



# **Preliminary Determination on the Assessment of Significant Market Power in Call Termination Services in The Bahamas under Section 39(1) of the Communications Act, 2009**

**Consultation Document**

**ECS 06/2013**

**Issued: May 17, 2013**

**Initial Response Date: June 17, 2013**

**Comments on Responses Date: July 17, 2013**

**UTILITIES REGULATION & COMPETITION AUTHORITY**

**UBS Annex Building, East Bay St | P.O. Box N-4860 Nassau, Bahamas | T 242. 393. 0234 | F 242. 393. 0153**

**[www.urcabahamas.bs](http://www.urcabahamas.bs)**

## Table of Content

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
<b>1.1</b>	<b>REGULATORY FRAMEWORK OF THIS CONSULTATION.....</b>	<b>1</b>
<b>1.2</b>	<b>PROCEDURES FOR MAKING A DETERMINATION .....</b>	<b>3</b>
<b>1.3</b>	<b>HOW TO RESPOND TO THIS CONSULTATION .....</b>	<b>4</b>
<b>1.4</b>	<b>STRUCTURE OF THE REMAINDER OF THIS DOCUMENT.....</b>	<b>5</b>
<b>2</b>	<b>URCA’S PRELIMINARY DETERMINATION.....</b>	<b>6</b>
<b>3</b>	<b>BACKGROUND – CURRENT SITUATION IN CALL TERMINATION SERVICES .....</b>	<b>9</b>
<b>3.1</b>	<b>DESCRIPTION OF CALL TERMINATION SERVICE .....</b>	<b>9</b>
<b>3.2</b>	<b>CALL TERMINATION RATES AND RETAIL PRICING.....</b>	<b>10</b>
<b>3.3</b>	<b>PREVIOUS DECISIONS ON CALL TERMINATION IN THE BAHAMAS .....</b>	<b>11</b>
<b>4</b>	<b>APPROACH TO CONDUCTING THE REVIEW .....</b>	<b>14</b>
<b>4.1</b>	<b>DESCRIPTION OF ANALYTICAL FRAMEWORK FOR MARKET REVIEWS .....</b>	<b>14</b>
<i>4.1.1</i>	<i>DEFINING RELEVANT MARKETS.....</i>	<i>14</i>
<i>4.1.2</i>	<i>SMP ASSESSMENT .....</i>	<i>16</i>
<i>4.1.3</i>	<i>SMP OBLIGATIONS.....</i>	<i>17</i>
<b>4.2</b>	<b>SUMMARY OF MARKET REVIEW PROCESS.....</b>	<b>17</b>
<b>5</b>	<b>MARKET REVIEW STAGE 1 - MARKET DEFINITIONS .....</b>	<b>21</b>
<b>5.1</b>	<b>PRODUCT MARKET .....</b>	<b>21</b>
<b>5.2</b>	<b>SUMMARY OF PROVISIONAL FINDINGS REGARDING REFERENCE PRODUCTS FOR CONDUCTING THE SSNIP TEST.....</b>	<b>23</b>
<b>5.3</b>	<b>PROPOSED RELEVANT PRODUCT MARKETS .....</b>	<b>23</b>
<i>5.3.1</i>	<i>THE PROPOSED PRODUCT MARKET FOR FIXED CALL TERMINATION .....</i>	<i>23</i>
<i>5.3.2</i>	<i>THE PROPOSED PRODUCT MARKET FOR MOBILE CALL TERMINATION ON BTC’S MOBILE NETWORK .....</i>	<i>25</i>
<i>5.3.3</i>	<i>THE PROPOSED PRODUCT MARKET FOR MOBILE MESSAGE TERMINATION ON BTC’S MOBILE NETWORK .....</i>	<i>26</i>
<b>5.4</b>	<b>PRELIMINARY CONCLUSION ON PRODUCT MARKETS.....</b>	<b>27</b>
<b>5.5</b>	<b>PROPOSED GEOGRAPHIC MARKET .....</b>	<b>28</b>
<i>5.5.1</i>	<i>PAST EVIDENCE OF CONSUMERS DIVERTING ORDERS TO SUPPLIERS IN OTHER AREAS.....</i>	<i>28</i>
<i>5.5.2</i>	<i>BASIC DEMAND CHARACTERISTICS.....</i>	<i>28</i>
<i>5.5.3</i>	<i>BARRIERS TO SWITCHING .....</i>	<i>29</i>
<i>5.5.4</i>	<i>VIEWS OF THIRD PARTIES.....</i>	<i>29</i>

5.5.5	<i>PRELIMINARY CONCLUSIONS ON GEOGRAPHIC MARKET</i> .....	30
5.6	<b>PRELIMINARY CONCLUSION ON MARKET DEFINITION</b> .....	30
6	<b>MARKET REVIEW STAGE 2 – SMP ASSESSMENT</b> .....	32
6.1	<b>LICENSEE'S MARKET SHARE</b> .....	32
6.2	<b>BARRIERS TO ENTRY AND EXPANSION</b> .....	33
6.3	<b>COUNTERVAILING BUYER POWER (CBP)</b> .....	34
6.4	<b>CONTROL OF INFRASTRUCTURE NOT EASILY DUPLICATED</b> .....	35
6.5	<b>LICENSEE'S ABILITY TO INFLUENCE MARKET CONDITIONS</b> .....	35
6.6	<b>NUMBER OF ACTIVE COMPETITORS</b> .....	36
6.7	<b>OTHER FACTORS</b> .....	36
6.8	<b>CONCLUSION ON PRELIMINARY SMP ASSESSMENT</b> .....	36
7	<b>COMPETITION PROBLEMS AND IMPACTS ON COMPETITION AND CONSUMERS</b> .....	38
7.1	<b>COMPETITION PROBLEMS</b> .....	38
7.2	<b>POTENTIAL IMPACTS ON THE OBJECTIVES OF THE COMMS ACT</b> .....	39
7.3	<b>CONCLUSION ON COMPETITION PROBLEMS</b> .....	40
8	<b>MARKET REVIEW STAGE 3 – PROPOSED SMP REMEDIES</b> .....	41
8.1	<b>SUSCEPTIBILITY OF THE DEFINED MARKETS TO SMP REGULATION</b> .....	41
8.2	<b>OBLIGATIONS ON SMP LICENSEES</b> .....	42
8.2.1	<i>PUBLICATION OF TARIFFS AND NON-PRICE TERMS</i> .....	44
8.2.2	<i>WHOLESALE PRICE CONTROLS</i> .....	45
8.2.3	<i>ASYMMETRIC VERSUS SYMMETRIC FIXED TERMINATION RATES</i> .....	47
9	<b>CONCLUSION AND PROPOSED NEXT STEPS</b> .....	50

# 1 Introduction

## 1.1 Regulatory Framework of this Consultation

The Utilities Regulation and Competition Authority (URCA) is the governing body of the regulatory regime for electronic communications in The Bahamas established under the Communications Act, 2009 (“Comms Act” or the “Act”). Under the Comms Act, URCA is responsible for licensing undertakings that establish, operate or maintain an electronic communications network or provide an electronic communications service, including by the use of any radio spectrum. Sections 4 and 5 of the Comms Act also provide guidelines that URCA must follow for issuing a determination on regulatory measures. The Comms Act gives URCA wide-ranging powers which are to be exercised in full compliance with principles of good regulation.

