Telecommunications Decision 2008 – 8

Decision on the Second Price Cap Regime

Issued by the

Turks and Caicos Islands Telecommunications Commission

on

February 18, 2009

Contents

SUMMARY i

1 Introduction 1
1.1 Legislative and Regulatory Background 1
1.2 Consultation Process 1

2 Objectives and Approach 2
2.1 Objectives of the Second Regime 2
2.2 General Approach to the Second Regime 4

3 Review of Initial Regime 4
3.1 Summary of Initial Regime 4
3.2 Assessment of Initial Regime 5

4 Price Cap Index Constraints 7
4.1 Principal Pricing Constraint, including the PCI and API 7
4.2 X-factor 8
4.3 I-factor 9
4.4 Z-factor 10
4.5 Carry-over of Headroom 12

5 Price Cap Services and Control Baskets 12
5.1 Price Cap Services 12
5.2 Price Control Baskets 14
5.3 Other Pricing Constraints 19
5.4 New and Bundled Services 20
5.5 Market Trials and Promotions 22

6 Price Caps Timing Matters 23
6.1 Specification of the Price Cap Year 23
6.2 The Bridge Period and Transition 23
6.3 Price Cap Regime Period 24

7 Price Caps Administrative Matters 24
7.1 Notification of Price Changes 24
7.2 Compliance Filings 26
7.3 Annual Regulatory Reporting 28

Appendix A – General Price Cap Index Formulae 30

Appendix B – Price Cap and Uncapped Regulated Services List 32

SUMMARY

In this Decision, the Telecommunications Commission (the "Commission") establishes a New or Second Price Cap Regime (the "Second Regime") to govern the tariff changes of regulated services provided by for Cable & Wireless (Turks & Caicos Islands) Limited ("C&W" or "LIME"). The Second Regime becomes effective on April 1, 2009 and will remain in effect for a four year period ending March 31, 2013.

The rationale underlying and the specific details and of the Second Regime are set out in this Decision. A summary of the key elements of the Second Regime are provided below.

Much like the existing price caps regime, which came into effect in January 2005, the Commission has implemented a simplified price cap regime for C&W in view of the relative scale of C&W's operations in the Turks & Caicos Islands ("TCI") relative to other international jurisdictions.

Policy Objectives

The Second Regime was designed by the Commission, with the aid of a public consultation process, to meet, on balance, the following six policy objectives:

- *i) to foster the availability of reliable, affordable and high quality telecommunications services throughout the country;*
- *ii) to provide the service provider incentives to improve efficiencies, invest in new plant and equipment and be more innovative;*
- *iii) to provide the service provider with a reasonable opportunity to earn a fair return;*
- *iv) to ensure that consumers share in the expected efficiency gains through lower prices;*
- *v) to foster competition in the TCI telecommunications market; and*
- *vi) to minimize regulatory procedures to the greatest extent possible in keeping with the above-noted objectives.*

Price Control Basket Structure and Pricing Constraints

For the Second Regime, the Commission adopts a simplified price cap plan that includes two Price Control Baskets.

***Price Control Basket #1** includes all domestic fixed network services other than fixed-to-mobile calling. This includes residential access and business access and installation services, on-island and intra-island calling, enhanced/VAS services (including Voice-mail) and domestic private*

leased circuits ("DPLC"). The services in this basket are individually capped at existing, going-in rates – in other words productivity offset (the X-factor) is set equal to the rate of inflation (the I-factor) for each service in the basket.

The Commission notes that going-in rates to the Second Regime are defined as the rates in effect as of the end of the Initial Regime, March 31, 2009.

*The Commission recognizes that this pricing constraint poses significant risk to C&W. If inflation were to rise significantly, adhering to this constraint would become increasingly difficult. Therefore, as under the Initial Regime, the Commission caps the implicit X-factor at a maximum level of five percent (**5%**). As a result, the principal pricing constraint on Price Control Basket #1 becomes:*

$$X = I \quad \text{when } I \leq 5\% \quad \text{and} \quad X = 5\% \quad \text{when } I > 5\%$$

Where the I-factor is measured on the basis of the average annual percentage change in the All Bahamas CPI, measured over the 12-month period ending two months prior to the start of the Price Cap Year

***Price Control Basket #2** includes a single service: domestic fixed-to-mobile calling. The X-factor on this basket has been determined on a calculated basis using a forward-looking price cap model subject to the condition that the rate of return on C&W's Price Cap Services, collectively, is expected to equal the target rate of return established by the Commission, on average, over the Second Regime. The value of the X-factor calculated on this basis is **14.1%**.[1] Relative to the going-in retail domestic fixed-to-mobile per minute call of 50¢, this X-factor and expected inflation have been translated into the follow set of maximum annual domestic fixed-to-mobile per minute call charges over the course of the Second Regime:*

Price Cap Year	**Maximum Fixed-to Mobile Calling Rate**
1. Effective as of the April 1, 2009	***46¢***
2. Effective as of April 1, 2010	***43¢***
3. Effective as of April 1, 2011	***40¢***
4. Effective as of April 1, 2012	***37¢***

[1] Note that the X-factor of 14.1% was calculated on the basis of "net" rather than "gross" or "retail" fixed-to-mobile calling revenues. As a result, the year-over-year reductions in maximum allowed retail fixed-to-mobile calling rates, shown below, are necessarily lower than those that would be calculated relative to net fixed-to-mobile calling rates. From the consumer's perspective, retail rather than net rates are relevant and, therefore, the annual maximum allowed fixed-to-mobile rate caps have been set on the basis of retail rates.

*The above-noted fixed-to-mobile rate reductions in combination with the rate freezes applied to all other Price Cap Services results in a savings for consumers of roughly **$2.5 million in total** or just over **$600,000 per year**, on average, over the course of the Second Regime.*

*Lastly, the **Uncapped Services** category includes all other regulated services. These include international outbound calling services, international card services, international private leased circuits ("IPLC") and payphone services. In view of the increasingly competitive market conditions associated with the provision of these services, it is expected that prices for this group services will decline over the course of the next price cap period. Thus, the rates for each service assigned to this category will not be permitted to rise above their respectively going-in rate levels. In addition, to ensure that fixed international direct dialed ("IDD") rates, at a minimum, mimic competitive trends in the mobile market, each fixed standard IDD rate must, at all times during the Second Regime, be equal to or less than the corresponding mobile IDD rate charged by C&W.*

Figure 1 provides a summary of the adopted Price Cap Plan for the Second Regime and Appendix B provides a listing of all the Price Control Baskets and uncapped services category.

Figure 1: Summary of Second Price Cap Regime

Price Control Basket #1	Price Control Basket #2	Uncapped Services
$X_1 = I$ when $I \leq 5\%$ *$X = 5\%$ when $I > 5\%$* *(on each rate element)*	*Annual Maximum Rate Caps based on $X_2 = 14.1\%$*	*Going-in Rate Cap (Fixed ≤ Mobile IDD Rates)*
Domestic Services (other than Fixed-to-Mobile):: Residential and business fixed access & installation; on-island & inter-island calling; VAS, voice-mail and DPLC services	**Domestic Calling - Fixed-to-Mobile**	**Other Regulated Services::** International calling, cards, IPLC and payphone services

Exogenous Cost Factors

The Commission considers that allowance for exogenous cost factors should be made under the Second Regime. In this respect, the Commission considers that the following criteria could be used to determine on a case-by-case basis whether a specific exogenous cost application made by C&W or another party is eligible for treatment as an exogenous cost event – i.e., it must be:

i) *Material in magnitude, so that any individual proposed cost adjustment must exceed an equivalent of 1.5% of C&W gross annual revenues from the provision of regulated telecommunications services affected by the exogenous cost for the most recent fiscal year.*

ii) Unique to the telecommunications sector or have a disproportionate impact on the telecommunications sector which is not otherwise captured by the price cap formulae;

iii) Outside of C&W's control, and

iv) Must not result from a transaction or transactions with a C&W affiliate.

Depending on their nature, eligible exogenous cost factor adjustments would result in modifications to the above-noted pricing constraints on Price Control Baskets #1 and/or #2.

Administrative Matters

Notification of price changes for regulated services must be filed with the Commission in accordance with the existing Pricing Regulations which, among other things, stipulate that 28 working day advance notice must be provided to users and the Commission of price increases and 7 working day advance notice in the case of price decreases. The Commission notes that it will allow C&W to file notices of price decreases in confidence with the Commission. These notification requirements apply to all Price Cap Services as well as uncapped regulated services.

Whenever a notification of a price change is filed with the Commission for one or more Price Cap Services, the filing must include a description of the proposed rate changes and confirm that the rate change is in compliance with all established price cap constraint. This latter requirement constitutes a Rate Change Compliance Filing ("RCCF").

In addition, Annual Compliance Filings ("ACF") must be filed with the Commission on ***the first business day of March*** *each year of the Second Regime. Each ACF shall include:*

i) A complete list of regulated services – i.e., including both Price Cap Services and uncapped regulated services – along with their respective going-in rate levels (as of March 1, 2009) and their expected current rate levels as of April 1 of the filing year;

ii) For international outbound calling services, a list of both C&W's fixed and mobile rates must be provided (to demonstrate that each individual fixed standard IDD rate is less than or equal to the corresponding mobile IDD rate);

iii) An update of the I-factor for the 12-month period ending January 31 (following the formulation set out in Section 5.2); and

iv) Notification of any required or proposed price changes to be implemented as of April 1 of the filing year.

Thus, the first ACF shall be filed on ***March 2, 2009*** *and include (i) a listing of all the Price Cap Services and uncapped regulated services and their respective going-in rate levels, (ii) a listing of C&W's current fixed and mobile IDD rates, (iii) the I factor for the period ending January 31, 2009 and (iv) notification of any required or proposed price changes to be implemented as of*

April 1, 2009 (including, but not necessarily limited to, required reductions in fixed-to-mobile calling charges scheduled for April 1, 2009.

Finally, the Commission notes that C&W's Regulatory Statements based on an updated Enhanced Allocation Model ("EAM") will be required by the Commission as part of the process to review and assess the performance of the Second Regime. Given the term of the Second Regime has been set at four years, Regulatory Statements, based on an updated EAM, will be required for the third year of the Second Regime – i.e., fiscal year April 1, 2011 to March 31, 2012. C&W is directed to file this information with the Commission no later than six months after the completion of the third Price Cap Year – i.e., October 1, 2012.

1 Introduction

1. In this Decision, the Telecommunications Commission (the "Commission") establishes a New or Second Price Cap Regime (the "Second Regime") to govern the tariff changes of regulated services provided by for Cable & Wireless (Turks & Caicos Islands) Limited ("C&W" or "LIME"). The Second Regime becomes effective on April 1, 2009 and will remain in effect until March 31, 2013. Before the end of this four-year period, the Commission will initiate a consultation process to review the performance of the Second Regime and determine whether price caps is still appropriate, and the form of such a price cap regime, including whether the Second Regime should be maintained for another term and, if so, whether it should be modified in any manner.

1.1 Legislative and Regulatory Background

2. The Commission was formed following the enactment of the Telecommunications Ordinance in 2004 (the "Ordinance"), based on the Government's liberalization agenda pursuant to its Telecommunications Policy published in 2003 (the "Policy"). The Government subsequently brought into force a series of regulations, including the Telecommunications Pricing Regulations in 2005 and the Telecommunications (Administrative Procedure) Regulations in 2008 (respectively, the "Pricing Regulations" and the "Administrative Regulations"). Together with the Ordinance, these regulations constitute a comprehensive regulatory framework for the telecommunications sector in the Turks & Caicos Islands ("TCI").[2]

3. With a view to its liberalization agenda, on January 25, 2006, the Government signed an agreement with C&W (the "C&W Agreement") which resulted, inter alia, in the issuance of a new, non-exclusive licence to that entity on that same date (the "C&W Licence"). Consistent with the 2005 Pricing Regulations, which stipulated that the Commission commence a process to establish an "initial" Price Cap Regime to regulate the prices for services for C&W was found to be dominant (and, therefore, subject to regulation), the Commission approved the Initial Price Cap Regime that was incorporated in the C&W Agreement and the C&W Licence (the "Initial Regime"). The Initial Regime was established for a three-year period and, therefore, was due to expire on January 24, 2009. As indicated in Section 6 of this Decision, this Initial Regime has been extended to March 31, 2009.

