Data Records (CDRs)

CDRs are used as a basis of apportioning network component costs, e.g. the switch, and non-network costs e.g. interconnect costs, to relevant call products. CDR reports detail the volume of particular traffic types, that is, there are CDRs maintained for each distinct call type where the source and respective destination can be identified. This detailed call information allows many call related costs to be apportioned accurately.

Route factors are calculated to appropriately indicate that similar call types may utilize the same network components, but in different volumes. Hence, raw CDR results may be weighted by their respective route factor. These are calculated by applying a defined rule-set of network traffic routing to the base CDR information. This logic is best illustrated with a simple example.

In the following scenario:

- The '926-XXXX' number is connected to Switch A
- The '988-XXXX' number is connected to Switch B
- The '704-XXXX' number is connected to Switch B
- a) A fixed line local number '926-XXXX' makes 100 minutes of local calls to another local fixed '988-XXXX' number. This call routing utilizes 2 x Switch component because the source and destination numbers are in different zones.
- b) A fixed line local number '988-XXXX' also makes 100 minutes of local calls to another local fixed '704-XXXX' number. This call routing utilizes 1 x Switch component because the source and destination numbers are in the same zone.

The Switch Route Factor for these two local call types would therefore be ( $(2 \times 100 \text{ minutes}) + (1 \times 100 \text{ minutes})$ ) / 200 total minutes = 1.5.

This logic is also applied to calculate route factors for other network components, such as concentrators, local transmission, mobile base stations, mobile switch, etc.

# 2.7 Network transfer charges

#### 2.7.1 Overview

The transfer charges of Network Components from the Fixed Network Business to Retail Activities and charges to Other Licensed Operators are based on the 1) interconnection tariffs which are in turn based on unit costs of Network Components including the applicable rate of return and the volume of segments used by the Retail Business and other operators respectively, and 2) other wholesale service tariffs, primarily leased lines.

#### 2.7.2 Creation of the Network Business account

The Network Business account consists of interconnect revenues from other operators and the transfer charge income from the Retail Business and the cost and capital employed of all Network Components.

#### 2.7.3 Creation of the Retail Business account

The Retail Activities are attributed together with all their income; costs and capital employed including transfer charges for their use of the fixed network to the Retail Business account.

# 3. Transfer charging System

# 3.1 Background and overview

Under Accounting Separation, C&WJ is required to prepare separate Regulatory Statements for four separated businesses, that have been defined by the OUR. C&WJ is required to prepare Regulatory Statements on a current cost basis using Transfer Charges calculated in accordance with the principles outlined below.

#### 3.2 Network charges

The Fixed Network Business sells a range of network and wholesale services to meet the differing needs of other operators and the Retail Business respectively. The price of each network service is based on the fully allocated cost of the Network Elements or parts thereof.

A Network Component is a unit of network plant or activity, which can be separately costed but, in most cases, cannot be separately supplied, e.g. call processing functionality of a concentrator. All services sold by the Fixed Network Business, either to other operators or the Fixed Retail Services Business, are built up from combinations of one or more Network Components.

In accordance with the C&WJ's licence conditions, the cost of network services includes a return on capital. The determinants of the level of this return are the cost of capital and the

capital used to provide the service. In accordance with a direction from the OUR, the rate of return on capital used in these Regulatory Statements is 26.7%.

Periodically, these costs are used to produce interconnection charges. These charges are implemented through a reference interconnection offer to form the payment between CWJ and Other Licensed Operators. It is these interconnection charges that are used as the basis of transfer charges in the model.

# 3.3 Derivation of Network charges from the Network Business

# 3.3.1 Volumes and usage data requirements

The system used to calculate the network charges and that form the basis of the transfer charges used in the Regulatory Statements contains non-financial data, including detailed analyses of service volumes and network usage data. The main classes of information are summarized below.

# Call conveyance and Network Component usage

- Call traffic by product/service (in minutes)
- Route factors by Network Component by product/service
- Network Component usage (in minutes)

# **Ancillary services**

Various volume and usage information by product/service

#### 3.3.2 Calculation of the Fixed Network Business network charges

Calculated Network Component charges form the basis of the Fixed Network Business' transfer charges to the Fixed Retail Services Business. Route factors and volumes for all types are used to derive Network Component costs,

Network charges are calculated in two stages:

- Aggregation of unit Network Component cost into unit network service charges
- Multiplication of unit network service charges and network service volumes

The following is an example of the various cost categories for interconnection service charging.

