
Office of Utilities Regulation

**Evaluation of Tariffs Application
Filed by Cable & Wireless Jamaica
Limited**



OFFICE OF UTILITIES REGULATION

June 30, 1999

EXECUTIVE SUMMARY

Introduction

- ❖ On May 31, 1999 an application for a tariff change was submitted to the Honourable Phillip Paulwell, Minister of Commerce & Technology by Cable & Wireless Jamaica Limited. Prior to this application the last time the Company sought a tariff change was April 1998 and this was rejected by the Minister on the advice of the Office of Utilities Regulation, OUR. As was the case with the April 1988 application the Minister requested the OUR to conduct an evaluation of the application in accordance with the provisions of the All Island Telephone Licence, 1988.

OUR Analysis

- ❖ According to the documents accompanying the May 1999 rate application the Company claimed that without a tariff change it will fall short of the minimum permitted return on shareholders' equity stipulated in the licence. In fact, the application was predicated on a 17.72% rate of return on shareholders' equity.
- ❖ CWJ has projected costs and revenues for the financial year 1999/00. The short period of time allowed (30 days) for evaluating the application placed enormous constraints on the extent of the investigation that could be carried out by the OUR. Consequently, it was only possible to focus on the major cost and revenue items. The OUR made three adjustments to the costs projected by CWJ:-
 - a) exclusion of J\$195 million to be paid by CWJ to its parent company, CW plc of the UK, for royalty arising from the decision of CW plc to change the name of its operation in Jamaica from Telecommunications of Jamaica (TOJ) to Cable & Wireless Jamaica. The OUR does not consider this an essential expense to be incurred by CWJ in supplying services to its customers, thus it was disallowed.
 - b) depreciation expenses for the 1999/00 period was projected by CWJ to be J\$3.21 billion. The OUR is of the opinion that CWJ's calculation was not consistent with the provisions of the licence and has carried out its own calculation to reflect what it considers to be the true amount (J\$3.18 billion).

c) J\$475.8 million was set aside by the Company to meet its ongoing restructuring exercise. The licence provides that extraordinary/exceptional expenses be apportioned over a period of time not exceeding five years. CWJ apportioned this amount over a two year period. However, the OUR decided to apportioned this amount over a four year period.

- ❖ Revenues were adjusted to reflect the losses of J\$500 million due to the bypass of CWJ's international gateways by legal and illegal operators of VSATs. In addition, the Company had projected lower settlement rate of US\$0.30 per minute for the final quarter of 1999/00, i.e. January 1 through to March 31,2000. This was US\$0.275 per minute below the settlement rate for the period April 1999 through to December 31, 1999. Although the OUR recognised that there is growing pressure for settlement rates to fall the Company has failed to substantiate the extent of the decline. In fact, it is yet to conclude settlement contracts with the major overseas carriers for the period January 1 - March 31,2000. The licence provides that changes in revenue and cost for the test period should only be made where these are known and measurable with reasonable accuracy. In the absence of sufficient evidence the OUR accept the level of inpayment existed for the test period, 1998/99. Third, is the annualization of revenues.

Approved Rates and Structures

- ❖ Below are the proposed changes to the existing rate structure and rate levels recommended by the OUR. The approved structure and rates will provide C&WJ with a rate of return on ordinary shareholders' equity of 17.5% (and not 17.72% as proposed by the Company in its application), in accordance with the All Island Telephone Licence, 1988. The structure and levels approved rates to be applied in the provision of telephone services in Jamaica are set out below and are to become effective on 1999 September 1.

Rate Structure

- The change in rate structure proposed by Cable and Wireless Jamaica (C&WJ) for inter-parish calls is approved, namely, peak, off-peak, and week-ends;

- The change in rate structure proposed by C&WJ for intra-parish calls is approved, namely, peak, off-peak, week-ends;
- The change in rate structure proposed by C&WJ for outgoing international calls is approved, namely, peak, off-peak, weekends;
- The rate structure proposed by C&WJ for the low-user package is approved, namely, peak, off-peak, weekends. C&WJ should embark on a massive public campaign to alert eligible customers to the benefits that may be realised by switching to the new package.

	Current	Proposed (CWJ)	Approved (OUR)	% Increase
Low User Rates				
<u>Intra-Parish:-</u>				
Peak	0.15	0.44	0.29	93.33
Off-Peak	0.15	0.38	0.27	80.00
Week-end	0.15	0.22	0.22	46.67
<u>Inter-Parish:-</u>				
Peak	0.76	1.48	1.14	50.00
Off-Peak	0.38	1.06	0.86	126.32
Week-end	0.38	0.56	0.56	47.37
Standard Rates				
<u>Intra-Parish:-</u>				
Peak	0.15	0.30	0.15	0.00
Off-Peak	0.15	0.26	0.15	0.00
Week-end	0.15	0.15	0.15	0.00
<u>Inter-Parish:-</u>				
Peak	0.76	1.10	0.76	0.00
Off-Peak	0.38	0.73	0.53	39.47
Week-end	0.38	0.38	0.38	0.00

Rate Levels

- The customer dialed usage rates proposed by C&WJ for inter/intra-Parish calls are modified as set out in the Table A.1 below.
- The rates for residential and business line rentals proposed by C&WJ are modified as shown in Table A2. The increases on line rental reflect the fact that this service is substantially below cost and moving them closer to cost, albeit in a small way is the right decision. Even at these increased rates a comparison of rental charges with other regional countries show that they are still below international levels.

Table A2

Domestic Line Rentals

J\$ per Month

	Current	Proposed (C&WJ)	Approved	% Change
Standard Rental				
• Business	215.00	700.00	500.00	132.56
• Residential	100.00	250.00	210.00	110.00
Low User Rental	100.00	150.00	100.00	0.00

- All other price changes proposed by C&WJ are approved, including the average 19% reduction in outgoing international calls. Increases in the charges for directory listing and related services, telex, telegraph, etc are approved.

Table 7.3: IDD Rates

	Old Rates	New Peak	New Off-Peak	Old Weekend
USA -1	48.20/40.41	30.00	28.00	26.00
USA-2	34.05/25.89	30.00	28.00	26.00
UK	48.20	35.00	31.00	28.00
Canada	48.20/40.41	35.00	19.00	28.00
Trinidad	23.78	21.00	19.00	17.00
Cayman	23.78	21.00	19.00	17.00
Barbados	23.78	21.00	28.00	17.00

Bahamas	67.94	30.00	28.00	26.00
Puerto Rico	67.94	30.00	19.00	26.00
Turks & Caicos	8.02	21.00	19.00	17.00
St. Lucia	11.82	21.00	19.00	17.00
Antigua	11.82	21.00	19.00	17.00
Germany	75.73	55.00	50.00	45.00
Cuba	56.55	51.00	46.00	41.00
India	78.95	68.00	61.00	55.00
Guyana	23.78	21.00	19.00	17.00

Impact on customers

- The effective price changes are shown in Table A.4. Each of the residential and business customer distributions are split into 10% slices (or deciles). The percentage changes and the bill sizes shown in the Table relate only to the main services: line rental, intra-parish calls, inter-parish calls and international calls (other services, such as access points or directory listings are omitted because of lack of information).
- Residential customers will face effective price increases ranging from 10% to 40%. The exception is the highest spending 10% of customers who will benefit from an effective price reduction of 10%, because they make such a large volume of international calls. The effective price increases faced by residential customers are much lower than the percentage increase in the line rental of 110% (from \$100 to \$210), because nearly all of the charges for calls are either remaining the same or falling. Also, the lowest spending 40% of residential customers benefit from the impact of the low user package. Without the low user package these customers would have faced the largest effective price increases of all residential customers (as shown by the figures in square brackets). The low user package provides the greatest benefit to the very lowest spending customers. The low user package was one of the proposals contained in the OUR's Consultative Document *"Rebalancing Telephone Prices"* 1998 November.
- Business customers face larger effective price increases, because the percentage increase in the business line rental is larger at 133% (from \$215 to \$500). As for

residential customers, the top 10% of customers will see an effective price reduction of 10%. The largest percentage increases will be experienced by the lowest spending 30% of customers - in dollar terms their monthly bill increase will be similar to the line rental increase of \$327.75 per line per month, including GCT (although some of these businesses will pay more, because they rent more than one line). For business customers the effective increase is also significant for low user customers. These customers are facing significant increases in the line rental and the fact that they make very little international calls they do not benefit significantly from the reduction in outgoing calls. The OUR is of the view that consideration should be given to a low user package for this category of customers at the next rate review. This is one of the proposals contained in the OUR's recently published Consultative Document "A Strategy for Rebalancing Telephone Prices" 1999 June.