1.2 Consultation Process

4. Pursuant to the Pricing Regulations and the general objectives of the Administrative Regulations,[3] the Commission initiated a consultation process to assist with the

---

2 These documents are available on the Commission's website: http://www.tcitelecom.gov.tc.

3 More specifically, Sections 5(3) and 5(4) of the Pricing Regulations, among others, and the general objectives of the Administrative Regulations in relation to consultation processes, as reflected in Part II therein.

establishment of the Second Regime to replace the Initial Regime. In this respect, on September 30, 2008 the Commission issued its Price Caps Consultation Document (the "Consultation Document") to seek interested parties' comments on the design and formulation of a new price caps regime for C&W. The Consultation Document set out in detail the issues to be addressed in establishing the Second Regime, and included the Commission's preliminary views and proposals on each element of the Second Regime.

5. Three parties filed comments with the Commission in response to the Consultation Document: C&W, Digicel Turks & Caicos Islands ("Digicel") and Islandcom. Their comments were received by the Commission on or before November 14, 2008.[4] In addition, the Commission met with representatives of each party to discuss, in person, their respective comments on the Consultation Document.

6. As part of the process of establishing the Second Regime, the Commission also undertook a review and assessment of C&W's historical and projected operating and financial performance. In this regard, the Commission initiated a data collection process through which it collected recent historical financial and statistical information on C&W's operating revenues, expenses, investments and profits on a service-by-service basis, along with output and input price and volume information.[5]

7. The Commission has relied on the financial and statistical data collected through this process to assist in the establishment of the Second Regime. As well, the Commission has also taken into account the comments received from and its discussions with C&W, Digicel and Islandcom in establishing the design of the Second Regime.

8. In addition, the Commission notes that it relied on the assistance of external consultants to review and assess the comments and views provided by parties regarding the New Regime as well as the financial and statistical data collected for price caps modeling purposes which was also used to assist with the design and formulation of the Second Regime.

2 Objectives and Approach

2.1 Objectives of the Second Regime

9. Neither the Ordinance nor the Pricing Regulations contain an explicit set of policy objectives pertaining to price cap regulation. Consequently, the Initial Regime, set out in

[4] Parties' comments along with the Commission's Consultation Document are available on the Public Consultation section of the Commission's website: http://www.tcitelecom.gov.tc. Note that the deadline for submissions, as set out in the Consultation Document, was November 7, 2008; however, the Commission subsequently granted parties a one week extension to November 14, 2008.

[5] In should be noted that the historical and prospective financial and statistical information for C&W collected through this process is confidential in nature and that its public release would likely cause C&W specific and direct harm. Therefore, this information is being retained in strict confidence by the Commission and its external consultants engaged for this price caps review process.

the January 2005 C&W Agreement and C&W Licence, was not established in reference to a defined set of specific policy objectives.[6]

10. As stated in the Consultation Document, the Commission is of the view that a set of price cap related policy objectives should be formalized as part of the process of establishing the Second Regime. Such objectives can be used not only to assist with the overall structure and design of the Second Regime but also provide a framework for assessing the performance of the Initial Regime as it approaches its expiry.

11. To this end, in the Consultation Document the Commission proposed the following set of policy objectives for the Second Regime:

    i) to foster the availability of reliable, affordable and high quality telecommunications services throughout the country;

    ii) to provide the service provider incentives to improve efficiencies, invest in new plant and equipment and be more innovative;

    iii) to provide the service provider with a reasonable opportunity to earn a fair return;

    iv) to ensure that consumers share in the expected efficiency gains through lower prices;

    v) to foster competition in the TCI telecommunications market; and

    vi) to minimize regulatory procedures to the greatest extent possible in keeping with the above-noted objectives.

12. Parties were asked to comment on these proposed policy objectives and, as they may consider necessary, to suggest an alternative set of policy objectives.

13. C&W was generally supportive of the proposed policy objectives. However, it considered that mimicking competitive market forces should be the overarching objective of a price caps regime. It also highlighted the importance of ensuring that the regulated service provider be ensured a fair opportunity to earn a reasonable rate of return on its regulated services so that incentives to invest and innovate are maintained. C&W also warned that the objective of a price cap regime should not be to simply drive prices down since doing so could deter competitive entry. Lastly, it emphasized the need to keep the regime simple and straightforward, especially in view of the scale of C&W's operations in TCI relative to other international jurisdictions where price cap regimes are in place.

14. In contrast, while not commenting directly on the proposed policy objectives, Digicel raised concerns that price cap regimes can potentially serve to protect the incumbent's dominant market position. Consequently, it suggested that the Commission should take a light-handed approach to regulating C&W and, in doing so, ensure market-based pricing is permitted.

---

[6] As well, it should be noted that no set of policy objectives pertaining to price cap regulation are set out in the Telecommunications Ordinance issued by the Government in 2004 or Telecommunications Pricing Regulations issued by the Government in 2005.

15. Islandcom did not comment on the proposed policy objectives.

16. The Commission considers that the above-noted policy objectives adequately take into account the concerns raised by both C&W and Digicel. They reflect the need to ensure competition is fostered under price caps, so that regulation will ultimately become unnecessary. In the meantime, the objectives also take into account the need to encourage investment and innovation as well as minimize regulatory burden. However, no single policy objective is intended to take precedence over the others. Thus, the Commission recognizes that achieving any one objective must be balanced against achieving the others.

17. The Commission concludes, therefore, that the six above-noted policy objectives will be adopted for the purposes of establishing the Second Regime as well as assessing the Initial Regime.

2.2 General Approach to the Second Regime

18. As indicated in the Consultation Document, the Commission is of the view that international best practice, especially recent experience within the English-speaking Caribbean, should be taken into account in designing the Second Regime. The Commission recognizes, however, that C&W's fixed network in TCI is relatively small by international as well as regional standards. Thus, while many international best practices may be appropriate, their application should be modified, as necessary, to take into account TCI's relative size. In other words, the "principle of proportionality" should be borne in mind to ensure that the solution (for instance, in terms of review process and simplicity of design) should be proportional to the size of the problem.

19. Parties who commented on this issue were generally supportive of the Commission's proposal to adhere to the principle of proportionality both in terms of the process to review the Initial Regime as well as the process to establish the Second Regime.

20. Therefore, consistent with the sixth policy objective – i.e., to minimize regulatory procedures to the greatest extent possible in keeping with other policy objectives – the Commission has also adopted the principle of proportionality in the establishment of the Second Regime.

3 Review of Initial Regime

3.1 Summary of Initial Regime

21. The details of the Initial Regime are set out in the January 2005 C&W Agreement. The C&W Agreement identified the retail services provided by C&W which are regulated under the Initial Regime (i.e., including residential and business fixed line and domestic local calling services, international direct dial services, and leased line services) as well as the maximum "going-in" rate levels for each of these services. The C&W Licence, on the other hand, set out the specific pricing constraints that applied to regulated services included under the Initial Regime. The Initial Regime was established for a period of

three years after the signing of the C&W Agreement – i.e., January 25, 2006 to January 24, 2009. As indicated in Section 6.2 of this Decision, the Initial Regime has been extended to March 31, 2009.

22. As explained in the Consultation Document, price cap regimes generally include one or more price cap index ("PCI") constraints based on the difference between a specific inflation factor ("I-factor") and a productivity offset factor ("X-factor"). PCI constraints are applied to one or more baskets of regulated services (i.e., "Price Control Baskets").

23. In this instance, the Initial Regime was a highly simplified form of price caps regulation. A common PCI constraint was applied to each service included in the Initial Regime rather than to defined baskets of services. Each regulated service rate was capped at its going-in rate level. Once the Initial Regime commenced, rate increases were only permitted to the extent the annual inflation rate exceeded 7% - i.e., rate increases would be permitted up to a maximum of the difference between the actual annual rate of inflation and 7%.[7] Thus, in effect, the X-factor was set (i) equal to the rate of inflation or the I-factor when inflation was at 7% or (ii) less and equal to 7% when the inflation was higher than 7%. As designed, the Initial Regime did not require that C&W reduce any of the rates of its regulated services. On the other hand, given that inflation did not exceed 7% on an annul basis during the term of the plan, no regulated service rates were increased during the Initial Regime.

24. It should also be noted that the Initial Regime allowed the Commission to authorize an increase in the prices for line rental charges and domestic local calls if C&W demonstrated the existence of an Access Deficit.[8] However, no application for a rate increase was filed by C&W pursuant to this provision.

3.2 Assessment of Initial Regime

25. As noted in the Consultation Document, an assessment of the Initial Regime can be made on a number of grounds by considering, for instance, the extent to which consumers may have benefited or been harmed under the regime, the extent to which C&W may have benefited or been harmed under the regime, the extent to which competition, more generally, may have been fostered or constrained by the regime and/or comparative international experience. The set of price cap objectives adopted in Section 2.1 above also provides a framework for assessing the success of the Initial Regime.

26. In the Consultation Document parties were asked to provide their assessment of the performance of the Initial Regime. The Commission notes that C&W considered the

---

7 The Initial Regime defines the inflation rate as the "most recent annual Consumer Price Index ("CPI") used by the [TCI] Government in standard economic planning exercises" and in the absence of such a publication, the "Consumer Price Index for All Urban Consumers (CPI-U), published by the U.S. Department of Labor." The Commission notes that the TCI Government does not publish a TCI-specific CPI.

8 An "Access Deficit" is defined as follows in the C&W Licence: "the difference between the total cost to the interconnection provider for providing access services (which may include appropriate operating expenditures, depreciation, an appropriate return on capital employed, and mark-ups for contributions to fixed joint and common costs of providing access lines that originate at the customer's network interface device and terminate in the line card and include the cost of the line card and subscriber sensitive portion of the exchange) and the revenues derived from providing that service (i.e. line rental fees), calculated in accordance with guidelines published by the Commission pursuant to section 25A of the [..] Ordinance".

Initial Regime to be generally successful in that consumers benefited from real price reductions over the course of the three years and that competitive entry was encouraged. On the other hand, C&W suggested that the Initial Regime did not allow it to earn a fair return on all regulated services, noting basic access services in particular. In contrast, while not commenting on the performance of the Initial Regime, Digicel claimed that it covered too broad a range of services. Islandcom, for its part, suggested that the Initial Regime did not adequately promote competitive entry.

27. In the Commission's view, relative to the price caps objectives set out in Section 2.1, the Initial Regime can be viewed in general terms as a success:

i) The regime helped foster the availability of reliable, affordable and high quality telecommunications services throughout the country. Residence and business fixed line access services have grown, albeit it slowly, while at the same the adoption of wireless access service alternatives grew rapidly.

ii) The regime provided C&W with incentives to improve efficiencies, invest in new plant and equipment and be more innovative. The evidence available to the Commission suggests that C&W's productivity has grown and significant capital investments have been made by C&W in both its fixed and wireless networks over the term of the Initial Regime.

iii) The regime provided C&W with a reasonable opportunity to earn a fair return. Indeed, the evidence available to the Commission suggests that C&W has been able to earn a fair rate of return if not on each individual regulated service, certainly on all regulated services collectively.

iv) The regime ensured that consumers shared in the expected efficiency gains through lower prices than otherwise. In this case, the Commission notes that while nominal prices may not have decreased, real prices did – i.e., price increases that otherwise would have resulted from year-over-year inflation have been offset in their entirety over the last three years. All the same, the Commission considers that, based on available historical financial evidence, there was likely some room to decrease rather than simply freeze regulated rates over the course of the first price caps regime.

v) While the Initial Regime did not necessarily foster competition in the domestic fixed line market in TCI, nor did it deter entry. On the other hand, in the Commission's view, the Initial Regime allowed competition in the provision of international services as well as mobile wireless services to grow significantly. On balance, in the Commission's view, the Initial Regime was structured in a manner that was consistent with the objective of encouraging the development of a competitive telecommunications market in TCI.

vi) Lastly, the fact the Initial Regime represented a highly simplified price cap regime, with minimal reporting requirements, meant that it successfully minimized regulatory procedures to the greatest extent possible.

