



OFFICE OF UTILITIES REGULATION

Regulatory Accounts for a Dominant Carrier or Service Provider

A Consultative Document



OFFICE OF UTILITIES REGULATION

March 2000

Abstract

The Telecommunications Act, 2000 granted statutory powers to regulate the telecommunications sector in Jamaica. As per section 4(1) of the Act the functions of the OUR include among other things:-

- to promote the interests of customers; while having due regard to the interests of carriers and service providers; and
- to promote competition among carriers and service providers.

The Act provides for the OUR to "...make rules, subject to affirmative resolution, prescribing the system of regulatory accounts to be kept by a dominant carrier or service provider in relation to specified services"(section 4(5)). This document sets out the OUR's initial proposal for the structure of a system of regulatory accounts for Cable & Wireless Jamaica (CWJ). Issues relating to accounting principles, cost allocation methods and so forth are not the focus of this document. However, during the ensuing months these will be the focus of investigation by the OUR.

The proposed system of accounts is to enable the OUR to discharge its duties and functions in a transparent and accountable manner and to undertake regulatory activity with regard to the following:-

- identify unfair cross-subsidies,
- ensure non-discriminatory pricing practices;
- ensure that interconnection charges are cost oriented; and
- for retail price control purposes.

Written submissions on the contents of this document are invited from interested parties, including consumer groups, carriers and service providers.

Additional copies of this document will be available at the OUR's Web site at <http://www.our.org.jm>

Contents

| | Pages |
|--|--------------|
| 1 | |
| COMMENTS FROM INTERESTED PARTIES | 2 |
| EXECUTIVE SUMMARY | 4 |
| CHAPTER 1:INTRODUCTION..... | 6 |
| THE REGULATORY FRAMEWORK..... | 6 |
| STRUCTURE OF THIS DOCUMENT | 7 |
| CHAPTER 2: REGULATORY ACCOUNTING..... | 8 |
| INTRODUCTION | 8 |
| ACCOUNTING SEPARATION | 9 |
| CONCLUSION | 12 |
| CHAPTER 3: STRUCTURE OF REGULATORY ACCOUNTS FOR CABLE & WIRELESS | 13 |
| INTRODUCTION | 13 |
| ACCOUNTING STRUCTURE FOR CWJ | 13 |
| REGULATORY OBJECTIVES AND STRUCTURE OF CWJ'S ACCOUNTS..... | 18 |
| CONCLUSION | 26 |
| CHAPTER 4: REPORTING OF REGULATORY ACCOUNTS | 27 |
| INTRODUCTION | 27 |
| CONTENTS OF ANNUAL REGULATORY ACCOUNTS | 27 |
| AUDITING OF REGULATORY ACCOUNTS | 29 |
| PUBLICATION OF ACCOUNTS | 29 |
| DOCUMENTATION AND PUBLICATION | 30 |
| CONCLUSION | 30 |

COMMENTS FROM INTERESTED PARTIES

Persons who wish to express opinions on this Consultative Document are invited to submit their comments in writing to the OUR. Comments are invited on all aspects of the issues raised.

Responses to this Consultative Document should be sent by post, fax or e-mail to:-

Franklin Brown
P.O. Box 593, 36 Trafalgar Road, Kingston 10
Fax: (876) 929 3635
E-mail: fknbrown@our.org.jm

Responses are requested by June 30, 2000. Any confidential information should be submitted separately and clearly identified as such. In the interests of promoting transparent debate, respondents are requested to limit as far as possible the use of confidentiality markings. Respondents are encouraged to supply their responses in electronic form, so that they can be posted on the OUR's website (or a link included where the respondent wishes to post its response on its own website).

Comments on responses

The OUR's intention in issuing this Consultative Document is to stimulate public debate on the structure of regulatory accounts for Cable & Wireless Jamaica. The responses to this Consultative Document are a vital part of that public debate, and so as far as possible, should also be publicly available. The OUR considers that respondents should have an opportunity both to find out the evidence and views put forward in other responses, with which they may disagree, and to comment on them. The comments may take the form of either correcting a factual error or putting forward counterarguments.

Comments on responses are requested by **July 17, 2000** ie two (2) weeks after the deadline for the receipt of responses.

Arrangements for viewing responses

To allow responses to be publicly available, the OUR will keep the responses that it receives on files, which can be viewed by and copied for visitor to the OUR's Offices. Individuals who wish to view the responses should make an appointment by contacting Granville Newell by one of the following means:-

Telephone: (876) 968 6053 (or 6057)
Fax: (876) 929 3635
E-mail: granewell@our.org.jm

The appointment will be confirmed by a member of the OUR's staff. At the pre-arranged time the individual should visit the OUR's Offices at:-

3rd Floor, PCJ Resource Centre, 36 Trafalgar Road, Kingston 10.

The individual will be able to request photocopies of selected responses at a price, which just covers the cost to the OUR.

Timetable

The timetable for the consultation is summarised in the table below which includes an indicative timing for the Decision.

Summary of the timetable for the consultation on the structure of regulatory accounts for Cable & Wireless

| <i>Event</i> | <i>Date</i> |
|---------------------------|----------------|
| Response to this document | June 30, 2000 |
| Comments on Responses | July 17, 2000 |
| Statement | September 2000 |

Executive Summary

Chapter 1: Introduction

- The 1893 Telephone Act has been repealed with the passage of the Telecommunications Act, 2000. This new legislation provides for the phased liberalization of the telecommunications sector in Jamaica. During the first phase (18 months from the appointed day) competition will be introduced in the supply of customer premises equipment, domestic mobile services, data services using CWJ's networks, and the resale of CWJ's international switched telephone minutes.
- Under this Act the OUR has been granted the legal authority to regulate the telecommunications sector. The functions of the OUR include *inter alia* to promote the interests of customers, while having due regard to the interests of carriers and service providers; promote competition among carriers and service providers; and make available to the public, information concerning matters relating to the telecommunications industry.
- It also provides for the OUR to prescribe a system of regulatory accounts for a dominant carrier or service provider.
- This document sets out the OUR's preliminary views on the structure of regulatory accounts for the incumbent operator, CWJ, which at present is both the dominant carrier and service provider in Jamaica.

Chapter 2: Regulatory accounting

- A dominant carrier or service provider has the power to distort competition in the market because:-
 - it will be supplying critical inputs to rival firms; and
 - also competes with these firms in downstream retail markets.
- Market distortion may take various forms. Excessive charges for interconnection services, discrimination in pricing, unfair cross-subsidies, and predatory pricing are some examples of pricing behavior that can stifle competition and even prevent market entry.
- In the absence of mechanisms for detecting anti-competitive pricing practices by a dominant carrier or service provider market liberalization will not confer benefits to consumers.
- The structure of the regulatory accounts for a dominant carrier or service provider is aimed at supporting four regulatory activity:-
 - ensuring non-discrimination,
 - identifying unfair cross-subsidies,
 - setting or assessing interconnection charges; and
 - retail price control (CPI-X).

Chapter 3: Structure of regulatory accounts for Cable & Wireless Jamaica

- In keeping the regulatory activity cited in the previous chapter the OUR's proposal is that for accounting purposes CWJ separate its activities into ten Businesses. For the fixed network the Businesses are:-
 - Fixed Access,

- Fixed Network,
- National Retail Services
- Data Communications , and
- International
- For the mobile network, the separated Businesses are:-
 - Mobile network, and
 - Retail
- The remaining activities of the Company are separated into three distinct Businesses:-
 - Equipment Supply,
 - Other Retail (for example voicemail, and prepaid calling cards)
 - Residual.
- To guard against discriminatory pricing CWJ must separate its Businesses supplying non-competitive inputs to rival firms and to itself from its Businesses supplying downstream retail services.
- Identifying unfair cross-subsidies requires a separation between Businesses supplying services in which CWJ will retain a monopoly in Phase I or II and Businesses in which competition is permitted.
- Finally, separation of revenue and costs within relevant Businesses and those services to be covered by a system of price control will allow the OUR to undertake investigations of the cost basis for interconnection charges and retail services to be covered by a formal system of price control.