Table A.4: Estimated effective price changes

Decile averages	Residential customers		Business customers	
	Bill change	Approximate bill size (before changes)	Bill change	Approximate bill size (before changes)
1	15% [80%]	up to 300	125%	up to 400
2	25% [70%]		115%	
3	35% [55%]		100%	
4	40% [45%]	300 - 700	80%	400 - 1,000
5	35%		70%	
6	30%		55%	
7	25%		45%	
8	20%	greater than 700	35%	Greater than 1,000
9	10%		15%	
10	-10%		-10%	
Mean	9%		6%	

Source: OUR analysis using billing information supplied by CWJ

Notes: Figures in square brackets are increases in the absence of the low user package.

Bill figures comprise line rental, intra-Parish, inter-Parish and international calls and GCT.

Figures shown are rounded.

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CHAPTER 1:BACKGROUND

- 1.1 On May 31, 1999 an application for a tariff change, bearing the signature of Mr. Errald Miller, President and Chief Executive Officer of Cable & Wireless Jamaica Limited (C&WJ), formerly Telecommunications of Jamaica (TOJ), was submitted to the Honourable Phillip Paulwell, Minister of Commerce & Technology.
- 1.2 Cable & Wireless' operations in Jamaica is governed by five licences, all of which were issued in 1988. Four of these licences were granted under the Radio & Telegraph Control Act:-
 - Wireless Telephony Licence;
 - Telex and Teleprinter Services Licence;
 - Telegraphic Services Licence; and
 - the External Telecommunication's Service Licence.
- 1.3 The fifth licence, the All Island Telephone Licence, was granted under the 1893 Telephone Act. All five licences recognized the Minister with responsibility for the telecommunications sector as the agent of the Government of Jamaica with regulatory powers over the Company. At present, statutory authority resides with the Minister of Commerce & Technology. The OUR was established as a body corporate to regulate undertakings supplying water and sewerage, electricity, telecommunications, and public transportation (by road, rail, and ferry). However, at present the OUR lacks the legal authority to regulate the major utilities, including C&WJ due to deficiencies in the OUR Act, 1995. Until these deficiencies are remedied the OUR only serve in an advisory role to the Minister, and therefore the Minister need not accept the recommendations of the OUR.

Scope of the OUR's Evaluation

- 1.4 Section 27 of the All Island Telephone Licence, 1988 sets out the framework for adjusting the rates to be charged for the services provided by C&WJ. In

conducting this evaluation the OUR has focused its attention on the following areas:-

- the Company's claim that without a tariff increase it would not achieve the minimum return on shareholders' equity permitted by Section 27 of the All Island Telephone Licence, 1988 is justified.
- the extent of the revenue shortfall required by the Company to realize a target rate of return on equity; and
- the variation in rates to close the revenue gap and the impact on this of the rate of return on shareholders' equity.

1.5 This Report sets out the:-

- OUR's recommendations to the Minister;
- the justifications for the recommendations made by the OUR to the Minister of Commerce & Technology; and
- the impact of the proposed tariff changes on business and residential customers, and domestic inflation.

CHAPTER 2: FINANCIAL OVERVIEW 1998/99

- 2.1 Table 2.1 highlights C&WJ's financial performance for the period March 31, 1996 through to March 31, 1999. In April 1998 the Company applied for tariff revisions which it stated would have provided the appropriate level of revenue for them to achieve more than 19% return on equity. In its evaluation of the application the OUR concluded that the rate levels and structures existing at the time provided the opportunity for the Company to realize the minimum permitted return on equity of 17.5%.

Table 2.1: Profit Summary 1996/97 1997/98 1998/99

International Turnover	9,322,637	9,906,892	10,453,900
Domestic Turnover	2,956,962	4,019,530	4,802,857
Net Revenue	11,480,160	13,737,133	15,189,346
Profit After Tax	2,665,775	3,138,786	3,475,577
Return on Equity	17.26%	17.26%	15.55%

- 2.2 In recommending a rejection of the application to the Minister the OUR differed with the Company on some fundamental aspects of the All Island Telephone Licence. The first area of disagreement had to do with the appropriate rate base to be used in evaluating the application. The application filed by C&WJ was predicated on the unaudited financial results for the year ending March 1998. This is inconsistent with the provisions of the licence, which defined the rate base as shareholders' equity "... at the end of the last year for which there are audited consolidated accounts of the Group" Shareholders' equity includes the stated or par value of the issued ordinary shares, reserves (excluding provision for depreciation, renewals or diminution in value of assets or retained by way of providing for any known liability) and share premiums on ordinary shares or any other amount which by standard accounting practice in Jamaica is treated as part of Ordinary Shareholders' Equity. The latest audited accounts available was for 1996/97 and this was used by the OUR in its evaluation of the application.

- 2.3 The schedule to the All Island Telephone Licence stipulates the depreciation rates to applied to the various categories of plant in service during the last month of the latest audited financial year. C&WJ's calculation of depreciation not only take into account plant held for future use but also projected addition to plant during the budget year. Both of these adjustments were disallowed by the OUR.
- 2.4 The licence further provides that expenses deemed to be exceptional/extraordinary should be apportioned over a period of time not exceeding five years. C&WJ sought increases to recover \$809 million of re-organization costs in one year. The OUR, however, that this amount should be spread over the maximum five year period permitted by the licence.
- 2.5 The actual return on equity for 1998/99 was below the OUR's target return of 17.5%, but was above the Company's own projection. The Company had projected return on equity of 13.36% under the assumption that prices remain unchanged. For the twelve month period ending March 31, 1999, it posted after-tax profit of J\$3,475,577,000. This was 30% and 10% higher than the respective figures for 1996/97 and 1997/98. Despite the increase in after-tax profits, return on equity as defined by section 27(1) of the All Island Telephone Licence, 1988, was 1.95% below the minimum permitted amount (17.5%) and better its own projection by 2.19%.
- 2.6 The Company's audited financial statements for 1998/99 highlighted factors that would have accounted for the difference between the target return (17.5%) and the actual return (15.55%) realized in 1998/99:-
- a) the accrual of \$438 million of liabilities for withholding tax on interest charges relating to certain overseas loans. This item has served to reduced after-tax profit by 1.5%, or J\$52,133,655; and
 - b) redundancy expense of \$225 million arising from the reorganization of the Company.

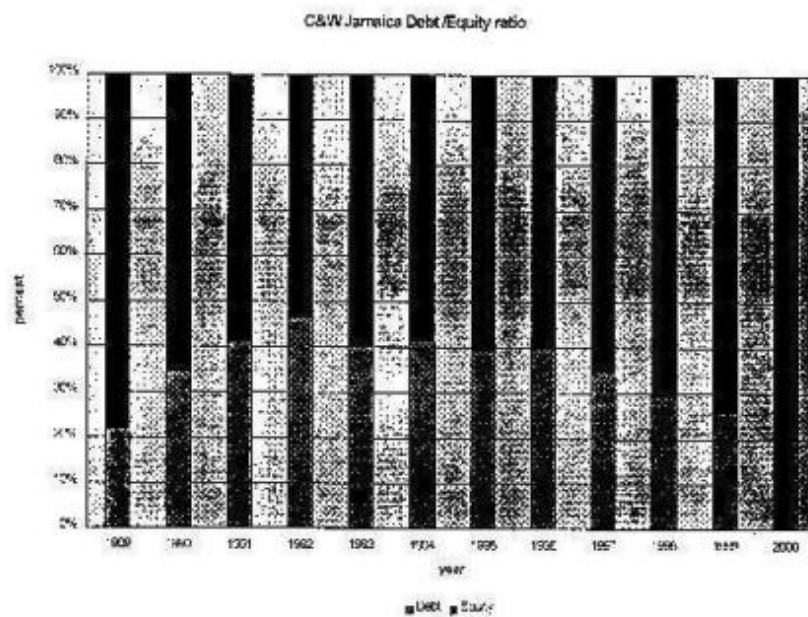
- 2.7 It is important that a distinction be made between target return and actual return. The rates set by a Regulator are not intended to guarantee a particular return but rather to give the regulated company the opportunity to earn the permitted return. The regulator cannot guarantee that the regulated firm will realize the target rate of return. If the Company reduces costs then actual return may exceed target return. Similarly, if costs rise actual return may be lower than target return. In addition, actual return may deviate from target return due to adjustments made by the Regulator in (a) disallowing or normalizing costs, and (b) adjusting projected revenues or varying the rate base. The divergence between actual and target returns may also arise due to the timing of the implementation of rates. They can differ for technical reasons as well variations between budget and actual outcome. The gap between the test year and the implementation date is part of what is known as regulatory lag.