28. In sum, while the Initial Regime was generally successful in the Commission's view, the Commission considers that experience suggests that in the context of the Second Regime continued streamlining and design simplicity should be pursued and that targeted actual rate reductions should be required to the extent that prices for any significant service(s) are well above costs so that they would otherwise contribute to returns for the Price Cap Services above the target rate of return established by the Commission.

4 Price Cap Index Constraints

29. As noted, price cap regimes typically apply a principal pricing constraint to one or more baskets of services. The principal pricing constraint consists of two elements: the PCI and the API. The PCI dictates the maximum rate of change that the price service or the aggregate price of a basket of services can change in a given year. The PCI depends on an inflation factor (I-factor) rate less a productivity offset (or X-factor). In addition, in some years, it can also depend on allowed exogenous cost factors (Z-factors). Depending on the annual values of each of these factors, the PCI may allow price increases in some years or require price decreases in others.

30. The API provides a measure of actual price levels. Where more than one service is included in a Price Control Basket, the API is calculated as an aggregate weighted average index of the prices of the services included in the basket. If a PCI constraint applies to a single service, then the corresponding API is simply the price of that same service.

4.1 Principal Pricing Constraint, including the PCI and API

31. For any given Price Control Basket, a principal pricing constraint normally requires that the API for the service(s) in that basket be equal to or below the corresponding PCI for the same basket at all times.

32. Consistent with international best practice and the general provisions included in the Pricing Regulations, the Commission indicated in the Consultation Document that it was of the preliminary view that the Second Regime should include the standard specification of the principal pricing constraint as well as the underlying PCI and API formulae. In Section 4 of the Consultation Document, the Commission set out proposed formulae for the PCI and API. These formulae are reproduced in Appendix A to this Decision.

33. C&W was the only party to provide comments on the proposed principal pricing constraint, PCI and API formulae. While generally supportive of the proposed approach, C&W expressed concern about the potential difficulties it would face in terms of producing an API for Price Control Baskets containing multiple services. It suggested that the resources required to produce one or more APIs would be a significant cost relative to the size of C&W's operations in TCI.

34. The Commission considers that the principal pricing constraint, PCI and API formulae set out in the Consultation Document should be adopted for the Second Regime. However, to reduce the regulatory burden for both C&W as well as the Commission associated with producing and updating APIs, the Commission adopts a simplified price cap approach,

similar to the Initial Regime. The adopted principal pricing constraint will be applied to individual rather than groups of services, as set out in Section 5.2 below. As a consequence, there will be no need for C&W to produce aggregate weighted APIs for groups of services.

4.2 X-factor

35. As discussed in the Consultation Document, while there are a variety of ways in which an X-factor can be set, two of the most common are an historical productivity approach and a forward-looking modeled approach.

36. The historical productivity approach involves the estimation of the service provider's past productivity performance and is often supplemented by adjustments to take into account the different operating conditions expected in the future during the price cap regime in comparison to the period during which the past productivity was calculated.

37. The forward-looking modeled approach, on the other hand, is based on a forward-looking financial price cap model which provides a means to calculate one or more X-factors in such a manner that the service provider is expected to earn an approved, target rate of return on the services subject to price caps during the price caps period. The forward-looking financial model developed for this purpose by the Commission with the assistance of its consultants required a number of data inputs and assumptions, including:

- Pre-price cap period or "test year" (i.e., fiscal year 2007-08) financial results for C&W split out by regulated service;
- An estimate of an appropriate weighted average cost of capital ("WACC") for C&W's regulated services in TCI;
- Forecast market growth rates for each of C&W's regulated services and general inflation rates for TCI; and
- Price sensitivity parameters (or elasticities) and factor input cost and capital efficiency parameters appropriate for C&W's regulated services.

38. As indicated in the Consultation Document, the Commission was of the preliminary view that the forward-looking approach for setting the X-factor(s) was preferable to the historical productivity approach. Parties were asked to provide their views on this proposal and, if desired, suggest alternative approaches.

39. C&W generally supported the forward-looking approach as long as it was based on an appropriate WACC for its regulated services in TCI. Digicel considered the forward-looking approach to be unnecessarily costly and overly complex. It suggested a simpler approach be adopted under which modest real rate reductions be stipulated.

40. The Commission appreciates Digicel's concerns in this respect, but notes that this same approach has been followed by other countries in the Caribbean. Thus, the forward-looking modeling framework implemented in other countries can readily be adopted and

modified as necessary for TCI. For this reason, the Commission considers the forward-looking modeling approach to be appropriate for setting X-factors for C&W and, in view of the fact that the required financial modeling tools are available, to be consistent with the principle of proportionality. The Commission notes that a forward-looking approach is also consistent with the requirements set out in Section 7 of the Pricing Regulations.

41. In the process of collecting financial data from C&W, as part of the consultation process, a number of WACC studies for a variety of Caribbean jurisdictions were collected by C&W and provided to the Commission. Since a WACC study for TCI was not available, the Commission has relied on an average of the results for forward looking price cap modeling purposes. The average WACC derived in this manner, 13% (after taking into consideration tax differences across the countries considered), was used as the established "target" rate of return on regulated services for the next price cap period.

42. The Commission notes that for the test year period, C&W's rate of return on its regulated services was found to exceed the established target rate of return. In the context of the forward looking price cap model used by the Commission, this finding implied that, all else being equal, rate reductions of some form would be required to lower C&W's going-in return on its regulated services to the established target rate of return level, on average, over the course of the next price cap period.

4.3 I-factor

43. As discussed in the Consultation Document, a number of different indices can used to measure inflation. These include a consumer price index ("CPI"), which measures changes in the prices of goods and services purchased by typical consumers, a producer price index ("PPI"), which measures changes in the prices of goods and services purchased by different types of production industries or other more general rate of inflation such as a Gross Domestic Product deflator index.

44. As also noted in the Consultation Document, the Commission considers that the criteria for selecting an inflation index to be used as the I-factor include the following:

i) The index should be reflective of changes in the service provider's costs;

ii) The index should be obtained from a credible, published, independent source;

iii) Forecasts of the index should be available (for forward-looking financial modelling purposes);

iv) The index should be published on a timely basis (i.e., available with a lag of preferably 2 to 4 months); and

v) The index should be readily understandable to the public at large.

45. The Commission notes that a TCI-specific CPI, PPI or other economy-wide price index is not available. Therefore, it is necessary to adopt a non-TCI-specific inflation measure for price cap purposes.

46. The Commission notes that the Pricing Regulations indicate that the I-factor should be calculated based on the US CPI. On the other hand, in the Consultation Document, the Commission suggested that relying on an inflation measure for a nearby English-speaking Caribbean country, such as the Bahamas, would be likely be more appropriate than a US-based inflation measure. In this respect, the Commission noted that the All Bahamas CPI would likely be a more appropriate proxy for a TCI consumer price index than the US CPI given the similarities in the level and structure of economic development as well as in the similarities in currency and trading relationships in the Bahamas compared to TCI. In addition, the Commission noted that the Bahamas CPI is published by the Statistics Department of the Central bank of the Bahamas on a monthly basis and that forecasts of the Bahamas CPI are published by the International Monetary Fund.

47. Both C&W and Digicel supported the use of the Bahamas CPI as the basis for the I-factor. Digicel noted that the Commission should establish criteria to determine when the selected CPI may no longer be appropriate. On the other hand, Islandcom supported the use of the US CPI in its comments, suggesting that it may be more stable than the Bahamas CPI.

48. The Commission considers that the Bahamas CPI reasonably satisfies the criteria identified above and, in this respect, there is no reason to prefer the US CPI over the Bahamas CPI on the basis of their relative stability. Thus, the Commission concludes that the Bahamas CPI is a more appropriate proxy for the TCI consumer price inflation than the US CPI.

49. Based on the simplified framework adopted for the Second Regime, set out in Section 5.2, reliance on an explicit I-factor is largely avoided, with the exception of the possible occurrence of relatively very high annual inflation. The primary use of the Bahamas CPI is for forward-looking financial modeling purposes, as noted indicated in the third inflation index criterion above. Therefore, the need for criteria to assess on the ongoing appropriateness of the Bahamas CPI over the course of the Second Regime, as suggested by Digicel, is unnecessary.

4.4 Z-factor

50. Most, if not all, price cap regimes allow for the possible inclusion of exogenous cost factors or Z-factors in the PCI formula. The Z-factor allows for adjustments for changes in the regulated service provider’s input costs that are beyond its control and not otherwise captured in the I-factor.

51. As noted in the Consultation Document, the Commission was of the preliminary view that allowance for exogenous cost factors in the PCI would be appropriate. In this respect, the Commission proposed that the following criteria could be used to determine whether a specific exogenous cost application by C&W or another party would be eligible for treatment as a Z-factor – i.e., the exogenous cost event should be:

i) Material in magnitude, so that any individual proposed cost adjustment must exceed an equivalent of 1.5% of C&W gross annual revenues from the provision of regulated telecommunications services affected by the exogenous cost for the most recent fiscal year.[9]

ii) Unique to the telecommunications sector;

iii) Outside of C&W's control, and

iv) Must not result from a transaction or transactions with a C&W affiliate.

52. Both C&W and Digicel agreed that provision for potential exogenous cost factors should be taken into account in the New Regime. However, they expressed concerns with the second criteria that to be eligible for exogenous cost factor treatment the cost event had to be unique to the telecommunications sector. It was pointed out by way of example that the impact of a hurricane or tax changes could have a disproportionate impact on telecommunications sector. Similarly it was also noted, in discussions with the parties, that the use of the Bahamas CPI would not necessarily capture all input cost changes unique to TCI and, therefore, provision should be made to allow for applications for exogenous cost factor treatment of significant cost impacts not otherwise reflected in the price cap formulae.

53. The Commission concludes that provision for eligible exogenous cost factors should be included in the New Regime and, moreover, it agrees with C&W and Digicel that a somewhat broader allowance should be made with respect to potentially eligible exogenous cost events in the New Regime. To this end, the Commission modifies the second exogenous cost factor eligibility criterion as follows – the exogenous cost event must be:

> *Unique to the telecommunications sector or have a disproportionate impact on the telecommunications sector which is not otherwise captured by the price cap formulae.*

54. The Commission also notes that an application for an exogenous cost factor adjustment may be proposed by C&W or a third-party or, for that matter, proposed by the Commission itself. Any such application will be considered on a case-by-case basis and should include an explanation and quantification of the financial effect of any proposed exogenous cost change, along with supporting documentation by the party proposing the adjustment. All documentation supporting proposed exogenous cost changes must include a proposed recovery/disbursement mechanism, including a rationale for the proposed mechanism. The recovery/disbursement of any exogenous cost changes should, to the extent possible, be applied proportionally to the services affected by the exogenous cost change.

---

9 The Commission notes that, relative to the Consultation Document, it has modified this criterion to apply to" regulated" rather than "total" revenues in view of the fact that the effects of any eligible exogenous cost factor would be considered relative to "regulated" services alone and, as such, would not take into account "unregulated" service effects, if any.

4.5 Carry-over of Headroom

55. As discussed in the Consultation Document, headroom exists whenever an API is below the corresponding PCI for a particular Price Control Basket. If the carry-over of headroom is permitted in one Price Cap Year to the next, then the regulated service provider would be allowed to raise prices in subsequent Price Cap Years, if it desired, to eliminate any existing headroom created in earlier Price Cap Years. This equally applies in a case where a single service is subject to a price cap. If the rate of the service is lowered below the price cap, which would create headroom, then the service provider would be permitted to raise the rate for the service back to the cap at a later point in time.

56. The Commission indicated in the Consultation Document that is was of the preliminary view that the carry-over of headroom should be permitted in the New Regime. Moreover, it noted that the Pricing Regulations also indicate that the carry-over of headroom should be permitted.[10] No party filing comments in response to the Consultation Document was opposed to this provision. Thus, the Commission concludes that carry-over of headroom is permitted in the Second Regime.