Unit network service charge

	Network elements				
	Local switch	Tandem switch	Transport	Others (to be specified)	
Unit network element cost		В	С	D	
Interconnection services (to be specified)	Usage Route factors			Unit network service charge	
1	Е	F	G	Н	A*E + B*F + C*G + d*h
2	Ι	J	K	L	A*I + B*J + C*K + D*L
Etc					Etc

# 3.4 Other intra-C&WJ transfer charges

For other inter-Business sales, the transfer charges are, as required by the OUR (to ensure no preferential treatment is given to Businesses within C&WJ), set at a rate equivalent to the charge that would be levied if the product/service were sold externally rather than internally. The Fixed Retail Business should pay the same price for network components purchased from Carrier Services, required to provide its ADSL service as any other operator purchasing these same components from Carrier Services.

Primary among these other services is dedicated transmission capacity, which are sold on a leased line basis, from the Fixed Network business to the Retail fixed and Mobile.

#### 3.5 Reporting of transfer charges

The Regulatory Statements record transfer charges as specified above as:

- Revenue accruing in one distinct separated business
- Operating cost recognized in another separated business

The Fixed Retail Services Business purchases from the Fixed Network Business are analyzed in the general form described within the proforma Regulatory Statements as set out in the Guidelines.

To facilitate transparency, a provisional listing of the products for which transfer charges are paid are provided below.

For Fixed Retail Business

- Fixed Call origination and termination
- Transmission capacity for retail leased-line and internet services
- Transit Service for calls from other domestic fixed and mobile operators

- Transit service for calls from international operators
- Mobile call termination

# For Mobile Business

- International Incoming PSTN access for termination on Mobile network
- International Outgoing PSTN access
- Transit Service for traffic to other domestic operators
- Approach Link from Cell Site and other fixed dedicated links
- Termination of calls to the fixed network

# 4. Accounting Policies

# 4.1 Basis of Preparation of Regulatory Statements

The structure of the Businesses required under the OUR Guidelines (i.e. Fixed Access Business, Fixed Network Business, Fixed Retail Services Business, Mobile Business) does not correspond to the way in which the statutory accounting records are structured. The Regulatory Statements are produced by overlaying the requirements of the OUR Guidelines on the statutory accounting record structure of C&WJ by disaggregating balances recorded in the general ledgers and other accounting records of the company maintained in accordance with the statutory obligations.

# 4.2 Basis of Accounting

The Regulatory Statements are prepared in accordance with the Regulatory Accounting Guidelines to Cable & Wireless Jamaica-Guidelines' (March 29, 2006) and Regulatory Accounting Rules (Telecommunications) Determination Notice (May 24, 2006). These set out the framework under which the Regulatory Statements are to be prepared, within which it identifies and details:

- The Regulatory Accounting Principles
- The Cost Allocation Principles
- The Transfer Charges
- The Accounting Policies

The Regulatory Statements are prepared in accordance with the particular accounting policies described below.

#### 4.3 Basis of Preparation of the Current Cost (CCA) Financial Statements

C&WJ is required to prepare its Regulatory Statements under the Current Cost Accounting (CCA) convention. Current cost valuations are prepared under the financial capital maintenance convention. Under this convention the current cost profit is normally adjusted by the erosion of purchasing power that shareholders equity has experienced during the year due to general inflation. However, as per best practice when applying CCA within the telecom sector this complex inflationary adjustment is not made within C&WJ's current cost calculations. The effect of current cost asset revaluations is to increase the historical cost profit by any unrealized holding gains arising in the year and to decrease it by unrealized holding losses. Unrealized holding gains for the various categories of fixed asset are treated in the same way as depreciation, so that losses increase costs and gains reduce them.

# 4.4 Current Cost Accounting Modelling Process

The model employed to bring the Fixed Assets of Cable & Wireless, Jamaica to current cost is the Indexation Model that has been accepted by the OUR.

#### 4.5 Details of the Indexation Model

The Indexation Model consists of numerous inputs that adjust the statutory values of the Fixed Assets of Cable & Wireless, Jamaica to their respective current costs. These inputs include the weighted average Turner Index, a US dollar-Jamaican dollar exchange rate index, values for a Modern Equivalent Asset (MEA) valuation done for F/Y 2000/01 on the Asset base of C&WJ, MEA accumulated depreciation, additions to the Asset base and disposal of Assets.

The Indexation Model uses the MEA asset values as at F/Y 2000/01 as the base. From these values the disposals are subtracted and then the Turner Index is used to adjust the asset values. The exchange rate index is then applied and then the values of the additions to the asset base are added to the respective asset classes. The resulting adjusted values are the Gross Book Values for the respective asset classes. The accumulated depreciation values for the asset classes are then subtracted to yield the Net Book Values of the Asset Classes in the Fixed Asset Register.

# 4.6 Principles of Valuation of Fixed Assets in the Current Cost Financial Statements

Assets are restated in the CCA fixed register at their value to the business, usually equivalent to the Net Replacement Cost (NRC). NRC is generally derived from the assets Gross Replacement Cost and for each asset is the current purchase price of an identical new asset. The current cost valuation method that has been utilized by the OUR thus far has been Indexation and C&WJ does not foresee any change in methodology.