The current regulatory framework requires URCA to introduce regulatory measures which are efficient and proportionate to their purpose and to introduce them in a manner that is transparent, fair and non-discriminatory. This means that where URCA believes that market forces alone are unlikely to achieve a policy objective within the required timeframe, URCA may introduce regulatory requirements, having due regard to the costs and implications for affected parties.<sup>1</sup>

In this consultation paper, URCA sets out its preliminary views and proposals on assessing Significant Market Power (SMP) in the supply of call termination services in The Bahamas under section 39(1) of the Comms Act. Call termination is an essential wholesale service which all holders of Individual Operating Licences (IOLs) providing voice service need to purchase from each other in order to allow their customers to call customers on other public networks.<sup>2</sup> The analysis set out in this document is only applicable to licensees presently operating public networks<sup>3</sup> and buying and selling call termination services, namely:

- Bahamas Telecommunications Company Ltd. (operates fixed and mobile networks);<sup>4</sup>
- Cable Bahamas Ltd. (including its affiliates Systems Resource Group Ltd. and Caribbean Crossings Ltd.);
- IP Solutions International Ltd.; and
- Last Mile Communications Ltd.

URCA has also assigned telephone numbers to the aforementioned licensees for the purpose of routing services to members of the public.

---

<sup>1</sup> See section 5(b)(i), 5(b)(ii) and 5(c) of the Comms Act.

<sup>2</sup> The analysis set out in this document does not apply to Class Licensees, due to restrictions in those licences that prevent their holders from offering services to end customers which makes use of interconnection to other Public Networks.

<sup>3</sup> A “public network” is “any network provided wholly or mainly for the purpose of making services available to members of the public.”

<sup>4</sup> The other licensees identified operate fixed networks only.

The regulatory framework applicable to electronic communications networks and services in The Bahamas requires URCA to define relevant markets for the purposes of SMP regulation and to analyse these markets to ensure that regulatory measures remain appropriate in light of changing market conditions, a process otherwise known as market review. In conducting this proposed market review, URCA had regard to the overarching objective of the Comms Act which is to ***“Further the interests of consumers by promoting competition ... in particular ... to encourage, promote and enforce sustainable competition”*** by:

- identifying any potential scope for opportunistic behaviour by a supplier of call termination;
- ensuring the interconnection regime remains current and fit for purpose as competition evolves;
- ensuring that the interconnection regime is in line with best practice considerations; and
- going forward, providing regulatory certainty for existing and aspiring licensees and for investors.

The concept of SMP is equivalent to the concept of a dominant position established in general competition law.<sup>5</sup> SMP<sup>6</sup> is a necessary condition that must be fulfilled in order for URCA to impose *ex ante* regulatory measures.<sup>7</sup>

Under section 39(1) of the Comms Act, URCA may at any time determine that a licensee is a SMP licensee if the licensee *“... individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers.”* Section 39(2) of the Comms Act requires URCA to establish and publish criteria relating to the definition of markets in the electronic communications sector, and against which market power may be assessed. To this end, URCA set out in URCA document reference ECS 20/2011<sup>8</sup> (dated 13 October 2011) the criteria relating to the definition of markets in the electronic communications sector, and against which market power may be assessed.

There are three elements constituting the market review process, as elucidated in ECS 20/2011:

- defining the relevant product and geographic dimensions of the markets (Stage 1);
- identifying operator(s) with SMP or dominance in the defined market(s), if any (Stage 2); and
- where market power is identified, determining the appropriate SMP obligations in relation to that market (Stage 3).

---

<sup>5</sup>“Dominance and Significant Market Power under EC Competition Law” by Nicolas Petit, Institute for European Legal Studies, University of Liege.

<sup>6</sup> Throughout this document SMP and dominance are used interchangeably.

<sup>7</sup> See section 40(2)(a) of the Communications Act, 2009.

<sup>8</sup>“Methodology for Assessment of Significant Market Power (SMP) under Section 39(2) of the Communications Act, 2009” available at [www.urcabahamas.bs](http://www.urcabahamas.bs).

Given the narrow scope of this current proceeding, URCA has addressed all three Stages of the review in a single consultation document. URCA considers that this approach will result in a more focused and efficient consultation.

## 1.2 Procedures for making a Determination

Section 99(1)(a) and (b) of the Comms Act collectively prescribe that if, on its own motion, URCA has reason to believe that a determination is necessary, it may make determinations relating to (amongst other things):

- any obligations on a licensee regarding the terms or conditions of any licence, including obligations in licence conditions and regulations,
- any activity set out in the Comms Act, and
- where the Comms Act provides for URCA to “determine” or “to make determinations” as is the case under section 39(1).

Pursuant to section 99(2) of the Comms Act, in making any determination, URCA must comply with section 11 of the Comms Act, consult persons with sufficient interest in the subject matter and must provide written reasons for its determination. Section 11 of the Comms Act requires URCA to afford persons with sufficient interest a reasonable opportunity to comment on regulatory or other measures which in URCA’s opinion are of public significance. A person whose rights or interests may be materially adversely affected or prejudiced by the proposed regulatory or other measure shall be considered as having sufficient interest. Section 13 of the Comms Act establishes that a regulatory and other measure is of public significance if it can lead to, inter alia, a significant impact on persons carrying on activities in those areas where URCA has functions under the Comms Act. URCA is of the opinion that the regulatory and other measures consequential to this consultation are of public significance and hereby affords persons with sufficient interest the opportunity to comment on URCA’s proposals contained herein.

URCA issues this Preliminary Determination in accordance with the process set out in section 100 of the Comms Act. This document constitutes URCA’s formal notice to the licensees identified at Section 1.1 above of URCA’s *“Preliminary Determination on the Assessment of Significant Market Power in Call Termination Services in The Bahamas under Section 39(1) of the Comms Act.”* Specifically, the document contains URCA’s analysis and proposals relating to relevant wholesale markets for voice call termination (including mobile messaging service termination) in The Bahamas, and identifies the licensees that URCA believes have SMP in the defined markets. Where URCA determines that the defined markets are susceptible to ex-ante or SMP regulation, URCA proposes that remedies will be implemented to enable competition to evolve or to result in outcomes which replicate competition.

In summary, URCA in undertaking this market review has had regard to all relevant provisions of the Comms Act as follows:

- section 8(1) on URCA’s general powers to issue regulatory and other measures, including the power to make determinations under sections 99 to 102 of the Comms Act;
- section 39(1) requiring URCA to determine that a licensee is an SMP licensee;

- section 39(2) requiring URCA to establish and publish criteria relating to the definition of markets and against which market power may be assessed;
- section 40(2) on procedures URCA must follow prior to imposing *ex-ante* obligations;
- sections 99 to 101 on URCA's power to make determinations and the procedures which URCA must follow when making a determination; and
- section 116(8) requiring URCA, at its earliest opportunity, to carry out further market reviews to determine whether existing SMP licensees and other licensees have SMP in relevant economic markets.

### 1.3 How to respond to this Consultation

URCA invites responses on this Preliminary Determination from all interested parties. However, given the importance of this consultation, the consultation process is extended beyond the minimum one month period for responses, as prescribed under section 100(3) of the Comms Act. In the first phase, respondents should submit their representations on and objections (if any) to this Preliminary Determination, which will be published by URCA as soon as possible following the end of the first phase. In the second phase, respondents may submit reply comments (in whole or in part) to the representations and objections of other respondents. The submission deadlines for initial responses and reply comments are as follows:

- Initial responses must be submitted to URCA by **5 p.m. on June 17, 2013**.
- Reply comments must be submitted to URCA by **5 p.m. on July 17, 2013**.