Chapter 4: Reporting and publication of regulatory accounts

- At the end of each financial year CWJ is to submit to the OUR a set of regulatory accounts. These accounts should be subject to external audit.
- The accounts should include statements of Profit & Loss, and Capital Employed for each Business and some service categories. These regulatory accounts should be reconciled with the firm's statutory accounts. Deviation between the two sets of accounts should be documented and fully explained.
- These accounts should be available for wider circulation as is the best practice elsewhere, for example UK. The OUR recognizes that new entrants and other interest groups will be affected by regulatory decisions of the OUR that are based on the information derived from these accounts.
- Detailed documentation of the methodologies used in the preparation of these accounts should be prepared and available not only to the OUR but also the public. This documentation should cover the following topics:-
 - regulatory accounting principles;
 - methods used for allocating revenues and costs;
 - the derivation of transfer charges; and
 - the accounting conventions used by the Company

CHAPTER 1: INTRODUCTION

- 1.0 The liberalization of the telecommunications sector in Jamaica will be undertaken on a phased basis.¹ The first Phase will last for eighteen months. During this phase competition will be introduced in the supply of single and multi-line Customer Premises Equipment (CPEs), domestic mobile services, data services using the incumbent's networks, and the resale of the incumbent's wholesale international switched minutes, eg international prepaid calling cards. Phase II starts at the end of Phase I and this too will last for eighteen months. During this phase additional areas of the market may be open to competition, including domestic voice services, such as wireless in the local loop, and Subscriber Television (STV) operators will be able to deliver internet access over their networks. After phase II there may be full liberalization of all remaining exclusive market segments, including competition in international facilities and domestic data facilities.
- 1.1 Another feature of the new arrangement is that the incumbent operator is to offer interconnection voice services on a non-discriminatory basis. Furthermore, the rate of return pricing mechanism of the 1988 All Island Telephone Licence will be replaced by price cap regulation on the first anniversary of the appointed day of the Act (March 01, 2000) .
- 1.2 The changes summarize above will require regulatory oversight and intervention by the OUR in a number of areas, including those listed below:-
- retail price control;
 - arbitration of interconnection disputes and the determination or assessment of interconnection charges; and
 - competition related matters such as excessive charging for critical non-competitive inputs.

The Regulatory Framework

- 1.3 The principal legislation governing the sector is the Telecommunications Act, 2000. The broad objectives of this Act are:-
- to promote and protect the interests of the public;
 - to promote universal access to telecommunications services for all persons in Jamaica, to the extent that it is reasonably practicable to provide such access;
 - facilitate competition in a manner consistent with Jamaica's international commitments in relation to the liberalization of telecommunications;² and

¹ Part XVII of the Telecommunications Act.

² See Annex A of *Rebalancing Telephone Prices, A Consultative Document*, November 1998 at <http://www.our.org.jm>.

- encourage economically efficient investment in the sector.
- 1.4 The OUR has been granted powers under the Act to carry out certain regulatory functions. Amongst the functions of the OUR are to:-
- promote the interests of customers; while having due regard to the interests of carriers and service providers; and
 - promote competition among carriers and service providers and in the provision of telecommunications equipment.
- 1.5 In order to fulfill its duties and functions, the Act provides that the OUR, if it considers it necessary, may prescribe a system of regulatory accounts for a dominant carrier or service provider (Section 4(5)). There is also a duty under the Act on each dominant public voice carrier to keep separate accounts in such form and containing such particulars as will enable the OUR to assess whether that carrier is providing interconnection services in accordance with the principles applying to dominant carriers, such as, non-discrimination, reasonable and transparent terms and conditions, cost oriented charges and no unfair cross-subsidies.
- 1.6 This consultative document focuses on the structure of regulatory accounts for dominant carriers and service providers. In a separate consultative document the OUR has invited comments on its view that Cable & Wireless Jamaica (CWJ) is the dominant public voice carrier. Much of this document deals, therefore, with the appropriate structure of regulatory accounts for CWJ. It is the OUR's view that a thorough investigation into various aspects of CWJ's accounts including those listed below is needed. Indeed, the OUR has invited proposals from consultants to carry out this investigation.
- (i) method(s) of asset valuation, and general accounting principles (for eg treatment of holding gains and losses);
 - (ii) appropriateness of treatment of transfer charges and other intra-Group transactions between CWJ and other C&W companies; and
 - (iii) allocation and attribution methods used by CWJ's Activity Based Management system and other systems relevant to the derivation of costs of interconnection and retail services.

Structure of this Document

- 1.7 The remainder of the document deals with:-
- general discussion of regulatory accounts for a dominant carrier or service provider (Chapter 2);
 - the proposed structure of regulatory accounts for CWJ (Chapter 3); and
 - annual reporting and publication of regulatory accounts for a dominant carrier or service provider (Chapter 4)

CHAPTER 2: REGULATORY ACCOUNTING

Introduction

2.0 Promoting the interests of customers and competition among carriers and service providers are just two of the OUR's functions under the Act. These objectives will require the OUR to undertake certain regulatory activities in relation to a dominant carrier or service provider. This Chapter provides a review of these regulatory activities. It is these regulatory activities which influence the OUR's thinking on the structure of regulatory accounts that all dominant carriers and service providers will be required to adopt.

A Dominant Carrier or Service Provider

2.1 The OUR has a duty to promote fair competition among carriers and service providers. The international experience has been that effective competition in telecommunications has brought tremendous benefits to both consumers and operators. Competition provides consumers with greater choice of service operators, wider variety of services, significantly improved service quality, and more cost reflective tariffs. Effective competition also provide incumbent operators with the correct incentives to make improvements in their efficiency and to exploit opportunities for growth and innovation.

2.2 For competition to be effective firms must be able to compete on terms and conditions that are fair and non-discriminatory. For this reason regulatory agencies must always be on the look-out for evidence of anti-competitive pricing practices by dominant firms. As per the requirement of the Telecommunications Act a firm "...holds a dominant position in a market if by itself or together with an interconnected company, it occupies such a position of economic strength as will enable it to operate in the market without effective constraints from its competitors or potential competitors"(Section 19, Fair Competition Act, 1993). In telecommunications the dominant firm is usually a vertically integrated incumbent, ie it operates in both upstream and downstream markets.

2.3 The potential for distortion of competition by a vertically integrated dominant firm arises because it will be both:-

- a supplier of critical inputs (interconnection and wholesale) to new entrants; and
- a competitor against those entrants in downstream retail markets.

2.4 For example, the mobile entrants, Cellular One and Mossel, will need to have access to the dominant incumbent's networks at prices that are non-discriminatory, if they are to compete effectively in the marketplace. Simultaneously the mobile entrants will also be competing with CWJ's mobile business for customers and market share. The dominant firm

usually regards entrants as a threat to its business, and thus may adopt anti-competitive pricing practices aimed at thwarting competition.

Accounting separation

2.5 Accounting separation is the most common tool used worldwide to address the concerns identified about anti-competitive behaviour. Under this approach, the operator's activities are split for accounting purposes into separate businesses or services. The Telecommunications Act provides for the imposition of Accounting Separation. The Act does not explicitly allow for regulatory imposition of Business or Ownership Separation. A discussion of these different approaches is set out in Chapter 9 of the OUR's Consultative Document (1999), *Interconnection in Telecommunications*.³

2.6 Accounting separation does not impose on the operator a set of rules about how its activities should be organized, but how accounting information is to be collected and reported. The transfer charges from one of the Company's businesses to another can be explicitly identified, allowing non-discrimination to be enforced, and the profitability of particular businesses or services can be monitored, allowing for cross-subsidies to be identified. Accounting separation would also ensure a systematic division of costs between retail and network, and ensuring that the cost base for interconnection charges included only relevant costs. It would also form a sound basis for the production of robust cost information on the main retail services required to support decisions on tariff rebalancing and retail price control.

2.7 In considering the appropriate design of the structure of regulatory accounts, four types of regulatory activity by the OUR are of particular importance - the implications of each is discussed in turn below:-
(i) ensuring non-discrimination in charges;
(ii) identifying cross-subsidies;
(iii) setting or assessing interconnection; and
(iv) retail price control.

Non-Discrimination

2.8 The OUR will need to be in a position to ensure that a dominant carrier or service provider is not able to behave anti-competitively by charging new entrants more for the supply of inputs than it effectively charges itself. In the case of interconnection, it is one of the principles applying to a dominant carrier under the Act that interconnection is provided on a non-discriminatory basis and that charges for interconnection be cost-oriented. For the regulatory accounts non-discrimination requires that the transfer charges between different parts of the dominant firm be explicitly identified

³ This document may be downloaded from OUR's website at <http://www.our.org.jm>

corresponding to the same or similar inputs purchased from it by downstream competitors. This implies a separation between Businesses supplying the inputs and the downstream Businesses buying and using those inputs.