5 Price Cap Services and Control Baskets

5.1 Price Cap Services

57. The Pricing Regulations indicate that for a service to be treated as a Price Cap Service, C&W must be found to be dominant in the provision of that service.[11] In other words, any services for which C&W possesses market power are to be treated as Price Cap Services. The Commission notes that this approach is consistent with international best practice.

58. The 2005 C&W Licence provides a summary of the telecommunications services with respect to which C&W was considered to be dominant at the time. These services were broadly defined to include (i) domestic public telephone services provided over C&W's fixed network, (ii) international public telephone services provided over C&W's fixed network, and (iii) domestic and international leased line services provided over C&W's fixed network.[12] The Commission notes that it has not received a petition from C&W pursuant to section 16(3) of the Ordinance to modify the dominance finding included in the C&W Licence, nor has the Commission undertaken on its own behalf a dominance review of the services included in the dominance finding included in the C&W Licence.

59. Thus, in the Consultation Document, the Commission indicated that it was of the preliminary view that, consistent with the Pricing Regulations and the dominance finding included in the C&W Licence, the following retail services should be treated as Price Cap

---

[10] Pricing Regulations, Section 6 (10).

[11] Pricing Regulations, Section 3 (2).

[12] C&W Licence, Annex A.

Services under the Second Regime:

i) business and residential access installation charge;

ii) business and residential access;

iii) domestic (fixed-to-fixed) calling;

iv) domestic (fixed-to-mobile) calling (net receipts);

v) international (outbound) standard calling (net of outpayments);

vi) international (outbound) discount calling (net of outpayments);

vii) domestic leased lines

viii) international leased lines

ix) enhanced services/VAS (associated with fixed access lines, including but not limited to Voicemail, Caller ID, etc.)

x) payphones

xi) others, if any, to be determined

60. The Commission asked for parties to comment on this proposed approach to the determination of and the proposed list of Price Cap Services.

61. Islandcom indicated that it is generally supportive of the Commission's proposed approach as well as the list of proposed Price Cap Services. It, however, suggested that Interconnection Transit Service also be added to the list.

62. C&W was also generally supportive of the approach. However, it questioned whether comprehensive dominance tests had been conducted by the Commission for each of the services included in the Price Cap Services list. For instance, C&W considers mobile to be a substitute for both domestic and international calling as well as payphone services. As a result, C&W believes that it does not possess market power in the provision of these services and, therefore, these services need not be subject to price caps. C&W also took issue with the possible inclusion of international inbound calling under the price cap regime, given that it is a wholesale rather than retail service and, therefore, should, in its view, not be subject to price caps.

63. Digicel was also of the view that comprehensive dominance tests had not been conducted for the proposed Price Cap Services. It believed that a fresh look should be taken as to whether C&W is currently or, over the next year or two, is likely to be dominant in the provision of each of the services listed. Digicel suggested that such an exercise, if conducted, would likely exclude at a minimum, international outbound calling and leased line services as well as payphone services from the proposed list of Price Cap Services.

64. Based on the comments received and discussions with all three parties who filed comments, the Commission is of the view that C&W's market power with respect to the provision of international and payphone services has diminished significantly since the C&W Licence was issued and is likely to decline further still over the next year or two.

Consequently, the Commission considers that these services need not be subject to price cap constraints under the Second Regime. However, until such time that a formal dominance analysis is undertaken and a non-dominance finding is reached for these services, they will continue to be treated as regulated services. As discussed below, all such services will be assigned to an "uncapped" services category or basket and, as such, are not treated as Price Cap Services.

65. In regard to Islandcom's proposal to treat Interconnection Transit service as a Price Cap Service, the Commission notes that this service is a wholesale rather than retail service. The price cap regime under consideration in this Decision applies to retail services only and, therefore, does not apply to wholesale services such as Interconnection Transit. In this respect, the Commission notes that wholesale services, such as Interconnection Transit, are subject to Commission oversight pursuant to the Interconnection and Access to Telecommunications Facilities Regulations issued in 2005.

5.2 Price Control Baskets

66. As discussed in the Consultation Document, once the list of Price Cap Services is determined, the next consideration is the grouping of these services into one or more Price Control Baskets, as may be deemed appropriate, each of which would be subject to separate pricing constraints. While there are no specific provisions in either the Ordinance or Pricing Regulations in this regard, the criteria proposed by the Commission in the Consultation Document for this purpose included the following:

- The similarities and/or differences in the price/cost relationship of the various Price Cap Services;
- The homogeneity and/or heterogeneity of the Price Cap Services, including with respect to demand price elasticities, and to the type of consumer to which it is targeted (e.g. residential/business, etc.;
- The degree of substitutability of Price Cap Services; and,
- The simplicity/complexity of the price cap plan and the degree of pricing flexibility provided to the service provider.

67. Taking these criteria into account, in the Consultation Document, the Commission suggested the following set of Price Control Baskets may be appropriate for the Second Regime:

- **Price Control Basket #1: Domestic Residential Services**, including, residential access installation charge, residential access, residential domestic (fixed-to-fixed) calling, residential domestic (fixed-to-mobile) calling (net receipts) and residential enhanced services/VAS (associated with access lines, including but not limited to Voicemail, Caller ID, etc.).

- **Price Control Basket #2: Domestic Business Services**, including business access installation charge, business access, business domestic (fixed-to-fixed) calling, business domestic (fixed-to-mobile) calling (net receipts), business enhanced services/VAS (associated with access lines, including but not limited to Voicemail, Caller ID, etc.), domestic leased lines and payphones.
- **Price Control Basket #3: International Services**, including international (outbound) standard calling (net of outpayments), international (outbound) discount calling (net of outpayments) and international leased lines
- **"Uncapped" Services**, possibly including international (inbound) calling (net receipts).

68. The Commission notes that once a set of Price Control Baskets is defined, the price cap model underlying the Forward-Looking Approach would be used to calculate corresponding X-factor(s) such that C&W will be expected to meet the established target rate of return of 13%, on average, over the course of the Second Regime (as noted in Section 4.2 above).

69. In the context of the Price Control Basket included in the Consultation Document, the Commission suggested that the X-factor applied to the Domestic Residential Price Control Basket could be set on a "policy" basis taking into account the price/cost relationships for the services in this basket, affordability or other policy considerations. In the case of the Domestic Business Price Control Basket, the Commission suggested that the applicable X-factor could be set either on a policy basis (taking into account price/cost relationships and other factors) or "calculated" using the price cap model underlying the Forward-Looking Approach. In the case of the International Services Price Control Basket, the Commission suggested that the applicable X-factor would "calculated residually" using the price cap model underlying the Forward-Looking Approach such that C&W would be expected to earn the target rate of return target, on average, over the course of the Second Regime.

70. Under the proposal included in the Consultation Document, the uncapped services category would include all other regulated services, although there would be no pricing constraints placed on the services in this category. The services included in this category could either be included or excluded in the price cap model underlying the Forward-Looking Approach which would potentially affect the magnitude of the residually calculated X-factor applicable to Price Control Basket # 3 and possibly Price Control Basket # 2. For instance, while international inbound calling is not a retail service and, therefore, would not be subject to price caps, the revenues, costs and capital employed associated with the provision of this service could be included in the price cap model underlying the Forward-Looking Approach for the purposes of calculating the X-factors applicable to other Price Control Baskets.

71. All three parties commented on the Commission's Price Control Basket proposal set out in the Consultation Document. Islandcom generally supported the proposal, adding that it believed that Interconnection Transit Service also be included under the regime.

72. Digicel was concerned that the proposal was too complex and overly restrictive in terms of pricing flexibility. Moreover, it questioned the need to regulate residence and business fixed services in view of the fact that these services will soon be subject to competition from the fixed wireless services Digicel plans to deploy shortly. Digicel also argued that a price cap regime that drove prices down would be harmful to competition.

73. C&W also suggested that a more simplified approach would be preferable. In its comments, C&W suggested, on a preliminary basis, that the Domestic Residential Basket be limited to residential access and installation services. It suggested that the X-factor on this basket be set on a policy basis and that it should allow for annual rate increases no higher than the rate of inflation. With respect to the Price Control Basket #2, C&W suggested that it be expanded to include residual calling and enhanced/VAS services. It suggested that the X-factor on this basket be calculated on a residual basis using the price cap model underlying the Forward-Looking Approach. With respect to the Price Control Basket #3, C&W suggested that it could include international calling and leased lines services and that this basket could be capped at existing rates (in other words, X = I). More generally, C&W argued that there was no need to price cap international services or payphone services.

74. Based on the comments received and discussions with all three parties, the Commission is of the view that its Price Control Basket proposal set out in the Consultation Document is unnecessarily complex and burdensome to administer. Consequently, the Commission considers that a more simplified Price Control Basket structure is more appropriate. In addition, the Commission believes that a simplified approach would provide a means to ensure that required rate reductions are targeted to services where current margins and public concerns are highest.

75. Thus, for the Second Regime, the Commission adopts a simplified price cap plan that includes two Price Control Baskets:

76. **Price Control Basket #1** includes all domestic fixed network services other than fixed-to-mobile calling – i.e., residential access and business access and installation services, on-island and intra-island calling, enhanced/VAS services (including Voice-mail) and domestic private leased circuits ("DPLC"). The services in this basket are individually capped at existing, going-in rates – in other words X = I for each service in the basket. A key benefit of this price constraint is that it eliminates the need for C&W to calculate and file an API index with the Commission. In this respect, the Second Regime is similar in nature to the Initial Regime.

77. The Commission notes that going-in rates to the Second Regime are defined as the Price Cap Service rates in effect as of the end of the Initial Regime (as defined in Section 6.2 below).

78. The Commission recognizes that setting X = I for the services included in this basket poses significant risk to C&W. If inflation were to rise significantly, adhering to this constraint would become increasingly difficult. Therefore, the Commission caps the implicit X-factor at an annual inflation rate of five percent (**5%**). The Commission notes that similar inflation-based implicit X-factor cap of seven percent applied under the Initial Regime. The Commission considers that a lower inflation cap of five percent is more consistent with other price cap regimes in the region and, in the context of the entire set of pricing constraints established for the Second Regime, more appropriately balances the risk of high inflation in the coming years between C&W and consumers.

79. As a result, the principal pricing constraint applying to each service in Price Control Basket #1 is:

$$X = I \quad when\ I \leq 5\% \quad and \quad X = 5\% \quad when\ I > 5\%$$

Where the I-factor is measured on the basis of the average annual percentage change in the All Bahamas CPI, measured over the 12-month period ending two months prior to the start of the Price Cap Year.[13]

80. **Price Control Basket #2** includes a single service: domestic fixed-to-mobile calling. The X-factor on this basket has been determined on a calculated basis using the price cap model underlying the Forward-Looking Approach in such a manner so that collectively, the returns for Price Control Basket #1 and #2 over the Second Regime are on average equal the target rate of return established by the Commission. The value of the X-factor calculated on this basis is **14.1%**.[14] Relative to the going-in retail domestic fixed-to-mobile per minute call of 50¢, this X-factor and expected inflation have been translated into the follow set of maximum annual domestic fixed-to-mobile per minute call charges over the course of a four-year price cap period:[15]

---

[13] As set out in Section 6.2, the Price Cap Year starts on April 1. Therefore, the I-factor at the start of each Price Cap Year would be measured as the average annual rate of change in the All Bahamas CPI for the period February 1 to January 31 of the preceding year.

[14] The Commission notes that the X-factor of 14.1% was calculated relative to the “net” fixed-to-mobile (“FTM”) rate for price cap modelling purposes. The net FTM rate is less than the “gross” or “retail” FTM rate since the net FTM rate excludes outpayments to terminate domestic FTM calls along with government royalties. Thus, the required FTM rate reductions, determined by the price cap model, measured in percentage terms relative to the retail FTM rate will necessarily be lower compared to when they are measured relative to the net FTM rates. This is due to the fact that the absolute magnitude of the required FTM rate changes, measured in cents per minute, are the same relative the net and gross FTM rate base. From the consumer’s perspective, retail rather than net rates are relevant and, therefore, annual maximum allowed fixed-to-mobile rate caps have been set on the basis of retail rates.