Written responses or comments on this Preliminary Determination should be sent to URCA's Director of Policy and Regulation, either:

- by hand, to URCA's office at UBS Annex Building, East Bay Street, Nassau; or
- by mail to P.O. Box N-4860, Nassau, Bahamas; or
- by fax, to (242) 393-0153; or
- by email, to [info@urcabahamas.bs](mailto:info@urcabahamas.bs).

Where a respondent believes that URCA's approach and/or proposals are contrary to relevant principles and objectives or outside the international mainstream, the respondent should state his or her position and clearly set out the reasoning for such position, together with evidential information to substantiate their position. Persons may obtain copies of this document by downloading it from the URCA website at **[www.urbahamas.bs](http://www.urbahamas.bs)**.

URCA proposes to and reserves the right to make all responses available to the public by posting responses online on its website. If a response is marked confidential, reasons should be given to facilitate evaluation by URCA of the request for confidentiality. URCA may, in its sole discretion, publish or refrain from publishing any document or submission.

URCA will review and take into account the representations on and objections to this Preliminary Determination, and the comments on representations and objections made by other respondents, in making its Final Determination, which will be published together with a Statement of Results summarising the representations and objections and URCA's responses thereto.

## **1.4 Structure of the remainder of this document**

Section 2 of this document sets out URCA's Preliminary Determination on the relevant markets for call termination in The Bahamas. The remainder of the document then sets out the background to this Preliminary Determination and the analysis conducted by URCA to reach its preliminary conclusions. Specifically:

- Section 3 describes the background to the review, by defining call termination services and setting out the framework under which those services are currently provided in The Bahamas.
- Section 4 describes the Legislative and Analytical Framework for Market Reviews.
- Section 5 sets out URCA's analysis of the relevant product and geographic market.
- Section 6 sets out URCA's assessment of the SMP in the defined markets.
- Section 7 describes potential challenges to competition and the potential impact of those challenges on consumers.
- Section 8 presents the ex-ante regulatory measures/remedies URCA proposes to place on licensees with SMP in the defined markets.
- Section 9 concludes and sets out proposed next steps.



## 2 URCA’s Preliminary Determination

This Section sets out the Determination which URCA proposes to make, subject to URCA’s consideration and review of any representations and objections made by interested persons. URCA’s Determination will be addressed to, and will be binding upon, all licensees referred to in the Determination:

“WHEREAS,

- (i) section 39(1) of the Communications Act, 2009 empowers URCA to determine that a Licensee has Significant Market Power (SMP) in a market where the Licensee “... *individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers.*”; and;
- (ii) pursuant to section 39(2) of the Communications Act 2009 URCA issued ECS 20/2011, the “Methodology for Assessment of Significant Market Power (SMP) under Section 39(2) of the Communications Act, 2009” (the “SMP Methodology”), containing criteria relating to the definition of markets in the electronic communications sector, and against which market power may be assessed; and,
- (iii) URCA having conducted a review of certain markets and services in the ECS in accordance with the SMP Methodology considered that it is appropriate to make certain determinations regarding the definition of markets, the existence of licensees with SMP in those markets, and the extent to which ex-ante regulation is appropriate and necessary in those markets.

NOW URCA proposes to make the following determination:

1. Determination of Relevant Market – “Wholesale Call Termination”

The Wholesale Call Termination market shall include voice call and mobile messaging termination on fixed and mobile networks as follows:

- a) The wholesale market for fixed voice calls termination provided by Bahamas Telecommunications Company Ltd. (BTC) over its fixed networks in The Bahamas.
- b) The wholesale market for mobile voice call termination provided by BTC over its mobile networks in The Bahamas.
- c) The wholesale market for mobile message termination provided by BTC over its mobile networks in The Bahamas.
- d) The wholesale market for fixed voice call termination provided by Cable Bahamas Limited (CBL) over its fixed networks in The Bahamas.
- e) The wholesale market for fixed voice call termination provided by IP Solutions International Ltd. over its fixed network in The Bahamas.

- f) The wholesale market for fixed voice call termination provided by Last Mile Communications Ltd. over its fixed network in The Bahamas.

## 2. Determination of Significant Market Power

The following Licensees have Significant Market Power in the Wholesale Call Termination market as set out below:

- a) BTC in the wholesale market for fixed voice call termination on its fixed networks in The Bahamas.
- b) BTC in the wholesale market for mobile voice call termination on its mobile networks in The Bahamas.
- c) BTC in the wholesale market for mobile message termination on its mobile networks in The Bahamas.
- d) CBL in the wholesale market for fixed voice call termination on its fixed networks in The Bahamas.
- e) IP Solution International Ltd. in the wholesale market for fixed voice call termination on its fixed network in The Bahamas.
- f) Last Mile Communications Ltd. in the wholesale market for fixed voice call termination on its fixed network in The Bahamas.

## 3. Obligations Imposed on SMP licensees

- a) The Wholesale Call Termination market is susceptible to SMP regulation.
- b) Given the position of strength held by the SMP licensees identified above, and in light of the potential challenges to competition which URCA's review has indicated may arise, the following obligations are imposed on each SMP licensee, namely:
  - i. The SMP licensee is, at a minimum, obligated to comply with the SMP obligations specified in section 40(4) of the Comms Act.<sup>9</sup>
  - ii. Where an SMP licensee was not, prior to the date of this determination, subject to an obligation to publish a Reference Access and Interconnection Offer (RAIO) inclusive of call termination services, it shall publish prominently on its website (and make available upon request through other means) the tariff and non-price terms and conditions

---

<sup>9</sup>SMP licensees identified shall -

- "(a) not unduly discriminate against particular persons or a particular description of persons in relation to the electronic communications services offered;*
- (b) provide technical specifications, or other relevant information about any interconnection essential facilities or other mandated wholesale electronic communications services on a reasonable and timely basis, when the information is required by another licensee to provide its licensable services and when the information is not readily available from other sources; and*
- (c) not adopt technical specifications for a network that prevents interconnection or interoperability with a network of a competitor."*

prevailing for all services it provides within the Wholesale Call Termination market. For the avoidance of doubt, pre-existing obligations to publish a RAIO shall be maintained.

- iii. Each SMP licensee shall be subject to a formal process of regulatory price control in respect of all services it provides within the Wholesale Call Termination market. To limit the regulatory burden on smaller SMP operators, wholesale call termination charges shall be set equal to BTC's wholesale call termination charges (as determined by URCA) for all SMP operators.

All references to a licensee shall, in accordance with section 21(1) of the Comms Act, be taken to include both the licensee and any subsidiary undertaking of the licensee listed in the application for a licence or notified to URCA from time to time in accordance with section 21(2) of the Comms Act.”

### 3 Background – Current Situation in Call Termination Services

At the outset of its review and analysis of SMP in call termination markets in The Bahamas, URCA sought to analyse and identify the key elements or characteristics of call termination and how call termination works both from an economic and technical perspective. Knowledge of these elements is extremely important to the market analysis process carried out by URCA and detailed in Section 5 and onwards of this consultation document. URCA also sets out in this Section the current extent of termination rate regulation in The Bahamas.