The Indexation Method for current cost valuation is detailed in section 6.

In using Indexation as the method of valuation for current cost, the OUR has accepted the use of the C.A. Turner Telephone Plant Index in the formulation of an indexation model that appropriately reflects the current cost of the asset base of C&WJ.

The C.A. Turner Telephone Plant Index is compiled semi-annually by an independent U.S. consultancy firm. Unlike some providers of telecommunication financial information, this consultancy holds no position in utility company common stock and as such the information and estimates within the index are widely recognised as objective and unbiased. The C.A. Turner Telephone Plant Index is based on U.S. data and the definitions of the Federal Communications Commission (FCC) Uniform System of Accounts (USOA) Part 32. That is, there is index series prepared for each of the primary telecom plant accounts as defined by the FCC. The plant accounts measured by the Index include:

#### C.A. Turner Telephone Plant Index

Plant in Service Description	FCC Account	Plant in Service Description	FCC Account
Motor Vehicles	2112	Public Telephone Term Eq.	2351
Special Purpose Vehicles	2114		

Cable & Wireless Jamaica 24
Accounting Documents for Regulatory Accounts (Draft)
January 26, 2007

Garage Work Equipment	2115	Poles	2411
Other Work Equipment	2116	Aerial Cable - Metallic	24211
		Aerial Cable - Fibre	21212
Buildings	2121	Underground Cable - Metallic	24221
Furniture	2122	Underground Cable - Fibre	24222
Office Equipment	2123	Buried Cable - Metallic	24231
General Purpose Computers	2124	Buried Cable - Fibre	24232
		Submarine Cable - Metallic	24241
Analogue Electronic Switching	2211	Submarine Cable - Fibre	24242
Digital Electronic Switching	2212	Intra Building Cable - Metallic	24261
Electro-Mechanical Switching	2215	Intra Building Cable - Fibre	24262
		Aerial Wire	2431
Operator Systems	2220	Conduit Systems	2441
Radio Systems - Analogue	22311		
Radio Systems - Digital	22312		
Circuit Equipment - Analogue	22321		
Circuit Equipment - Digital	22322		

Plant in Service Description	<u>C&amp;WJ Account</u>	Plant in Service Description	<u>C&amp;WJ Account</u>
Digital Electronic Switch	JM1800	Non-Metallic Sub Cable	JM2000
Sat & Earth Station Facilities	JM1710	Aerial Wire	JM2105
Other Radio Facilities	JM1700	Conduits	JM2502
Digital Circuit Eqpt	JM1701	Land	JM1000
Small PABX	JM1601	Motor Vehicle	JM1100
Station App – MRE	JM1711	Special Purpose Vehicles	JM1100
СРЕ	JM1602	Work Eqpt	JM1301
CPW	JM1603	Testing Eqpt	JM1300
LPBX	JM1604	Training School Eqpt	JM1300
Public Telephone	JM3000	Bldg-Structure	JM1010
Poles	JM2501	Bldg-Trans Towers	JM1720
Metallic Aerial Cable	JM2101	Bldg-Central A/C Units	JM1011
Non-Metallic Aerial Cable	JM2102	Bldg-Power Supply	JM1012
Metallic Underground Cable	JM2103	Bldg-Yard Improvement	JM1013
Non-Metallic Underground Cable	JM2104	Furniture	JM1200
Metallic Sub Cable	JM2001	Computer Software	JM1500
		Computer Hardware	JM1400

The translation of the Turner Index for C&WJ's Asset Register is shown above with the associated reference codes for each asset class.

Each of the index series is comprised of underlying material, labour and overhead component indices. It is generally accepted that material cost trends experienced in the U.S. are mirrored globally. The Index is adjusted to reflect changes in the Exchange rate between the Jamaican dollar and the U.S. dollar.

#### 4.7 Turnover

Turnover comprises the gross invoiced value of all services provided and equipment sold in the period. It includes the value of unbilled calls as at the end of the period calculated by reference to the amount at which calls will be billed. This total of unbilled calls is included in debtors.

# 4.8 Tangible fixed assets

Expenditure on tangible fixed assets is capitalized at cost. Fixed asset costs include assets under construction for which no depreciation has been charged.

For all other assets, additions are recorded and maintained by reference to category and year of acquisition. Depreciation is charged against the cost of the asset category as shown below. Assets are written out of the accounting records at the end of their expected useful life as determined from the year of acquisition and the asset categories expected useful life.

Computer development expenditure is capitalized and amortized over its useful economic life when it relates to significant projects and will benefit the company for more than one year. Computer development expenditure that takes place annually, such as software upgrades, is expensed as incurred.