[15] The Commission notes that the annual Maximum Fixed-to Mobile Calling Rates set out in Table 1 have been calculated on the basis of current or going-in mobile termination rates (which are currently reflected in the going-in retail domestic fixed-to-mobile charge of 50 cents). If a reduction(s) in mobile termination rates is approved by the Commission over the course of the Second Regime, then the Commission considers that an equal reduction in the retail fixed-to-mobile rate cap – as set out in Table 1 – should immediately take effect. Thus, for example, if mobile termination rates were reduced by one cent per minute mid-way through the second year of the Second Regime, then the Maximum Fixed-to Mobile Calling Rate for the second price cap year would be immediately reduced by one cent per minute at that time and, moreover, the Maximum Fixed-to Mobile Calling Rates for the third and fourth price cap years would also both be reduced by one cent per minute.

Table 1: Required Fixed-to-Mobile Rate Reductions

Price Cap Year	Maximum Fixed-to Mobile Calling Rate
As of day one of the 1st Price Cap Year	***46¢***
As of day one of the 2nd Price Cap Year	***43¢***
As of day one of the 3rd Price Cap Year	***40¢***
As of day one of the 4th Price Cap Year	***37¢***

81. As noted in Section 4.2, based on the test year financial information the Commission collected from C&W, the Commission determined that C&W's actual test year rate of return on its domestic regulated services exceeded the target rate of return of 13% established by the Commission.[16] The price cap model used by the Commission to calculate the above-noted X-factor of 14.1% indicated that, absent any rate reductions, C&W would have continued to earn a rate of return on its domestic regulated services in excess of the established 13% target rate of return throughout the course of the next price cap period. The resulting estimated surplus earnings on regulated domestic fixed network services, in dollar terms, would have amounted to roughly $2.5 million in total or over $600,000 per year on average absent any required rate caps or rate reductions. The calculated X-factor of 14.1%, and equally the corresponding annual fixed-to-mobile rate reductions shown in Table 1 above, have the effect of eliminating this surplus and, by doing so, an equivalent amount is passed onto consumers in the form of savings resulting from lower "nominal" prices in the case of fixed-to-mobile calling charges as well as from lower "real" prices for all domestic Price Cap Services.

82. **The "Uncapped" Regulated Services** category includes all other regulated services. These services include international outbound calling services, international card services, international private leased circuits ("IPLC") and payphone services. As noted, these services are excluded from the Price Cap Services category under the Second Regime and, therefore, are not subject to any formal price cap constraints. In view of the increasingly competitive market conditions associated with the provision of these services, it is expected that prices for this group services will decline over the course of the next price cap period. Thus, the rates for each service assigned to this category will not be permitted to rise above their respective going-in rate levels.

83. In addition, the Commission notes that C&W has also committed to ensuring that individual international direct dialed ("IDD") calling standard rates for its fixed line customers will be no higher than those charged to its mobile customers. In this way, it will be ensured that standard fixed IDD rates, at a minimum, mimic competitive trends in

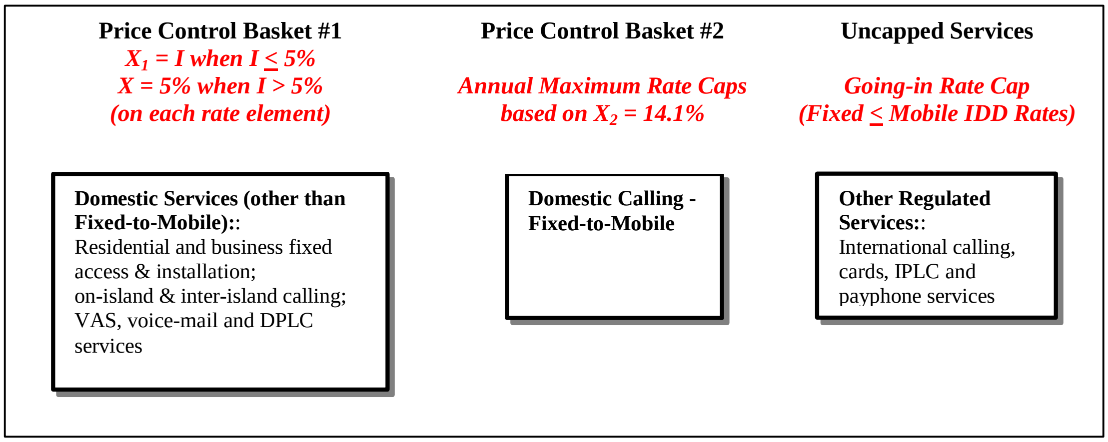
---

16 Note that only domestic fixed network services were used in the price cap model to calculate the residual X-factor on Price Control Basket #2.

the mobile market.[17] The Commission, therefore, includes this price constraint on fixed IDD rates as a condition of service applicable to C&W's IDD service.

84. Figure 1 provides a summary of the adopted Price Cap Plan for the Second Regime and Appendix B provides a listing of all the Price Control Baskets and uncapped services category.

Figure 1: Summary of Second Price Cap Regime



5.3 Other Pricing Constraints

85. In addition to a principle pricing constraint, price cap regimes generally include other restrictions on the service provider's pricing flexibility to change individual rate elements within a Price Control Basket in terms of maximum allowed rate increases in any single year while ensuring the applicable principle pricing constraint remains satisfied. As noted in the Consultation Document, the Pricing Regulations include such provisions.[18]

86. The Commission notes, however, that under the Price Control Basket structure adopted for the Second Regime, additional pricing constraints are unnecessary due to the fact that each service included in Price Control Baskets #1 and #2 is subject to individual rate element constraints. While individual rates for the services included in Price Control Basket #1 cannot rise given they are capped at going-in rate levels (i.e., rate levels in effect at the end of the Initial Regime), C&W is free to reduce any rate for a service(s) in this basket.

87. The same considerations apply to domestic fixed-to mobile call charges which are assigned to Price Control Basket #2.

17 For greater certainty, the Commission notes that this constraint applies solely to standard IDD per minute charges. It would not apply, for instance, to flat-rated bundled IDD minute plans, since one would normally expect such plans to offer interested customers discounts relative to standard charges. Moreover, the continued availability of standard IDD calling rates would serve as a back-stop for customers on such plans.

18 Pricing Regulations, Section 9 (a) and (b).

88. The Commission notes, however, that a price floor constraint applies to all regulated services (including those in Price Control Baskets #1 and #2 as well as the uncapped services category) which precludes any rate being reduced to potentially anti-competitive levels, as defined in Section 27(8) of the Ordinance. Such a constraint would not generally apply in the case of short-term promotional rate reductions.

5.4 New and Bundled Services

89. As discussed in the Consultation Document, consistent with the Pricing Regulations,[19] a process is required to review newly introduced services provided over C&W's fixed network to determine whether they should be treated as a Price Cap Service.

90. In this respect, the Commission indicated in the Consultation Document that it was of the preliminary view that a new service should be included as part of the Price Caps Services if, either together or in combination with another service, the new service provides the same kind of functionality as one of the existing Price Cap Services and, consequently, does not expand the range of services available. If it does not meet such a test, the new service would not be included as part of the New Regime or, at a minimum, would be included in the uncapped services category.

91. While not explicitly addressed in the Consultation Document, the Commission notes that new services also include new bundled services. There are, of course, already a variety of bundled services that C&W offers and which would under the Second Regime be included in Price Control Basket #2. For example, C&W's residential bHome services, which bundle fixed access, domestic calling and enhanced services, are bundled services which are be assigned to Price Control Basket #2. Were C&W to introduce a new bundled service offering, then the same functionality test noted above could be applied to determine whether the new bundled service should or should not be included as part of the Price Caps Services.

92. The Commission notes that the Pricing Regulations do not address the specific treatment of bundled services under price caps, but do state that C&W may offer packages of Price Cap Services as long as it also each Price Cap Service included in such a package is available on a standalone basis as well.[20]

93. C&W was the only party to comment on the treatment of new and bundled services. C&W considered the proposed functionality test to be too vague and, consequently, that it could result in too many services being unnecessarily classified as Price Cap Services. In C&W's view, this could serve to undermine its incentives to innovate. Moreover, to the extent a new service amounted to a bundle of existing Price Cap Services, C&W suggested that it would be effectively redundant to include such a new service bundle as a Price Cap Service. It noted that each of the individual service elements would already be subject to price caps and, to attract customers to the new service bundle, C&W would

---

19 Pricing Regulations, Section 5 (5).

20 Pricing Regulations, Section 5 (6).

have to offer a price discount relative to the standalone prices. Therefore, in effect, a price cap on the service bundle would be redundant.

94. The Commission disagrees with C&W's view that the proposed functionality test is too vague for the purpose of assessing whether new services or service bundles should be treated as Price Cap Services. Consideration of the functionality of a new service relative to existing services offered by C&W would take into account the nature of the service, including the extent to which it offered the same functionalities as existing services (perhaps in different combinations or usage levels) or whether it offered new and unique functionalities. In this respect, the existence of competitive alternatives to the new service or service bundle would also be relevant. Such considerations are clearly relevant to determining how a new service should be treated for price cap purposes. Thus, the Commission considers that a functionality test is necessary to determine the treatment of new services and service bundles under the Second Regime.

95. To this end, during the course of the Second Regime, the Commission directs C&W to file a description of any new service or new service bundle[21] that it introduces and to propose how it should be categorized taking into account the functionality the service provides relative to existing services and, as may be relevant, competitive alternatives. The Commission expects that C&W shall categorize a new telecommunication service consistent with the categorization of its existing telecommunications services and that it shall categorize as a Price Cap Service as a new telecommunications service that is a combination comprising predominantly or exclusively Price Cap Services.

96. Consistent with the price change notification requirements addressed in Section 7.1 below, the Commission directs C&W to file a notice with the Commission of the planned introduction of any new service or new service bundle. Each such notice must include a description of the new service or new service bundle along with proposed rates, terms and conditions applicable thereto. It must also include C&W's proposed categorization of the new service or new service bundle under the Second Regime, together with an explanation of the rationale for proposed categorization. Any such notices must be filed with the Commission at least **seven (7) working days** before the introduction of the new service or new service bundle.

97. If the Commission does not reply in writing to such a notice, either to disallow, suspend or modify the proposed rates, terms or conditions of the new service or service bundle within the 7 working day notice period, then the new service or service bundle would be deemed approved. The Commission may, however, to take up to 180 days after the introduction of the new service or new service bundle to assess whether it may be have potentially anti-competitive effects or whether the proposed categorization should be modified.

[21] For greater certainty, the Commission notes that, in addition of the introduction of a wholly new service bundle, a reconfiguration of an existing bundle – for instance, by adding or subtracting service components or otherwise alternating the combination of bundled service components – would also constitute a new service bundle under this provision.

5.5 Market Trials and Promotions

98. As noted in the Consultation Document, the Commission was of the preliminary view that C&W may conduct a market trial or short term promotion for a Price Cap Service without prior approval of the Commission, provided that:

a) the market trial or short term promotion does not exceed 90 days in duration;

b) the market trial or short term promotion is not similar to a market trial or short term promotion that concluded less than 120 days earlier; and

c) C&W files a description of the market trial or short term promotion, and the rates, terms and conditions applicable thereto, with the Commission at least 10 days before the beginning of the market trial or short term promotion.

99. In addition, the Commission noted in the Consultation Document that it was of the preliminary view that market trials and short term promotions should not be included in the calculation of the API.

100. C&W was the only party to comment on the treatment market trials or short term promotions under the Second Regime. It took issue the requirement to give notice of market trials or short term promotions 10 days in advance of their commencement. C&W considered the proposed time frame would not allow it to react to a competitor's initiative in a timely manner. C&W suggested that 5 days notice should be sufficient and that, in any event, the Commission would have the power to call off the market trial or short term promotion on an *ex post* basis if it were to discover problems after the launch.