#### 3.1 Description of Call Termination Service

Call termination can be provided on a fixed network (fixed termination), or a mobile network (mobile termination). Messaging services (i.e., Short Messaging Service [SMS] and Multimedia Messaging Service [MMS]) can also be terminated on other mobile networks (SMS/MMS termination). ‘Termination’ describes the service whereby one operator (the terminating party) accepts traffic that has originated on another network but which is destined for customers on its own network, and carries that traffic to those customers.

The demand for call termination is derived from retail markets.<sup>10</sup> This is because subscribers, for example on Operator A's network, also communicate with subscribers on other public networks (i.e., Operators B and C's networks and *vice versa*). Without the ability to terminate calls on different networks, subscribers on one network (e.g., Operator A) would also have to subscribe to services from other service providers (e.g., Operators B and C) to be able to make calls to, and receive calls from, all other telephony users. That is, call termination assures the *any-to-any* principle of interconnection. *Any-to-any* requires the installation of a physical interconnection link from one network to at least one other public voice communications network. In order to give effect to this principle, there is usually a standard obligation that each operator of a public voice network permits interconnection of its public voice network with the public voice network of any other operator for the provision of voice calls (and mobile messaging in the case of mobile networks) services. This facilitates off-net communications by ensuring that users of separate public voice networks can communicate with each other or obtain services from other public voice networks. As a result, termination services are critical for fostering sustainable competition in downstream (retail) markets by enabling all operators to offer end-to-end calling/SMS/MMS services and to compete with each other for retail customers. In other words, the availability of termination services helps to ensure that operators can replicate the retail offerings of their competitors in:

- Offering calls to all fixed line numbers, using ***fixed voice call termination services***.

---

<sup>10</sup> Mark Armstrong (May 2001) “*The Theory of Access Pricing and Interconnection*” available at <http://mpa.ub.uni-muenchen.de/15608/1/acc-int-num.pdf>.

- Offering calls to all mobile numbers, using **mobile voice call termination services**.
- Offering mobile to mobile messaging service (i.e., SMS [texting] and MMS) using **mobile message termination services**.

## 3.2 Call Termination Rates and Retail Pricing

Operators incur costs for providing call termination services. These costs can be recovered in different ways, according to the retail pricing model applied in the market.

Calls to fixed line numbers in The Bahamas are billed on a Calling Party Pays (CPP) basis (this includes local calls, although URCA notes that in BTC's case such calls are unmetered). This charging basis is also applied to calls from a BTC mobile number to another BTC mobile number. Under this retail pricing model, interconnecting operators typically make payments known as termination payments (fixed and mobile) to each other for using the other operator's network to terminate calls and mobile messaging service. This means that the operator on whose network the call or message originates (i.e., the originating operator) makes a payment (which is a source of revenue) to the operator on whose network the call terminates (i.e., terminating operator).<sup>11</sup>

In a CPP environment, the level of charging for call termination can have a significant impact on the retail tariff that customers ultimately pay their service providers for off-net communications services.<sup>12</sup> Termination rates, therefore, do not directly raise costs to the customer of the operator that sets the termination rates; rather they tend to raise costs to those who place a call to that operator's customers. Overall, the international experience indicates to URCA that absent SMP regulation, terminating operators in CPP markets are incentivized to set termination rates above cost to the detriment of customers and competition generally. These include markets at varying levels of competition in the Caribbean (e.g., Jamaica) and within Europe (such as UK, Ireland, and Australia), to name a few.

Conversely, in a Receiving Party Pays (RPP)<sup>13</sup> environment the terminating operator does not receive termination payments from the originating operator. The RPP principle means that the called party pays his/her service provider (i.e., the terminating operator) a fee to receive off-net calls. Domestic fixed-to-mobile calls in The Bahamas are billed on a RPP or Mobile Party Pays (MPP) basis.

---

<sup>11</sup> Call termination services can also be provided on a 'Bill and Keep' basis whereby operators do not charge each other for carrying terminating traffic.

<sup>12</sup> Stephen C. Littlechild (April 2004) "*Mobile Termination Charges: Calling Party Pays vs. Receiving Party Pays*" (CWPE 0426).

<sup>13</sup> CPP is the predominant payment system in the Caribbean, the EU and other jurisdictions except for the USA and Canada. URCA understands that there are pockets of CPP use in the USA and Canada but the most common pricing structure elsewhere is one of RPP (See "*Working Party on Telecommunication and Information Services and Policies: Cellular Mobile Pricing Structures and Trends*", Directorate for Science, Technology, Industry: Committee for Information, Computer and Communications Policy - DSTI/ICCP/TISP (99) 11/Final - OLIS: 16 May 2000; Dist: 19 May 2000).

### 3.3 Previous Decisions on Call Termination in The Bahamas

In The Bahamas, the current regime for call termination is asymmetric in that only BTC’s call termination services are subject to SMP regulation. This approach was formally established by URCA in April 2010.<sup>14</sup>

By way of background, in 2009, pursuant to section 116(2) and (3) of the Comms Act, URCA initiated a public proceeding under section 116 and Schedule 4 of the Comms Act on *ex-ante* remedies to be imposed on specified licensees presumed to have SMP in the provision of the following services:

- a) BTC in the provision of fixed voice;<sup>15</sup>
- b) BTC in the provision of mobile voice and mobile data services;
- c) CBL in the provision of high speed data services and connectivity; and
- d) CBL in the provision of pay TV services.

That public proceeding culminated in the publication of URCA’s “*Final Decision on Obligations imposed on SMP Operators*” (ECS 11/2010) dated 22 April 2010, in which URCA determined that the retail and wholesale markets as detailed in Table 1 below fall within the high level SMP markets applicable to BTC.

**Table 1: BTC's SMP Markets - Retail and Wholesale**

Retail Products	Wholesale Products
(1) Fixed telephony access and local calling	<b>(1) Fixed intra-island call termination</b>
(2) Domestic long distance calling (DLD)	<b>(2) Fixed inter-island call termination</b>
(3) Domestic fixed calls to rated numbers	<b>(3) Mobile call termination</b>
(4) International long distance international calling	<b>(4) SMS termination<sup>16</sup></b>
(5) Mobile access	(5) Termination to directory inquiries
(6) Local mobile calling	(6) Termination to ancillary services
(7) Domestic long distance mobile calling	(7) Termination to local emergency numbers or services
(8) International long distance mobile calling	(8) Call transit
(9) Mobile data (internet, SMS and MMS)	(9) Termination to freephone numbers
	(10) Termination to operator assistance facilities

Within its Final Decision document (ECS 11/2010), URCA defined separate fixed voice and mobile voice/SMS termination products for BTC and identified the relevant geographic market as the area in which BTC has facilities to provide the products.

URCA’s finding that call termination on BTC’s fixed and mobile networks are in the SMP markets applicable to BTC triggered the standard regulatory obligations on BTC under section 40(4) of the Comms Act, in respect of which BTC shall -

<sup>14</sup> “Final Decision on Obligations imposed on SMP Operators” (ECS 11/2010) dated 22 April 2010.

<sup>15</sup> Under the 2009 Electronic Communications Sector Policy, BTC is designated as having SMP in both fixed voice and data services.

<sup>16</sup> BTC does not presently provide SMS termination. However, when mobile competition is introduced, BTC must provide SMS and MMS termination within its RAIO.

