



FAIR TRADING COMMISSION

CONSULTATION PAPER

CONSULTATION ON CABLE & WIRELESS (BARBADOS) LIMITED REFERENCE INTERCONNECTION OFFER (RIO) 2017

Document No. FTC/URD/CONRIO-2019-01

Date of Issue: January 2, 2019

DOCUMENT NUMBER: FTC/URD/CONRIO-2018-01

DOCUMENT TITLE: Consultation on Cable & Wireless (Barbados) Limited Consolidated Reference Interconnection Offer (RIO) 2017

ANTECEDENT DOCUMENTS

Document Number	Description	Date
No. 0003/10	Decision and Order in the matter of Digicel (Barbados) Limited's Application for a Review of the Consolidated Reference Interconnection Offer Decision	August 18, 2010
FTC/UR/ 2010 - 01	Decision on Cable & Wireless (Barbados) Limited Consolidated Reference Interconnection Offer	February 22, 2010

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Purpose of Document

This Consultation Paper outlines the Fair Trading Commission's (Commission) review of Cable & Wireless (Barbados) Limited's (C&W) Draft Reference Interconnection Offer 2017 (Draft RIO 2017). The main objective is to outline the Commission's position on the appropriateness of the terms and conditions included in the Draft RIO 2017 and provide stakeholders and interested parties with the opportunity to comment on the same.

On September 25, 2008 the Commission requested that C&W file a RIO which would set out the terms and conditions for the interconnection of mobile, domestic fixed wireless and international service providers with its public telecommunications network. This RIO, the RIO 2010, was approved on February 22, 2010. On April 9, 2015, citing a new set of developments in the telecommunications sector, the Commission requested that C&W submit a revised RIO for review. This revised draft RIO was submitted on July 20, 2015 and reflected proposed changes to rates and updates in line with technological developments. Given that a significant period of time has passed since the submission of the 2015 Draft RIO, the Commission on September 8, 2017 asked C&W to assess it to determine if any further adjustments were required. A revised draft was submitted to the Commission on October 12, 2017.

The Commission is specifically charged under the Fair Trading Commission Act, CAP. 326B of the Laws of Barbados (FTCA) to consult with interested persons and stakeholders when it is discharging certain functions. The views and opinions of stakeholders are therefore being sought through this public consultation document. The Commission will take these contributions into consideration when making its determination.

This document is intended to solicit comments on:-

- a. The inclusion of a Public Land Mobile Network (PLMN) Transit Charge as found in the Commission's Decision on the Interconnection Dispute between C&W and Digicel (Barbados) Limited (Digicel) of June 2013;

- b. Whether the Draft RIO 2017 addresses the various technological advances in the telecommunications/information and communications technology (ICT) industry; and
- c. Any other terms and conditions that may be deemed necessary.

The Commission encourages the widest possible participation in this consultation process. This document, along with the Draft RIO 2017, will be available at the Commission's offices and will be posted on the Commission's website, www.ftc.gov.bb.

The Consultation period will begin on January 2, 2019 and end on, January 30, 2019 at 4:00 p.m.

Structure of Paper

This paper is divided in to four (4) sections:

- Section 1 provides background information on the development of the RIO;
- Section 2 provides the legislative framework;
- Section 3 provides details on the proposed changes to the RIO; and
- Section 4 outlines the consultative process.

SECTION 1 BACKGROUND

A RIO is generally defined as a document that sets out the terms and conditions under which a telecommunications service provider or carrier will permit another service provider or carrier to interconnect with its network. Interconnection is a vital process for two (2) main reasons:

1. It facilitates the delivery of telecommunication services and traffic within and across borders; and
2. It facilitates the growth of competition in the telecommunications/ICT sector. If prospective providers recognize that a regulatory framework is characterized by fair and non-discriminatory access to the incumbent provider's network, they are more likely to enter the market. This is in turn beneficial to the consumer as it potentially drives prices down and forces service providers to offer better and more efficient products and services. Additionally, it potentially opens the door for a greater influx of foreign direct investment.

Previously, the interconnection process in Barbados was regulated by three separate RIOs - Mobile (filed August 22, 2003), Domestic Fixed Wireless (filed January 22, 2004) and International (filed July 30, 2004). The issuance of these RIOs marked the phased liberalisation of the Barbados telecommunications market. A direct result of the liberalisation process was the entry of new service providers into the Barbados market and the growth of services such as mobile and broadband internet¹, as well as new telecommunications policies. Consequently, the Commission considered it prudent to implement a consolidated RIO to streamline the process of interconnection among all telecommunications providers.