Identifying Cross-subsidies

- 2.9 A dominant firm usually provides services to a range of markets, some of which are open to competition from the start of Phase I, but others that will be exclusively supplied until Phase II or Phase III. Even where competition exists, it may not be fully effective and the dominant firm may remain dominant for a period of time. There is a concern that the dominant firm might beat the competition, where it exists, not by being more efficient or providing a better service to customers, but by cross-subsidizing from monopoly services (or those in which it retains a dominant position) to the services subject to competition (or more effective competition).
- 2.10 Under the Act, it is a specified principle that no unfair arrangements for cross-subsidies shall be made by a dominant public voice carrier. A cross-subsidy is deemed to exist if the revenues from supplying a service are not enough to cover cost, including a reasonable return on capital employed. From an economic standpoint the relevant cost is total service long run incremental cost (TSLRIC). As long as the total service long run incremental cost of supplying the service is equal to or less than the revenues generated from supplying the service, the service is profitable since the firm is better off by continuing to supply the service than by withdrawing it, and so there is no subsidy.
- 2.11 It is the OUR's intention to interpret "unfair" cross-subsidies as including those that are anti-competitive. In addition, subsidies that impact adversely on particular classes of customer might be considered unfair. But not all subsidies are necessarily unfair or anti-competitive. Some may have existed for a substantial period of time, such as the line rental is below cost. Other subsidies may have economic justifications. For example, it could be efficient to set the price of directory assistance calls below cost, if such calls generate additional calls on which a profit being earned. Whether a subsidy is unfair/anti-competitive needs to be judged in the context of the relevant market, whether dominance exists and taking account of the prevailing circumstances. Cross-subsidies that are found to be unfair should be removed.

Interconnection Charges

- 2.12 The term "interconnection" is used in this document, as it is in the Act, to refer to the physical or logical connection of public voice networks of different carriers. The carriers interconnecting with the dominant carrier in Phase I will be the two new mobile networks. The entrants will need to

interconnect both with the dominant firm's fixed network and with its mobile network. "Interconnection" excludes inputs provided to service providers, such as ISPs or international pre-paid calling card operators, which are treated as wholesale or retail sales. The OUR will be involved in either setting or assessing interconnection charges and some retail prices.

Retail Price Control

- 2.13 The dominant firm serves a range of markets, some of which may be open to competition but others that may remain monopolies. Thus, some of the retail prices for the dominant firm will be subject to formal price control, whilst it remains dominant in the provision of the services. The OUR has a duty to protect customers from abuse of dominance.
- 2.14 The OUR's view is that regulatory measures should only be put in place when they are needed. Otherwise, they can inadvertently distort the operation of competition in the market. The OUR would only consider formal and specific price controls for operators or service providers that are found to be dominant in a relevant market. Initially, all operators and service providers other than CWJ will be non-dominant. Therefore, the tariffs set by entrants should be subject to no regulatory control. This includes price caps or rate of return regulation or the need for prior or subsequent regulatory approval.
- 2.15 The necessary condition for price control to be imposed subsequently upon operators or service providers that are initially non-dominant would be:-
- the operator or service provider is found by the OUR to be dominant in a relevant market;
 - the operator or service provider is found by the OUR to be abusing that dominant position; and
 - the OUR is satisfied that there are no other measures that could be adopted, such as the removal of barriers to entry, that could reasonably be expected to remedy the abuse of dominance without undue delay.
- 2.16 It is a requirement of the Act that the OUR discharges its duties and functions in a transparent and accountable manner. Regulatory actions by the OUR will not only impact on the incumbent but also new entrants. For example, if the OUR is called upon to arbitrate a dispute relating to interconnection charges its determination will impact not only on the interconnection provider but also the interconnection seeker. Thus, the OUR is proposing that regulatory accounts be published on an annual basis. Furthermore, these accounts should be subject to external auditing. The methodologies used in deriving the information set out in the

regulatory accounts should also be documented in a separate document and also be published.

Conclusion

- 2.17 Even in liberalized markets competition can only be effective if there are adequate mechanisms in place to detect and shield non-dominant firms from anti-competitive pricing practices. These include excessive charges for and discrimination in the supply of critical non-competitive inputs by the dominant carrier or service providers. Under the Telecommunications Act the OUR has a duty to promote competition among carriers and service providers and protect customers' interests.
- 2.18 The structure of regulatory accounts proposed for a dominant carrier or service provider should allow the OUR to undertake the following regulatory activities:-
- ensuring non-discrimination in charges;
 - identifying cross-subsidies;
 - setting or assessing interconnection charges; and
 - establishing a method of retail price control.
- 2.19 Consideration of the types of regulatory activity that the OUR will be undertaking drives the structure of the regulatory accounts proposed by the OUR. Ensuring that inputs are supplied by a dominant carrier on a non-discriminatory basis between its own downstream activities and competitors requires a separation between Businesses supplying the inputs and Businesses providing the downstream services. Identifying the existence of cross-subsidies requires a separation between Businesses supplying services in which the dominant service provider has a monopoly and Businesses supplying services open to competition. Consideration of rebalancing suggests the need for separate Businesses for Access and International Services. The need for information to allow the OUR to assess or set interconnection and retail services implies requirements for disaggregation of cost and revenue information (within the relevant Businesses) for all interconnection services and those services to be covered by the price cap.
- 2.20 For the sake of transparency regulatory accounts are to be published annually and must be subject to external auditing. The methodologies used to derived the information set out in these accounts should also be made public in a separate document.

CHAPTER 3: STRUCTURE OF REGULATORY ACCOUNTS FOR CABLE & WIRELESS

Introduction

- 3.0 This Chapter considers the structure of regulatory accounts proposed by the OUR for CWJ. For the purposes of this document it is taken as a working assumption that CWJ will be determined by the OUR to be a dominant fixed and a dominant mobile carrier - this follows the OUR's initial view which is explained in a separate Consultative Document published on this question⁴ (*Dominant Public Voice Carriers* - March 2000)⁵.
- 3.1 The focus in this and subsequent Chapters is on the requirements for regulatory accounts during Phase I. As circumstances change in Phases II and III, the principles and accounting structure articulated in this Chapter may imply the need for modifications to the structure of the regulatory accounts.
- 3.2 This Chapter sets out the regulatory accounting structure the OUR considers necessary for it to discharge the duties and functions accorded to it under the Telecommunications Act. In designing a structure of regulatory accounts for CWJ the OUR is guided by certain key objectives cited below. These objectives have been established in the previous Chapter and will be further elucidated in this Chapter.
- ensuring non-discrimination in charges;
 - identifying cross-subsidies;
 - setting or assessing interconnection charges; and
 - retail price control.

Accounting Structure for CWJ

- 3.3 The OUR is proposing a two stage separation of the system of regulatory accounts for CWJ. Note that CWJ fixed network is distinguished from its mobile network. The first stage of separation involves the separation of the firm's activities into separate Businesses. The Businesses of CWJ's fixed network are: Access Business, Fixed Network Business, National Retail Business, Data Communications Business, and International Business. CWJ's mobile Businesses are: Mobile Network, and Mobile Retail. In the second stage, and where considered necessary by the OUR, each Business is then separated into service categories. For example, Access is separated into Residential Access, Business Access, and Other Access. The remaining activities of CWJ's fixed and mobile networks are grouped

⁴ If, following consultation, a different conclusion is reached, there may be consequential changes to be made to the proposals set out here regarding CWJ's regulatory accounts.

⁵ <http://www.our.org.jm>.

into three separate Businesses: Equipment Supply, Other Retail, and Residual.

Definitions of Fixed Business and Service Categories

3.4 *Fixed Access Business*

3.4.1 Business containing all the revenues from access, as well as the costs, assets and liabilities associated with supplying connections and maintenance of ordinary exchange lines. Costs cover the non-traffic sensitive, ie, the line sensitive cost including the cost of the local loop, and line card, 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.