101. In this respect, the Commission agrees with C&W's that a shorter notice period would be sufficient in the case of market trials or short term promotions, which in the latter case would typically involve price discounts. Therefore, consistent with the price change notification requirements addressed in Section 7.1 below, the Commission modifies condition c) above as follows:

> *C&W files a description of the market trial or short term promotion, and the rates, terms and conditions applicable thereto, with the Commission at least* ***seven (7) working days*** *before the beginning of the market trial or short term promotion.*

102. If the Commission does not reply in writing to the notice market trial or short term promotion, either to disallow, suspend or modify the proposed market trial or short term promotion within the 7 working day notice period, then the market trial or short term promotion would be deemed approved. The Commission may, however, to take up to 30 days after the introduction of the market trial or short term promotion to assess whether it may be have potentially anti-competitive or unjustly discriminatory effects.

6 Price Caps Timing Matters

6.1 Specification of the Price Cap Year

103. In the Consultation Document, the Commission set out several options for the specification of the Price Cap Year for the Second Regime. The first option was to use the fiscal year of C&W, which covers the period April 1 to March 31. A second option was to use a calendar year period of January 1 to December 31. A third option was to use the implied Price Cap Year of the Initial Regime, January 25 to January 24.

104. As noted in the Consultation Document, the Commission was of the preliminary view that the Price Cap Year should be established as C&W's fiscal year period C&W's fiscal year. The main advantage of this option is that the historical and projected financial and operating information that is used to design and monitor a price cap regime is already presented in fiscal year terms and hence no further calculations are required to convert such data into a Price Cap Year.

105. As noted in the Consultation Document, the Commission was of the preliminary view that the Price Cap Year should be established as C&W's fiscal year period C&W's fiscal year. C&W, the only party to comment on timing aspects for the regime, supported this proposal. Consequently, the Commission concludes that it is appropriate to adopt C&W's fiscal year period as the Price Cap Year period for the Second Regime.

6.2 The Bridge Period and Transition

106. The adoption of a fiscal year based Price Cap Year creates a gap or Bridge Period between the end of the Initial Regime (January 24, 2009) to the first full year of the New Regime, which would start on April 1, 2009. Thus, under this approach, a Bridge Period of just over two months exists, covering the period January 25 to March 31, 2009.

107. In the Consultation Document, the Commission noted that there are a number of options with respect to the transitional arrangements for the Bridge Period. One option is to extend the provisions of the Initial Regime to March 31, 2009. This would have the advantage of effectively eliminating the requirement for a Bridge Period. Another option is to start the Second Regime on January 26, 2009 and hence incorporate the Bridge Period in the New Regime. One disadvantage with this approach is that the inclusion of the Bridge Period would require additional complexity in the New Regime by having relatively complex calculations for the Bridge Period that, given its relatively modest length, may not be proportionate.

108. In the Consultation Document, Commission expressed the preliminary view that the Initial Regime should be extended to March 31, 2009. In this respect, the Commission also noted that the Price Cap Services covered under the Initial Regime may potentially be viewed as a subset of the Price Cap Services under the New Regime. To the extent this was found to be the case, the Commission proposed a transitional arrangement for the Bridge Period, under which the Price Cap Services in the New Regime that are not

currently included in the Initial Regime Services should also be the subject of the provisions included in the Initial Regime.

109. C&W supported the Commission's proposal to extend the Initial Regime to March 31, 2009. However, C&W expressed concern with the proposed transitional arrangement for the Bridge Period, suggesting that it could create the equivalent of a special "interim" regime for a very short period which would have no public benefit. Moreover C&W suggested that such an arrangement would be inconsistent with the proposed objectives for the New Regime.

110. Having now established the structure of the Second Regime, as described in Section 5.2 above, the Commission considers that there is no need to establish any transitional arrangements for the Bridge Period. The Price Cap Services covered by the Second Regime are not different from those covered by the Initial Regime. Consequently, the concerns raised by the Commission in its Consultation Document and by C&W in its comments are no longer relevant. Thus, the Commission has extended the Initial Regime, as formulated, to March 31, 2009.

6.3 Price Cap Regime Period

111. According to the Pricing Regulations, the term of the Price Cap Regime Period should be three to five years. The Initial Regime, as extended, ran for a period of just over three years. In the Consultation Document, the Commission proposed a Price Cap Regime Period of four years for the Second Regime: April 1, 2009 to March 31, 2013.

112. No party was opposed to this time frame. The Commission, therefore, adopts a four year Price Cap Regime Period for the Second Regime starting April 1, 2009 and ending March 31, 2013. Thus, Second Regime covers the following four-year period:

Price Cap Year 1: April 1, 2009 – March 31, 2010

Price Cap Year 2: April 1, 2010 – March 31, 2011

Price Cap Year 3: April 1, 2011 – March 31, 2012

Price Cap Year 4: April 1, 2012 – March 31, 2013

113. The Commission reiterates that going-in rates to the Second Regime are the rates for all Price Cap Services in effect as March 31, 2009.

7 Price Caps Administrative Matters

7.1 Notification of Price Changes

114. Section 27 of the Ordinance sets out the following provisions related to rate changes:

> (5) In approving, disallowing or amending any regulated rate or tariff filed by the licensee, the aim of the Commission shall be to facilitate the policy of market liberalisation and competitive pricing.
>
> (6) Subject to the provisions of subsection (5) which shall govern rate of tariff increase, in approving, disallowing or amending any regulated rate or tariff filed by the licensee, the Commission shall reply in writing to a request by the licensee within 28 days of receipt of the tariff filing, failing which, such filing shall be deemed approved by the Commission.
>
> (7) In considering a rate or tariff decrease filed by the licensee, the Commission shall reply in writing to a request within 7 working days of receipt of the filing stating whether the filing is approved by the Commission as filed or whether it is conditionally approved.
>
> (8) Conditional approval under subsection (7) means that the rate or tariff decrease is approved so that the licensee may immediately implement the decrease and the Commission may then take up to 180 days after the introduction of the rate or tariff decrease to assess whether the rates or tariff are anti-competitive through a determination of whether they are above an incremental cost price floor.
>
> (9) If the Commission fails to reply to the request within 7 working days, the filing shall be deemed approved by the Commission as filed.

115. In addition, Section 6 of the Pricing Regulations includes the following provisions relating to price changes:

> **Changes to prices of Price Cap Services**
>
> 6. (1) Designated Licensees subject to the Price Cap Regime may freely adjust the prices for Price Cap Services, subject to these Regulations.
>
> (2) Before implementing any changes in prices of Price Cap Services, a Designated Licensee shall provide notice of at least twenty-eight (28) days for price increases, and seven (7) working days for price decreases to users and to the Commission, of such proposed change.
>
> (3) The Commission may review any proposed price changes notified to it and, if it determines there is reasonable cause, may notify the Designated Licensee in writing that it is suspending the effectiveness of such changes pending a formal investigation of whether they are consistent with the Price Cap Regime.
>
> (4) With respect to price decreases, within the seven (7) working day-period specified in subsection (2), the Commission may notify the Designated Licensee that the rate is conditionally approved, after which the Designated Licensee may immediately implement the decrease, subject to a determination by the Commission, by no later than 180 days after the effective date of such decrease, that such rate is anti-competitive or will have such effect.
>
> (5) If the Commission does not order a suspension of notified price changes within the twenty-eight (28) day or (7) working day notice period, then the new rates shall take effect.
>
> (6) Notwithstanding subsection (5), the Commission may at any time review any prior rate changes according to the provisions of these Regulations.

116. As indicated in the Consultation Document, the Commission considers the above-noted provisions to be sufficiently detailed to be fully practical under the New Regime and it indicated that it was of the preliminary view that these provisions should continue to apply during the course of the Second Regime.

117. C&W stated in its comments that while it recognized that the existing price change notification requirements are enshrined in Government legislation and, consequently, that it is not open to the Commission to not apply them or for C&W to not to adhere to them, C&W nevertheless argued that the requirements put it at a significant competitive disadvantage in the market place. The key concern raised by C&W in this respect relates to the requirement to give both the public (i.e., users and competitors) and the Commission seven days advance notice to price decreases. C&W believes that it should be required only to give the Commission advanced notice of a price reduction. According to C&W, this approach would preclude existing or potential competitors from gaining an unfair advantage, while not disadvantaging customers. Therefore, C&W asked the Commission to request a change to the Pricing Regulations to remove the requirement to provide prior notice to users of the service(s) subject to a price reduction, as that requirement serves no public policy purpose and is harmful to C&W.

118. As noted, the Commission considers that the provisions set out in the Ordinance and Pricing Regulations regarding price change notification requirements could, as under the Initial Regime, continue to be applied over the course of the Second Regime. However, the Commission agrees with C&W that notification of price reductions could be made solely to the Commission, in confidence, without any harm or disadvantage to users. Therefore, the Commission will undertake to have the Section 6(2) of the Pricing Regulations amended to exclude the requirement to notify both users and the Commission seven days in advance of proposed price reductions, replacing it with the requirement to notify just the Commission.

119. Recognizing that the process to change to the Pricing Regulations is likely to be lengthy, the Commission notes that it has the prerogative under Section 27(5) of the Ordinance to "facilitate the policy of market liberalisation and competitive pricing" in approving, disallowing or amending any regulated rate or tariff filed by the licensee. Applying this provision, the Commission considers that it is appropriate to permit C&W to file notices of price reductions in confidence with the Commission at least **seven (7) working days** before their proposed implementation date, until such time that the Pricing Regulations are formally amended. All other aspects of the pricing change notification requirements set out in the Pricing Regulations will continue to apply.

7.2 Compliance Filings

120. There are two forms in which compliance with the rules of the price cap regime can be routinely demonstrated. First, compliance can be demonstrated for each for price change or set of price changes introduced during the Price Cap Year. This form of compliance would be provided along with the price change notification requirements discussed in the previous section. Second, compliance can be demonstrated on an overall basis annually,

typically just prior to the start of a new Price Cap Year or shortly thereafter (on an *ex ante* or *ex post* basis, respectively).[22]

121. As indicated in the Consultation Document, the Commission believes that for any application for a price change during the Price Cap year, compliance should be shown on an *ex-ante* basis as part of the price change notification requirements discussed in the previous section. Hence, the Commission indicated that it was of the preliminary view that for any price change C&W should be required to file a Rate Change Compliance Filing ("RCCF") with the Commission. An RCCF must contain a description of the proposed rate changes and confirm that the rate change is in compliance with all established price cap constraints.

122. In addition, as indicated in the Consultation Document, and without prejudice to the *ex-post* provisions set out in the Pricing Regulations, the Commission was also of the preliminary view that that C&W file with the Commission an *ex-ante* Annual Compliance Filing ("ACF") one month before the beginning of each Price Cap Year (i.e., the first business day of the month of March) demonstrating that C&W's Price Cap Services rates will be in compliance with all established price cap constraints as of the start of the coming Price Cap Year.

123. In its comments, C&W suggested the Commission's proposals were unnecessarily onerous and costly. C&W stated that RCCFs should be sufficient to monitor the regime as services and rates evolve along with an *ex post* rather than *ex ante* ACF to review the operation of the regime at the end of the year.

124. In view of the highly simplified price cap regime being implemented in this Decision, the Commission is of the view that the associated compliance requirements are not onerous or costly for either C&W or Commission staff. Consequently, the Commission considers that C&W shall include a statement of compliance with the established price cap constraints whenever a notification of a price change is filed with the Commission for one or more Price Cap Services – i.e., the notification of a price change must include a description of the proposed rate changes and confirm that the rate change is in compliance with all established price cap constraints and, in doing so, simultaneously constitute an RCCF.

125. The Commission notes that notification of price changes must also be filed with the Commission for uncapped regulated services, although in this respect an RCCF requirement does not apply.

126. In addition, the Commission considers that ACFs should be filed with the Commission on an *ex ante* basis, on the first business day of March each year of the Second Regime. Each ACF shall include:

---

[22] Section 6 of the Pricing Regulations includes provisions related to the annual *ex-post* verification by the Commission of compliance with established price cap rules, but also provides the Commission with the flexibility to modify compliance rules as it sees fit.

i) A complete list of regulated services – i.e., including both Price Cap Services and uncapped regulated services – along with their respective going-in rate levels (as of March 1, 2009) and their expected current rate levels as of April 1 of the filing year;

ii) For international outbound calling services, a list of both C&W's fixed and mobile rates must be provided (to demonstrate that each individual fixed standard IDD rate is less than or equal to the corresponding mobile IDD rate);

iii) An update of the I-factor for the 12-month period ending January 31 (following the formulation set out in Section 5.2); and

iv) Notification of any required or proposed price changes to be implemented as of April 1 of the filing year.