Since the approval of the RIO 2010, the telecommunications industry in Barbados has seen significant developments necessitating a review of the same. The granting of a full domestic license to Digicel in 2012 precipitated a variation in the interconnection agreement between

¹ Initially, high speed internet was delivered via asymmetric digital subscriber line (ADSL) technology. Current fibre optic lines provide much faster speeds

C&W and Digicel, originally approved by the Commission in 2004. Issues arose over the revision of related services and interconnection charges, which are defined as the wholesale charges paid by licensed service providers to other licensed service providers for the terminating and transiting of telephone calls from one network to the other. The parties' negotiations of the variation agreement broke down and C&W referred the dispute to the Commission for resolution in accordance with the Commission's Decision on Interconnection Dispute Resolution Procedures dated June 30, 2003, which established a mechanism for the resolution of interconnection disputes between carriers. The need to review the RIO 2010 is also reinforced by the Commission's 2015 Decision on LRIC Interconnection Rates, which determined that there would be reductions in the interconnection rates for Fixed Transit, Fixed Termination, Mobile Transit and Mobile Termination interconnection services.

Lastly, the intervening years have seen the rapid development of technology in the telecommunications/ICT sphere. The sector in Barbados is no different, with traditional telecommunications services having to compete with newer disruptive technologies such as wireless broadband and voice over Internet Protocol (VoIP)². Additionally and perhaps more importantly, the network technology used for fixed telephony has evolved a great deal with traditional copper wires being replaced by fibre optic technology, bringing far greater speed and data transmission capacity. The Commission considers it reasonable that these technological advances ought to be reflected in the RIO in order to accurately represent the present state of the networks and the changes in the processes and standards required for interconnection.

In view of the aforementioned circumstances, the Commission considers that a review of the Draft RIO 2017, as submitted by C&W in response to the referenced developments, is necessary to ensure the equitable treatment of all licensed telecommunications providers in accordance with the Telecommunications Act, CAP 282B (TA).

² VoIP is a technology that allows the user to make calls using a broadband connection as opposed to the traditional analog telephone connection.

SECTION 2 LEGISLATIVE FRAMEWORK

The telecommunications sector is regulated by the Commission as well as the Minister responsible for Telecommunications through the Telecommunications Unit in the Ministry of Innovation, Science and Smart Technology. The industry is governed primarily by the TA and sections of the Utilities Regulation Act, CAP. 282 (URA) of the Laws of Barbados.

Section 25 (1) of the TA states:

“A carrier shall provide, on request from any other carrier, interconnection services to its public telecommunications network for the purpose of supplying telecommunications services in accordance with the provisions of subsection (2).”

Section 25 (2) of the TA states:

“Interconnection services referred to in subsection (1) shall

- (a) be offered at points, in addition to network termination points offered to the end-users, subject to the payment of charges that reflect the cost of construction of any additional facilities necessary for interconnection;*
- (b) be on terms that are transparent and non-discriminatory;*
- (c) in respect of the interconnection charges and service quality of the interconnection services, be no less favourable than similar services provided by the interconnection provider for
 - (i) its own purposes;*
 - (ii) any non-affiliate service supplier of the carrier;*
 - (iii) a subsidiary of the carrier; or*
 - (iv) for similar facilities so provided;**
- (d) be made available in a timely fashion;*
- (e) be offered at charges that are cost-oriented;*
- (f) be offered in such a way as to allow the requesting carrier to select the services required and not require the carrier to stand the cost of network components, facilities or services that are not required or have not been requested by that carrier; or*
- (g) allow for end-users of public telecommunications services to exchange telecommunications with other users of similar services regardless of the carrier to which the end-user is connected.*

Section 26 (1) of the TA states:

“A dominant carrier shall file with the Commission a Reference Interconnection Offer, also referred to in this Act as an “RIO”, that sets out the terms and conditions upon which other licensed carriers will be permitted to interconnect with the interconnection provider’s public telecommunications network.”