# 4.9 Asset Lives and Historic Cost Depreciation

Historic cost depreciation of tangible fixed assets is provided on a straight-line basis by reference to historical cost and the estimated working lives of the assets. Depreciation commences on the date the asset is included in the Fixed Asset Register. The lives assigned to major categories of fixed assets are:

Description	Asset Class	Asset Life (Years)	Depreciation Rate %
Land	JM1000	0	0.00%
Motor Vehicles	JM1100	0	0.00%
Special; Motor Vehicles	JM1101	0	0.00%
Work Equipment	JM1300	8	12.50%
Test/Training School Equipment	JM1301	8	12.50%
Building - Structure	JM1010	40	2.50%
Buildings - Transmission Tower	JM1720	25	4.00%
Buildings - Air Conditioning	JM1011	40	2.50%
Buildings - Power Supply	JM1012	40	2.50%
Buildings - Yard Improvement	JM1013	40	2.50%
Furniture	JM1200	10	10.00%
General Purpose Computers HW	JM1400	5	20.00%
General Purpose Computers SW	JM1500	3	33.33%
Digital Electronic Switching - CO Switching Eqpt	JM1800	15	6.67%
Satellite & Earth Station Facilities	JM1710	15.38	6.50%
Other Radio Facilities - Transmission eqpt	JM1700	15.38	6.50%
Circuit Equipment - Digital	JM1700	15.38	6.50%
Station App - Small PABX	JM1601	5	20.00%
Station App - Mobile Radio	JM1710	4.44	22.52%
Station App - General	JM1602	8	12.50%
Customer Premises Wiring	JM1603	10	10.00%
Large Private Branch Exchange	JM1604	5	20.00%
Public Telephone Term Equipment	JM3000	15	6.67%
Poles	JM2501		0.00%
Aerial Cable - Metallic	JM2101	16	6.25%
Aerial Cable - Fibre	JM2102	16	6.25%
Underground Cable - Metallic	JM2103	20	5.00%
Underground Cable - Fibre	JM2104	20	5.00%
Buried Cable - Metallic	JM2100	15	6.67%
Submarine Cable - Metallic	JM2000	15	6.67%
Submarine Cable - Fibre	JM2000	12.5	8.00%
Aerial Wire	JM2105	16	6.25%
Conduit Systems	JM2500	40	2.50%

# 4.10 Stock

Stock is valued at the lower of cost and net realizable value.

# 4.11 Deferred tax

The company has adopted Financial Reporting Standard (FRS) 19 "Deferred tax". Deferred tax is provided in full on timing differences which result in an obligation at the

balance sheet date to pay more tax, or a right to pay less tax, at a future date, at rates expected to apply when they crystallize based on current tax rates and law. Timing differences arise from the inclusion of items of income and expenditure in taxation computations in periods different from those in which they are included in financial statements. Deferred tax assets are recognized to the extent that it is regarded; as it is more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

# 4.12 Foreign exchange

Transactions denominated in foreign currencies are translated into Jamaican dollars at the rates ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated at the rates ruling at that date. The exchange rates used are the daily average market rate posted on the Bank of Jamaica (BoJ) website. These translation differences are dealt with in the Profit and Loss Account.

# 4.13 Pension and other post retirement benefits

The expected costs of providing pensions and other post retirement benefits as calculated periodically by professionally qualified actuaries, are charged to the Profit and Loss Account so as to spread the cost over the service lives of employees in the schemes operated by the C&WJ in such a way that the pension cost is a substantially level percentage of current and expected future pensionable payroll.

#### 4.14 Leases

Rentals are charged to the Profit and Loss Account in equal amounts over the lease term.

#### 4.15 Connection licence costs

Licence costs relating to the connection of software and hardware to the company's network are one-off costs, which allow the company to use the software and hardware on its network. As such, these are capitalized and amortized over their useful economic lives when they relate to software and hardware that will be in use for more than one year.

# 5. Costing Methodology(ies)

The structure of the Businesses required under the OUR Guidelines namely (i.e. Fixed Access Business, Fixed Network Business, Fixed Retail Services Business, Mobile Business) does not correspond to the way in which the statutory accounting records are structured. The Regulatory Statements are therefore produced by overlaying the requirements of the OUR Guidelines on the statutory accounting record structure of C&WJ.

As required by the Guidelines, wherever possible, revenue (including transfer charges), costs (including transfer charges and a reasonable return on capital employed), assets and liabilities are directly associated with a Business, Network Component or Activity using information recorded within C&WJ's accounting records and are directly attributed to that item. Where no such direct attribution is possible the revenue, costs, assets and liabilities are apportioned between two or more Businesses, Network Components or Activities on a basis that reflects the causality of the revenue, cost, asset or liability. Residual costs or business sustaining costs for which no direct or indirect method of apportionment can be identified are apportioned using an equal proportionate mark-up method.

Revenue, costs and assets and liabilities are attributed, by allocation and apportionment, either directly to Businesses, Activities or Network Components; or via a series of steps of indirect allocation through analysis of asset classes or the Activity Based Costing process; or through the apportionment of unattributable overheads.