*"(a) not unduly discriminate against particular persons or a particular description of persons in relation to the electronic communications services offered;*  
*(b) provide technical specifications, or other relevant information about any interconnection essential facilities or other mandated wholesale electronic communications services on a reasonable and timely basis, amongst others; and*  
*(c) not adopt technical specifications for a network that prevents interconnection or interoperability with a network of a competitor."*

In common with best practice considerations and section 40(1) and (3)(a), (b) and (c) of the Comms Act, URCA also placed the following additional SMP obligations on BTC:

- annual submission of regulatory/separated accounts to URCA and publication of cost accounting information;
- publication of a reference access and interconnection offer; and
- price control of fixed and mobile termination rates.

Table 2 summarizes the current regulated fixed and mobile termination rates that apply to BTC’s fixed and mobile networks. Note that the regulated termination rate for mobile only applies to incoming calls received from outside The Bahamas. This is because fixed calls originating domestically to mobile numbers in The Bahamas are charged on a RPP basis and hence no termination rate applies.

**Table 2: Regulated Fixed and Mobile Termination Rates**

<b>Call Types</b>	<b>Current Rates (Cents)</b>
Fixed On-Island Calls	0.938/Minute
Fixed Off-Island Calls	1.40/Minute
Fixed to Mobile Calls	0.0000/Min as RPP
Incoming International Calls to Mobile	6.03/Minute

Source: [http://www2.btcbahamas.com/features/interconnection/BTC\\_ref\\_access\\_inter\\_2.pdf](http://www2.btcbahamas.com/features/interconnection/BTC_ref_access_inter_2.pdf).

Within the public consultation on the presumption of SMP under section 116 of the Comms Act, URCA did not conduct an SMP analysis in respect of call termination on alternative fixed networks. As such, apart from BTC, no other fixed network licensee in The Bahamas is required to offer fixed termination on regulated terms. In other words, URCA has put no obligation on other fixed network licensees regarding the tariffs for providing termination of calls to their fixed networks.

Given the time that has elapsed since the establishment of the current regime and having regard to market developments in the intervening period, URCA now considers it appropriate to carry out a further review of termination markets to determine which, if any, licensees have SMP in the relevant markets.

In addition, given the structure of termination and retail services in the market, in this review URCA has examined all fixed and mobile termination services. However, URCA is aware that, should it find a

licensee to have SMP, different remedies (if any) may be appropriate, according to the retail pricing model followed for end-to-end calls and taking into account the different technical specifications of fixed and mobile termination rates.



## 4 Approach to Conducting The Review

The electronic communications regulatory framework applicable to The Bahamas requires URCA to define relevant markets for the purposes of SMP regulation and to analyse those markets to ensure that regulation remains appropriate in light of changing market conditions, a process otherwise known as market review. The main purpose of a market review is to identify the competitive conditions prevailing in a market by systematically assessing the competitive constraints faced by licensees in the market. A market review commences by defining a market, which is then analysed to assess the degree of effective competition in that market. Defining markets and assessing competition within those markets involves a degree of judgment, with the overarching objective being to ensure that all relevant competitive constraints operating in a market are identified and analysed in order to enable the regulator to impose any appropriate *ex ante* regulatory obligations on SMP operators.

In conducting market reviews, URCA must take account of specified procedures in the Comms Act<sup>17</sup> and the analytical framework (i.e., procedures and criteria) set forth in URCA document reference ECS 20/2011 ( “*Methodology for Assessment of Significant Market Power [SMP] under Section 39(2) of the Communications Act, 2009*”).<sup>18</sup> This document sets forth the procedures and criteria URCA will employ when undertaking market reviews for *ex ante* regulatory purposes.

These procedures and criteria are for the sole purpose of making determinations under section 39 (1) of the Comms Act which provides that:

*“URCA may at any time determine that a licensee is an SMP licensee if the licensee, individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers.”*

### 4.1 Description of Analytical Framework for Market Reviews

A market review comprises three main components:

- i. defining relevant product and geographic markets;
- ii. identifying operator(s) with SMP in each defined market(s), if any; and
- iii. where market power is identified, consideration of the appropriate SMP obligations in relation to each market.

#### 4.1.1 Defining Relevant Markets

Market definition (Stage 1) focuses on the substitutability of differentiated products or services. There are two dimensions to market definition: (i) relevant product market; and (ii) relevant geographic

---

<sup>17</sup>Section 39(1) and (2).

<sup>18</sup>Issued 13 October 2011 and available at <http://www.urcabahamas.bs/download/063526500.pdf>.

market. Under standard market analysis, a relevant product market comprises all those differentiated products or services that are regarded as interchangeable or substitutable by customers or suppliers by reason of product characteristics, intended use and pricing, such that providers of the products may compete to offer services to consumers.

### **Product Market Definition**

In defining the relevant economic markets, URCA follows the principles of the ‘Small but Significant Non-transitory Increase in Price’ (SSNIP) test, otherwise known as the Hypothetical Monopolist Test (HMT). The SSNIP test assesses customer (demand-side substitution) and supplier (supply-side substitution) behaviour in response to a hypothetical price increase above the competitive level (taken to be in the range of 5-10%). This is to determine whether customers have the ability and incentive to switch to an alternate product in response to a SSNIP (of 5-10%). If they can, the market definition is widened to include the alternative products.

When assessing demand-side substitutability, the question is whether the price increases provoke sufficient number of customers to switch to alternative products offered by any existing supplier such that it would make the hypothetical price increase unprofitable. If sufficient subscribers would switch to the alternate product thereby making the price increase unprofitable, then the alternative product is included in the relevant product market.

For supply-side substitutability, the SSNIP test assesses whether the price increase could provoke an existing operator to switch production capacity and start supplying the service or lead a new entrant to do so. Such supply-side substitution would only constitute an effective constraint were it to make the price increase unprofitable for the hypothetical monopolist. In this case, the product offered by the other supplier is included in the relevant product market.

The SSNIP test is carried out for any given number of alternative products, which by their characteristics, prices and intended use, may constitute an effective substitute to the product in question. If switching to these alternative products is sufficient to also render the SSNIP test unprofitable, then these are also included in the definition of the relevant product market.

While such economic tests can usefully be employed to examine demand- and supply-side substitution possibilities, it is also important to ensure that the approach to market definition is pragmatic and exhibits commercial common-sense. Given that formally conducting a SSNIP test is often not possible (including in this instance, given the lack of quantitative information on potential switching), URCA has examined the likely response of consumers and producers to a price increase by examining the four factors listed in Section 3.1 of ECS 20/2011 for product market definition analysis, namely:

- evidence of previous substitution;
- consumer preferences;
- barriers and switching costs; and

- quantitative studies (including surveys) of other markets.

### **Geographic Market Definition**

The geographic market is defined with respect to the scope of service within a defined region or territory within which competitive conditions are sufficiently homogenous or similar. The relevant geographic market considers the degree to which demand/supply-side substitutes for products vary by geography. The geographic boundaries are considered within the SSNIP test and the reach of any demand and/or supply-side substitutes identified. The test is applied on a product-by-product basis, meaning if particular products are offered in different geographic areas, the product market definition may vary by geography.

There are instances where the geographic market coincides with the territory that the licensees are authorised to operate their networks or provide their services.

In delineating the geographic boundary of the relevant market, URCA supplements the SSNIP tests (demand/supply-side substitution) with the listed criteria below to further inform and refine the geographic market definition analysis:

- past evidence of consumers diverting orders to suppliers in other areas;
- basic demand characteristics;
- barriers to switching; and
- views of third parties.