Capital Expenditure

- 2.8 During the year J\$4.8 billion was expended on capital projects. This was 2% above the amount (J\$4.7 billion) spent in the previous year. Fifty one thousand (51,000) land lines were added during the year along with 451 public payphones. Thus, at the end of March 1999 the total number of land lines and public payphones in service stood at 470,299 and 2,756 respectively. At March 31, 1999 the island's penetration level stood at 18.82 per 100 inhabitants compared with 16.77 in 1997/98. The number of cellular subscribers stood at 79,000, up by 20,899 on the 1997/98 figure.
- 2.9 The projected capital spending budget for 1999/00 is approximately J\$3,900,000,000, down 19% on the prior year's figure. Of this amount only 33% will be expended on providing basic telephone services. The plan is to install an extra 35,000 land lines during the period. This is well below the historical trend of approximately 60,000 per annum (between 1996-1999). The lion's share of the capital budget is geared towards the high margin services such as data, internet, mobile communications, and prepaid services. Under its licences, C&WJ is obligated to provide telephone services to all households that wish to be connected to the network. The shift in investment strategy will bring about a

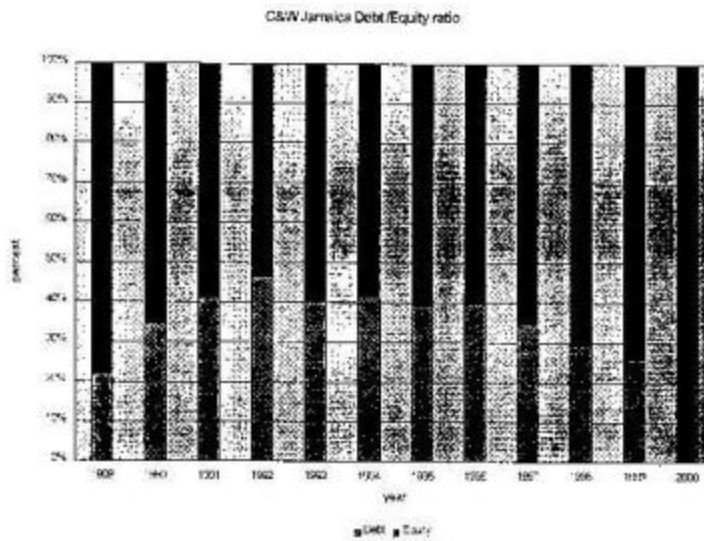
dramatic slowdown in the rate of expansion in telephone services especially in rural communities and low income urban areas. There is urgent need for a universal service strategy to develop for Jamaica.

- 2.10 For 1998-99 cash flow from operating activities totaled \$7.2 billion, of which \$4.6 billion was used to acquire additional fixed assets and \$1 billion for debt repayment. Over the year the Company's equity/debt ratio has been rising steadily (See Diagram below). A continuation of this trend when coupled with falling capital spending will render the Company virtually debt free in another four years. For C&WJ equity is a far more expensive method of financing when compared with debt. The real cost of equity capital is 17.5% (minimum) while debt is about 8% nominal. However, the regulatory mechanism provides the incentive for greater use of equity funding as this will increase the rate base on which the 17.5-20% rate of return is applied. In short, as the Company's equity base increases higher prices are required for the Company to realize a certain level of return. The net effect of this is that it imposes higher cost on consumers.



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- 2.11 Of relevance also is the fact that if the equity making up the rate base is represented by assets that are underperforming (i.e. earning less than 17.%% return) the burden on the ratepayer is even greater, since additional profits would have to be generated by those assets that are already making an equitable contribution to overall profitability.
- 2.12 C&WJ keeps about \$1.5 billion of its cash in foreign exchange accounts earning interest at 5.2%. While some foreign exchange holdings may be necessary for purchases, there is no need to hedge against devaluation since a significant portion of revenues are denominated in foreign exchange.

CHAPTER 3: C&WJ's TARIFF APPLICATION

3.1 In its most recent application the Company claimed that without a tariff increase it would not achieve the minimum return on equity permitted by Section 27 of the All Island Telephone Licence. The projected profit shortfall was driven by four major factors:-

- loss in revenue (J\$500 million) caused by the bypass of its international gateways by both legal and illegal operators of Very Small Aperture Terminals (VSATs);
- decrease in the collection charges for outgoing international calls to major destinations. This reduction is an attempt by the Company to bring the rates for outgoing international calls closer to cost;
- reduction in the price (settlement rate) paid by overseas carriers for terminating incoming international calls in Jamaica. For the period April 1999 through to December 31, 1999 the settlement rate is expected to be US\$0.575 per minute, and US\$0.30 per minute from January 1, 2000 through to March 31, 2000. The projected loss in revenue due to lower settlement rate is estimated to be J\$900 million; and
- the desire of the Company to realize a target rate of return on shareholders' equity of 17.72%.

Proposed Tariff Change

3.2 Below is a summary of the major tariff changes proposed by the Company:-

- Inter-Parish - - 36% (average);
- Intra-Parish - - 66% (average);
- Line Rental (both residential & business) - - 180% (average); and
- International outgoing calls (from Jamaica) - - (19% decline).

International Tariff

3.3 The plan was to reduce charges for outgoing international calls by 19% on average. Charges for outgoing international calls using prepaid calling cards will fall by 20%. International telephone prices would be unified and simplified such as the same charges for different destinations in the USA. Likewise, the rate

structure will be simplified by the unification of Commonwealth Caribbean rates. It is proposed that daytime rates to the majority of destinations, including popular routes such as Canada, the UK, Bahamas, and Puerto Rico would also fall. The current time bands (peak, and off-peak) will be restructured into three - peak, off-peak, and weekend.

International Tariff (JS per minute)

	Current	Proposed	Change
International Subscriber Dialing			
Canada:-			
ISD Peak Rate – 1 min. minimum	48.20	35.00	-27.39%
ISD Off-Peak Rate _ 1 min. minimum	40.41	31.00	-23.29%
ISD Weekend	40.41	28.00	-30.71%
United Kingdom:-			
ISD Peak Rate – 1 min. minimum	48.20	35.00	-27.39%
ISD Off-Peak Rate _ 1 min. minimum	48.20	31.00	-35.68%
ISD Weekend	48.20	28.00	-41.91%
U.S.A.			
Zone 1:-			
ISD Peak Rate – 1 min. minimum	34.05	30.00	-11.89%
ISD Off-Peak Rate _ 1 min. minimum	25.89	28.00	8.15%
ISD Weekend	25.89	26.00	0.42%
Zone 2:-			
ISD Peak Rate – 1 min. minimum	48.20	30.00	-37.76%
ISD Off-Peak Rate _ 1 min. minimum	40.41	28.00	-30.71%
ISD Weekend	40.41	26.00	-35.66%
Operator Assisted Calls			
Canada:-			
Station 3 minutes Minimum	132.92	105.00	-21.01%
Person 3 minutes Minimum	177.22	105.00	-40.75%
England:-			
Station 3 minutes Minimum	144.60	105.00	-27.39%
Person 3 minutes Minimum	192.80	105.00	-45.54%
USA:-			
Station 3 minutes Minimum	111.41	90.00	-19.22%
Person 3 minutes Minimum	148.55	90.00	-39.41%

Peak: Weekdays- from 06:00 to 17:59

Off-Peak: Weekdays-from 18:00 to 05:59

Weekend: Weekend-from Saturday 00:01 to Monday 05:59

Domestic Lines (JS/per Line)		Current	Proposed	Change
Business:-				
Main Line/PBXs	Rental	215.00	700.00	225.58%
	Relocation	160.00	600.00	275.00%
Internal Access Points (Extensions)	Installation	123.00	400.00	225.20%
	Relocation (Single Line)	49.35	400.00	710.54
Residential:-				
Main Line/PBXs	Rental	100.00	250.00	150.00%
	Relocation	98.25	400.00	307.12%
	Low User Package	-	150.00	-
Internal Access Points (Extensions)	Installation	98.25	400.00	307.12%
	Relocation (Single Line)	36.75	400.00	988.44%

Domestic Line & Usage

3.4 Significant increases were proposed for intra/inter-Parish calls and the monthly line rental. These increases are due in part to offset the decline in revenues arising from the reduction in outgoing international calls. The other reason for the proposed increases is to bring prices closer to costs. Increases in the installation and relocation charges for access points were also proposed by the Company. In the case of the monthly line rental and installation and relocation charges are aimed at bringing these services closer to costs. The current time bands (peak, and off-peak) will be restructured into three (peak, off-peak, week-ends). The restructuring of the time bands will also apply in the case of international calls. The proposed change to the time bands is aimed at providing customers with greater facility to control the cost of calling and will also allow for more efficient use of network resources.

3.7 The proposed price structure and charges for inter/intra-parish calls are set out in the table below. Without the loss of revenue due to bypass the line rental for residential and business customers would be increase to \$166 and \$385 respectively.

Domestic Usage (J\$ per minute)	Current	Proposed	Change
<i>Intra-Parish:-</i>			
Peak	0.15	0.30	100.00%
Off-Peak	0.15	0.26	73.33%
Weekends	0.15	0.15	0.00%
Average	0.15	0.25	66.66%
<i>Inter-Parish:-</i>			
Peak	0.76	1.10	45.00%
Off-Peak	0.38	0.73	92.00%
Saturdays	0.38	0.38	0.00%
Sundays	0.38	0.38	0.00%
Average	0.59	0.80	36.00%

Low User Package

3.8 C&WJ proposed an optional low user package to shield residential customers with affordability difficulties from falling off the network. It is aimed at the bottom 40% (or about 150,000). Under this plan customers would pay a lower monthly line rental of \$150, 50% greater than the current charge (\$100) but will be 40% below those on the standard tariff plan. Bypass also impact on the line rental for residential customers. Without bypass the proposed line rental would have been \$100 per month. Customers on the low user plan will still enjoy the 60 free minutes of intra-parish call per month, but will be required to pay higher domestic call prices (See Table below).