3.4.2 The service categories making up the Access Business are as follows:-

- Business Access
Installation, rental, relocation, and reconnection of ordinary business telephone exchange lines and including domestic and international toll free lines, and foreign exchange lines, and direct inward dialling (DID) lines.
- Residential Access
Installation, rental, relocation, and reconnection of ordinary residential telephone exchange lines, including low user lines.
- Other Access
Installation, rental, relocation, and reconnection of other access line technologies such as Integrated Services Digital Network (ISDN) by residential and business customers.⁶

3.5 *Fixed Network Business*

3.5.1 Business containing the costs, revenues, assets and liabilities associated with the provision of network services to other operators and downstream Businesses provided by CWJ. Revenues are chiefly the amount due from interconnecting operators for use of CWJ's fixed network and the transfer charges from CWJ's other Businesses. Costs are capital and operating costs for switching, transmission and other apparatus and system used in supplying services.

3.5.2 The charges for all interconnection services are to be proposed by CWJ in its Reference Interconnection Offer (RIO) and will be

⁶ ISDN is a telecommunication system capable of supporting a wide range of voice, video, and data services.

assessed by the OUR. Costs should be built up from network component costs such as local switching, tandem switching, and transport.

3.5.3 The service categories making up this Business are the various interconnection services such as call termination. A list of interconnection services is to be proposed by CWJ in its Reference Interconnection Offer (RIO).

3.6 *National Retail Services Business*

3.6.1 Business containing the costs, revenues, assets, and liabilities associated with the provision of retail calls over the fixed network, ie 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 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.

3.6.2 The service categories making up National Retail Services Business are as follows:-

- Intra-Parish Calls
Calls from a connection to the fixed network originating in one parish to a connection to the fixed network in the same parish.
- Inter-Parish Calls
Calls from a connection to the fixed network originating in one parish to a connection to the fixed network in another parish.
- Calls to Mobile
Calls originating from a connection to the fixed network but terminating on any mobile network
- Public Payphones
Calls originating from a public telephone to a telephone connected to the fixed network within the same parish (intra-parish) or to another parish (inter-parish) or to a mobile network and that are charged at a published standard tariff.
- Other National Retail
Covers national retail services such as 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), telephone directory, emergency calls, and freephone, etc.

3.7 *Data Communications Business*

3.7.1 Business containing the revenues, costs (including a reasonable return on capital employed and expenses incurred for repair and maintenance), assets, and liabilities associated with the provision of circuits and packet switch services. Revenues are the one time installation charges, monthly rental and payments for domestic and international usage.

3.7.2 The service categories making up Data Communications Business are as follows:-

- Domestic Leased Circuits (N-Link)
Rental, maintenance, installation, relocation of domestic and international leased circuits. The costs and revenue should be recorded.
- International Leased Circuits (I-Link)
Rental, maintenance, installation, relocation of international leased circuits. The costs and revenue should be recorded.
- Domestic and International Packet Switched
Rental, maintenance, installation, 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 Service (IDAS)

3.8 *International Retail Services Business*

3.8.1 Business containing the revenues, costs (including a reasonable return on capital employed), assets and liabilities for international voice calls. Revenues are the amounts from collection charges, ie the price for making calls from Jamaica to locations outside of the island, and settlement revenues received from overseas carriers for incoming international calls. Costs of outgoing calls include retail costs and cost for network transmission and switching facilities and settlement payment for international call termination by overseas carriers and transfer charges to CWJ fixed network and mobile network. For incoming calls costs include the cost of using CWJ's international transmission and gateway switches and transfer charges to CWJ fixed network and CWJ mobile or interconnection charges to other carriers for national termination.

3.8.2 The service categories making up International Retail Services Business are as follows:-

- Outgoing International Calls
Calls originating from a connection to the fixed network and wholesale minutes (including sale to mobile service providers) to a connection outside of Jamaica. Costs and revenue should be shown separately for USA, Canada, UK, Caribbean, and the Rest of the World (ROW).
- Incoming International calls
Calls originating from a connection overseas to a connection within Jamaica. Costs and revenue should be shown separately for USA, Canada, UK, Caribbean, and the Rest of the World (ROW).

Definitions of Mobile Business and Service Categories

3.9 *Mobile Network Business*

3.9.1 Business containing the revenues, costs (including a reasonable return on capital employed), assets and liabilities associated with the provision of network services to other operators and CWJ's own downstream Businesses.

3.9.2 The service categories making up Mobile Network Business are interconnection services such as call termination. CWJ's RIO will contain its proposed mobile network interconnection services.

3.10 *Mobile Retail Services Business*

3.10.1 Business containing revenues, costs (including a reasonable return on capital employed), assets, and liabilities associated with calls originated on mobile network but terminating overseas or to a fixed or mobile subscriber in Jamaica. It also contains revenues and costs associated with incoming calls to mobile subscribers on called-party-pays tariff packages, such as Performer and Security.

3.10.2 The service categories making up Retail Services Business are as follows:-

- Mobile to Fixed Calls
Call originating from a mobile network to a fixed network connection.
- Mobile to Mobile Calls
Calls originating from a mobile network to another mobile network.

- Outgoing International Calls
Calls originating on a mobile network connection in Jamaica to a connection outside of Jamaica.

CWJ Fixed and Mobile Businesses and Service Categories

3.11 *Other Retail Services Business*

3.11.1 Business containing the revenues, costs (including a reasonable return on capital employed), assets, and liabilities associated with the provision of downstream services not covered in National Retail, International Retail, Data Communications, and Mobile Retail.

3.11.2 This Business comprises various services for which there are no legal barriers to entry, for example international pre-paid calling cards. Below is the list of services:-

- Pre-paid calling cards;
- Voicemail (In Touch Personal, In Touch Family, In Touch Extended Family, and In Touch Executive)
- Internet service provision (dial-up, and dedicated internet access to companies with Local Area Network)
- New and other existing data services

3.12 *Equipment Supply Business*

3.12.1 Business containing the revenues, costs (including a reasonable return on capital employed), assets, and liabilities associated with the rental, lease, or sale of equipment in Jamaica. Examples of the services making up this category are single, and multi-lines CPEs

3.13 *Residual Business*

3.13.1 Business containing the revenues, costs (including a reasonable return on capital employed), assets, and liabilities not covered under the other nine Businesses. These include the activities of Jamaica Digiport Limited, dividends received from INTELSAT, telex and telegraph.

Regulatory Objectives and Structure of CWJ's Accounts

Non-discrimination

3.14 The enforcement of non-discrimination in the pricing of interconnection and wholesale services requires a separation of CWJ's activities between the business supplying interconnection services (such as the network) or wholesale services, and the business using or 'purchasing' those services, such as retail services. In this way the transfer charges paid by one business to the other can be explicitly identified and it can be ensured that the incumbent is charging itself the same for the same service, as it charges interconnecting operators or resellers.

- 3.15 The key inputs and the proposed Businesses in the regulatory accounts from which they would be supplied are:-
- interconnection services provided by the fixed network - Fixed Network Business
 - interconnection services provided by the mobile network - Mobile Network Business
 - wholesale supply of international switched minutes - International Services Business
 - domestic and international leased circuits - Data Communications Services Business

- 3.16 These inputs would be purchased by competitors to CWJ and also, via explicit transfer charges, by the relevant downstream services provided by CWJ (Table 3.1). Annex A illustrates various call types and identifies the Business or service category affected as well as the revenue and costs associated with each.

Identifying cross-subsidies

- 3.17 The structure of the regulatory accounts should enable cross-subsidies to be identified. This requires a separation between the incumbent's monopoly services and its services subject to competition. To this end, the OUR proposes the following Businesses in CWJ's regulatory accounts containing monopoly services, from which an unfair cross-subsidy might potentially be provided:-

- Access - including residential and business exchange lines;
- National Retail - including intra- and inter-parish calls and calls to mobile;
- International services - including international calls; and
- Data Communications services - including leased circuits.

- 3.18 In all of the above CWJ will retain a monopoly in Phase I and in some in Phase II as well.

- 3.19 The following are the proposed Businesses, which are open to competition and so might potentially be in receipt of a cross-subsidy from monopolistic services:-

- Mobile Retail - supply of mobile voice and data services;
- Other Retail - including services such as internet service provision, pre-paid calling cards, voice mail etc; and
- Equipment Supply - supply of customer premises equipment.