#### **4.1.2 SMP Assessment**

Stage 2 of the framework seeks to identify licensees that have SMP in the defined market(s), if any. Under section 39(1) of the Comms Act, a licensee is an SMP licensee if the licensee,

*"... individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers."*

The initial starting point for any SMP assessment in a defined market would be *"the licensee's market share."*<sup>19</sup> Although the Comms Act does not specify a market share threshold for SMP, URCA in ECS 20/2011 (Section 3.2, p.6) has established presumptions of SMP, wherein:

- "1. a licensee with less than 40% market share will not generally be presumed to have SMP; and*
- 2. a licensee with a market share of 40% and above may be presumed to be an SMP licensee."*

---

<sup>19</sup> Section 39(3)(a) of the Comms Act.

Because market share is an imperfect proxy for SMP, the Comms Act dictates that in addition to “the licensee’s market share”, URCA must also consider the criteria listed in section 39(3)(b), (c), (d) and (e) of the Comms Act, namely:

- “(b) the licensee's ability to influence market conditions;*
- (c) the licensee's access to financial resources;*
- (d) the licensee's experience in providing products to the market; and*
- (e) any other criteria considered relevant by URCA”.*

A list of the other factors or criteria URCA may consider when assessing market power can be found in Section 3.2 (p.6 to 7) of ECS 20/2011.

### 4.1.3 SMP Obligations

The third and final stage involves determining the regulatory obligations, if any, that should be imposed on SMP licensees to remedy any SMP.<sup>20</sup> Based on the Comms Act, such obligations must be efficient and proportionate to their purpose and introduced in a transparent, fair and non-discriminatory manner. This means that where URCA believes that market forces alone are unlikely to achieve the policy objectives within the referenced timeframe, URCA may introduce regulatory requirements, having due regard to the costs and implications for affected parties.

Prior to imposing remedies under section 40(1) of the Comms Act, URCA must follow the procedures specified in section 5 and section 40(2) of the Comms Act.

## 4.2 Summary of Market Review Process

Table 3 below summarizes the criteria URCA applies in each of the three stages of the market review process discussed above.

**Table 3: Overview of Market Review Process**

Stages of Market Review Process	Criteria assessed in each Stage of the Market Review Process
---------------------------------	--

<sup>20</sup> Absent a determination that a licensee has SMP in any of the defined markets, URCA would not employ the procedures and criteria set out in the third stage.

<b>Market Definition (Stage 1)</b>	<b>Relevant Criteria for Product Market Definition:</b> <ul style="list-style-type: none"> <li>• evidence of substitution between products;</li> <li>• consumer preferences;</li> <li>• barriers and switching costs;</li> <li>• quantitative studies (including surveys) of other markets;</li> <li>• demand-side substitution using the HMT<sup>21</sup> or SSNIP test; and</li> <li>• supply-side substitution using the HMT or SSNIP test.</li> </ul>
	<b>Relevant Criteria for Geographic Market Definition-</b> <ul style="list-style-type: none"> <li>• past evidence of consumers diverting orders to suppliers in other areas;</li> <li>• basic demand characteristics;</li> <li>• barriers to switching; and</li> <li>• views of third parties.</li> </ul>
<b>Assessment of Market Power (Stage 2)</b>	<b>Criteria for Assessing SMP in each defined market :</b> <ul style="list-style-type: none"> <li>• the licensee's market share;</li> <li>• the licensee's ability to influence market conditions;</li> <li>• the licensee's access to financial resources;</li> <li>• the licensee's experience in providing products to the market;</li> <li>• barriers to entry and expansion;</li> <li>• countervailing buyer power (CBP);</li> <li>• overall size of the undertaking;</li> <li>• control of infrastructure not easily duplicated; and</li> <li>• number of active competitors.</li> </ul>
<b>Ex-ante Remedies/Obligations (Stage 3)</b>	<i>Ex-ante</i> measures must be appropriate, efficient and proportionate to their purpose, introduced in a transparent, fair and non-discriminatory manner and URCA must have due regard to the costs and implications for affected parties.

The Framework for Market Review and Assessment as summarized in Table 3 above and used in this Preliminary Determination is consistent with section 39 of the Comms Act and international best practice as utilized by regulators and competition authorities elsewhere, including the European Commission and national regulatory authorities across European and Caribbean jurisdictions.<sup>22</sup>

In particular, as part of the market analysis addressed in this consultation document, URCA has reviewed proceedings and other relevant documents applicable to wholesale call termination markets in various jurisdictions by national regulators and other researchers and international organizations. This include, amongst others:

- **British Virgin Island (BVI) - Market Analysis of Wholesale Call and SMS Termination on Individual Fixed and Mobile Networks<sup>23</sup>;**

<sup>21</sup> Hypothetical Monopolist Test

<sup>22</sup> Including Jamaica (OUR), and British Virgin Islands (TRC).

<sup>23</sup>Reference Number C/02/2011 dated 1 June 2011 available at [http://www.trc.vg/images/attachments/015\\_Market%20Analysis\\_01\\_Interconnection%20Part%201.pdf](http://www.trc.vg/images/attachments/015_Market%20Analysis_01_Interconnection%20Part%201.pdf)

- **Bahrain** - Dominance designation for Termination Services on VIVA's Mobile Network<sup>24</sup>;
- **European Commission** - Regulatory Treatment of Fixed and Mobile Termination Rates in the EU<sup>25</sup>, Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation.
- **France** – SMS Termination in France;<sup>26</sup>
- **Gibraltar** - Wholesale Voice Call/SMS Termination on Individual Mobile Networks<sup>27</sup>, and Wholesale Call Origination/Termination on the Public Telephone Network<sup>28</sup>;
- **Ireland** – Market Review: Voice Call Termination on Individual Mobile Networks;<sup>29</sup>
- **InfoDev** - ICT Regulatory Toolkit on Interconnection<sup>30</sup>;
- **Jamaica** - Decision on Assessment of Dominance in Mobile Call Termination<sup>31</sup>;
- **Liechtenstein** - Analysis of the Market for Call Termination on Fixed Networks<sup>32</sup>;
- **Malta** – Wholesale Call Termination on Individual Public Telephone Networks provided at a Fixed Location<sup>33</sup>;
- **Netherlands** - Countervailing Buyer Power for Mobile Call Termination (The Dutch case)<sup>34</sup>;
- **Republic of Kosovo** - The IPKO Telecommunications LLC having Significant Market Power in Call Termination on Public Telephone Network provided at a Fixed Location Market<sup>35</sup>;
- **South Africa** - The Case for the Regulation of Call Termination in South Africa: An Economic Evaluation<sup>36</sup>;
- **Turkey** – Call Termination on Fixed Telephony Networks<sup>37</sup>;

<sup>24</sup> <http://www.tra.org.bh/EN/pdf/DraftDominanceDeterminationforVIVAmobiletermination.pdf>.

<sup>25</sup> 2009/39/EC.

<sup>26</sup> GSMA –April 26, 2006 by Philippe Defraigne available at [http://www.cullen-international.com/cullen/cipublic/presentations/sms\\_termination.pdf](http://www.cullen-international.com/cullen/cipublic/presentations/sms_termination.pdf).

Decision Notice No. 07/12 available at [http://www.gra.gi/sites/communications/downloads/332/des\\_not\\_7\\_12.pdf](http://www.gra.gi/sites/communications/downloads/332/des_not_7_12.pdf).

<sup>28</sup> Decision Notice No. 09/11 30<sup>th</sup> November 2011 available at <http://www.gra.gi/sites/communications/downloads/314/notice09-11.pdf>.