Optional Low Usage Tariff (J\$ per minute)		Current	Proposed	Change
Intra-Parish	Peak	0.15	0.44	193%
	Off-Peak	0.15	0.38	153%
	Weekends	0.15	0.22	47%
Inter-Parish	Peak	0.76	1.48	95%
	Off-Peak	0.38	1.06	278%
	Weekends	0.38	0.56	47%

Other Charges

3.9 Local telegram as well as international telex and telegram are slated for large increases. C&WJ has also proposed changes to the charges for certain calling features. The monthly rental for call forwarding by business will decrease by 50%

and residential customers will see an increase of 100%. For call waiting the monthly charge for residential customers will increase by 100%, while it will fall by 50% for business customers.

- Major increases to the rates for directory listing and related services rates are also proposed. These one time charges are shown in the Table below. C&WJ argued that that these increases are necessary in order to bring prices in line with costs.

Directory Listing & Related Services (JS)

		<i>Present</i>	<i>Proposed</i>	<i>Change</i>
Directory Listing				
Additional Listing:-	Business	5.10	146.00	2762.75%
	Residence	5.10	146.00	2762.75%
	Guest Hotel	5.10	146.00	2762.75%
	Reference to another service of the customer	5.10	146.00	2762.75%
	Reference to another customer	-	146.00	-
	Additional Line Information	5.10	146.00	2762.75%
Private Listing		60.00	120.00	100.00%
Directory Related Services				
Change of Name	Business	61.50	300.00	387.80%
	Residential	36.75	200.00	444.22%
Change of Number	Business	86.10	300.00	248.43%
	Residential	61.50	200.00	225.20%

3.10 Rates for several other services including those listed below will remain unchanged:-

- Internet;
- Cellular;



- Voice mail services; and
- Data services, such as leased lines, packet switching, etc.**

CHAPTER 4: THE RATE MAKING PROCESS

- 4.1 It is a well established principle of regulating monopolies that setting rates require that the legitimate interest of both customers and investors be considered. The objective of rate regulation is to mimic a competitive environment. In a competitive environment, prices are expected to reflect the cost of providing a good or service - where cost includes a fair return. Competition however forces a company to be more efficient thus lowering costs and eliminating waste.
- 4.2 The role of the Regulator is therefore not to rubber stamp revenues and costs proposed by the regulated firm. He must exercise his judgement about the reasonableness of items presented to him as the major components of the cost of service. The regulator must also pay particular attention to related party transactions to ascertain that the consumer gets value for the money spent and no undue costs are rewarded.
- 4.3 The Regulator must decide what total revenues the company is entitled to take in, then adjust permitted "rate levels," either selectively or across the board, to yield these totals. Regulators typically do this by undertaking a detailed investigation and appraisal of total company costs in a recent, "test" period. In this way, item by item, they build up an estimate of total permissible "revenue requirements". On the basis of this total, adjusted as much as possible for known or readily predictable changes between the test year and the period for which rates are to be ascertained, the company is ordered or permitted to propose the required adjustments in its rate schedules.
- 4.4 The "test" year is the twelve-month period for which the adequacy of the rates is to be determined. However, in order to accommodate changes to the business environment, adjustments are usually made to the "test" year's results for changes that are known and measurable. This implies a high degree of certainty about the changes that are to be made and would require detailed analysis of all such changes. If the Regulator has confidence that budgets are prepared in a proper manner then he may accept budget data as the basis for adjustment to the "test"

year. This does not remove the duty to examine the basis on which the budget was prepared.

Use of Budget Data

4.5 The rationale for the Regulator to be concerned with the projected cost and revenues of a company is that there is the danger of concealment of profit by exaggeration of costs. Whatever, is the actual level of costs, it obviously pays a regulated monopolist to exaggerate the estimated cost of service. The regulated firm exploits its monopoly power by misleading the regulator into allowing higher rates than actual costs justify. Such exaggerations sometimes show up after the event,

4.6 Secondly, it might be in the interest of the company - always assuming that regulation is effective to incur actually greater costs than is in the best interest of the consumer, provided it is then permitted to incorporate those costs in the regulated price. One example would be heavy expenditures for advertising and public relations, since the companies might receive numerous benefits therefrom while passing the costs on to the consuming public.

4.7 The regulated firm, even more, their promoters and managers can extract some of the potential monopoly profits by paying excessive prices to affiliated, companies for equipment, supplies, financial advice and underwriting, engineering, and managerial services - charges included in the cost of service and recovered from customers.

4.8 Finally, as monopoly firms are not subject to intensive price competition, they are usually not under the same pressures as firms in more competitive industries to be efficient and cost conscious. In this regard the role of the regulator is to take the place of competition, should make some effort in the same direction.

The All Island Telephone Licence, 1988

4.9 In the specific case of CWJ, the mechanisms and procedures for conducting rate revisions are set out in Section 27 of the All Island Telephone Licence. The

licence does not render the above discussion irrelevant but instead reinforces them. In fact, careful reading of the relevant sections clearly point to the need for the Company to be able to realize a reasonable rate of return and at the same time the interest of consumers must be protected. In other words the need for rates to be reasonable and fair is clearly recognized by the licence. Careful reading of this section clearly demonstrate that the drafters were not just concerned about the need for shareholders to earn a reasonable return on their investments but also that consumers should be protected from abuse. It is a requirement of the licence that the Company be given the opportunity to earn a permitted rate of return on equity (17.5%-20%). Cable & Wireless Jamaica ".....shall be subject to regulation by the Minister as to rates charged for telephone services PROVIDED THAT it shall be permitted to charge such rates as will when consolidated with other group revenues, provide to the Group such consolidated net profit after taxes and after dividends on preference shares as will when multiplied by one hundred and divided by the Ordinary Shareholders' Equity at the end of the last financial year for which there are audited consolidated accounts of the Group result in a figure of not less than 17 1/2 nor more than 20 (hereinafter called "the permitted rate of return") in each financial year; AND PROVIDED FURTHER THAT rates charged for telephone services shall be adjustable annually as necessary to provide the permitted rate of return"(Section 27(1)). But this must be balanced with the needs of consumers. Only changes in revenue and cost that are known and measurable with reasonable accuracy should be made.

4.10 For the purposes of 27(1):-

A Test Period is to be used for arriving at the appropriate rate adjustment. The test period comprises "the latest twelve months of operation for which there are audit accounts" (Section 27.(2)(b)) adjusted to reflect:-

- "normal operating conditions, if necessary; and" (27.(2)(b)(i));
- "such changes in revenues and costs as are known and measurable with reasonable accuracy at the time of filing and which will become effective within twelve months of the time of filing". Such "costs" include depreciation

in relation to plant in service during the last month of the test period at the rates of depreciation specified in the Schedule to the Licence" (27.(2)(b)(ii));

Extraordinary or Exceptional Items, "as defined by the Institute of Chartered Accountants of Jamaica, shall be apportioned over a reasonable number of years not exceeding five years" (27.(2)(b)(ii).

- 4.11 Ordinary Shareholders' Equity is to be adjusted downward by the value of fixed assets, (less accumulated depreciation) including construction work in progress, as are not related to services under the licence (Paragraph 27.(3)). It also lists examples of assets to be excluded. These assets include residential accommodation, certain recreational facilities for staff and similar items. The licence specifies that such items may only be included in the equity base if the company receives the prior approval of the Minister.
- 4.12 "The Company may apply to the Minister for a determination of the rates to be charged for services by the Company by an application in writing setting out the proposed rates and the basis for such rates PROVIDED THAT-
- (a) the application relates to rates proposed to be introduced no earlier than 90 days after the delivery of the application to the Minister; and
 - (b) no application for an increase in rates has been made to the Minister in the preceding twelve months" (27. (7)).
- 4.13 It further provided that "If the Minister is satisfied that the rates proposed by the Company in its application comply with sub-paragraph (1) and approves of such rates then he may determine the rates to be as proposed in the Company's application and notify the Company accordingly". The Minister may also propose a variation to the rates proposed by the Company ".....provided that such variation does not yield the Company less than the permitted rate of return. In addition, the Minister is required to respond to the Company's request within 30 days of filing.

4.14 Section 15 requires that "the Company shall at all times during the term of this licence or any extension thereof furnish and maintain an efficient and modern telephone integrated network", while section 30 provides that "the Minister or the Referee as the case may be shall be entitled to enquire into the accuracy and reasonableness of items of expenditures and revenues reported for the test period for rate-making purposes. Charges for consultant and specialist services shall be at competitive rates as normally understood in this type of business."