Table 3.1: Separation of Businesses required to ensure non-discrimination

| <i>Input</i> | <i>CWJ Business supplying the input</i> | <i>Example of CWJ's downstream retail service purchasing the input</i> | <i>CWJ Business in which downstream service resides</i> | <i>Example of competitor that also purchases the input</i> |
|---|--|---|--|---|
| Interconnection services, e.g. call termination | Fixed Network | mobile-fixed call | Mobile Retail | Mobile entrants |
| Interconnection services, e.g. call termination | Mobile Network | mobile-mobile call | Mobile Retail | Mobile entrants |
| Wholesale international switched minutes | International Services | World Talk (pre-paid calling card) | Other Retail | New entrant pre-paid calling card providers |
| Leased circuits | Data Communications Services | Voyageur (Internet Service Provision) | Other Retail | Competing ISPs |
| Wholesale domestic switched minutes (from Phase II) | National Retail Services | World Talk (pre-paid calling card) | Other Retail | New entrant pre-paid calling card providers |

Setting or assessing interconnection charges

- 3.20 Within thirty (30) days of the commencement of the Act the dominant carrier is to put forward its initial Reference Interconnection Offer (RIO). The RIO is to put forward a list of its proposed interconnection services and charges. The OUR will assess the RIO and may accept or reject it in whole or in part. Rejection of (a part of) the RIO would be because it is inconsistent with the interconnection principles set out in the Act, one of which is that the charges of a dominant public voice carrier shall be cost oriented. Carriers may negotiate about the terms and conditions of interconnection agreements (apart from those parts of the RIO that have been accepted by the OUR). In the case of a pre-contract dispute, either party may refer the matter to the OUR for resolution. The OUR will require detailed information on the costs of interconnection services to be in a position to assess the RIO and, if necessary, to arbitrate a pre-contract dispute about interconnection charges.
- 3.21 To carry out such regulatory activities, it is necessary that CWJ's regulatory accounts provide a robustly derived cost base for interconnection charges. One important issue is the separation of network costs from the costs that are relevant to access (i.e. exchange lines) and retail services. For this reason, the OUR is proposing that there should be separate businesses, comprising respectively fixed network and mobile network interconnection services:-
- Fixed Network
 - Mobile Network
- 3.22 Each interconnection service (in which CWJ is dominant) must be cost oriented. The OUR might be called upon to make a determination of any interconnection charge. Therefore, the cost information in the Fixed and Mobile Network Businesses needs to be disaggregated into the cost of each and every interconnection service.
- 3.23 To reach the identified customer, each POI requires a different number of switching stages and inter-exchange links in transmitting a call. Cost oriented interconnection charges require that charges for all interconnection services are built up from the various network components required for providing the service. There are two stages in deriving cost oriented interconnection charges. In the first stage the network elements needed for supplying the service are identified along with the unit cost, including a return on capital employed. The next stage requires a determination of the usage factor for each network element. This procedure is set out in Table 3.2.

Table 3.2: Illustration of Interconnection Service and Network Element costs

| | Network elements | | | | |
|--|------------------|---------------|-----------|--------------------------|-------------------------|
| | Local switch | Tandem switch | Transport | Others (to be specified) | |
| Unit network element cost | A | B | C | D | |
| Interconnection services (to be specified) | Usage factors | | | | Unit service cost |
| 1 | E | F | G | H | $axe + bxf + cxg + dxh$ |
| 2 | I | J | K | L | $axi + bxj + cxk + dxi$ |
| Etc | | | | | etc |

Retail Price Control

- 3.24 For the first year after the Act is passed, control of the dominant carrier or service provider's prices will be under a continuation of the pre-existing rate of return regulation regime set out in section 35 of the All Island Telephone Licence, 1988. This will be replaced by price caps on the first anniversary of the commencement day of the Act.
- 3.25 Under the rate of return regime CWJ has a permitted rate of return of 17.5%-20% on equity for the Group. Therefore, to derive the aggregate cost base (or revenue requirement) for the purposes of a rate review during 2000, no disaggregation of costs is required. As settlement rates fall, rebalancing will involve decreases in the prices of international calls and increases in the prices of the line rental and intra-parish calls.⁷ In order to assess the appropriate direction and magnitude of movements in the prices of individual services, robust cost information on the main retail services will be required.
- 3.26 The OUR proposes that there should be separate Businesses in the regulatory accounts for the services that are central to rebalancing: access (or exchange lines), whose prices are currently below cost, and international calls, whose prices are currently above cost. Within the Access Business, there should be a split between residential and business access costs, because business and residential customers pay different line rentals (and other line related charges, such as installation and reconnection) and it is important to assess whether or not such differences are cost based. Within the International Business, it will be essential to split between the costs and revenues from outgoing and incoming calls, which have quite different characteristics.
- 3.27 A substantial amount of cost and revenue information will be required for the OUR to be able to set a price cap. Financial forecasting will be undertaken on the costs and revenues of the services to be covered by the price cap to derive an appropriate value of "X" (in the formula, CPI-X). The price cap will also need to allow for rebalancing to occur within defined limits (a sub-cap of CPI+Y to apply to particular services). Cost and revenue information needs, therefore, to be available on all of the services to be included in the price cap. Since a final decision about the coverage of the cap has not yet been made, such information is needed for all of the services being seriously considered for inclusion in the price cap. This includes the main fixed telephone services and data services, such as leased circuits and packet switched services.
- 3.28 The initial price cap will be set for a period of three years, at which time consideration will be given to its replacement by a five year cap. Cost and

⁷ For further details on rebalancing see the OUR's Consultative Documents, *Rebalancing Telephone Prices* (1998 November), and *A Strategy for Rebalancing Telephone Prices* (1999 June).

revenue data on the services in the price cap will be needed during the operation of the cap (i.e. between price cap reviews), in order to inform the setting of subsequent price caps by providing information on the service cost and revenue trends.

- 3.29 The services for which separate cost information will be required, and the Businesses within which it is proposed that they reside, are as follows:-
- residential access costs - Fixed Access Business;
 - business access costs - Fixed Access Business;
 - incoming international calls - International Services Business;
 - outgoing international calls - International Services Business;
 - intra-parish calls - National Retail Services Business;
 - inter-parish calls - National Retail Services Business;
 - calls to mobile - National Retail Services Business; and
 - national and international leased circuits and packet switched services - Data Communications Services Business.

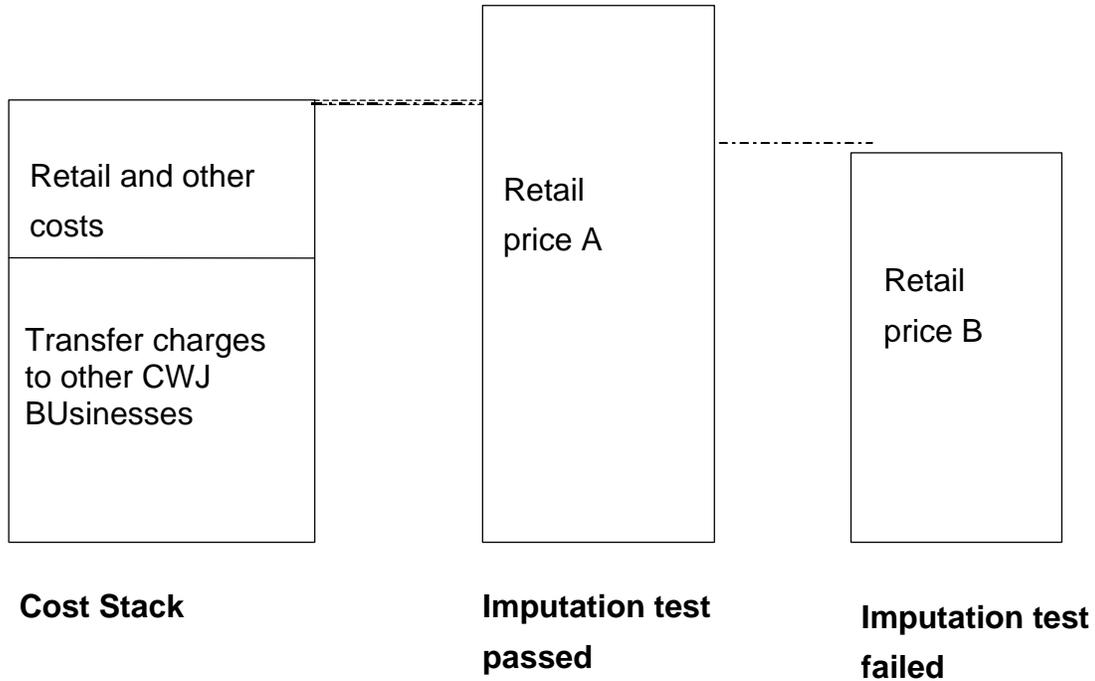
Imputation tests

- 3.30 It is important to establish not only that the transfer charges from one of the incumbent's businesses to another are calculated in a non-discriminatory manner, but also that these are treated by the incumbent as 'hard' charges and not simply paper accounting transactions. In other words, when the incumbent sets the prices for the downstream retail services that purchase inputs (whether as interconnection, wholesale or retail services), it must treat the transfer charges as real costs that need to be recovered. Otherwise, a price squeeze may be occurring: because of the incumbent's discriminatory pricing behaviour, the margin between the interconnection charges and the incumbent's retail price, against which the entrant is competing, may be insufficient to allow an efficient competitor to make a profit. This would constitute a distortion of competition.