<sup>29</sup> Consultation and Draft Decision ComReg 12/46 dated 23/05/2012 available at <http://www.comreg.ie/fileupload/publications/ComReg1246.pdf>.

<sup>30</sup> <http://www.ictregulationtoolkit.org/en/Section.3585.html>.

<sup>31</sup> Document No. TEL 2004/10 available at <http://www.our.org.jm/>

<sup>32</sup> [http://www.llv.li/pdf-llv-ak-lie\\_fixed\\_call\\_termination\\_market\\_m3.pdf](http://www.llv.li/pdf-llv-ak-lie_fixed_call_termination_market_m3.pdf).

<sup>33</sup> <http://www.mca.org.mt/sites/default/files/attachments/decisions/2012/m3-mt-final-decision.pdf>.

<sup>34</sup> <http://www.oxera.com/Oxera/media/Oxera/Research-on-countervailing-buyer-power.pdf?ext=.pdf>.

<sup>35</sup> <http://www.art->

<ks.org/repository/docs/6%20SMP%20IPKO%20Call%20Termination%20Fixed%20location%20Decision%20no%20185.pdf>.

<sup>36</sup> <http://www.ictregulationtoolkit.org/en/Publication.4009.html>.

- **Turks and Caicos Islands** - Review of Mobile Termination Rate<sup>38</sup>; and
- **UK** - Review of the Fixed Geographic Call Termination Markets.<sup>39</sup>

The remainder of this document sets out URCA's preliminary findings on the Market Review Process for Call Termination Services. This is undertaken as follows:

- Section 5 presents URCA's preliminary market definition;
- Section 6 presents URCA's preliminary SMP assessment in each defined market;
- Section 7 describes potential competition problems from operators having SMP in termination markets and the resulting potential impact on consumers; and
- Section 8 presents the preliminary *ex-ante* remedies proposed for SMP operators in each defined market.

---

<sup>37</sup>

[http://eng.btk.gov.tr/elektronik\\_haberlesme\\_sektoru/sektorel\\_rekabet/piyasaanalizleri/dosyalar/Final%20Documents/Market%203-Call%20Termination%20on%20Fixed%20Telephony%20Networks-Final%20Document.pdf](http://eng.btk.gov.tr/elektronik_haberlesme_sektoru/sektorel_rekabet/piyasaanalizleri/dosyalar/Final%20Documents/Market%203-Call%20Termination%20on%20Fixed%20Telephony%20Networks-Final%20Document.pdf).

<sup>38</sup> <http://www.telecommission.tc/content/root/files/20100719112927-TCI-MTR-Consultation-Document- July-19-2010.pdf>.

<sup>39</sup> [http://www.ofcom.org.uk/static/archive/oftel/publications/eu\\_directives/2003/eu\\_geo\\_term/geo0303.pdf](http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/eu_geo_term/geo0303.pdf).

## 5 Market Review Stage 1 - Market Definitions

As discussed in the previous Section, there are two dimensions to any market definition:

- the relevant products that are sold in the market ('the product market' dimension); and
- the geographical area within which the relevant products are sold ('the geographic market' dimension).

### 5.1 Product Market

The first step in defining the 'product market' involves identifying the products against which demand/supply-side substitutability will be assessed. In this first step, URCA has given utmost consideration to the approach adopted by established regulators in other jurisdictions (Section 4.2 above) wherein the relevant call termination products against which demand/supply-side substitutability tests have been assessed are commonly the following products:

- a) Fixed Voice Call Termination;
- b) Mobile Voice Call Termination; and
- c) Mobile Messaging Service Termination (i.e., SMS and Multimedia Messaging Service or MMS).

As explained in Section 3.1 above, fixed termination is used when calls are made by subscribers on fixed or mobile networks to subscribers on a different fixed network. Mobile termination, on the other hand, is used when calls are made by subscribers on mobile or fixed networks to subscribers on a different mobile network. Mobile termination is also used for supplying off-net Short Messaging Services ("SMS") and Multimedia Messaging Services ("MMS").

URCA considers that the product definition for call termination should not distinguish where the call originates. This is because, for example terminating a call on a fixed network involves essentially the same functional elements irrespective of whether the call originated on another fixed network, mobile network or from abroad. (i.e., where the call is made by a subscriber in another country).<sup>40</sup> This also holds for calls terminating on a mobile network.

However, call termination on each licensee's network is potentially different from the perspective of a consumer of call termination services. This is because if a customer of Network A wishes to call a customer on Network B, Network A has no choice but to terminate that call on Network B. Terminating that call on the network of another operator (e.g., Network C) is not a suitable alternative.

---

<sup>40</sup> URCA notes, however, that fixed termination rates may vary in line with their use of the fixed network (i.e., for on-island and off-island fixed call termination services).



## **Technology neutrality**

URCA has adopted a technology neutral approach to market definition.<sup>41</sup> That is, the product market definition is independent of the underlying technology employed by a licensee to provide the call termination service in question. For example, in a mobile environment, operators do not differentiate retail charging to other competing mobile operators on the basis of whether the called party is connected to a 2G, 3G or 4G network. In common with regulatory practices in other jurisdictions, URCA considers that this lack of retail price differentiation lends itself to a technology neutral approach when defining termination markets. Within its Review of Wholesale Call Termination in Mobile, the Irish regulator (ComReg) noted that it would be the mobile terminating operator, and not the originating mobile operator, that decides whether the call is terminated on its 2G or 3G network.<sup>42</sup> URCA understands that other regulators in the EU have adopted this same approach and notes that the regulator in BVI has employed a similar approach. Given the international precedent, URCA proposes that there should be no difference in the treatment of mobile termination on the basis of the technology used by a mobile network operator to terminate a call/SMS on its network. This means in URCA's view that the product market for mobile termination in The Bahamas would include all possible technologies capable of provisioning termination on mobile networks.

This reasoning is consistently applied when defining termination markets on fixed networks. Accordingly, URCA also considers that there should be no technological difference in the treatment of fixed termination (e.g., between fixed wire line or fixed wireless). URCA proposes that the product market for fixed termination should be independent of the underlying technology used to provision fixed termination on any given fixed network. This means that the proposed product market for fixed termination in The Bahamas would include all possible technologies employed by fixed network operators to provide termination on fixed networks.

## **Common Pricing Constraint**

In common with the European Commission's recommendations on the regulation of wholesale termination services,<sup>43</sup> URCA considers that termination markets should be defined in terms of voice call termination (including SMS and MMS) on individual fixed public voice networks provided at a fixed location, and on individual mobile networks.<sup>44</sup> The reasoning behind this approach is that termination markets are not generally defined on a subscriber by subscriber basis. The reason for this approach is that termination on a given network is usually provided on a homogenous basis and is subject to a

---

<sup>41</sup> URCA notes that it is standard practice by communications regulators to adopt a technology neutral approach to market definition.

<sup>42</sup> [http://www.comreg.ie/publications/market\\_review\\_-\\_voice\\_call\\_termination\\_on\\_individual\\_mobile\\_networks.472.104101.p.html](http://www.comreg.ie/publications/market_review_-_voice_call_termination_on_individual_mobile_networks.472.104101.p.html).

<sup>43</sup> Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU – 2009/39/EC.