4.15 In summary, proper evaluation of CWJ's rate proposal, should proceed as follows:-

- Ordinary shareholders' equity from the last audited accounts should be adjusted by removing the equivalent of the value of assets used for purposes other than licensed services.
- the twelve-month period of the last audited account is the test period to be used in arriving at the appropriate rate adjustment.
- the test period should be adjusted to reflect normal operating condition. This may include the effects of hurricanes, earthquakes etc. or rate adjustment that occurred in the middle of the year
- the test year should be adjusted for changes in revenues and costs that are known at the time of filing or will become effective up to twelve months after. projected revenues and costs should be examined for reasonableness and permissibility and adjusted where necessary.
- extraordinary/exceptional items should be spread ~~spread~~ over a reasonable period not exceeding five years;
- depreciation expense for the test year should be adjusted to depreciation with respect to plant in service during the last month of the test year.
- the resulting profit after tax should be divided by the adjusted ordinary shareholders' equity to provide the return on equity for the test period.

CHAPTER 5: REVENUES AND COSTS PROJECTIONS

- 5.1 The C&WJ's licence provides that only changes that are "... known and measurable with reasonable accuracy..." should be made to the test period figures, both revenues and costs. Moreover, the onus is on CWJ to convince the Regulator of the reasonableness of any variation from the test year. The tariff application filed by CWJ contains projected revenues and costs for 1999/00. The various revenue and cost categories were examined to ascertain the reasonableness of the projections. As mentioned above the monopoly firm has the incentive to understate revenue and overstate costs since by so doing it is able to obtain higher rates to achieve its permitted level of return.

Projected Costs

- 5.2 The GOJ's medium term macro-economic outlook is predicated on a 4-6% rate of inflation for the fiscal year, 1999/00 and a rate of exchange of J\$38.50/US\$1. This is consistent with the recent trends of lower inflation¹. Table 5.1 sets out the projected costs for 1999/00. To ascertain the reasonableness of the projections data for the period 1996/97, 1997/99 and the test period 1998/99 are also shown. Below is a discussion on the five major cost categories:-
- a) salaries;
 - b) other staff cost
 - c) other operating cost, for example travel and entertainment, marketing, consultancy, royalty, etc;
 - d) management fees; and
 - e) depreciation
- 5.3 Item (a) comprises the total wage bill for various categories of employees. The increase in this item was 1.81% above the test year's figure. This is consistent

¹ Budget Presentation by The Honourable Minister of Finance & Planning, Dr. Omar Davies, April 15, 1999.

with 1998/99, when it went up by only 2.41% on the 1997/98 figure. The company has undertaken a staff cutting exercise which has served to reduced the number of employees and the size of the wage bill.

Table 5.1: Gross Operating Costs

	1996/97	1997/98	% Change	Test Year 1998/99	CWJ Plan 1999/00	% Change
<i>Salaries:-</i>						
Permanent Staff	2,063,922	2,521,723	22.18	2,581,570	2,593,353	0.46
Contractors	80,651	57,348	(28.89)	52,501	78,749	50.00
Temporary Staff	13,052	14,394	10.28	21,912	32,054	46.29
Total Salaries	2,157,625	2,598,465	20.20	2,655,983	2,704,156	1.81
<i>Other Staff Cost:-</i>						
Pension	271,617	316,254	16.43	293,351	289,202	(1.41)
Social Security	381,851	557,204	45.92	494,852	505,823	2.22
Accommodation	41,243	30,503	(26.04)	33,651	32,084	(4.66)
Training - Course	34,471	30,235	(12.29)	39,912	46,523	16.56
Other	265,921	360,185	35.45	321,090	563,535	75.51
Total Other Staff Cost	995,103	1,294,381	30.08	1,182,836	1,437,167	21.30
Total Gross Staff Cost	3,152,728	3,887,864	23.32	3,838,839	4,141,323	7.88
<i>Other Operating Cost:-</i>						
Travel & Entertainment	27,805	32,924	18.41	32,507	41,057	26.30
Vehicles	437,559	354,642	(18.95)	499,964	684,146	36.84
Building/Admin Cost	424,141	835,560	97.00	747,062	798,763	6.92
Network & Technical	438,024	429,431	(1.96)	362,812	551,543	52.02
Computer	248,663	351,890	41.51	337,073	434,070	28.78
Marketing	201,246	142,827	(29.03)	159,575	204,475	28.14
Consultancy	61,534	72,886	18.45	43,138	43,557	0.97
Professional Fees	187,416	66,641	(64.44)	81,917	86,762	5.91
Bad & Doubtful Debts	159,610	385,442	141.49	280,790	251,562	(10.41)
Finance	21,883	59,127	170.20	21,871	40,843	86.75
Royalty Payment to CW plc	11,173	14,074	25.96	12,910	15,928	23.38
Legal & Regulatory	16,208	19,786	22.08	28,301	43,185	52.59
Others	295,925	224,073	(24.28)	606,165	371,796	(38.66)
Total Gross Other Operating Cost	2,531,187	2,989,303	18.10	3,214,085	3,567,687	11.00
Total Expenses	5,683,915	6,877,149	20.99	7,052,924	7,709,010	9.30
Plus: Management Fees	-	-	-	205,723	187,303	(8.95)
Depreciation	2,321,104	2,738,636	17.99	3,038,273	3,212,837	5.75
Total Operating Costs	8,005,019	9,615,785	20.12	10,296,920	11,109,150	7.89

Source: Schedule 11, C&WJ's Rates Application , May 1999

- 5.4 The disaggregation of the wage bill into its various components shows that the wage bill for permanent staff is to rise by less than 1%. It is a reasonable assumption to make that most of the retrenchment in staff is from this category, and so a reduction would seem to be the most likely trend. The wage bill for contractor workers and temporary staff is slated to go up by 50% and 46% respectively. The OUR was advised by the Company that the increase in the former is for specialized skills to be acquired in the areas of new product development especially relating to its Integrated Communications Systems. This is a legitimate business expenses the Company will have to incur if it is to diversify its revenue base and reduce its heavy dependence on high settlement rates. The rise in the temporary staff category reflect the increasing reliance on casual workers to operate the Company's growing number of call centers.
- 5.5 The overall increase in the combined wage bill is in line with domestic inflation levels. Inflation is a primary factor driving wage increases and with inflation projected to fall significant increases in wages are not required to maintain the real purchasing power of the workforce. The combined wage bill for 1999/00 seem reasonable and is well below the annual average inflation of 8.7% in 1998 and the 4-6% projected for fiscal year 1999/00.
- 5.6 The category "other staff cost" will go up by 38.9% on the test year's figure. All sub-categories comprising this group with the exception of pension, and accomodation show sizeable increases. For the following reasons spending on training is projected to rise by 16.56%:-
- training to facilitate the development of the new Integrated Communications Division;
 - retraining to staff for multitasking;
 - staff training in customer relations; and
 - training in new technologies.
- 5.7 According to the GOJ's Telecommunications Policy certain segments of the market will be open to competition. In addition, there is the likelihood that in the

near future the OUR will be given the legal authority to oversee the terms and conditions of the licences under which it operates. For these two reasons the Company may be positioning itself to deal with the challenges ahead. Success in this kind of environment may require retraining of staff and greater emphasis on service quality. In this new environment the quality of the firm's human resource assumes even greater importance. Thus, the OUR has no objection to the sum allocated for this purpose.

- 5.8 The category "other" is budgeted to increase by 139.76%. Of the \$769,858,000, \$475,800,000 is for meeting redundancy expenses. "The payment to be made to employees under this programme will be in accordance with agreements with the trade unions." This item constitute an exceptional expense. The licence provides that exceptional/extraordinary expense be apportioned over a number of year not exceeding five (Section 27.(2)(b)(ii)). In determining its revenue requirement C&WJ apportioned the J\$475.8 million over a period of two years. But the OUR is not in agreement with C&WJ's approach and has set out its response in Chapter 6.
- 5.9 In the unrelated staff category "operating cost" of particular concern to the OUR was the proposal to pay CW plc royalty for the rebranding of its business unit in Jamaica from Telecommunications of Jamaica (TOJ) to Cable & Wireless Jamaica Limited. C&WJ was given the opportunity to explain the basis of the amount (J\$195 million) as well as the likely benefits to its own consumers. The Company advised that the quantity of the payment "... is the subject of a commercial negotiation between C&WJ and Cable & Wireless plc and will be subject to the approval of the CWJ Board of Directors." The OUR is not convinced that this is a legitimate cost to be borne by consumers, thus its should be excluded from the rate review. The rationale for disallowing this expense will be set out in the next Chapter (6).
- 5.10 Management fees payable to CW plc is showing a 58.5% increase. In response to enquiries made by the OUR, the Company has advised that this increase "...is to compensate for the greater support that will be required as C&WJa. attempts to

consolidate and reorganize to meet the challenges of its market." The OUR is concerned about the increase in this category especially since it is a related party transaction and the necessity and level of this cost are strongly influenced by the holding company. However due to the streamlining that is now taking place in the company it is fair to expect some closer attention from CW plc. The OUR will be expecting efficiency gains arising from this involvement to manifest itself in future years.