- 3.31 A widely used technique to ensure that such price squeezes are not occurring is the 'imputation test'. For CWJ's downstream retail service in question, the retail price charged by the incumbent is compared against the 'stack' of costs incurred to provide that service, as shown in Figure 3.1. These costs comprise the transfer charges for the inputs into that service obtained from other CWJ Businesses, plus its retail costs (and any other relevant costs). The transfer charges relevant to the service are calculated using the same charges as paid by interconnecting carriers or competing service providers, and depend on the particular inputs used by the downstream retail service in question. The imputation test is failed if the retail price charged by the incumbent fails to cover the stack of costs. If so, the incumbent must take action to remove the price squeeze. This would be achieved either by lowering by a sufficient amount interconnection charges, not only to itself but to all other interconnecting

operators purchasing the relevant interconnection services, or by increasing by a sufficient amount the retail price in question.

Figure 3.1: Illustration of Imputation Test



3.32 Potentially, an imputation test may be required for any of CWJ’s retail services subject to competition, e.g. if a concern is raised, perhaps by a competitor, that the price charged by the CWJ for a particular service involves a price squeeze. As noted above, such services are proposed to be included for the most part in the Mobile Retail and Other Retail Businesses. The OUR proposes that accounts be prepared only for the aggregate costs and revenues of these Businesses and does not propose separate reporting for each individual service in the regulatory accounts. Disaggregation of accounting information to the level of each individual service would be burdensome. It may be that, in practice, imputation tests are not needed for many of the services in these Businesses. Moreover, to the extent that competition exists for these services and its effectiveness increases over time, a much smaller level of disaggregation and disclosure is appropriate.

3.33 However, CWJ’s position both as a supplier of critical inputs and as a participant in downstream markets open to competition means that provision needs to be made for investigation into price squeezes and other types of anti-competitive behaviour and, in particular, imputation tests. The disaggregated information required to implement the test, on the costs of the particular downstream service in question and the various inputs

obtained from other Businesses (to compute the transfer charges), may lack robustness and credibility, if obtained on a purely ad hoc basis. Therefore, in developing its accounting systems CWJ needs to be aware that it may be required to provide sufficient information to implement an imputation test on any of its services on reasonable notice.

Conclusion

3.34 The accounting structure proposed by the OUR is aimed at meeting the following regulatory objectives:-

- detect anti-competitive pricing practices;
- provide useful information to set price caps, and inform decisions relating to the rebalancing of tariff;
- check for non-discriminatory prices; and
- check for cost oriented interconnection charges.

3.35 To enable the OUR to undertake the above regulatory activity it is proposed that CWJ separate its business activities into ten Businesses. Some of these Businesses are further separated into service categories. For its fixed network the Businesses are:-

- Access,
- Network,
- National Retail Services,
- Data Communications; and
- International

3.36 For CWJ mobile network the separated Businesses are:-

- Network, and
- Retail Business

3.37 There are three other Businesses:-

- Equipment supply;
- Other Retail; and
- Residual

CHAPTER 4: REPORTING OF REGULATORY ACCOUNTS

Introduction

- 4.0 CWJ is to submit to the OUR Annual Regulatory Accounts. These accounts are to provide the OUR with the information it will need to evaluate the financial and operational performance of CWJ and to check that the principles of non-discrimination, and no unfair cross-subsidies are adhered to. Some regulatory activities may require substantially more detailed or disaggregated information than those set out in the Annual Regulatory Accounts. For example, the OUR may need detailed disaggregated costing information to carry out imputation tests should there be allegation of price squeeze. Thus, the OUR may require additional information from CWJ on specific request and it should be able to satisfy any reasonable request from the OUR for additional information.
- 4.1 From the Annual Regulatory Accounts the OUR should be able to:-
- monitor earnings after interest and taxation (EAIT) and return on capital employed per Business and service categories;
 - monitor the impact of tariff rebalancing on EAIT and return on capital employed per Business;
 - assist in the investigation of anti-competitive pricing practices; and
 - obtain information to assess or set cost oriented interconnection charges and some retail prices.

Contents of Annual Regulatory Accounts

- 4.2 The annual regulatory accounts should contain the following statements for each Business and within some Businesses for each defined service category:-
- 4.2.1 *Profit & Loss:*The Statement of Profit & Loss should detail the operating result (EAIT) and return on capital employed per Business and defined service categories. A sample Profit & Loss Statement is set out in Annex B.
- 4.2.2 *Statement of Capital Employed:* It should show the capital employed by the firm for supplying each Business and defined service categories. A sample Statement of Capital Employed is set out in Annex C.
- 4.2.3 Table 4.1 contains a summary of the various Businesses and defined service categories for which the OUR will require CWJ to prepare statements of Profit & Loss, and Capital Employed.

Table 4.1: Service Categories for which Separate Statement of Profit & Loss and Capital Employed are Required

| Business | Service Categories | Justification |
|------------------------------|--|--|
| <i>Fixed Network</i> | | |
| Fixed Access | <ul style="list-style-type: none"> Residential Access Business Access Other Access | Costing information needed for tariff rebalancing and setting price caps. |
| Fixed Network | <ul style="list-style-type: none"> Interconnection services | To check that interconnection charges are cost oriented and to verify that the principle of non-discrimination interconnection charges is obeyed. |
| National Retail Services | <ul style="list-style-type: none"> Intra-Parish calls Inter-Parish calls Calls to mobile Public payphones Other national retail | Costing information needed for tariff rebalancing and setting of the initial and subsequent price caps. |
| Data Communications Services | <ul style="list-style-type: none"> Domestic leased circuits International leased Circuits Domestic and international packet switching | To verify that the principle of non-discrimination is obeyed. More specifically, the OUR would need to know whether charges by CWJ to its own Business is the same as those it charges other organizations, some of which are likely to be competing with CWJ. |
| International Services | <ul style="list-style-type: none"> Outgoing international calls (USA, Canada, UK, Caribbean, ROW) Incoming international calls (USA, Canada, UK, Caribbean, ROW) Incoming international calls | Tariff rebalancing and setting of price caps. |
| <i>Mobile Network</i> | | |
| Mobile Network | Interconnection services such as call termination | Deriving cost oriented interconnection charges and non-discrimination. |
| Mobile Retail Services | <ul style="list-style-type: none"> Mobile to fixed calls Mobile to mobile calls Outgoing international calls | Competition issues such as cross-subsidy. Explicit transfer charges for purchase of interconnection and wholesale services to satisfy non-discrimination. |
| <i>Other Businesses</i> | | |
| Equipment Supply | | To address competition issues such as cross-subsidy |
| Other Retail | | Explicit transfer charges for purchase of interconnection and wholesale services to satisfy non-discrimination. |
| Residual | | To reconcile to CWJ Group figures. |

4.2.4 *Statement of Service Unit Costs:* This statement should detail the unit costs of supplying certain services. Cost should be split into two parts, operating cost and the cost of capital employed (i.e capital employed x weighted average cost of capital). A sample of this statement with the list of services for which unit costs information is to be provided is set out in Annex D.

4.2.5 *Statement of Reconciliation:* CWJ's Statements of Profit and Loss, and Capital Employed should be reconciled with the annual statutory financial accounts (i.e Profit & Loss, Balance Sheet) for the Group. If the accounting principles used in preparing the regulatory accounts differ from the statutory accounting principles the effects should be disclosed in this statement. Notes explaining these differences should also be provided. Samples of Statement of Reconciliation for Profit & Loss, and Capital Employed are set out in Annex E.

