
Office of Utilities Regulation

Cable & Wireless Jamaica's Price Cap Plan

Determination Notice



OFFICE OF UTILITIES REGULATION

2001 August

Abstract

Cable and Wireless Jamaica (C&WJ) has traditionally been regulated under a rate of return regime. Subsequent to the passing of the Telecommunications Act 2000 ('the Act'), Sections 46 and 81 of the Act provide for the existing carrier, C&WJ, to be regulated under a Price Cap regime as of March 2001. The Act further mandates that the Office of Utilities Regulation (OUR) shall establish rules for the imposition, monitoring and enforcement of Price Caps.

The OUR, pursuant to these stipulations, and have published Notice of Proposed Rulemaking (NPRM) documents on the general and specific rules for the price cap regime. The general and specific rules outline the principles and procedures governing the establishment of price caps. This determination notice outlines the specifics of the price cap plan for C&WJ that will be effective as of 1 September 2001.

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CHAPTER 1. INTRODUCTION

- 1.0 Sections 46 and 81 of the Telecommunications Act 2000 provide for the existing carrier, Cable & Wireless Jamaica (C&WJ), to be regulated under a Price Cap regime as of March 2001. The Act further mandates that the Office shall establish rules for the imposition, monitoring and enforcement of Price Caps. In keeping with the latter requirement, the Office has published Notice of Proposed Rule Making documents seeking the comments from interested parties on both the General and Specific Rules to be applied in respect of Price Cap Regulation. Comments on these rules were received from a number of interested parties including C&WJ, Digicel which is a new entrant in the mobile market and the Fair Trading Commission. The Office has subsequently amended the proposed rules to reflect the various comments and they have now been passed to the Minister of Industry, Commerce and Technology in order to have them brought to Parliament for affirmative resolution.
- 1.1 The General and Specific Rules outline the principles and procedures governing the establishment of Price Caps. As part of the discussions surrounding the General and Specific Rules, the Office has also had extensive consultation, particularly with C&WJ, on the specifics of the Price Cap regime that will apply as of September 1, 2001. This Determination now sets out these specifics. In particular, it addresses the following:
- The duration of this initial price cap period;
 - The formulae for the Actual Price Index (“API”) and the Price Cap Index (“PCI”);
 - Methods and model for estimating the value of the “X” Factor in the PCI;
 - The measures taken in the Office’s financial analysis to provide C&WJ with the opportunity to earn a normal return on its investment;
 - The classification of C&WJ’s services and their treatment during the price cap period; and the initial treatment of imputation tests and the time table for application of such test to C&WJ.
- 1.2 C&WJ is hereafter required to take such steps as are necessary to ensure that it is in compliance with the requirements of the General and Specific Rules and this Determination Notice once the Price Cap mechanism goes into effect on September 1. The Office is also issuing a description of the Model along with this document.

CHAPTER 2. PRICE CAP PERIOD

- 2.0. In arriving at its decision regarding the appropriate duration for the initial Price Cap regime, the Office weighed the risk of mis-specification of parameter values in the regime versus the efficiency gains associated with a longer initial period. Note was taken of the fact that the more frequently the Price Cap plan is renegotiated, the less the incentive for efficiency given the likelihood that the regulated entity will be asked to return productivity gains to consumers at the beginning of each new regime. Additionally, a longer Price Cap period would provide the Office with more data points and better information in setting future regimes. At the same time, in a rapidly changing environment with very few data points for setting the initial regime, there is a greater risk of establishing a model that is sub-optimal. This means that in such situations a shorter initial period is perhaps desirable.
- 2.1. The issue of a pure versus a hybrid Price Cap model where there are constraints on profits and losses was also given consideration. A hybrid model is often adopted to reduce the adverse effects if it turns out that sub-optimal parameters are selected. Hybrid models reduce the incentives for efficiency, however as they force the regulated entity to pass on productivity gains over and beyond those anticipated in the model. In an effort to ensure that an optimal plan is selected, the Office has also examined results from Price Cap plans in other jurisdictions. It has also sought to anticipate changes in the regulatory environment during the period of the plan; these include movements in settlement rates¹ and loss of market share to competitors.