C&WJ's approach to attribution is to identify the appropriate cost drivers for each type of revenue, cost, asset or liability and, as far as possible, to use objective operational and/or financial data relevant to that cost driver to generate apportionment bases.

Apportionment bases will be reviewed at least annually and methodologies regularly reviewed with enhancements introduced to reflect, for example, changing technologies.

Details of this process are given in the Attribution Methods section within these Applicable Accounting Documents. Details of specific apportionment can be found in associated separate documentation Detailed Attribution Methods – A published list of cost/revenue drivers, which for each includes:

- o Driver name and system reference
- o Methodology Overview
- o Name and reference of cost/revenue being apportioned (shown as 'Source')
- o List of items over which cost/revenue is being apportioned ('Destinations')

The confidential version (for C&WJ and OUR use only) of the Detailed Attribution Methods) provides – A more thorough explanation, with values showing for each driver:

- o More detailed instructions
- o Value of cost/revenue to be split
- o Value/percentage driven to each destination

# **Detailed Cost Attribution Methods**

The Detailed Cost Attribution Methods come in the form of an Excel workbook with worksheets that describe the processes and drivers used to fully allocate costs to C&WJ's activities and services. The sheets are numerous and contain information confidential to C&WJ. In this document, we present the format of that worksheets and describe their contents. Non-confidential and confidential versions of the worksheets will be presented as Appendices at the time of annual filing.

DRIVER:				]		
Methodology overv	riew:					
Data Sources:						
Detailed instruction	ns:					
DRIVER REF:	SOURCE:	SOURCE REF:	SPLIT VALUE:	DESTINATIONS:	DESTINATION REF:	TO EACH:

The driver- states the cost allocator described in this particular worksheet.

The methodological overview- describes which costs the driver is allocating to which activity or service and on what basis

Data sources- list what document or study the driver information was produced from

Detailed Instructions- describes how the source was used to derive the driver information

Driver Ref, Source Ref and Destination Ref, - give the model notation for the drivers activities and services involved in the allocation.

Split Value gives the value of the cost to be split among the activities or services

To Each- gives the absolute or percentage value driver to each destination (service or activity)

To give a better sense of what these sheets will look like in their submitted form we provide a sample of payroll function driver below.

#### DRIVER: Payroll Function

Methodology overview: This driver apportions the cost of the payroll function to departments within C&WJ based on the number of employees in each. This is considered to be the

Data Sources: Payroll system

Detailed instructions: A monthly report is provided by the Payroll Officer, which is checked against the HR list to ensure accuracy. The report details staff members and their departments. From there pivot tables are created which sum the total number of A summary tab is created, where an average headcount for the year per department can be worked out. The total cost is then apportioned over the number of employees.

DRIVER REF:	SOURCE:	SOURCE REF:	SPLIT VALUE:DESTINATIONS:	DESTINATION REF:	TO EACH:
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	MARKETING (Staff related)	Px-MARKETING (Staff related)	5.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	IT (Staff related)	Px-IT (Staff related)	5.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	SALES (Staff related)	Px-SALES (Staff related)	10.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	PRODUCT MANAGEMENT (Staff related)	Px-PRODUCT MANAGEMENT (Sta	2.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	CORE TRANSMISSION (Staff related)	Px-CORE TRANSMISSION (Staff re	3.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	ACCESS NETWORK (Staff related)	Px-ACCESS NETWORK (Staff related	3.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	MOBILE ENGINEERING (Staff related)	Px-MOBILE ENGINEERING (Staff r	3.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	CUSTOMER SUPPORT CENTRE (Staff r	Px-CUSTOMER SUPPORT CENTF	10.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	LEGAL & REGULATORY (Staff related)	Px-LEGAL & REGULATORY (Staff	1.00
PXY	PAYROLL FUNCTION	Px-PAYROLL FUNCTION	FINANCE (Staff related)	Px- FINANCE (Staff related)	6.00

# **Detailed Asset Valuation Methodology**

#### Overview

This section provides an overview of the various Asset Classes in the Fixed Asset Register of Cable & Wireless Jamaica Limited. The valuation methodology used is based on the prescribed Indexation Model from the OUR. The Indexation model consists of a Modern Equivalent Asset (MEA) study conducted by the OUR in 2001 which was used to revalue the asset base of C&WJ. These values are then rolled forward using the Turner Index and an exchange rate index.

#### Asset Class JM1000 - Land

This asset class consists of all real estate property held by C&WJ. Land is a non-depreciable asset in the Register of C&WJ and the company continues to reduce the value of asset held in this asset class by gradual sale of land.

# Asset Class JM1100 – Motor Vehicles (Private, Trade and Specialized)

C&WJ has made a concerted effort to shed all motor vehicle assets, and at present the Company owns no motor vehicles, but instead accesses vehicles when needed via lease agreements.