Auditing of Regulatory Accounts

4.3 The annual Regulatory Accounts to be submitted to the OUR should be accompanied by a report from external auditors attesting to the accuracy and completeness of the information set out in the Accounts. The proposed contents of this report are set out in Annex F. More specifically the auditors must report on the following:-

- a) the accuracy and completeness of information provided by CWJ in the Annual Regulatory Accounts;
- b) fair presentation of the financial result per Business capital employed and return on assets or revenue for the financial year; and
- c) any cross subsidies observed if applicable (negative assurance).

Publication of Accounts

4.4 It is proposed that CWJ should submit the Annual Regulatory Accounts to the OUR within three months after the end of each financial year (i.e. June 30). The OUR is of the view that given the proposed structure and details of the regulatory accounts and the need for external verification of the information and reconciliation with the firm's statutory accounts to be set out in these accounts this is a reasonable time period.

4.5 The OUR considers that the annual regulatory accounts should be made public as is the best practice elsewhere, for example the United Kingdom. However, the OUR recognizes that there might be genuine concerns by CWJ about disclosing certain types of information to the general public (recognised in section 7 of the Act). A compromise might be for the OUR and CWJ to decide on a reasonable set of information to be supplied by CWJ's in its regulatory accounts to the general public.

4.6 In addition to the Annual Regulatory Accounts, the OUR is proposing that CWJ assembles a second document detailing the methodologies used in preparing annual accounts. There are two reasons for the OUR to make such a proposal. The first is that it will allow the OUR and interested

parties to check for reasonableness and consistency in the preparation of regulatory accounts. Second, to promote transparency in the preparation of regulatory accounts. A copy of this Document should accompany the Annual Regulatory Accounts submitted by CWJ to the OUR. The minimum set of subjects to be covered in this Document are:-

- Accounting conventions used in the preparation of its regulatory accounts. The document should detail the accounting conventions adopted in preparing the Statements of Profit and Loss and Capital Employed. The minimum list of conventions on which detailed documentation should be provided are listed below:-
 - consolidation of group companies accounts;
 - transactions between CWJ and other C&W companies;
 - principles of asset valuation (intangible and tangible);
 - depreciation method and rates;
 - Investment in associated undertakings
 - inventories
 - account receivables
 - stockholders' equity
 - deferred taxes
 - long-term liabilities
- Regulatory accounting principles followed by the Company in preparing the regulatory accounts.
- Methods for allocating costs.
- Process and methods used for deriving internal transfer charges between the operator's Network Business and its other Businesses and service categories.

Documentation and Publications

4.7 The OUR is proposing that the documentation of the methodologies used in preparing the Annual Regulatory Accounts should be available to the public because of the need for transparency. Some of the OUR's regulatory activities will be based on the information provided in the regulatory accounts. These regulatory activities have implications not only for CWJ but also new entrants. Thus, new entrants should have access to the basis on which these accounts are prepared.

Conclusion

4.8 Three types of financial statements are to be included in the regulatory accounts are to be produced and submitted by CWJ:-

- statements of profit and loss per Business and service category in some instances;
- statements of capital employed per Business and service category in some instances; and

- statement reconciling CWJ's regulatory accounts with statutory accounts.
- 4.9 CWJ is to prepare and submit to the OUR a document setting out the methodologies used in the preparation of the Annual Regulatory Accounts. The topics to be covered by the document are:-
- the regulatory principles underpinning the firm's accounts;
 - methods used for allocating costs and revenues;
 - accounting conventions used by the firm; and
 - the derivation of internal transfer charges.
- 4.10 This document is to be made public because of the need for transparency and the fact that it provides information which will guide the regulatory actions of the OUR. Thus, new entrants will have an interest in the methodologies used to derive this information.

ANNEX A: Examples of Accounting Treatment of Call Types

A.1 To demonstrate the application of separated accounts set out below are some examples that identify the various elements of revenue and cost as well as the Businesses and service categories affected by these transactions.

A.1.1 Outgoing international call from mobile subscriber

(a) Call made by subscriber of mobile entrant

- Mobile entrant pays wholesale charge to CWJ International for international switched minutes

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|------------------------|--|--|
| International services | <ul style="list-style-type: none"> • Wholesale charge for international switched minutes paid by entrant | <ul style="list-style-type: none"> • Settlement rate • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission to international gateway |
| Fixed Network | <ul style="list-style-type: none"> • Transfer charge from International: domestic switching and transmission to international gateway | <ul style="list-style-type: none"> • Domestic switching and transmission to international gateway |

Note: Domestic switching and transmission and the consequent transfer charge between the International and Fixed Network Businesses is avoided only if the mobile entrant has a point of interconnection at CWJ's international gateway.

(b) Call made by CWJ's mobile subscriber

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|------------------------|--|--|
| Mobile Retail | <ul style="list-style-type: none"> • Retail revenue | <ul style="list-style-type: none"> • Transfer charge to International: wholesale charge for international switched minutes • Mobile call origination • Mobile retail costs |
| International services | <ul style="list-style-type: none"> • Transfer charge from Mobile Retail: wholesale charge for international switched minutes | <ul style="list-style-type: none"> • Settlement rate • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission to international gateway |
| Fixed Network | <ul style="list-style-type: none"> • Transfer charge from International: domestic switching and transmission to international gateway | <ul style="list-style-type: none"> • Domestic switching and transmission to international gateway |

Note: Domestic switching and transmission and the consequent transfer charge between the International and Fixed Network Businesses is avoided only if CWJ's mobile network is physically connected to CWJ's international gateway.

A.1.2 Incoming international call to mobile subscriber (on caller pays tariff package)

(a) Call received by subscriber of mobile entrant

- Mobile entrant receives a call termination interconnection charge from CWJ International

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|--|
| International | <ul style="list-style-type: none"> • Settlement rate | <ul style="list-style-type: none"> • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission from international gateway • Call termination interconnection charge to mobile entrant |
| Fixed Network | <ul style="list-style-type: none"> • Transfer charge from International: domestic switching and transmission from international gateway | <ul style="list-style-type: none"> • Domestic switching and transmission from international gateway |

Note: Domestic switching and transmission and the consequent transfer charge between the International and Fixed Network Businesses is avoided only if the mobile entrant has a point of interconnection at CWJ's international gateway.

(b) CWJ's mobile subscriber (prepaid tariff package)

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|---|
| International | <ul style="list-style-type: none"> • Settlement rate | <ul style="list-style-type: none"> • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission from international gateway • Transfer charge to Mobile Network: call termination interconnection charge |
| Fixed Network | <ul style="list-style-type: none"> • Transfer charge from International: domestic switching and transmission from international gateway | <ul style="list-style-type: none"> • Domestic switching and transmission from international gateway |
| Mobile Network | <ul style="list-style-type: none"> • Transfer charge from International: call termination interconnection charge | <ul style="list-style-type: none"> • Mobile call termination |

Note: Domestic switching and transmission and the consequent transfer charge between the International and Fixed Network Businesses is avoided only if CWJ's mobile network is physically connected to CWJ's international gateway.

A.1.3 Incoming international call to mobile subscriber (on tariff package under which both caller and call recipient pay)

- (a) Call received by subscriber of mobile entrant
- Not applicable, because mobile entrants may only have caller pays tariff packages
- (b) Call received by CWJ's mobile subscriber (Companion Performer or Security tariff packages)

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|---|
| International | <ul style="list-style-type: none"> • Settlement rate | <ul style="list-style-type: none"> • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission from international gateway |
| Fixed Network | <ul style="list-style-type: none"> • Transfer charge from International: domestic switching and transmission from international gateway | <ul style="list-style-type: none"> • Domestic switching and transmission from international gateway |
| Mobile Retail | <ul style="list-style-type: none"> • Retail revenue from mobile subscriber (call recipient) | <ul style="list-style-type: none"> • Transfer charge to Mobile Network: call termination interconnection charge |
| Mobile Network | <ul style="list-style-type: none"> • Transfer charge from Mobile Retail: call termination interconnection charge | <ul style="list-style-type: none"> • Mobile call termination |

Note: Domestic switching and transmission and the consequent transfer charge between the International and Fixed Network Businesses is avoided only if CWJ's mobile network is physically connected to CWJ's international gateway.