Determination 2.1

The Office has determined that an initial price cap period of 4 years, beginning 1 September 2001 through 31 August 2005, best strikes the appropriate balance in respect of the duration of the Cap. This period of time will provide C&WJ, consumers and the Office with adequate opportunity for the benefits of price regulation to be felt and analysed. At the end of the 4-year period, the Office will make adjustments in the event that it finds that parameters of the price cap plan are sub-optimal. The Office has also determined that to maximise the incentive for efficiency during the period of the Cap, a pure Price Cap Model is suitable for Jamaica.

¹The settlement rate is the amount to be paid by one operator to another for an international call to be terminated. The settlement rates are usually equal in each direction of the international route.

CHAPTER 3. CLASSIFICATION OF SERVICES UNDER PRICE CAP REGULATION

3.0. The Office takes the view that all of the services provided by C&WJ potentially fall within the Price Cap Regime. The Office has assigned services to different baskets which are accorded different treatment. These baskets are Unregulated services, Fixed-to-Mobile services; Interconnection Services and Basic Services. These classifications are illustrated in the table at Annex 1 to this Notice.

Unregulated Services Basket

3.1. The unregulated services basket consists of those services that the Office has taken a decision to exclude from Price Cap regulation. As provided for at 1.2 and 1.5 of the Specific Rules the Office may exclude a service from Price Cap regulation if it determines that that service faces effective competition or alternately that effective competition is deemed to be imminent or if the Office deems that there are substantial public benefits to be derived from such exclusion.

Determination 3.1

On the basis of one or more of the above criteria, the Office has determined that the following services are initially excluded from Price Cap regulation: Mobile Services (retail mobile access and usage, mobile sale to resellers, etc)¹, terminal equipment (handsets, PBX, answering machines, etc)², Internet Service provision³.

Fixed to Mobile Service Basket

3.2. The fixed to mobile service basket consists of the retailing of fixed line service to mobile providers. Although this service is provided for in the Interconnection Agreement, the Office has included it in a separate basket with its own Price Cap for administrative convenience.

Determination 3.2

Fixed-to-mobile retail communications shall constitute a separate basket for Price Cap regulation. The charges for this service shall be subject to a cap equal to the sum of the cost-oriented rates determined in the Reference Interconnect Order (“RIO”) process for mobile termination and retail fixed network origination. This cap will be permitted to increase by any increases in those rates i.e. C&WJ shall be entitled to automatically pass through any such increase.

¹ One competitor has already begun operation in the market (Digicel) and a second, (Centennial Digital Jamaica) has indicated its intention to start operation by the end of the year.

² The market for these services, except for PBX, was liberalised from as early as 1995 after intervention by the Fair Trading Commission.

³ This market is substantially liberalised with a number of entities providing competition to C&WJ either by leasing facilities from the Company or via their own VSAT facilities.

Interconnection Service Basket

- 3.3. This basket constitutes services that are provided as part of the Reference Interconnection Offer (RIO) process and are consequently not subject to the Price Cap Index. The tariffs for these services are therefore concluded as part of interconnection arrangements approved by the Office or otherwise agreed between parties.

Determination 3.3

Services with the exception of those within the Fixed-to-Mobile basket and wholesale basic services for which tariffs are decided as part of an interconnection agreement shall not be subject to the Price Cap Index.

Basic Services Basket

- 3.4. All services currently provided by C&WJ and not included in any of the three aforementioned baskets are included as part of the Basic Basket. The rates and quantities for these services will be incorporated into the calculation of the API at each price change and will be subject to the cap of the PCI. Services within the Basic Basket will be subject to specific price control to meet the requirements of rebalancing. Although the rates for some wholesale basic services are concluded as part of the RIO process, these services are included as part of the Basic Basket and their wholesale rate elements are treated as distinct from their respective retail offerings.

Determination 3.4

All services currently provided by C&WJ and not a part of any other basket shall be included in the Basic Basket. The rates and quantities for these services shall be used to calculate the API for each price change and each rate change shall be subject to the PCI. Basic wholesale services shall constitute distinct rate elements.

International Incoming Calling Services

- 3.5. Incoming international calls currently represent C&WJ's most profitable area of activity. Additionally, C&WJ will retain a monopoly in this area for the first eighteen months of the Cap. The payment for international calls is not, however represented as rate elements in the Price Cap. Revenue from this activity has, however, been taken account of in computing the X factor.

CHAPTER 4. PRICE CAP FORMULAE

- 4.0. The formulae needed for the Price Cap Plan were not included in the General and Specific Price Cap Rules. These formulae are known as the Price Cap Index (“PCI”) and Actual Price Index (“API”) mechanisms. The PCI is an index calculated annually based on measures of economy-wide inflation in Jamaica and estimates of the company’s own productivity.