Section 26 (2) of the TA states:

“The terms and conditions referred to under subsection (1) may include the following:

- (a) a description of interconnection services to be provided;*
- (b) terms of payment, including billing procedures;*
- (c) location of points of interconnection;*
- (d) technical standards for interconnection;*
- (e) processes for the testing and establishment of interconnection;*
- (f) interconnection charges;*
- (g) the procedure in event of alterations being proposed to the network or services, of services to be offered by one of the parties;*
- (h) access to ancillary services;*
- (i) traffic forecasting and network management;*
- (j) maintenance and quality of interconnection services;*
- (k) the duration of the RIO;*
- (l) limitation of liability;*
- (m) indemnity;*
- (n) dispute resolution procedures; and*
- (o) confidentiality in relation to certain aspects of the agreement.*

Section 27 of the TA states:

“(1) The RIO shall not take effect unless approved in writing by the Commission.”

“(2) Where the Commission considers that the RIO or any part of the RIO is inconsistent with the principles of interconnection as set out in section 25(2), the Commission may refuse to approve the RIO or a part of the RIO outlining the inconsistency and giving reasons for its decisions.”

“(3) In deciding whether to approve or refuse an RIO the Commission shall

- (a) consult with the carrier providing the RIO and any other carriers likely to seek interconnection to that carrier's network; and*
- (b) have regard to*
 - (i) the interconnection principles set out in section 25;*
 - (ii) the interconnection policy specified by the Minister under paragraph (i) of subsection (2) of section 4;*
 - (iii) the need to promote competition;*
 - (iv) the long-term interests of end-users; and*
 - (v) the submissions, whether oral or written, of the carriers providing and seeking interconnection.*

“(4) Where the Commission approves an RIO of a carrier or part of that RIO then it shall make a declaration as to the approval specifying the date on which the approval takes effect.”

“(5) Where the Commission refuses the RIO of a carrier or part of that RIO, the Commission shall consult with the carrier in order to resolve the inconsistency with the interconnection principles referred to in section 25; and the carrier may amend the RIO to remedy the inconsistency.”

“(6) Where the Commission is satisfied that an amendment of an RIO by a carrier pursuant to subsection (5) satisfies the interconnection principles referred to in section 25, it shall approve the amended RIO and the carrier shall file the amended RIO with the Commission.”

SECTION 3 THE RIO AND PROPOSED ADJUSTMENTS

Since its approval in February 2010, the RIO 2010 has been used as the basis for several interconnection agreements between C&W and various service providers, including inter alia, Digicel, TeleBarbados Inc. (TeleBarbados), Karib Cable Inc³. (KC), and Ozone Wireless (Barbados) Inc. (Ozone).

The following sections outline the various adjustments made to the the RIO 2010 in producing the Draft RIO 2017 and the rationale for each.

In addition to the principles embodied in Section 25 of the TA, the Commission's current review takes into account a general practice gleaned from its examinations of RIOs from other international jurisdictions. Accordingly, new RIO iterations build on the foundational principles established by earlier versions. As such, the Commission is of the view that it is not necessary, at this time, to make substantive wholesale changes to the existing structure of the RIO apart from what is set out herein. In terms of the sections of the RIO, which are outlined below, these are maintained in the Draft RIO 2017, indicating that there has been no change to its fundamental structure.

It must be noted that this review is not meant to present an exhaustive list of every change in the RIO as many of them are related to syntax and grammar and may be observed upon perusal of the Draft RIO 2017 itself.

The RIO consists of the following sections:

- Legal Framework
- Definitions
- Service Descriptions
- Service Schedules
- Joint Working Manual
- Parameter Schedule

³ In 2013, KC and TeleBarbados were purchased by Columbus and are therefore now a part of the new C&W merged entity.

➤ Tariff Schedules

1. General Adjustments to the RIO structure

- The Definitions section includes a few minor changes such as the removal of unnecessary terms;
- The Legal Framework includes significant adjustments to sections 11.7 and 21.1 along with other minor changes;
- The Service Schedule omits the International DQ Service; and
- The Service Descriptions section omits the International DQ Service as well as the section entitled “Review and Amendment of Incoming International to Mobile Termination Charge”.

The Commission does not consider these minor amendments to have any significant impact on the conformity of the Draft RIO 2017 to the principles of Section 25 of the TA.

2. New Technology

There have been significant technological changes which ought to be considered as a basis for making adjustments to the RIO to bring it into alignment with what currently obtains in the sector. The Draft RIO 2017 removes all previous references to “T1, 1.544 Mbit/s⁴” Network Links for services contained within the Service Schedule altogether. The technology currently in use provides for speeds far beyond the capability of a T1 line.