# Asset Class JM1301 - Work Equipment

The assets captured in this asset class include all equipment used in the installation and provision of service to customers such as ladders, and hydraulic jacks. These assets are utilised in installing customer premises equipment as well as installation of distribution lines that provide customer access to telephony services.

# Asset Class JM1300 - Test Equipment

The Test Equipment asset class comprises equipment used in the detection of faults as well as testing of line operations. This asset class includes line testers, voltmeters and probes. Equipment from the asset class formerly known as Training School Equipment has been incorporated into JM1300.

# Asset Class JM1010 – Building Structure

This asset class consists all commercial, administrative and technical building infrastructure owned by C&WJ.

# **Asset Class JM1720 – Buildings – Transmission Towers**

This asset class comprises all tower infrastructure used as part the transmission network for mobile and fixed telephony services.

# Asset Class JM1011 - Buildings - Air Conditioning

This asset class is comprised of all central air conditioning units for administrative and commercial buildings and specialized climate control units for technical buildings that house very delicate telecommunications equipment.

# Asset Class JM1012 – Buildings – Power Supply

This asset class consists of all generators and secondary power supply units for all buildings and transmission towers. The power supply units provide continuity in service provision to customer in the event of disruptions in the public power supply.

#### Asset Class JM1200 – Office Furniture

Desks, chairs, cabinets and all other furniture items used in offices of C&WJ are recorded in this asset class.

# Asset Class JM1400 – General Purpose Computers - Hardware

The assets recorded in this asset class are the desktop personal computers, network servers, backup hardware and laptop computers used to facilitate the flow of information and manage the operations of business for the Company. This asset class also includes peripherals to the computers such as printers and scanners.

# Asset Class JM1500 – General Purpose Computers – Software

Software applications for which C&WJ has acquired ownership via purchase and payment of licence fees are recorded in this asset class. Financial systems used by the company are also recorded in this asset class.

# Asset Class JM1800 – Digital Electronic Switching

This asset class consists of all equipment used in the process of moving data from one interface and delivering it through another interface, selecting the best paths between machines that store messages. Switching equipment provides call set-up, traffic routing and call duration maintenance functions.

#### **Asset Class JM1710 – Satellite and Earth Station Facilities**

This asset class comprises all satellite transmission and earth station equipment located at C&WJ's Chalmers Avenue facility.

# **Asset Class JM1700 – Other Radio Facilities (Transmission)**

Transmission equipment dedicated to the provision of mobile service is recorded in this asset class.

# Asset Class JM1701 – Circuit Equipment – Digital

All equipment used to augment the capacity of digital transmission systems between several switching centres, is captured in this asset class. This class of equipment allows the concentration of several input trunk channels on a reduced number of transmission links.

# Asset Class JM1601 – Station Apparatus – Small Private Automatic Branch Exchange (PABX)

This asset class consists of small switching systems installed on business customers' premises that provides internal telephone switching, as well as outside connections. These systems are based on the customer having a single line or very few lines provided by C&WJ, with many extensions attached to each line.

# Asset Class JM1711 – Station Apparatus – Mobile Radio Equipment

This asset class consists of all equipment related to provision of mobile service.

# Asset Class JM1602 - Station Apparatus - General

Small digital switchboards provided to business customers are captured in this asset class. This class consists mainly of Meridian PABX's with less than 100 extension lines.

# Asset Class JM1604 – Large Private Automatic Branch Exchange (PABX)

Large digital switchboards provided to business customers are captured in this asset class. This class consists mainly of Meridian PABX's with more than 100 extension lines.

# Asset Class JM3000 - Public Telephone Terminal Equipment

All payphones island wide are recorded in this asset class.

# **Asset Class JM2501 – Poles**

All concrete and wooden poles own by C&WJ that form part of the island wide distribution network providing telephony access to customers are recorded in this asset class.

#### Asset Class JM2101 - Aerial Cables - Metallic

Metallic cables providing connectivity for customers to the PSTN that traverse the poles in the air and are a part of the island wide transmission network are recorded in this asset class.

# **Asset Class JM2102 – Aerial Cables – Fibre-Optic**

This asset class consists of all data transmission wires made of glass or plastic that are connected to the exchanges and travel along the poles to provide customer connectivity to the PSTN.

# **Asset Class JM2103 – Underground Cables – Metallic**

This asset class comprises transmission wires providing customer connectivity to the PSTN that have been placed underground and work as complements to aerial cables in the provision of services to customers.

# Asset Class JM2104 – Underground Cables – Fibre-Optic

Underground fibre-optic cables which are data transmission wires made of glass or plastic providing customer connectivity to the PSTN that have been placed underground and function as complements to aerial cables in the provision of services to customers, are recorded in this asset class.