5.11 The schedule to the All Island Telephone Licence sets out the rates of depreciation applicable to the various categories of plant in service "**...during the last month of the test period ..**" Section 27(2)(b)(ii). CWJ has traditionally applied these rates not only to plant in service at the end of the last month of the test year but also plant held for future use at a rate of 2.78%. Depreciation for 1999/00 is estimated by the Company to be J\$3,212,756,357- taking into account plant held for future use and additions made during the budget period. The OUR is of the view that this practice is inconsistent with the licence which is to make depreciation consistent with the equity at the end of the test period. Depreciation was recalculated to reflect the OUR's own interpretation of the licence (See next Chapter).

5.12 In summary, the OUR will be making adjustments to three cost items:-

- payment to CW plc for the rebranding of its business unit in Jamaica;
- depreciation; and
- the apportioning of the redundancy expense.

Projected Revenues & Traffic Volume

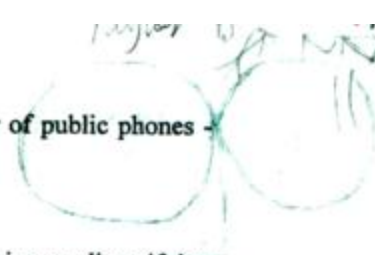
5.13 C&WJ's cost and revenue structure will be substantially influenced by its volume projections. Since different estimated volumes lead to different revenues and costs, OUR endeavored to make sure that projected costs and revenues have a sound base in the estimates of volumes. The short period of time allowed for the evaluation of the application limit the scope of the investigation that could be carried out by the OUR. Detailed information on projected volumes per month,

including the underlying assumptions, for the major services and especially those for which changes have been proposed to the price structure and which will impact on the majority of consumers, have been provided. Forecast of volumes for 1999/00 have been obtained from the demand plan supplied by C&WJ. For calculations of traffic volumes following upon the tariff change request, C&WJ assumes price elasticities of demand of -0.1 for domestic calls, and -0.3 for outgoing international calls.

Table 5.2: Summary Statistics'000	1996/97	1997/98	1998/99	Test Year 1999/00	Change (%)
Number of Telephone Connections	352,060	419,733	470,299	505,299	7.44
• Business	84,494	100,736	112,872	118,122	4.65
• Residential	267,566	318,997	357,427	387,177	8.32
Change in Telephone Connections	62,520	67,673	50,566	35,000	(30.78)
• Business	3,423	3,705	2,769	5,250	89.60
• Residential	59,097	63,968	47,797	29,750	(37.76)
Intra-Parish ('000)	3,204,361	3,918,600	4,633,946	5,422,546	17.02
Inter-Parish ('000)	990,428	1,367,710	1,780,649	1,621,340	(8.95)
Total ('000)	4,194,790	5,286,310	6,414,595	7,043,886	9.81
International Outgoing ('000)					
• USA					
• Canada	44,541	37,557	40,197	45,050	12.07
• UK	4,530	4,514	4,694	4,864	3.62
• Caribbean	4,230	4,283	4,694	5,342	13.81
• Rest of World	7,008	7,406	4373	8,419	92.52
	4,437	4,667	5078	4,512	(11.15)
Total Outgoing	64,746	58,427	59,036	68,187	15.50
Incoming International ('000)					
• USA	225,902	263,269	286,182	332,967	16.35
• Canada	21,998	19,223	16,016	21,430	33.80
• UK	23,377	27,244	26,396	29,180	10.54
• Caribbean	15,745	18,349	19,481	25,692	31.88
• Rest of World	5,107	5,952	8,636	4,584	(46.92)
Total Outgoing	292,129	334,037	356,712	413,853	16.02
Total International	356,875	392,464	415,748	482,040	15.95
Public Phones	2,121	2,305	2,732	4,086	49.56
Cellular Subscribers	54,640	65,092	78,624	97,000	23.37
Number of Mobile Minutes ('000)	135,474	130,965	132,931	-	-

5.13 Table 5.2 gives an overview of the historical and projected volumes of services sold (assuming no change in rates for 1999/00) as submitted by CWJ. Following are our comments on these volume forecasts:-

- projected growth in line rentals is not consistent with historical trends. Only 35,000 new land lines are to be installed in the budget year 1999/00. The OUR has sought an explanation from CWJ as to the reasons for the sudden drop in line installation. The Company advised that the levels of installation seen in previous years cannot be sustained indefinitely due to the following reasons:-
 - (a) current regulatory environment is uncertain;
 - (a) anticipated reduction in settlement rates will remove the cross-subsidies that have traditionally been used to keep access and call charges below cost. CWJ has taken a strategic decision to focus its investment programme toward ensuring that the network has sufficient capacity to meet demand, and toward growth areas of the future.
- projected growth in intra-parish minutes appear to be in line with historical trends. The growth in inter-Parish minutes, however, is projected to be lower in 1999/00 than the prior year. CWJ does not offer any explanation for the decline.
- projected growth in inbound traffic seems to be in line with historical trends. However, expected growth in inbound traffic from the Rest of the World is low, relative to the trend in prior years.
- projected growth in incoming traffic is consistent with the historical trends with all the major destinations showing increases of more than 10%. The combined increase of all destinations is 16%. However, a 47% reduction in the traffic from the Rest of the World is forecasted for the year. CWJ has not provided an explanation for this decline.

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- The projection is for a substantial increase in the number of public phones - from 2,756 in 1998/99 to 4,086 for 1999/00.
 - in keeping with its capital expenditure programme of focusing on diversifying its revenue structure and at the same time facilitate greater utilization of network some of new services are being introduced. These will enhance the revenue potential of the Company.
 - In its projection of revenue from incoming international traffic the Company assumed that the settlement rate will fall to US\$0.30 per minute for the final quarter of 1999/00 (i.e January 1, 2000 through to March 31, 2000). There is no settlement contract to substantiate this claim. As a result the OUR has proposed an alternate approach (see next Chapter).
 - CWJ has projected a loss in revenue amounting to \$500 million due to the unauthorized termination of international incoming calls by both legal and illegal operators of VSATs. CWJ's estimate of known bypass for the months of March and April 1999 are at least 4.5 million and 6 million minutes respectively. The Company considers this to be a conservative estimate based on the assumption that the traffic in bypass will not grow in the coming months and that the losses will be limited to the first three to four months of the current fiscal year only. The OUR has also assumed that the bypass traffic will be brought under substantial control or completely eliminated for the remainder of the current fiscal year. The OUR has incorporated the \$500 million projected by CWJ.

CHAPTER 6: ADJUSTMENTS TO THE TEST YEAR (1998/99)

- 6.1 Below are the adjustments to CWJ's cost and revenue projections as well as the OUR's justifications for these changes.

Cost Adjustments

- 6.2 In the area of cost there are three items that have been adjusted by the OUR:-

- depreciation;
- redundancy/reorganization; and
- royalty payment to CW plc.

Depreciation

- 6.3 The OUR is of the view that CWJ's depreciation calculation is incorrect as it leads to an overstatement of the amount. There are two reasons for this. First, CWJ in its calculation applied a depreciation rate of 2.78% to plant held for future use. Second, depreciation is calculated as if the assets in service during the last month were in service for the entire test year. The schedule to the All Island Telephone Licence specifies the depreciation rates to be applied to the various categories of assets. It further provides that these rates should be applied to assets in service during the final month of the test year, i.e. 1 March 1999. The OUR is of the view that if depreciation were to be treated like any other cost item then the relevant section of the licence would be silent on its treatment. There are also two other reasons why the OUR's approach is the correct method:-

- 6.4 Other reasons why this is the correct approach to adopt are provided below:-
- The definition of the rate base is usually a very contentious issue in rate regulation. The rate base is usually defined in terms of assets employed and the depreciation that is to be allowed in relation to them. The licence granted to CWJ solves this problem by defining the rate base as the equity at the end of the test year and depreciation as applying to the assets at the end of the year at specified rates.

these benefits, will flow over a period of time longer than two years. Such benefits include improvement to the company's operations and profitability and the enhancement of its competitiveness, this puts the company in a strong position when the market is open to competition. It is therefore, right to allocate the cost of redundancy in light with the benefits that will flow from it. The OUR also considers the cost material in ascertaining whether the Company achieves the required rate of return. The amount represents a 1.2% change in the return on equity

Impact of cost Adjustments

- 6.11 Table 6.2 summarizes the impact of these adjustments on the Company's operating cost projections. These adjustments had the effect of reducing operating cost for 1999/00 by J\$374,848,000.