127. Thus, the first ACF shall be filed on March 2, 2009 and include (i) a listing of all the Price Cap Services and uncapped regulated services and their respective going-in rate levels, (ii) a listing of C&W's current fixed and mobile IDD rates, (iii) the I-factor for the period ending January 31, 2009 and (iv) notification of any required or proposed price changes to be implemented as of April 1, 2009 (including, but not necessarily limited to, required reductions in fixed-to-mobile calling charges scheduled for April 1, 2009).

7.3 Annual Regulatory Reporting

128. There are no specific provisions in this regard in the Ordinance or the Pricing Regulations. As indicated in the Consultation Document, the Commission is mindful that it has to strike the appropriate balance between its requirement to monitor and analyze and monitor the price cap regime on the one hand and its goal of not imposing unreasonable additional regulatory burdens on C&W. In this regard, the Commission stated in the Consultation Document that it was of the preliminary view that for the duration of the New Regime, C&W should be required to provide the Commission the following:

- Annual audited Statutory Financial Statements;
- Annual Regulatory Statements, showing, inter alia, service and overall return on mean capital employed and a reconciliation to the audited Statutory Financial Statements;
- Biennial updated versions of the Enhanced Allocation Model ("EAM") that is to say, an EAM for FY2009-2010 to be submitted by July 1, 2010 and another for FY2011-2012 to be submitted by July 1, 2012.

129. In its comments, C&W agreed with a requirement to file annual audited statutory financial statements; although it noted that this requirement applies to all licensees as per Section 14(g) of the Ordinance. It this respect, C&W indicated that the requirement need not be considered part of the price caps regime.

130. On the other hand, C&W considered the filing separate regulatory statements and updating the EAM to be unacceptable and inconsistent with the intent of the New Regime. C&W stated that filing separate regulatory statement would significantly increase its financial reporting costs. In addition, C&W added that while the EAM is useful for determining going-in rates of return and prices, it is not useful or relevant to the ongoing monitoring of prices during a price cap regime. C&W noted that the fundamental purpose of a price cap regime is to regulate prices with out reference to rate of return.

131. The Commission generally shares C&W's concerns regarding the potential cost involved with producing Annual Regulatory Statements and updating the EAM for TCI. At the same time, the Commission notes Annual Regulatory Statements based on an updated EAM will be required by the Commission as part of the process to review and assess the performance of the Second Regime. Given the term of the Second Regime has been set at four years, Regulatory Statements, based on an updated EAM, will be required for the third year of the Second Regime – i.e., April 1, 2011 to March 31, 2012. This information should be filed with the Commission no later than six months after the completion of the third Price Cap Year – i.e., October 1, 2012.

132. Thus, C&W is directed to file Regulatory Statements for fiscal year 2011-12, showing, inter alia, service and overall return on mean capital employed along with a reconciliation of the results with its audited Statutory Financial Statements and including the underlying updated EAM, by no later than October 1, 2012.

133. The Commission recognizes that C&W's annual audited Statutory Financial Statements must be filed with the Commission in accordance with the provisions of the Ordinance. However, these statements will also be relevant to the ongoing monitoring of the Second Regime and the Commission will also use them for that purpose.

Appendix A – General Price Cap Index Formulae

As explained in the Consultation Document, price cap formulae generally include (i) a price cap index ("PCI") and (ii) an actual price index ("API"), representing a weighted index of the service provider's prices. Normally, the API must at all times be equal to or below the PCI, which forms the "Principal Pricing Constraint", i.e.:

(Equation #A) $API_{j,t} \leq PCI_{j,t}$ for all t

where: t = Price Cap Year
j = Price Control Basket

That is, for each Price Control Basket j, the API for a particular Price Cap Year t must always be less than or equal to the corresponding PCI. Note that a Price Control Basket may include many services or as few as a single service.

As discussed in the Consultation Document, the standard specification for the PCI is as follows:

(Equation #B) $PCI_{j,t} = PCI_{j,t-1} * (1+ I_t - X_{j,t} +/- Z_{j,t})$

where: t = Price Cap Year
j = Price Control Basket
I_t = I-factor for Price Cap Year t
$X_{j,t}$ = X-factor for Price Control Basket j in Price Cap Year t
$Z_{j,t}$ = a Commission approved exogenous-cost factor adjustment for Price Control Basket j in Price Cap Year t (see Section 6.3 below)

As also discussed in the Consultation Document, the standard specification for the API is as follows:

(Equation #C) $$API_{j,t} = API_{j,t-1} * \left(1+ \sum_k \left[w_{j,k,t-1} * \left(\frac{P_{k,t}}{P_{k,t-1}} - 1 \right)_j \right]\right)$$

where $API_{j,t}$ = for each Price Control Basket j, the proposed actual price index value for the current Price Cap Year, year t.

$API_{j,t-1}$ = for each Price Control Basket j, the actual price index value at the beginning of the previous Price Cap Year, year t-1.

$API_{j,t} = 100$, when t = 0.

k = an individual service rate element in Price Control Basket j.

$P_{k,t}$ = the average price of the k^{th} rate element at the end of the current Price Cap Year, year t, where the average price is a time-period weighted price over the 12 months of the Price Cap Year.

$P_{k,t-1}$ = the average price of the k^{th} rate element at the end of the previous the Price Cap Year, year t-1. For the first annual compliance filing, P_{t-1} would be the price in effect immediately preceding the date the New Regime comes into effect. For each subsequent annual filing, P_{t-1} would be the average price from the preceding Price Cap Year.

$W_{j,k,t-1}$ = for each Price Control Basket j, the revenue weight for the k^{th} rate element during the previous Price Cap Year, year t-1, calculated as the ratio of revenue for the k^{th} rate element in the Price Cap Year to the total revenue for all services in the Price Control Basket j during the previous Price Cap Year, year t-1.

Appendix B – Price Cap and Uncapped Regulated Services List

Price Control Basket #1: Domestic Services (excluding Fixed-to-Mobile Calling)

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Residential				
Line Rental - Fax	4245	Direct Exchange Line Residential Fax	Y	Y
Line Rental - Other DEL	4	Direct Exchange Line Staff	Y	Y
Line Rental - Residential DEL	2	Direct Exchange Line Residential	Y	Y
Line Rental - Residential DEL	10000	SmartChoice Residential DEL	Y	Y
Smart Choice	10020	SmartChoice Residential Plan A	Y	Y
Smart Choice	10021	SmartChoice Residential Plan B	Y	Y
Smart Choice	10022	SmartChoice Residential Plan C	Y	Y
Smart Choice	10023	SmartChoice Residential Plan D	Y	Y
Smart Choice	13954	bHome Residential DEL	Y	Y
Smart Choice	13959	bHome 500	Y	Y
Smart Choice	13960	bHome 800	Y	Y
Smart Choice	13961	bHome Unlimited	Y	Y
Business				
Line Rental - Business DEL	1	Direct Exchange Line Business	Y	Y
Line Rental - Fax	7	Direct Exchange Line - Business FAX	Y	Y
Line Rental - Government DEL	3	Direct Exchange Line Government	Y	Y
Line Rental - Government DEL	7452	Direct Exchange Line Government (Fax)	Y	Y
Line Rental - Other DEL	15	Direct Exchange Line TOLL-FREE 800	Y	Y
Line Rental - Other DEL	1878	Direct Exchange Line CCV	Y	Y
Line Rental - PABX	8	Direct Exchange Line PABX	Y	Y
Line Rental - Other DEL	10	Direct Exchange Line Home Direct	Y	Y
Smart Choice	10640	SmartChoice Business Plan A	Y	Y
Smart Choice	10641	SmartChoice Business Plan B	Y	Y
Smart Choice	10642	SmartChoice Business Plan C	Y	Y
Residential/Business				
On-Island Fixed-to-Fixed (FTF) Calling	NA	Day	Y	NA
On-Island FTF Calling	NA	Evening	Y	NA

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
On-Island FTF Calling	NA	Weekend	Y	NA
Inter-Island FTF Calling	NA	Day	Y	NA
Inter-Island FTF Calling	NA	Evening	Y	NA
Inter-Island FTF Calling	NA	Weekend	Y	NA
Value Added Services				
Other Non Telecom	988	Misc Charges Ex Directory Listing	Y	Y
CLASS - Abbreviated Calling	850	Exch Feature Abb Dial 30 Numbers	Y	Y
CLASS - Abbreviated Calling	880	Magic Touch Abbreviated Dialling	Y	Y
CLASS - Call Barring	867	Exch Feature Inward Call Barring	Y	Y
CLASS - Call Barring	868	Exch Feature Local Outward Call Bar	Y	Y
CLASS - Call Barring	875	Exch Feature Bar IDD	Y	Y
CLASS - Call Barring	2095	Exch Feature Bar IDD & Int'l Operator	Y	Y
CLASS - Call Barring	5845	Telemax Cust con IDD Barring	Y	Y
CLASS - Call Barring	5846	Telemax Call Barring	Y	Y
CLASS - Call Barring	11338	Subscriber Activation: Call Barr	Y	Y
CLASS - Call Forwarding	878	Magic Touch Call Forwarding	Y	Y
CLASS - Call Forwarding	889	Magic Touch Call Fwd/Call Wait/Conf Call	Y	Y
CLASS - Call Forwarding	5841	Telemax Call Forwarding	Y	Y
CLASS - Call Waiting	879	Magic Touch Call Waiting	Y	Y
CLASS - Call Waiting	5840	Telemax Call Waiting	Y	Y
CLASS - Call Waiting	6798	Call waiting on Caller Id-cordless phone	Y	Y
CLASS - Caller ID	4616	Caller ID Interface NT8B88FA-93	Y	Y
CLASS - Caller ID	4617	Caller ID Interface, NT5B41GA-93	Y	Y
CLASS - Caller ID	4634	Caller ID Interface NT8B88FA	Y	Y
CLASS - Conference Calling	881	Magic Touch Conference Calling	Y	Y
CLASS - Conference Calling	5842	Telemax Conference Call	Y	Y
CLASS - Other	866	Exch Feature Hot Line	Y	Y
CLASS - Other	874	Exch Feature Warm Line	Y	Y
CLASS - Other	1282	Magic Touch Call/F Call/W Conf/C Abb/ 30	Y	Y
CLASS - Other	4410	Calling Name/No. Delivery blocking	Y	Y
CLASS - Other	4467	TeleMax Basic Package	Y	Y
CLASS - Other	4468	TeleMax Bronze Package	Y	Y
CLASS - Other	4469	Telemax Silver	Y	Y
CLASS - Other	4470	Telemax Gold	Y	Y