Another notable adjustment is that the Joint Working Manual in the Draft RIO 2017 is titled the “Joint Working Manual for Session Initiation Protocol (SIP) Interconnection” (JWMSIP), whereas in the RIO 2010 it was simply entitled “Joint Working Manual” (JWM). This name change reflects the substantive change in the network architecture used for fixed line telephony i.e. a shift from circuit switched to packet switched technology. SIP is used in internet telephony and in Internet Protocol (IP) telephone systems for voice calling, video calling and instant messaging. It is a communications protocol for signalling and controlling multimedia application sessions. The technical specifications described in the JWMSIP,

⁴ A T1 line is a leased line brought into the home or office which can be either fibre or copper. It can carry data at a rate of 1.544 megabits per second and is significantly slower than the speeds available with current fibre systems.

state that the Carrier System is capable of supporting a one (1) Gigabit Ethernet Network Link as opposed to eighty-four (84) 1.544 Mbit/s⁵ Network Links as per the RIO 2010. A one (1) Gigabit (1,000 Megabits) capacity is much higher than the previous capacity of eighty-four (84) times 1.544, (129.70 Megabits).

The Commission considers that this is a clear indication of the upgrades in the technology being utilized.

There are several other sections which have been updated to reflect the new technical specifications and advances in technology. These include, inter alia:

- In the Parameter Schedule at Section 6, the term Uniform Resource Identifier⁶ (URI) is added to the Trunk Groups and routing principles entry. This is an indication of a move to more digital based network elements.
- In the Definitions section, the speed of the Carrier System has been adjusted from 155 Mbit/s to 1 Gbit/s⁷
- In the JWMSIP, under the section entitled “Circuit Termination Unit Specification”, C&W has specified Cisco as a manufacturer and the product as “Cisco 3800, 3900 Series”.
- Also in the JWMSIP, under the section entitled Protocols, C&W has removed descriptions of protocols related to older technology and replaced them with new protocols i.e. “The SIP signalling shall carry ISUP⁸ signalling in accordance with the ITU-T⁹ SIP-I specification Q.1912.5”.
- The Trunk Groups section of the JWNSIP indicates that trunk groups will now have dedicated IP addresses. This is further indication of the updated technology now in use.

⁵ This is an abbreviation for Megabits per second.

⁶ A URI is used to identify the location of a file or other digital resource. URI Definition, techterms.com, <https://techterms.com/definition/uri>, accessed 10/16/2017.

⁷ This is an abbreviation for Gigabits per second.

⁸ ISUP stands for Integrated Services Digital Network (ISDN) User Part. This is a feature of a PSTN.

⁹ International Telecommunications Union (ITU) Telecommunication Standardization Sector. This division of the ITU coordinates standards for telecommunications.

3. The LRIC Decision

As previously alluded to, there have been developments within the telecommunications sector since the approval of the RIO 2010 which when considered, necessitate adjustments to the RIO going forward. Perhaps the most significant of these is the Commission's 2015 Decision on LRIC Interconnection Rates. In the 2010 Decision on the RIO, the Commission determined that C&W would be required to adopt a forward-looking, LRIC methodology in order to determine interconnection rates. This necessitated the development of fixed and mobile LRIC models for deriving the costs that an efficient operator would incur in providing interconnection services in a competitive market. The resulting costs for fixed and mobile, termination and transit services were used to inform the rates that would be applied for interconnection purposes.

The Commission, having analyzed the results of the models, determined that the interconnection rates for Fixed Transit, Fixed Termination, Mobile Transit and Mobile Termination interconnection services in \$BDS¹⁰ per minute would be adjusted to the values that follow:

- Fixed Transit - \$0.010;
- Fixed Termination - \$0.011;
- Mobile Transit - \$0.011;
- Mobile Termination - \$0.055

Additionally, the rate structure for interconnection services under the LRIC would be based on a single per minute tariff (instead of a two-part tariff). As it relates to charges, of note are the following amendments:

- Section 4.5 of the Service Descriptions now states that Usage Charges include, inter alia, "Call Duration Charges depending on duration" as opposed to distance and duration as previously stated.
- Section 5.5 of the Service Descriptions now states that Usage charges include, inter alia, "Transit Charges pursuant to the PSTN Transit Service, where applicable". The phrase "pursuant to the PSTN Transit Service" is a new inclusion.