#### Asset Class JM2001 – Submarine Cables – Metallic

This asset class consists of all under sea wires that provide international connectivity between C&WJ's PSTN and international service carriers, thus enabling international calling functions.

# Asset Class JM2000 - Submarine Cables - Fibre-Optic

This asset class comprises all under sea data transmission wires made of glass or plastic that provide international connectivity that enable the provision of international data and Internet services in Jamaica.

# Asset Class JM2105 – Aerial Wire

The wires recorded in this asset class are used in tandem with aerial cables as apart of the national transmission network providing customer connectivity to the PSTN.

#### **Asset Class JM2502 – Conduit Systems**

This asset class includes all the Labour and excavation work as well as PVC pipes and fittings in which underground cables are encased for protection.

# **Costing Model: Relationships and Parameters**

#### 1 Overview

Cable & Wireless, Jamaica has made significant investment in a new Cost Separation software called OROS which is currently an international standard for the production of Regulatory Accounts. The following documentation illustrates the key design elements of this model, the methodologies employed, the reporting procedures used and the Regulatory Statement production process employed.

# 2 OROS Model Design & Methodology

The OROS Model consists of three screens of information namely the Resource Module, the Activity Module and the Cost Object Module. Each module plays a very significant and specific role in the entire Modeling process and the production of the Regulatory Accounts. The Model is constructed using a fully allocated cost methodology where all costs including the cost of the asset base of the business, are allocated to the products and services that the Company offers.

In the Model, assignments are made from the Resource Module to the Activity Module and from the Activity Module to the Cost Object Module. Based on the model design, accounts in the Resource Module are not mapped directly to any accounts in the Cost Objects Module. All line items from the Resource Module must be assigned to items in the Activity Module that would then be mapped to items in the Cost Object Module. These assignments are indicative of the relationships between the components in the various Modules. For example, all assets in the Fixed Asset Register in the Resource Module are assigned to the relevant Network Components in the Activity module that the assets support. These network components are then assigned/mapped to the products and services that utilize the components. For greater clarity, a GSM mast from the Asset Register (Resource Module) would be mapped to the GSM national Transmission network component (Activity Module) that would then be mapped to a GSM to GSM local call (Cost Object Module).

The completed OROS Model, once calculated, should yield the same balance for each Module. This indicates that all costs from the Resource Module have been passed through the Model based on the assignments from the Resource Module to the Activity Module and from the Activity Module to the Cost Object Module.

#### 2.1 The Resource Module

The Resource Module is the point of entry of all General Ledger information of Cable & Wireless, Jamaica. The Trial Balance and the Fixed Asset Register containing the historic

depreciation charge, supplementary depreciation charge, holding losses or gains and the return on capital, are entered into the OROS Model in the Resource Module. The Resource Module consists of a listing as follows: Balance Sheet Items, Outpayments, Cost of Sales (COS), Operating Expenditure (OPEX) and Fixed Asset Register (FAR).

The Balance Sheet Items include Fixed and Current Assets, Current and Non Current Liabilities and Equity. The values for the Balance sheet items are mapped to appropriate holding accounts in the activity Module. These holding accounts are then analyzed to created the most appropriate drivers for cost going to products and services in the Cost Objects Module.

The Outpayments account captures all costs incurred during normal operations that are neither Cost of sales Items nor part of the Operating Expenditure of the Business unit. Outpayments relate to all payments made by the company to other operators for termination of C&WJ calls on their networks or for the transit of calls originating on C&WJ networks. Outpayments that are made within C&WJ, i.e., transfer charges are calculated out of model as they involve quantities that are derived from tariff tables and only indirectly from costs within the model.

The Cost of Sales account entails all costs incurred to facilitate the sale of products and services such as commission on card sales. The OPEX Account consists of all cost centers of Cable & Wireless, Jamaica that are further subdivided into the numerous cost items necessary for the continuity of business operations. The Fixed Asset Register provides a detailed listing of the asset base of C&WJ. The asset classes are captured in the Register under five major headings namely: Buildings, Plant, Vehicles, Furniture and Fixtures and Cables and Repeaters. The Fully Allocated Costing (FAC) methodology drives the monthly costs from these accounts to the products and services in the Cost Object Module transiting the Activity Module.

# 2.2 The Activity Module

The Activity Module creates the link between all costs in the business and the output from the business i.e. products and services. Some OPEX accounts can be easily aligned to the products and services that they facilitate based on the activities done in the cost centers. For example all mobile cost centers conduct mobile specific activities that can be directly aligned to mobile products in the Cost Object Module. Some cost centers from the OPEX account do not have any direct impact on product and services based on the activities conducted. However, these support cost centers facilitate the operations of other cost centers that do have direct impact on products and services. Support cost centers include Finance, Human Resources and Information Technology (IT) cost centers. The costs in the support cost centers are reallocated to the cost centers with direct impact on product and services. This reallocation process is described below.