A.1.4 Outgoing international call using pre-paid calling card

- (a) Customer using competing pre-paid calling card
- Competing pre-paid calling card operator pays wholesale charge to CWJ International for international switched minutes

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|--|
| International | <ul style="list-style-type: none"> • Wholesale charge for international switched minutes paid by competitor | <ul style="list-style-type: none"> • Settlement rate • Costs of international network (switching and transmission) • Transfer charge to Fixed Network: domestic switching and transmission to international gateway |

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|--|
| Fixed Network | <ul style="list-style-type: none"> Transfer charge from International: domestic switching and transmission to international gateway | <ul style="list-style-type: none"> Domestic switching and transmission to international gateway |

(b) Customer using CWJ's pre-paid calling card (Worldtalk)

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|--|
| Other Retail | <ul style="list-style-type: none"> Retail revenue from pre-paid calling card customer | <ul style="list-style-type: none"> Transfer charge to International: wholesale charge for international switched minutes Other retail costs |
| International | <ul style="list-style-type: none"> Transfer charge from Other Retail: wholesale charge for international switched minutes | <ul style="list-style-type: none"> Settlement rate Costs of international network (switching and transmission) Transfer charge to Fixed Network: domestic switching and transmission to international gateway |
| Fixed Network | <ul style="list-style-type: none"> Transfer charge from International: domestic switching and transmission to international gateway | <ul style="list-style-type: none"> Domestic switching and transmission to international gateway |

A.1.5 Fixed to Mobile calls (mobile subscriber on caller pays tariff package)

(c) Call received by subscriber of mobile entrant

- Mobile entrant receives a call termination interconnection charge from CWJ National Retail

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|---|
| National Retail | <ul style="list-style-type: none"> Retail revenue from caller | <ul style="list-style-type: none"> Interconnection charge to mobile entrant for call termination Transfer charge to Fixed Network: domestic switching and transmission on fixed network Retail costs |
| Fixed Network | <ul style="list-style-type: none"> Transfer charge from National Retail: domestic switching and transmission on fixed network | <ul style="list-style-type: none"> Domestic switching and transmission |

(d) Call received by CWJ's mobile subscriber (prepaid tariff package)

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|---|
| National Retail | <ul style="list-style-type: none"> Retail revenue from caller | <ul style="list-style-type: none"> Transfer charge to Mobile Network for mobile call termination Transfer charge to Fixed Network: domestic switching and transmission on fixed network Retail costs |
| Fixed Network | <ul style="list-style-type: none"> Transfer charge from National Retail: domestic switching and transmission on fixed network | <ul style="list-style-type: none"> Domestic switching and transmission |
| Mobile Network | <ul style="list-style-type: none"> Transfer charge from National Retail: call termination interconnection charge | <ul style="list-style-type: none"> Mobile call termination |

A.1.6 Mobile to Fixed calls

(c) Call made by subscriber of mobile entrant

- Mobile entrant pays call termination charge to CWJ Fixed Network

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|---|--|
| Fixed Network | <ul style="list-style-type: none"> Interconnection charge from mobile entrant for fixed call termination | <ul style="list-style-type: none"> Fixed call termination |

(d) Call made by CWJ mobile subscriber (prepaid tariff package)

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|---|---|
| Mobile Retail | <ul style="list-style-type: none"> Retail revenue from prepaid mobile subscriber | <ul style="list-style-type: none"> Transfer charge to Fixed Network for fixed call termination Other retail costs |
| Fixed Network | <ul style="list-style-type: none"> Transfer charge from Mobile Retail for fixed call termination | <ul style="list-style-type: none"> Fixed call termination |

A.1.7 Mobile to Mobile calls

(a) Call made by subscriber of mobile entrant to CWJ mobile subscriber

- Mobile entrant pays call termination charge to CWJ Mobile Network

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|--|---|
| Mobile Network | <ul style="list-style-type: none"> Interconnection charge from mobile entrant for mobile call termination | <ul style="list-style-type: none"> Mobile call termination |

(b) Call made by CWJ mobile subscriber (prepaid tariff package) to subscriber of mobile entrant

| <i>CWJ Business</i> | <i>Revenue</i> | <i>Cost</i> |
|---------------------|---|--|
| Mobile Retail | <ul style="list-style-type: none"> Retail revenue from prepaid mobile subscriber | <ul style="list-style-type: none"> Interconnection charge to mobile entrant for mobile call termination Other retail costs |

Note: It is assumed above for simplicity that physical interconnection exists between CWJ's mobile network and the mobile entrants' networks. If the networks are only logically interconnected via CWJ's fixed network, interconnection or transfer charges (as the case may be) to CWJ Fixed Network

ANNEX B: Statement of Profit & Loss

| Business or Service Category | Notes | Previous Year | Current Year |
|--|--|---------------|--------------|
| ----- | | | |
| Gross Operating Revenue | | | |
| | Transfer charges received from other CWJ Businesses | | |
| | Payments received from other operators | | |
| | Other Revenue | | |
| ----- | | | |
| Gross Operating Revenue | | | |
| ----- | | | |
| Operating costs | | | |
| | Transfer charges to other CWJ Businesses | | |
| | Payments to other operators | | |
| | Other operating costs | | |
| ----- | | | |
| Total operating costs | | | |
| ----- | | | |
| Profit before interest & taxation | | | |
| ----- | | | |
| Return on capital employed (profit before interest & taxation) | | | |
| ----- | | | |

ANNEX C: Statement of Capital Employed

| Business or Service Category | Notes | Previous Year | Current Year |
|--|-------|---------------|--------------|
| Fixed assets | | | |
| Investments | | | |
| Deferred expenditure | | | |
| Total Fixed Assets | | | |
| Current assets | | | |
| Cash & short-term deposits | | | |
| Accounts receivable | | | |
| Due from related companies | | | |
| Inventories | | | |
| Current portion of deferred expenditure | | | |
| Total current assets | | | |
| Total Assets | | | |
| Current liabilities | | | |
| Bank overdraft | | | |
| Accounts payable | | | |
| Current portion of loans | | | |
| Current portion of obligations under finance lease | | | |
| Taxation | | | |
| Due to ultimate parent company | | | |
| Due to related companies | | | |
| Dividends payable | | | |
| Dividends proposed | | | |
| Total current liabilities | | | |
| Net current assets (liabilities) | | | |
| Long-term liabilities | | | |
| Loans | | | |
| Obligations under finance leases | | | |
| Deferred taxation | | | |
| Total Long-term Liabilities | | | |
| Shareholders' equity | | | |
| Share capital | | | |
| Capital reserve | | | |
| Retained earnings | | | |
| Total shareholders equity | | | |
| Capital employed | | | |

ANNEX D: Statement of Selected Service Unit Costs

| | <i>Operating costs</i> | <i>Cost of capital employed</i> | <i>Total</i> | <i>Volume</i> | <i>Unit cost</i> |
|--|------------------------|---------------------------------|--------------|---------------|------------------|
| Residential access | | | | | |
| Business access | | | | | |
| Intra-parish calls | | | | | |
| Inter-parish calls | | | | | |
| Calls to mobile | | | | | |
| Domestic Leased Circuits | | | | | |
| International Leased Circuits | | | | | |
| Domestic & international packet switch | | | | | |
| Outgoing International calls (USA, Canada, UK, Caribbean, ROW) | | | | | |
| Incoming international calls (USA, Canada, UK, Caribbean, ROW) | | | | | |
| Mobile to fixed calls | | | | | |
| Mobile to mobile calls | | | | | |

ANNEX E: Statement of Reconciliation

(i) Profit & Loss Account

| | Operating Revenue | Operating Costs |
|-------------------------------------|-------------------|-----------------|
| ----- | | |
| Fixed Business | | |
| Access | | |
| Network | | |
| National Retail | | |
| Data Communications | | |
| International | | |
| Mobile Business | | |
| Retail | | |
| Network | | |
| Other Business | | |
| Other Retail | | |
| Equipment supply | | |
| Residual | | |
| ----- | | |
| Total Regulatory Accounts | | |
| ----- | | |
| Adjustments | | |
| ----- | | |
| As in the Annual Statutory Accounts | | |
| ----- | | |

(ii) Capital Employed

| | | |
|---|--|--|
| Fixed Business | | |
| Access | | |
| Network | | |
| National Retail | | |
| Data Communications | | |
| International | | |
| Mobile Business | | |
| Retail | | |
| Network | | |
| Other Business | | |
| Other Retail | | |
| Equipment supply | | |
| Residual | | |
| ----- | | |
| Capital employed in Regulatory Accounts | | |
| ----- | | |
| Adjustments | | |
| ----- | | |
| As in the Annual Statutory Accounts | | |
| ----- | | |