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
CLASS - Other	4471	Telemax Platinum	Y	Y
CLASS - Other	5423	Telemax: Automatic busy callback	Y	Y
CLASS - Other	5843	Telemax Speed Dialing	Y	Y
CLASS - Other	5844	Telemax Hot Line/Warm Line	Y	Y
CLASS - Other	5847	Telemax Auto Recall	Y	Y
CLASS - Other	5848	Telemax Ex-Directory	Y	Y
CLASS - Other	5849	Telemax 3 Features	Y	Y
CLASS - Other	5850	Telemax 4 Features	Y	Y
CLASS - Other	6797	Subscriber call rejection	Y	Y
CLASS - Other	7745	Business VoIP Call Package	Y	Y
Voicemail	4741	Voicemail notif. to Pager/Telephone	Y	Y
Voicemail	4766	Basic Voicemail with Call Wait	Y	Y
Voicemail	4767	Deluxe Voicemail	Y	Y
Voicemail	5256	Voicemail Family Box	Y	Y
Voicemail	5976	Virtual Mail box Basic	Y	Y
Voicemail	5978	Virtual Mailbox Super	Y	Y
Voicemail	7404	Personal Voice Mail Plan	Y	Y
Voicemail	7405	Executive Voice Mail Plan	Y	Y
Other Domestic Services				
Domestic L/C 56/64 KBit	1869	Private Wire (Four Wire)	Y	Y
Domestic L/C Between 64 and 384 KBit	13840	Domestic Private Leased Cct: 256KB	Y	Y
Domestic L/C Greater than 1024 KBit	13844	Domestic Private Leased Cct: 2048KB (E1)	Y	Y
Domestic L/C Greater than 1024 KBit	13847	Domestic Private Leased Cct: 45MB	Y	Y
Domestic L/C Greater than 1024 KBit	13999	Domestic Private Leased Cct: 20MB	Y	Y
Domestic L/C Greater than 1024 KBit	14000	Domestic Private Leased Cct: 100MB	Y	Y
Domestic L/C Greater than 1024 KBit	14001	Domestic Private Leased Cct: 155MB	Y	Y
Domestic L/C Greater than 1024 KBit	14027	Domestic Private Leased Cct: 5MB	Y	Y
Domestic L/C Greater than 1024 KBit	14028	Domestic Private Leased Cct: 10MB	Y	Y
Domestic L/C Greater than 1024 KBit	14037	Domestic Private Leased Cct: 3MB	Y	Y
Domestic L/C Greater than 1024 KBit	14038	Domestic Private Leased Cct: 4MB	Y	Y
Domestic L/C Greater than 1024 KBit	14039	Domestic Private Leased Cct: 6MB	Y	Y
Domestic L/C Greater than 1024 KBit	14040	Domestic Private Leased Cct: 7MB	Y	Y
Domestic L/C Greater than 1024 KBit	14041	Domestic Private Leased Cct: 8MB	Y	Y
Domestic L/C Greater than 1024 KBit	14042	Domestic Private Leased Cct: 9MB	Y	Y

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Domestic L/C Greater than 1024 KBit	14043	Domestic Private Leased Cct: 15MB	Y	Y
Domestic L/C Greater than 1024 KBit	14044	Domestic Private Leased Cct: 25MB	Y	Y
Domestic L/C Greater than 1024 KBit	14045	Domestic Private Leased Cct: 30MB	Y	Y
Domestic L/C Greater than 1024 KBit	14046	Domestic Private Leased Cct: 35MB	Y	Y
Domestic L/C Greater than 1024 KBit	14047	Domestic Private Leased Cct: 40MB	Y	Y
Domestic L/C Greater than 1024 KBit	14145	Domestic Private Leased Cct: 250MB	Y	Y
Domestic L/C Greater than 1024 KBit	14146	Domestic Private Leased Cct: 500MB	Y	Y
Domestic L/C Less than 56/64 KBit	61	Private Wire 0.50 - 0.75 Miles	Y	Y
Domestic L/C Less than 56/64 KBit	63	Private Wire 1.00 - 1.25 Miles	Y	Y
Domestic L/C Less than 56/64 KBit	64	Private Wire 1.25 - 1.50 Miles	Y	Y
Domestic L/C Less than 56/64 KBit	1246	Private Wire (2 Pairs)	Y	Y
Domestic L/C Less than 56/64 KBit	1249	Leased Circuit IBS Service	Y	Y
Domestic L/C Less than 56/64 KBit	1870	Private Wire (Two Wire)	Y	Y
Domestic L/C Less than 56/64 KBit	7086	Private Wire (4w) 64k	Y	Y
Domestic L/C Less than 56/64 KBit	7087	Private Wire 128K	Y	Y
Domestic L/C Less than 56/64 KBit	7088	Inter-island 128K	Y	Y
Domestic L/C Less than 56/64 KBit	7089	Private Wire 128K	Y	Y
Domestic L/C Less than 56/64 KBit	7090	Private Wire 192K	Y	Y
Domestic L/C Less than 56/64 KBit	7091	Inter-island 192K	Y	Y
Domestic L/C Less than 56/64 KBit	7092	Private Wire 192K	Y	Y
Domestic L/C Less than 56/64 KBit	7093	Private Wire 256K	Y	Y
Domestic L/C Less than 56/64 KBit	7094	Inter-island 256K	Y	Y
Domestic L/C Less than 56/64 KBit	7095	Private Wire 256K	Y	Y
Domestic Leased Circuits	58	Private Wire 220 - 440 Yds	Y	Y
Domestic Leased Circuits	60	Private Wire 660 - 880 Yds	Y	Y
Domestic Leased Circuits	62	Private Wire 0.75 - 1.00 Miles	Y	Y
Domestic Leased Circuits	7500	Private Wire 64K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7501	Private Wire 64K (1Year Contract)	Y	Y
Domestic Leased Circuits	7502	Private Wire 64K (3Year Contract)	Y	Y
Domestic Leased Circuits	7503	Private Wire 128K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7504	Private Wire 128K (1 year contract)	Y	Y
Domestic Leased Circuits	7505	Private Wire 128K (3Year Contract)	Y	Y
Domestic Leased Circuits	7506	Private Wire 256K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7507	Private Wire 256K (1Year Contract)	Y	Y
Domestic Leased Circuits	7508	Private Wire 256K (3Year Contract)	Y	Y
Domestic Leased Circuits	7509	Private Wire 512K (Monthly Contract)	Y	Y

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Domestic Leased Circuits	7510	Private Wire 512K (1Year Contract)	Y	Y
Domestic Leased Circuits	7511	Private Wire 512K (3Year Contract)	Y	Y
Domestic Leased Circuits	7512	Private Wire 768K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7513	Private Wire 768K (1Year Contract)	Y	Y
Domestic Leased Circuits	7514	Private Wire 768K (3Year Contract)	Y	Y
Domestic Leased Circuits	7515	Private Wire 1024K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7516	Private Wire 1024K (1Year Contract)	Y	Y
Domestic Leased Circuits	7517	Private Wire 1024K (3Year Contract)	Y	Y
Domestic Leased Circuits	7518	Private Wire 2048K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7519	Private Wire 2048K (1Year Contract)	Y	Y
Domestic Leased Circuits	7520	Private Wire 2048K (3Year Contract)	Y	Y
Domestic Leased Circuits	7521	Inter-Island PLC 64K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7522	Inter-Island PLC 64K (1year Contract)	Y	Y
Domestic Leased Circuits	7523	Inter-Island PLC 64K (3Year Contract)	Y	Y
Domestic Leased Circuits	7524	Inter-Island PLC 128K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7525	Inter-Island PLC 128K (1Year Contract)	Y	Y
Domestic Leased Circuits	7526	Inter-Island PLC 128K (3Year Contract)	Y	Y
Domestic Leased Circuits	7527	Inter-Island PLC 256K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7528	Inter-Island PLC 256K (1Year Contract)	Y	Y
Domestic Leased Circuits	7529	Inter-Island PLC 256K (3 Year Contract)	Y	Y
Domestic Leased Circuits	7530	Inter-Island PLC 512K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7531	Inter-Island PLC 512K (1Year Contract)	Y	Y
Domestic Leased Circuits	7532	Inter-Island PLC 512K (3Year Contract)	Y	Y
Domestic Leased Circuits	7533	Inter-Island PLC 768K (Monthly Contract)	Y	Y
Domestic Leased Circuits	7534	Inter-Island PLC 768K (1Year Contract)	Y	Y
Domestic Leased Circuits	7535	Inter-Island PLC 768K (3Year contract)	Y	Y
Domestic Leased Circuits	7536	Inter-Island PLC 768K (Monthly contract)	Y	Y
Domestic Leased Circuits	7537	Inter-Island PLC 1024K (1Year Contract)	Y	Y
Domestic Leased Circuits	7538	Inter-Island PLC 1024K (3Year Contract)	Y	Y
Domestic Leased Circuits	7539	Inter-Island PLC 2048K (Monthly Contract	Y	Y
Domestic Leased Circuits	7540	Inter-Island PLC 2048K (1Year Contract)	Y	Y

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Domestic Leased Circuits	7541	Inter-Island PLC 2048K (3Year Contract)	Y	Y

Price Control Basket #2: Residential & Business Fixed-to-Mobile Calling

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Fixed -to-Mobile Calling	NA	Day	Y	NA
Fixed -to-Mobile Calling	NA	Evening	Y	NA
Fixed -to-Mobile Calling	NA	Weekend	Y	NA

Uncapped Services: International Fixed Network Services and Domestic and International Payphone Services

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
International Leased Circuits				
Int'l L/C 56/64 KBit	1371	L/C North/South/Central America 56/64 K	Y	Y
Int'l L/C 56/64 KBit	7826	IPLC: 56/64 Kbits	Y	Y
Int'l L/C Between 384 and 1024 KBit	7829	IPLC: 512 KBits	Y	Y
Int'l L/C Between 384 and 1024 KBit	7830	IPLC: 1024 KBits	Y	Y
Int'l L/C Between 64 and 384 KBit	7827	IPLC: 128 Kbits	Y	Y
Int'l L/C Between 64 and 384 KBit	7828	IPLC: 256 Kbits	Y	Y
Int'l L/C Greater than 1024 KBit	7831	IPLC: 1544 KBits	Y	Y
Int'l L/C Greater than 1024 KBit	7832	IPLC: 2048 KBits	Y	Y
Int'l L/C Greater than 1024 KBit	7833	IPLC: 9200 KBits	Y	Y
Int'l L/C Greater than 1024 KBit	7834	IPLC: 45 MBits	Y	Y
Int'l L/C Greater than 1024 KBit	11529	IPLC - Wholesale - 2048Kbits	Y	Y
Int'l L/C Less than 56/64 KBit	105	Leased Circuit Voice Grade Zone 1	Y	Y
Int'l L/C Less than 56/64 KBit	1007	Leased Circuit; USA	Y	Y
Int'l L/C Less than 56/64 KBit	1274	Leased Circuit USA XPI	Y	Y

Product Group	Product Code	Product	Recurring Charge	Non-recurring Charge
Int'l L/C Less than 56/64 KBit	1281	Leased Circuit LS Zone 1	Y	Y
Int'l L/C Less than 56/64 KBit	1290	Leased Circuit Caribbean A 50 Baud	Y	Y
Int'l L/C Less than 56/64 KBit	1295	Leased Circuit Caribbean A 2.4 Kbits	Y	Y
Int'l L/C Less than 56/64 KBit	1298	Leased Circuit Caribbean A Voicegrade	Y	Y
Int'l L/C Less than 56/64 KBit	1331	Leased Circuit Caribbean C 2.4 Kbits	Y	Y
Int'l L/C Less than 56/64 KBit	1370	Leased Circuit N America Voicegrade	Y	Y
Int'l L/C Less than 56/64 KBit	4193	L/C International Lease 19.2Kbps Band 1	Y	Y
Int'l L/C Less than 56/64 KBit	4194	L/C International Lease 14.4Kbps Band 1	Y	Y
International Outgoing Calls				
Caribbean	NA	Day	Y	NA
Caribbean	NA	Evening	Y	NA
Caribbean	NA	Weekend	Y	NA
Other Caribbean	NA	Day	Y	NA
Other Caribbean	NA	Evening	Y	NA
Other Caribbean	NA	Weekend	Y	NA
Phillipines Mobile	NA	Day	Y	NA
Phillipines Mobile	NA	Evening	Y	NA
Phillipines Mobile	NA	Weekend	Y	NA
USA & Canada	NA	Day	Y	NA
USA & Canada	NA	Evening	Y	NA
USA & Canada	NA	Weekend	Y	NA
UK	NA	Day	Y	NA
UK	NA	Evening	Y	NA
UK	NA	Weekend	Y	NA
Western Europe	NA	Day	Y	NA
Western Europe	NA	Evening	Y	NA
Western Europe	NA	Weekend	Y	NA
Cuba	NA	Day	Y	NA
Cuba	NA	Evening	Y	NA
Cuba	NA	Weekend	Y	NA
Rest of World	NA	Day	Y	NA
Rest of World	NA	Evening	Y	NA
Rest of World	NA	Weekend	Y	NA

Note that the Uncapped Services category also includes payphone services and international card services.