Determination 4.1

The API shall be the calculation of the actual weighted price level of C&WJ’s prices at a given moment. The API is adjusted with each price change and must remain less than or equal to the PCI for C&WJ to remain in compliance with the Price Cap regulation.

- 4.1. The PCI will also consider the quality of services provided by C&WJ as well as the impact of changes in international settlement rates that are beyond C&WJ’s control. Under Price Cap regulation, the incentives to reduce costs could result in a reduction in quality of service. The service quality provision enables the Office to exert its authority to influence the quality of service to customers by providing C&WJ with positive incentives to maintain high standards.

Determination 4.2

A provision for a service quality adjustment shall be included in the Price Cap formula to provide a potential means by which the Office may offset any decline in the Company’s quality of service.

- 4.2. C&WJ argued that it should be able to demonstrate compliance periodically, i.e., at the end of a Price Cap year. C&WJ argued that compliance should simply require showing that its prices throughout the year were, on average, within the Price Cap constraints. The Office rejects this approach because it would permit C&WJ to price above the Cap for much of the year and, near the end of the year, lower rates in order to comply for a short period of time.

Determination 4.3

C&WJ shall be required to demonstrate that each and every price change for services covered by price cap regulation results in the API remaining less than or equal to the PCI.

- 4.3. The PCI and API formulae allow for C&WJ to carry over unused headroom to the next year. That is, if C&WJ prices its services so that the API remains below the PCI throughout a particular year, C&WJ is not penalized for pricing below the cap and may take advantage of any unused portion of the cap in future price cap years. This means that the headroom for the next year will be computed as if C&WJ was pricing at PCI in the prior year. If C&WJ prices below the cap in a given year, C&WJ is not

permitted to price above the new PCI in the following year. The new PCI already incorporates the prior year's headroom.

Determination 4.4

The Price Cap formulae shall allow C&WJ to carry over unutilised headroom from one year to the next. Headroom shall not, however, be computed in such a way as to allow C&WJ to price above the API in any year.

PCI Formula

4.4 To begin a price cap period, the initial PCI level will be set by the Office. The Office is setting this initial level, PCI_1 , based on its economic analysis.

Determination 4.5

The PCI for the first year of the Cap shall be set by the Office based on its economic analysis. See Determination 5.1.

Determination 4.6

For every year after the initial year, the PCI shall be calculated each September 1, beginning September 1, 2002, through September 1, 2004, according to the following formula:

$$PCI_t = PCI_{t-1} \left(\frac{PI_t}{PI_{t-1}} - X - Q_t + Z_t \right) \quad t = 2,3,4 \quad (4.1)$$

where

PI_t = the Jamaican consumer price index ("CPI") in year t . PI_t is calculated as the simple average of the monthly CPIs for the 12 consecutive months ending 31 May in year 2001+t;

X = a constant to be determined by the Office; (See Determination 5.2)

Q_t = the quality-of-service adjustment factor in year t ;

Z_t = the exogenous adjustment factor for international settlement rates in year t .

Determination 4.7

The quality-of-service adjustment factor will initially be set equal to zero. It may be set equal to a positive number in the future if the quality of C&WJ's service declines and becomes unsatisfactory. The Q factor will be changed only as a last resort and only after completion of a public consultation process.

Determination 4.8

The exogenous adjustment factor will be zero in year 1. PCI_1 is set by the Office so as not to require an adjustment year 1. In subsequent years, the exogenous adjustment factor is calculated as follows:

$$Z_t = V \frac{\sum_m q_{t-1}^m (b_{t-1}^m - b_t^m) - (a_{t-1}^m - a_t^m) \frac{q_{t-1}^m}{q_t^m}}{r_{t-1}} \quad t = 2,3,4 \quad (4.2)$$

where

The summation is taken over all international settlement rate elements m for the various routes;

V = a constant determined by the Office;

b_t^m = the value of international settlement rate m at the beginning of the fiscal year that ends 31 March in the year $2001 + t$;

r_{t-1} = revenues from the prior fiscal year for the all the price-cap rate elements; and

a_t^m = payments to mobile operators (including C&WJ Mobile) for termination of incoming international calls.

- 4.5. The quantities, q^m , in Equation (4.2) of Determination 4.8 above are minutes of incoming international traffic. The revenues apply to price-cap services, which exclude international settlements.