The Activity Module contains four (4) major areas: Activities, Network Components, Secondary Accounts and Reallocation Pools. Each major area has a specific purpose. The Activities Folder of the Activity Module comprises the Non Line of Business (LOB)

Processes and LOB processes. These processes are the documented activities executed as part of normal operations by the various cost centers of the Business unit. As part of the model-building process, activity interviews are conducted to capture the core functions of each cost center. Time analysis is also conducted per cost center to establish the percentage of time spent by the staff in each cost center executing these core functions. These percentages are used as a driver in the model called "Full time Equivalents (FTE)". This driver channels cost from the OPEX account in the Resource Module to the relevant Activities in the Activity Module.

The Network Components account of the Activity Module includes the numerous parts of Cable & Wireless Jamaica's entire network. This account is sub-divided into PSTN Components, Mobile Components, Non-network Components and Fully depreciated Network Assets. Contents of the Network Component Account include all forms of transmission e.g. PSTN voice, Data and international data. The account also includes switching components and the various platforms utilized for service provision such as prepaid mobile service and voicemail. PSTN components consist of but are not limited to, all parts of the Local Loop. Mobile Components are further subdivided into GSM and TDMA Components. The Non-Network Components comprise Motor cars, other non-telecom equipment, Administrative Land and Buildings and General IT equipment such as Laptops. The Full Depreciated Network Assets Account is essentially the holding area that captures all assets that have been fully depreciated in the Company's records.

Secondary Accounts form the mechanism that allows the costs associated with Balance Sheet Items, Outpayments and Cost Of Sales to be appropriately driven to the products and services in the Cost Object Module. The Secondary Accounts are created to enable the assignment of costs from the Resource Module that could be directly mapped to products and services in the Cost Object Module. Given CWJ model structure, there is no direct mapping from Resource Module to Cost Object Module, these accounts are created to facilitate the cost flow.

The Reallocation Pools are replicas of the cost centers in the OPEX Account in the Resource Module. The Model drives cost from the Cost centers in the OPEX Account to the relevant Activities in the Activity Module. As stated above, some cost centers provide support for others based on the activities conducted. The costs of these support cost centers are reallocated to the other direct cost centers that have direct impact on products and services. Once the OPEX Account is fully assigned to the relevant Activities in the Activity Module, the costs associated with the activities performed by these support cost centers are assigned to the cost centers in the Reallocation Pools Account based on an appropriate apportionment basis. The Reallocated Cost centers are then mapped back to the Activities ensuring that Reallocated Cost centers are not mapped back to the Activities that are being reallocated. Activities are then assigned to the products and services that benefit from their execution.

# 2.3 The Cost Object Module

The Cost Object Module is the final recipient of cost in the OROS FAC Model. This Module comprises Non-Profit & Loss Items, Products and Services and the Service Bundles of the Company. The Non-P&L Items include Share Capital, Reserves, Dividends and Corporate Taxes that are excluded from the profitability calculations. The Products and Services Account is subdivided into Fixed Line, Mobile and Carrier Services which essentially captures the distinction across C&WJ as prescribed by the OUR. Service Bundles reflect the combination of different products and services at discounted rates as a single product or several packages based on the same product.

# 3 Reporting Procedure

The structure of the Cost Object Module lends itself to immediate identification of the profitability of each area of operation of C&WJ i.e. Fixed Line Services, Mobile Services and Carrier Services. The alignment between C&WJ business operations and businesses as prescribed by the OUR are as follows: C&WJ Fixed Line business is subdivided into the Fixed Access Business and the Fixed Retail Services Business; C&WJ Mobile business equates to the Mobile services business, and Carrier Services operations are the equivalent to the Fixed Network Business as prescribed by the Office.

Reporting Attributes are created in the model that are consistent with the four businesses prescribed by the OUR: Fixed Access Business, Fixed Retail Services Business, Mobile services business and the Fixed Network Business. Attributes are attached to each product in the Cost Object module to identify the business into which each product belongs. A Microsoft Access link is used to extract these attributes from the model with the associated products to provide Regulatory statements that are fully compliant with the format prescribed by the OUR. This link extracts data from the OROS model and presents the required reporting format in Microsoft Excel spreadsheets.

In adhering to reporting requirements for separated accounts, C&WJ shall produce the following:

- 1. Profit & Loss Statements for each Business as defined by the OUR.
- 2. Profit and Loss statements for each service in the Fixed Retail Business as defined by the OUR
- 3. Statement indicating Transfer Charges between Businesses
- 4. Separate financial analysis of operating costs, exceptional costs, Balance Sheet items, relevant financial notes and CCA adjustments.

C&WJ caveats that regardless of best intentions to provide as much detail as possible, there will be some level of adaptation required as the costing model is developed.

#### END DOCUMENT