Table 6.2: Cost Adjustments	CWJ	OUR	Difference
Depreciation	3,212,837,000	3,176,323,719	36,513,000
Redundancy/Reorganization	237,900,000	95,160,000	142,740,000
Royalty payment to CW plc	195,595,000	Disallowed	195,595,000
Total	3,408,432,000		374,848,000

Adjustments in Revenues

Lower Settlement Rates

- 6.12 Although the settlement contract between AT&T and C&WJ expires on December 31, 1999 no new contract has been negotiated for 2000 and beyond. C&WJ maintains that although a new contract is not yet signed, the suggested glide path to the FCC benchmark rate is for settlement rates of US\$0.40 at January 1999 and US\$0.30 at January 2000. The Company considers it unlikely that it will be able to negotiate for any rate above US\$0.30 given the fact that the current rate of US\$0.575 is substantially above the glide path. It also expects to be penalised for not achieving US\$0.40 this year by being forced to accept US\$0.19 as at January 2000. Therefore, there is some uncertainty as to what rate will apply for the period January 1, 2000 through March 31, 2000.

- 6.13 The OUR recognizes that there are extreme external pressures to force a reduction in settlement rates. The unilateral efforts of the FCC is just one source of this pressure. Also of relevance is the multilateral approach that is ongoing under the auspices of the ITU, an agency of the United Nations. Technological developments have also increased the scope for 'alternative calling procedures': arbitrage and bypass of the settlement rate system. While recognizing that settlement rates will fall, the magnitude of the fall is not known at this time, thus it is not prudent to take this into account in evaluating the rates application filed by CWJ.
- 6.16 The licence allows for adjustments to be made to the test year's revenues and costs only in instances where these are known and measurable with reasonable accuracy. Since there is no contract between CWJ and AT&T for the last quarter of the year, there is insufficient evidence for the Regulator to assume a settlement rate of 30 cents. In cases of uncertainty, the position to be taken is to assume the inpayments and outpayment for the test year.
- 6.17 Under these circumstances the most appropriate approach would have been for CWJ to delay its rate application until a contract has been negotiated with the major external carriers. This would have removed the uncertainty as to the appropriate settlement price to apply in the evaluation of the rates application. Neither the OUR nor the Minister have control over (1) timing of rates application, and (2) the level of settlement rates negotiated with AT&T. These are all under CWJ's control. US\$0.30 /minute is an optimistic outcome but there is nothing to suggest that this will be the case. The fact that there is no contract would suggest that the company is hoping to secure a deal that it would consider more favorable.
- 6.18 The impact of the assumption of this new level of settlement rate is of major significance in the determination of the rates. CWJ's revenue from incoming international calls has been growing by about \$600 million per year. The projection shows a \$318 million decline resulting in an effective \$918 million

impact on revenues. It is difficult for the OUR to accept such an impact without adequate evidence.

- 6.19 The impact of lower settlement rates on CWJ's operation will also depend on two other factors:-
- the extent to which lower settlement rates will be reflected in lower charges paid by consumers in the USA; and
 - the responsiveness of US consumers to lower collection charges.

Elasticity of Demand

- 6.20 There is also uncertainty about the likely volume response to a fall in collection rates charged by US carriers. The volume response is measured by the price elasticity of demand. Two such measures are relevant to the discussion. The first, is called the point elasticity of demand. This measures the increase in volume due to a small change in the collection charge. The second is called the arc elasticity of demand. Unlike the point elasticity, the arc elasticity measures the increase in volume for a large change in price. When considering large price changes, it is important to make the distinction between point and arc elasticity. When the price change is not small, the percentage change in demand depends upon the shape of the demand function over a significant portion, not just the point elasticity. This is what is captured with the arc elasticity. The importance of this difference is that (if say) the collection charge falls by say 50%, the percentage increase in demand is larger than would be expected if just the point elasticity was considered. For example, for a point elasticity of -1.5 it might be thought that the volume increase would be 75% ($= -1.5 \times 50\%$). But consideration is given to the arc elasticity, the volume increase will depend upon the larger magnitude of the arc elasticity. The demand could at least double (100% increase, arc elasticity of -2) depending. In measuring the revenue impact of lower settlement rates between January and March 2,000, CWJ assumed a point elasticity of demand of -0.34. But as indicated earlier, for large price changes the relevant elasticity should be the arc elasticity. By using a point elasticity, CWJ might be effectively underestimating the volume response.

Lower Collection charges in the US

- 6.21 The volume response to any fall in the settlement rate will also depend on how much of the reduction is passed on to consumers in the USA, i.e the level of reduction in collection charges. It is quite unclear as to how much of the reduction will be passed on to US consumers. One argument is that the intensity of competition on the US/Jamaica route will force the carriers to pass on these reductions to consumers. An alternate assumption is that most of the reduction will be absorbed by the carriers and consumers will not see any sizeable reduction in collection charges.
- 6.22 CWJ's assumption of -0.34 point elasticity of demand, and 30 cents settlement rate will generate inpayment revenues of J\$7,725,700,000, a decline of J\$192 million from the test year. The elasticity assumption underpinning CWJ's calculation is conservative and it is not known whether the settlement rate will fall to 30 cents. The OUR has tested the reasonableness of maintaining the test year's inpayments. It shows that under various assumptions about the magnitude of the drop in settlement rates, and arc elasticity (instead of point elasticity) the test year's inpayment revenues is found to be reasonable. For example, an elasticity of -0.9 coupled with a settlement rate of 40 cents will give the test year's figure. Also an elasticity of -1.5 coupled with a settlement rate of 35 cents would generate this figure. In light of the uncertainty about the level of the settlement rate that will apply during the final quarter of the period, the OUR considers it reasonable to adopt the test year's inpayment and outpayment.
- 6.23 The net effect of assuming the test year's inpayment and outpayment is \$190 million more revenue than CWJ has projected. It should be noted that this provides some relief to CWJ as the fall-off due to the potential settlement reduction is \$918 million.
- 8. P 10 - 7*

SUMMARY OF INCOME STATEMENT

	Test Period 1998/99	CWJ Plan No Rate Change 1999/2000	% Change	CWJ Plan Adj. For Bypass and Except. Item	OUR adjusted Plan	Difference	Tax effect	New OUR rates	Proposed OUR Plan
Gross Turnover	16,690,779	18,177,154	9	18,177,154	18,495,630	318,476	106,148	520,756	19,016,386
Bypass				(500,000)	(500,000)				(500,000)
Less Outpayments	(1,425,719)	(1,363,446)	(4)	(1,363,446)	(1,491,880)	(128,434)	(42,807)		(1,491,880)
Television Programming Costs	-	(11,440)	-	(11,440)	(11,440)				(11,440)
Rental of Transmission Facilities	-	-							
Cost of Sales	(75,714)	(336,838)	345	(336,838)	(336,838)				(336,838)
Net Turnover	15,189,346	16,465,430	8	15,965,430	16,155,472				16,676,228
Staff Costs	3,197,461	3,805,353	19	3,567,453	3,448,503	118,950	39,646		3,448,503
Other Operating Costs	2,511,752	2,873,967	14	2,873,967	2,873,967				2,873,967
Depreciation	3,038,273	3,212,837	6	3,212,837	3,176,324	36,513	12,170		3,176,324
Management Fee	205,723	187,302	(9)	187,302	187,302				187,302
Total Operating Costs	8,953,209	10,079,459	13	9,841,569	9,686,096				9,686,096
Operating Profit/Contribution	6,236,137	6,385,971	2	6,123,871	6,469,376	(345,505)			6,990,132
Profit from Associates	-	-	-	-					
Disaster Related Insurance Income	(225,234)	-	-	-					
Other Non-Trading Income/Expenses-Rebranding	-	(179,667)	-	(179,667)		179,667	59,883		
Interest - Income	335,965	377,946	12	377,946	377,946				377,946
Interest- Payable Intergroup	-	-	-	-					
Interest-Payable Third Party	(1,077,780)	(658,096)	(39)	(658,096)	(658,096)				(658,096)
Profit Before Tax	5,269,088	5,926,154	12	5,664,054	6,189,226	525,172			6,709,982
Less Tax	(1,793,511)	(2,026,329)	13	(1,938,971)	(2,114,011)	(175,040)	175,040	(173,568)	(2,287,579)
Profit After Tax	3,475,577	3,899,825	12	3,725,083	4,075,215	350,132			4,422,403
Shareholders' Equity		25,270,874		25,270,874	25,270,874				25,270,874
Return On Equity		15.43%		14.74%	16.13%				17.50%

REVENUE REQUIREMENTS

OUR 1	Rejecting C&WJ's inpayment and using inpayment and outpayment for test year 1998/9
OUR 2	Accepting that settlement rate will fall to US\$0.30 in January 2000 and using C&WJ's projection

CHAPTER 7: IMPACT ON RATE OF RETURN

- 7.1 Having made the adjustment to cost and revenues, the next step in the process is to determine the revenue requirement of the firm for the test period. The objective of the rate review process is to allow the provider to generate enough revenues from the various services that when combined with other earnings of the Group will cover its cash and non-cash expenses and give an adequate return on the rate base. The revenue requirement (RR) is the sum of the revenues generated by the company from the various services plus any revenues earned from other areas of the Group's operation.

$$RR = OC + D + T + r \cdot RB; \text{ where}$$

OC - represents operating expenses, i.e. wages & salaries, utilities, etc,

D - depreciation,

T - corporate taxes

r - represents the allowed rate of return; and

RB - the rate base, i.e. shareholders' equity.