API Formula

Determination 4.9

Beginning on 1 September 2002 through 1 September 2004, the API will be calculated as follows:

$$API_t = \frac{\sum_i q_{t-1}^i p_t^i (1 - \frac{7}{12} \bar{H}_{t-1})}{r_{t-1}} \quad t = 2 \quad (4.3)$$

$$API_t = \frac{\sum_i q_{t-1}^i p_t^i (1 - \frac{7}{12} \bar{H}_{t-1} - \frac{5}{12} \hat{H}_{t-2})}{r_{t-1}} \quad t = 3, 4 \quad (4.4)$$

where

The summation is taken over all price-cap rate elements i (excluding international settlement rates).

q_{t-1}^i = quantity demanded of price-cap rate element i in prior fiscal year;

p_t^i = current price for price-cap rate element i in current price cap year. Where there is a proposed price change, the proposed price should be used. For services which prices are not changing, the existing prices should be used;

Headroom

Determination 4.10

\bar{H}_t = the average headroom during the months of September through March of price cap year t . The average is weighted by the fraction of days (during the seven-month period) in which a particular headroom applied; and

\hat{H}_t = the average headroom during the months of April through August of price-cap year t . The average is weighted by the fraction of days (during the five-month period) in which particular headroom applies.

Headroom is calculated as follows:

$$H_t = \frac{PCI_t - API_t}{PCI_t} \quad (4.5)$$

where

H_t = headroom at any particular time during price-cap year t .

- 4.6. The purpose of the headroom adjustment is to avoid penalizing C&WJ for pricing below the cap. If C&WJ does price below the cap, its revenues would likely be reduced and would (without an adjustment) raise the actual price index the subsequent year. Separate adjustments are required for September through March and for April through August. Pricing below the cap in September through March affects revenues in the denominator of the API formula for the following price-cap year. Pricing below the cap in April through August affects revenues in the denominator of the API formula for the price-cap year two years ahead.⁴

Determination 4.11

For each price-cap filing, C&WJ must calculate, not only the API, but also the headroom associated with its proposed rates. Headroom must always be positive.

Determination 4.12

On September 1, 2001 C&WJ must file, a spreadsheet containing the specific data for every price-cap rate element and calculations of the API. The API calculations will be updated with each price change. The PCI will be updated annually, as described above.

Determination 4.13

Annually, beginning September 1, 2002, C&WJ will calculate the value of the exogenous adjustment factor according to Equation (4.2). C&WJ shall file a spreadsheet that contains the calculations for every settlement rate element. C&WJ shall further provide on 1 September each year, the new PCI, according to Equation (4.1) in determination 4.6 for years 2 through 4 of the price cap period.

- 4.7. The price cap regime includes additional constraints on standard residential and low-user rates for installation and line rental. These specific constraints are discussed in greater detail in Chapter 5.

⁴ While quantity and revenue weights are mathematically equivalent, the Office will employ quantity weights in the API formulae. Quantity weights have the advantage of usability when the prior year's demand for a rate element is zero. Revenue weights are not usable in that instance.

CHAPTER 5. ECONOMIC MODEL FOR JAMAICA PRICE CAP REGULATION

- 5.0. The Office is setting the X Factor for the Price Cap regime so that C&WJ will have an opportunity to earn its cost of capital over the 4-year Price Cap period. Toward that objective, the Office considered a number of factors such as the future decreases in international settlement rates and the need for rate rebalancing. In order to examine the various factors involved, the Office developed an economic model and reviewed models submitted by C&WJ and attempted to reconcile these analyses.
- 5.1. The Office has analysed a number of approaches for economic analysis of the effects of various Price Cap parameters. Consideration was given to such data contained in C&WJ's models and formulae. C&WJ was unable to provide on a timely basis much of the data that the Office sought for use in developing the price cap plan. Consequently, the Office has had to substitute its expert judgement in some instances in place of the actual data. In addition to considering the data and models put forth by C&WJ, the Office elected to construct its own model to examine the effects of price cap regulation and to set various parameters to the formulae. The Office benefits from the development of this tool by being able to examine the effects of various assumptions and proposed policies, and to examine a variety of means to meet its public policy objectives. The Office's model serves as a check on C&WJ's analysis, as well as provides further information for the Office in its decision-making role.
- 5.2. The Office, along with its consultants, SPR, have developed a model that is used to project C&WJ's costs and prices under Price Cap regulation for the 4-year Price Cap period. The model, the "Jamaica Price Cap Model", serves a number of purposes associated with the move to price regulation in Jamaica. The "Jamaica Price Cap Model" calculates C&WJ's annual increase in productivity of its operations, providing a basis for the X Factor in the PCI formula above. Further, the Jamaica Price Cap Model provides a financial analysis for use in evaluating alternative rebalancing plans.
- 5.3. The Model incorporates two major constraints on pricing: the Price Cap Index constraint and the zero-profit constraint, in which total costs are equal to total revenues. Total costs include the cost of capital. The pre-tax rate of return is a user-specified model parameter that the Office has set at C&WJ's cost of capital as calculated by Charles River Associates (for the Office), with some adjustments. The Model employs the nominal cost of capital less the rate at which C&WJ revalues its assets upward each year. This adjustment to the cost of capital ensures that C&WJ is not compensated twice for the effects of inflation. A detailed Model Description is available from the Office for further information.