¹⁰ Refers to Barbados Dollars

- Each Table of the Tariff Schedule has been adjusted to state that all charges are “per 60 secs” as opposed to per call.

The Commission contends that since the RIO is the general document that sets out the terms and conditions that govern the interconnection of one telecommunications service provider or carrier with another service provider or carrier, it should reflect all currently relevant and approved interconnection charges.

4. The Variation Agreement between C&W and Digicel

The Commission’s 2013 Decision on the C&W/Digicel dispute led to the introduction of a new feature which was not included in the RIO 2010. This is the PLMN transit charge and it was introduced into the Interconnection Agreement between C&W and Digicel that was approved by the Commission on December 9th, 2014. The Mobile Transit charge as given in the LRIC Decision replaces the rate for the PLMN Transit charge. In the Draft RIO 2017, C&W excluded the PLMN Transit charge altogether, stating that the PLMN Transit service is not something that it offers to other service providers and moreover, interconnection to C&W’s mobile network is facilitated by the PLMN Terminating Access Service. In relation to the C&W/Digicel Variation Agreement, the PLMN Transit charge was only included because this is a service supplied by Digicel to facilitate interconnection to its fixed network through its mobile network. Therefore, in that specific instance, the PLMN Transit charge was necessary and C&W was the Service Taker, not the Service Supplier. Consequently, C&W advises that it is not appropriate to include this particular charge in its RIO.

In response to this, the Commission agrees but is of the view that the charge should however be included in subsequent interconnection agreements on an as needed basis.

General Comments

The Commission considers that the updates and amendments proposed in the Draft RIO 2017 do not affect its conformity to the principles contained in Section 25 of the TA. The fundamental precepts which are embedded in the RIO 2010 are carried over in the Draft RIO 2017. These fundamentals were found to be fair, non-discriminatory and cost-oriented.

As it relates to all of the proposed changes discussed above, the Commission is of the view that they are of merit and are prudently expressed in the Draft RIO 2017. In view of the evidence presented, the Commission considers that these changes are necessary to accurately capture and reflect the current nature of the network technology and the associated interconnection processes.

SECTION 4 CONSULTATION PROCESS

This consultative document includes a series of specific topics upon which comments may be made. If it is considered appropriate, respondents may wish to address other aspects of the document or of the Draft RIO 2017, which the Commission has not specifically addressed. Failure to address all topics will in no way reduce the consideration given to the entire response. Commercially sensitive material should be clearly marked as such and included in an annex to the response.

Responding to this Consultation Paper

The Commission invites and encourages written responses in the form of views or comments on the matters discussed from all interested parties including C&W, other licensed operators, Government ministries, non-governmental organisations (NGO'S), consumer representatives, consumers and businesses.

The Consultation period will begin on, January 2, 2019 and end on, January 30, 2019, **at 4:00 p.m.** All written submissions should be submitted by this deadline. The Commission is under no obligation to consider comments received after 4:00 p.m. on, January 30, 2019.

The Consultation Paper and Draft RIO 2017 may be downloaded from the Commission's website at <http://www.ftc.gov.bb>

Respondents to the Consultation may submit responses in electronic format. The Commission would prefer that email responses forwarded to info@ftc.gov.bb be prepared as Word documents and attached to an email cover letter.

Responses may also be faxed to the Commission at (246) 424-0300. Mailed or hand delivered responses should be addressed to the Chief Executive Officer, Fair Trading Commission, Good Hope, Green Hill, St. Michael BB12003.

Confidentiality

The Commission is of the view that this consultation is largely of a general nature. The Commission expects to receive views from a wide cross section of stakeholders and believes that views and comments received should be shared as widely as possible with all respondents.

Respondents should therefore ensure that they indicate clearly to the Commission any response or part of a response that they consider to contain confidential or proprietary information.

Analysis of Responses

The Commission expects, in most consultations, to receive a range of views. Through its decision, the Commission will seek to explain the basis for its judgments and, where it deems appropriate, give the reasons why it agrees with certain opinions and disagrees with others. Instances may arise where analysis of new evidence presented to the Commission will cause it to modify its view stated in this paper. In the interests of transparency and accountability, the reasons for such modifications will be set out and where the Commission disagrees with major responses or points that were commonly made it will, in most circumstances, provide justification.