- 7.2 The first column of Table 7.1 (*CWJ 7 months*) show that in order to realize a 17.72% return on equity CWJ is seeking incremental revenues of J\$1,384,000,000 over a seven month period, which translate into \$2.4 billion over a twelve month period. This analysis is predicated on the following assumptions:-

- rates proposed by CWJ are implemented September 1, 1999;
- settlement rate of US0.30 is applied from January 1, 2000 through to March 31, 2000, i.e. inpayment revenue will fall as projected by CWJ;
- assuming projected incremental revenue from other miscellaneous services as calculated by CWJ, i.e. J\$115,000,000;
- accept the Company's estimated fall in revenue (J\$500,000,000) due to bypass;
- rebalancing of outgoing international calls; and

- apportion redundancy expense over 4 years; and
- using the depreciation figure calculated by the OUR.

7.5 The scenario *OURI* is the OUR's recommended option. It should be noted that the rates are applied as if they were in existence for the whole of the test period and is not dependent on the date of implementation. If the latter were the case and say a company needed an additional \$600 million to meet the revenue requirements of the adjusted test year, an implementation date of the final month of the budget year would mean that \$600 million is required per month while implementation at the beginning requires \$50 million per month. The incremental rates could therefore vary up to twelve times leading to massive windfalls in the following years. The situation would tend to absurdity if periods less than one month are considered. A more complex extension of this is where the application is made during the budget year and implementation is the beginning of the following year. If consideration is given to the budget year there would be zero recovery while considering the subsequent year would give twelve months of recovery.

7.7 The answer to the problem is that it is not the budget year that is being tested for adequacy of rates but the "test year" 1998/99 which is adjusted for changes that are known and measurable with reasonable accuracy. This option requires incremental revenues of \$1,093,811,000 distributed as follows:-

Rate of Return on Equity (17.5%)	520,758,000
IDD	305,143,000
IDD Outpayments	111,429,000
Low User Package	156,481,000
Total	1,093,811,000

7.8 This incremental amount is realized by raising the residential and business line rentals from \$100 (US\$2.53) and \$250 (US\$6.32) respectively to \$230 (US\$5.82) and \$515 (US\$13.04) respectively. These increases would generate additional

<i>Jamaica</i>	<i>21.27</i>	<i>5.44</i>	<i>15.19</i>	<i>2.53</i>
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7.10 Another scenario (*OUR2 annualised*) is based on the following assumptions:-

- assume a US\$0.30 settlement rate for the period January 1,2000 through to March 31, 2000;
- the price increase is spread over a twelve month period and not seven months as assumed by CWJ, thus does not give rise to any windfall to the Company;
- accepting bypass amount of J\$500 million;
- disallow the royalty payment to CW plc;
- apportion redundancy expense over four years; and
- assuming projected incremental revenue from other miscellaneous services as calculated by CWJ.

7.11 Under these assumptions the incremental revenue required is J\$1,398,583. This will lead to higher prices for line rental for business, residential and the low user package.

CHAPTER 8: STRUCTURE & LEVELS APPROVED FOR TELEPHONE TARIFFS

8.1 The structure and levels of the approved rates to be applied in the provision of telephone services in Jamaica are set out below and are to become effective on 1999 September 1.

Rate Structure

- the change in rate structure proposed by Cable and Wireless Jamaica (C&WJ) for inter-parish calls is approved, namely, peak, off-peak, and week-ends;
- the change in rate structure proposed by C&WJ for intra-parish calls is approved, namely, peak, off-peak, week-ends;
- the change in rate structure proposed by C&WJ for outgoing international calls is approved, namely, peak, off-peak, weekends;
- the rate structure proposed by C&WJ for the low-user package is approved, namely, peak, off-peak, weekends. C&WJ should embark on a massive public campaign to alert eligible customers to the benefits that may be realised by switching to the new package.

Rate Levels

- 8.2 The customer dialed usage rates proposed by C&WJ for inter/intra-Parish calls are modified as set out in the Table A.1 below. The rates for residential and business line rentals proposed by C&WJ are modified as shown in Table A2.
- 8.3 All other price changes proposed by C&WJ are approved, including the average 19% reduction in outgoing international calls. Increases in the charges for directory listing and related services, telex, telegraph, etc are approved.

Table A2
Domestic Line Rentals

JS per Month				
	Current	Proposed (C&WJ)	Approved	Difference
Rental:-				
Business	100.00	250.00	210.00	- 40.00
Residential	215.00	700.00	500.00	-200.00
Low User Package	100.00	150.00	100.00	- 50.00

Table 7.3: IDD Rates	Old Rates	New Peak	New Off-Peak	Old	Weekend
USA -1	48.20/40.41	30.00	28.00	26.00	
USA-2	34.05/25.89	30.00	28.00	26.00	
UK	48.20	35.00	31.00	28.00	
Canada	48.20/40.41	35.00	19.00	28.00	
Trinidad	23.78	21.00	19.00	17.00	
Cayman	23.78	21.00	19.00	17.00	
Barbados	23.78	21.00	28.00	17.00	
Bahamas	67.94	30.00	28.00	26.00	
Puerto Rico	67.94	30.00	19.00	26.00	
Turks & Caicos	8.02	21.00	19.00	17.00	
St. Lucia	11.82	21.00	19.00	17.00	
Antigua	11.82	21.00	19.00	17.00	
Germany	75.73	55.00	50.00	45.00	
Cuba	56.55	51.00	46.00	41.00	
India	78.95	68.00	61.00	55.00	
Guyana	23.78	21.00	19.00	17.00	

8.6 There is a very high probability that the following items may be the subject of arbitration:-

- the level of depreciation to be use in the rate review process;
- the OUR's decision to exclude the proposed royalty payment of J\$195,000,000 to be paid to CW plc;
- apportionment of exceptional expense in the form of redundancy payment over a period of four years instead of two years as proposed by C&WJ; and above all
- the spreading of the proposed rate increase over a period of 12 months and not seven months as proposed by C&WJ.

CHAPTER 9: IMPACT ON CONSUMERS

- 9.1 Since some charges are falling, eg international calls, but others are rising, eg line rental, the overall effect of the changes on customers depends upon their relative consumption of the various telephone services. The falling international call prices are of greater benefit to those customers who make more international calls. Since the line rental forms a relatively larger proportion of the bill of customers who make fewer calls, such customers face a larger overall percentage increase in their bills when the line rental increases. The overall effect of the price changes may be measured by the change in customers' bills (at unchanged call volumes), which is referred to as the effective price change.
- 9.2 The effective price changes are shown in Table A.4. Each of the residential and business customer distributions are split into 10% slices (or deciles). The percentage changes and the bill sizes shown in the Table relate only to the main services: line rental, intra-parish calls, inter-parish calls and international calls (other services, such as access points or directory listings are omitted because of lack of information).
- 9.3 Residential customers will face effective price increases ranging from 10% to 40%. The exception is the highest spending 10% of customers who will benefit from an effective price reduction of 10%, because they make such a large volume of international calls. The effective price increases faced by residential customers are much lower than the percentage increase in the line rental of 110% (from \$100 to \$210), because nearly all of the charges for calls are either remaining the same or falling. Also, the lowest spending 40% of residential customers benefit from the impact of the low user package. If the low user package had not been introduced, these customers would have faced the largest effective price increases of all residential customers (as shown by the figures in square brackets). The low user package provides the greatest benefit to the very lowest spending customers.

- 9.4 Business customers face larger effective price increases, because the percentage increase in the business line rental is larger at 133% (from \$215 to \$500). As for residential customers, the top 10% of customers will see an effective price reduction of 10%. The largest percentage increases will be experienced by the lowest spending 30% of customers - in dollar terms their monthly bill increase will be similar to the line rental increase of \$327.75 per line per month, including GCT (although some of these businesses will pay more, because they rent more than one line).

Table A.4: Estimated effective price changes

Decile averages	<i>Residential customers</i>		<i>Business customers</i>	
	Bill change	Approximate bill size (before changes)	Bill change	Approximate bill size (before changes)
1	15% [80%]	up to 300	125%	up to 400
2	25% [70%]		115%	
3	35% [55%]		100%	
4	40% [45%]	300 - 700	80%	400 - 1,000
5	35%		70%	
6	30%		55%	
7	25%		45%	
8	20%	greater than 700	35%	Greater than 1,000
9	10%		15%	
10	-10%		-10%	
Mean	9%		6%	

Source: OUR analysis using billing information supplied by CWJ

Notes: Figures in square brackets are increases in the absence of the low user package.

Bill figures comprise line rental, intra-Parish, inter-Parish and international calls and GCT.

Figures shown are rounded.