Analysis of Initial PCI and X Factor

- 5.4. The Office considered the Price Cap study using the unit cost model conducted by C&WJ's consultants, Price Waterhouse Coopers, the total factor productivity model

(TFP) and zero-profit constraint model. All three methods are theoretically equivalent, under certain assumptions. The Office has examined these methods, as well as C&WJ's results from its unit-cost model. The Office's Jamaica Price Cap Model is based on the zero-profit constraint methodology.

- 5.5. The next alternative to that used by the Office is the unit-cost model for estimating the company's productivity. The unit-cost model is more favourable than TFP in that the data requirements are not as severe. In fact, the data requirements are aligned with the company's accounting system. The Office, however, finds that the unit-cost method is less suitable for examining whether the company has the opportunity to earn its cost of capital. Further, accounting for efficiency only as it pertains to changes in costs from year to year may lead to incorrect estimates of the company's productivity gains. The unit-cost model cannot easily deal with other sources of efficiency gains such as changes in international settlement rates, exogenous adjustments, the need to rebalance, and year-to-year changes in quantity weights of the price cap plan. The Office's Model does account for such impacts on C&WJ's profitability.
- 5.6. The Office examined C&WJ's own calculations of its productivity growth. C&WJ chose the unit-cost model and made subsequent adjustments to the resultant X Factor to account for the zero-profit constraint. C&WJ relied on its accounting systems to apportion the costs among services that are to be included in the price cap. C&WJ projected changes in unit costs based on projected demand growth. This change in unit costs is C&WJ's basis for the X Factor. C&WJ estimate that the projected annual average change in real unit capital costs is a decrease of 1.8 percent over the price cap period. C&WJ further estimated that the average annual change in the operating costs over the price cap period is a decrease of 3.6 percent. Further, C&WJ estimated the average annual change in unit costs for both capital costs and operating expenses, along with considerations for growth in demand over the price cap period. The resultant change in real unit costs for C&WJ, according to its model, is an average annual decrease of 2.1 percent. C&WJ asserts that its analysis implies an X Factor equal to 2.134.
- 5.7. C&WJ asserted that the X Factor had to be adjusted in the instance that the initial rates under the price Cap plan would not yield revenues to cover its cost of capital. C&WJ recommended two alternatives to its X Factor calculation: (1) adjust tariffs prior to the start of the Price Cap period to a level at which C&WJ covers its cost of capital; or (2) spread the adjustment of tariffs over the Price Cap period and reduce the X Factor accordingly. C&WJ also included in its calculations the effects of discounts, packages and promotions to be offered over the Price Cap period.
- 5.8. C&WJ asserts that if interim rate rebalancing occurs so that C&WJ covers its cost of capital, then the X factor decreases by 3.95 percentage points, implying an X Factor of -1.82 . Alternatively, C&WJ asserts that without rate rebalancing, the X Factor should decrease by 7.6 percentage points, implying an X Factor of -5.466 . In all, C&WJ has presented a number of alternatives to the X Factor depending on on how rate rebalancing occurs. For each scenario of rate rebalancing, C&WJ has calculated the X Factor with consideration of compensation for reductions in international settlements, and initial rates being set to recover the cost of capital. The range of X

Factors with interim rate rebalancing is from 2.1 percent to –5.9 percent. The range of C&WJ's calculated X Factors in the instance of no interim rate rebalancing before September 1, 2001, is from 2.1 percent to –13.9 percent.

- 5.9. The Office does not agree with C&WJ's calculations of proposed X Factors, including the asset valuation by C&WJ, the cost of capital used, and the inclusion of promotions and discounts by C&WJ. In its analysis, the Office has found that correcting for differences in asset valuation and cost of capital alone more than fully explain the differences in the derived price cap parameters between the calculations by the Office and C&WJ.

Promotional Discounts

- 5.10. The Office has carefully considered C&WJ's proposal that promotional discounts on price-cap services be considered price decreases for purposes of determining compliance with the price cap. We understand that such discounts may be a sound way for C&WJ to ameliorate competitive losses. Furthermore, if a service continues to cover its costs, even at the discounted price level, the pricing would not be anti-competitive.

Nevertheless, the Office knows of no practical way to implement C&WJ's proposal, while protecting customers against unreasonable price discrimination. The Office therefore continues to adhere to its policy that only non-discriminatory decreases in price-cap rate elements be considered price decreases for purposes of price caps.

At the same time, the Office seeks to facilitate the offering of promotional discounts by C&WJ. In particular, such offerings may be made without any specific regulatory approval. C&WJ may choose to designate promotional offerings to be either new non-basic services or new basic services. If the latter, the initial discounts would not be considered price decreases for purposes of determining compliance with the price cap but subsequent reductions would be (as provided in the formulae for actual-price indices).

The Office is also aware that as competition intensifies, some existing and potential customers are likely to take their custom to C&WJ's competitors. In determining the initial price-cap index and the X factor, the Office took account of the likely effect of this loss of market share on C&WJ's profits. This effect was estimated on the assumption that C&WJ does *not* offer any discounts other than non-discriminatory reductions of price-cap rates.

Determination 5.1

After careful consideration of the C&WJ Model, as well as its own Model and other salient information, the Office determines that PCI_1 shall be equal to 1.02. In the first year of the Price Cap period, 1 September 2001 through 31 August 2002, C&WJ may change prices of services subject to the PCI constraint so that the API_1 remains less than or equal to 1.02. These initial levels consider C&WJ's ability to recover its cost

of capital over the 4-year Price Cap period, including consideration of initial rates and a rate rebalancing plan to meet that objective.

Determination 5.2

The “X” Factor shall be equal to 0.06 (6 percent) for the remaining 3 years of the Price Cap period. Included in this is 0.01 (1 percent) for anticipated gains over and beyond the historical trend. This is predicated on the assumption that the move from a monopoly to a competitive market over the period of the Cap should generate greater efficiency.

Rate Rebalancing

5.11. With regard to rate rebalancing, in February 2001 the Office had requested from C&WJ a proposal for rate rebalancing. C&WJ submitted at a late date (June 25, 2001) an “Interim Rate Proposal 2001.” This proposal is merely a plan for selective rate increases and was based on accounting data and asset valuation that the Office had already indicated that it had strong reservations. Further, C&WJ did not propose any reduction in international traffic rates to correspond with reductions in settlement rates. C&WJ’s proposal also relied upon a nominal cost of capital with an asset base that already incorporates inflation, thereby doubling the benefits of inflation in C&WJ’s calculations.

Determination 5.3

Using the Jamaica Price Cap Model, the Office has developed a schedule for annual increases in the caps for line rental and installation charges for standard residential, low-user residential, and business. The caps for these services for the first price cap year beginning in 1 September 2001 are as follows:

Table 1

First Year Caps for Certain Basic Services

Service Rate Element	1 September 2001 Cap Level
Standard Residential Line Rental	\$350/month
Low-User Line Rental	\$140
Business Line Rental	\$750/month
Residential Installation	\$700
Business Installation	\$940
Low-User Usage Intra parish- Full	\$0.51
Reduced	\$0.44
Weekends	\$0.35
Low-User Usage Inter parish- Full	\$1.51
Reduced	\$1.22

Weekends	\$0.81
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Determination 5.5

For the last 3 years of the price cap period, the annual sub-constraint on the prices of each of these services, in addition to meeting the PCI constraint each year, is

$$pc_t^i = pc_{t-1}^i (PI_t/PI_{t-1} + Y) \quad (5.1)$$

where

pc_{t-1}^i = price cap in previous year for service I subject to this cap mechanism;

PI_t = same meaning as defined in Eq. (4.1); and

Y = a parameter for growth in the cap on each service set by the Office.

Determination 5.6

The parameter Y is set to enable rate rebalancing over the Price Cap period. The Office has set Y at 0.1 (10 percent).

Opportunity to Recover the Cost of Capital

- 5.12. In setting the above Price Cap parameters, an important goal of the Office has been to afford C&WJ the *opportunity* to recover its cost of capital. Nevertheless, the policy objective of moving from rate-base rate of return regulation to Price Cap regulation explicitly requires a de-linking between C&WJ's costs and revenues from year-to-year. A firm regulated under Price Cap regulation, while not assured to earn a minimal return is likewise not limited in the rate of return it is able to earn. The opportunities for a firm under Price Cap regulation to obtain its cost of capital, or better, do not lie in the determinations of the regulator so much as in the firm's ability to adapt to the competitive market and take advantage of new technological innovations from which to obtain new revenue sources. In this way, Price Cap regulation emulates the competitive market more accurately, in its incentives and performance of the firm, than does rate-base rate of return regulation. Therefore, implicitly, there are a number of mechanisms built into Price Cap regulation to provide an operator such as C&WJ with the opportunity to recover its cost of capital on its investments.
- 5.13. Nonetheless, the Office has taken additional measures to afford C&WJ opportunities to recover its cost of capital, i.e., exogenous adjustments for future decreases in international settlement rates. The X Factor might have been higher or initial prices might have been lower had the Office not assumed that C&WJ will probably lose market share to competitors. The compensation that the Office is granting for decreases in international settlement rates, while substantial, is not complete so that C&WJ will have the incentive to mitigate its losses in its negotiations to determine international settlement rates. Additionally, the Office has proposed a schedule for

rate rebalancing that will further mitigate losses due to anticipated decreases in settlement rates.

- 5.14. Finally, the Office examined possible values of the parameter V to be used in the exogenous factor equation (4.2). This parameter considerably protects from adverse impacts of settlement reductions.

Determination 5.7

The Parameter V shall be equal to 0.6 for the price cap period.

- 5.15 The chosen value of V does not remove completely C&WJ's incentives and responsibility to reduce its losses by its own actions. For example, suppose that there is a 10 percent decrease in settlement rates. Since the long-run price elasticity of incoming international calls is -0.6 , the loss of revenues is only 4 percent, which is less than the exogenous adjustment. Nevertheless, several considerations make the decline in settlement rates more severe:

- The demand elasticity is much less in the short run;
- Additional costs must be incurred to meet the increase in demand;
- The Z adjustment goes into effect only after a lag; and
- As other prices are raised (as permitted by the Z adjustment), their demands are subject to suppression.

- 5.15. For these reasons, we believe that while a V factor of 0.6 provides C&WJ considerable compensation for losses associated with declines in international settlement rates, it does not provide full compensation.

CHAPTER 6. IMPUTATION TESTS

6.0. Imputation tests are employed by regulators to serve as a price floor guarding against cross-subsidy and price squeezes, two forms of anti-competitive pricing which an incumbent operator is in a position to employ to the detriment of the competitive market. At this time, the Office will not require C&WJ to file imputation tests. Rather, the Office shall initiate a consultation process regarding imputation rules that will be effective 1 March 2002. These rules will consider elements of imputation tests including filing requirements, the required calculations, the frequency and content of filings, and the services that shall be subject to imputation tests.

Determination 6.1

On 1 September 2001, an authorised signing officer of C&WJ shall provide a verified statement that C&WJ's inter-parish service covers its costs. Thereafter, any reduction in inter-parish rates must be accompanied by a verified statement by an authorised signing officer that the reduced rates cover their costs. Requirement for compliance with an imputation test shall apply as of 1 March 2002.

ANNEX 1: CLASSIFICATION & REGULATION OF C&WJ SERVICES DURING PRICE CAP PERIOD

Service Category	Basket	Regulatory Treatment
Fixed to Mobile Retail Usage	Fixed-to-Mobile	Office-Specified Cap
Retail Mobile	Unregulated	Unregulated
Mobile Sales to Resellers	Unregulated	Unregulated
Terminal Equipment	Unregulated	Unregulated
Internet Service Provision	Unregulated	Unregulated
International Incoming, including WorldTalk, Calls	Unregulated	Unregulated
Interconnection Services	Interconnection Services	Reference Interconnect Order
All other C&WJ Services	Basic Services	API and PCI mechanisms