<sup>44</sup> Annex of Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

common pricing constraint. In other words, the condition relating to the supply of mobile termination does not differ on the basis of the particular number/subscriber called and mobile termination rates are the same irrespective of the mobile number/subscriber called. In respect of fixed termination, a similar reasoning applies. Thus, URCA also proposes that the relevant fixed termination market and mobile termination market should include the provision of fixed call termination to all subscribers of a given fixed network and mobile termination to all subscribers of a given mobile network.

## **5.2 Summary of provisional findings regarding reference products for conducting the SSNIP test**

URCA considers that the product descriptions set out above capture the essential characteristics or elements of the narrowest product market definitions of fixed termination and mobile termination. From this narrowest of product definitions, URCA has then examined whether the defined products should be included in markets on their own or as part of wider markets including other products or services. In making this examination, URCA has applied the SSNIP test described in the preceding Section.

## **5.3 Proposed Relevant Product Markets**

The proposed relevant product markets are as discussed below:

- the proposed product market for fixed voice call termination on individual fixed networks (i.e., CBL, BTC, IPSI, and Last Mile Communications Ltd.);
- the proposed product market for mobile voice call termination on BTC's mobile networks; and
- the proposed product market for mobile message termination on BTC's mobile network.

### **5.3.1 The Proposed Product Market for Fixed Call Termination**

In this Section, URCA considers the breadth of the proposed product market for fixed call termination services. That is, URCA examines whether, based on the evidence available to it, consumers of fixed call termination services on an individual network would switch to an alternative service, in the event of a SSNIP for the service.

On the basis of this initial analysis, URCA preliminarily concludes that consumers of fixed call termination services on each individual network would not switch, in sufficient numbers, for a small but significant non-transitory increase in price from the competitive level, to be unprofitable. URCA's preliminary view, therefore, is that fixed call termination on an individual network forms a relevant economic market. URCA has reached this initial view due to the following factors:

- i. At the wholesale level, demand-side substitution appears to exist if the licensee whose customer originates the call could purchase call termination on a given fixed network from an alternative source. This possibility is not technically feasible in this case because, at present, once a particular number is called the terminating network to which that number is allocated is the only one that can terminate that call. Similarly, supply side substitution is apparently not possible because, in URCA's view, it is not feasible for another network to terminate calls to a customer on the network of a third party.
- ii. However, URCA considers it is also possible that a price increase could be unprofitable if it led to retail customers switching to different services, thus meaning that the call termination service of the hypothetical monopolist was bypassed. This is important because as a wholesale service, the demand for call termination is derived from the retail demand for off-net calls to fixed line numbers. Thus, if the off-net call leads to a change in the demand for retail services, this could render the price increase unprofitable.
- iii. Retail demand for off-net calls could change following an increase in the price of termination for two reasons: the called party could change to another network; or the calling party could change its behaviour. The called party may change to another network because he values receiving calls and by increasing the price of termination (and hence potentially the cost other consumers face for calling that customer), that network contributed to an increase in the cost of other consumers calling his subscribers. This could lead, in URCA's view, to a reduction in the volume of calls such a customer receives and hence a reduction in their utility. This could, therefore, lead these affected customers to switch to a network which it is cheaper for their contacts to call. However, given the CPP regime which applies to calls to fixed lines in The Bahamas, URCA considers it unlikely that consumers would switch in sufficient numbers to make such a price increase unprofitable. This is because such consumers do not themselves face directly the cost of call termination on their network.
- iv. Calling parties could also choose not to place calls to subscribers of the hypothetical monopolist, following the price increase. For example, they could switch instead to calling that person on their mobile handset, or using messaging or email services in place of a call. However, URCA's initial analysis suggests that this type of switching is unlikely to take place in sufficient volume for it to render the price increase unprofitable. For example, within its 2009/2010 market review, URCA concluded that at the retail level fixed and mobile calls are not substitutable. URCA found that, amongst other things, the functional characteristics of fixed and mobile services renders both services unsubstitutable for a significant number of customers. This led URCA to conclude that retail fixed and mobile calls are in separate economic markets. URCA has not seen any additional evidence to suggest this is no longer the case.
- v. Further, URCA does not consider SMS is an effective substitute for a voice call. URCA understands that where real-time communication or immediacy of contact is unimportant, an SMS may constitute an effective substitute for a segment of users. However, on balance, URCA

is not convinced that the number of customers switching would be sufficiently large to make the increase in fixed termination rates unprofitable for the hypothetical monopolist. Firstly, customers may not be able to transfer in one message all of the information that could be imparted through a call due to restrictions regarding the number of characters (160) that could be sent in an individual SMS. Secondly, SMS messages are sent on a 'store and forward' basis. This means that communication might not be immediate due to a delay in the recipient receiving a text. In contrast, voice communication is immediate and occurs at the point when the called party answers the incoming call. For these reasons, URCA considers that, for the vast majority of subscribers, sending an SMS is not a convenient substitute to making off-net calls (i.e., mobile-to-mobile and fixed-to-mobile calls).

- vi. For some segment of users, sending an email in lieu of making an off-net call could constitute an effective substitute to make a SSNIP unprofitable for the hypothetical monopolist. However, because email is not real time communication, URCA considers it would not be a close economic substitute, especially where immediacy of contact is highly valued by either the calling party or the called party. Additionally, the called party must have a smartphone and subscribe to a data plan which imposes additional cost on some customers and makes this option unattractive for some subscribers.

### **5.3.2 The Proposed Product Market for Mobile Call Termination on BTC's Mobile Network**

In this Section, URCA considers the relevant product market for mobile call termination services (i.e., whether, based on the evidence available to URCA, consumers of mobile call termination services on an individual network would switch to an alternative service, in the event of a SSNIP for the service).

BTC currently enjoys a statutory monopoly for providing mobile services in The Bahamas and this will remain in place until April 2014. As such, currently mobile-to-mobile off net calls are not possible in The Bahamas. Further, given the RPP nature of the retail market for fixed-to-mobile calls<sup>45</sup>, URCA's analysis has focused on the termination of calls which originate abroad and are then terminated on the mobile network in The Bahamas. URCA considers that this service could form a bottleneck. This position is arrived at because if a customer overseas calls someone on BTC's mobile network, the call can only be terminated by BTC, regardless of which operator brings the call into The Bahamas to the point of interconnection with BTC's mobile network (which may be provided indirectly via the BTC fixed network).

On the basis of this initial analysis, URCA considers that consumers of mobile call termination services on BTC's network would not switch, in sufficient numbers, for a small but significant non-transitory increase in price from the competitive level, to be unprofitable. URCA's preliminary view, therefore, is

---

<sup>45</sup> BTC's retail mobile customers pay for receiving calls from fixed line customers of any network, with that charge being intended to cover the costs BTC incurs in terminating the call.

that mobile call termination on BTC's network forms a relevant economic market. URCA has reached this initial view due to the following factors:

- i. Similar to fixed call termination services discussed above, demand-side substitution at a wholesale level for mobile call termination is not technically feasible as, at present, once a particular number is called, the terminating network to which that number is allocated is the only one that can terminate that call. Similarly, supply side substitution is not possible because it is not feasible for another network to terminate calls to a customer on the network of a third party.
- ii. It is also possible that a price increase could be unprofitable if it led to retail customers switching to different services, thus meaning that the call termination service of the hypothetical monopolist was bypassed. Given the RPP regime in the mobile market, the only demand side substitution for URCA to consider is whether the calling parties (i.e., a consumer based abroad calling a BTC mobile customer) would choose not to place calls to BTC's mobile subscribers, following the price increase.<sup>46</sup> Instead they could conceivably switch to calling that person on their fixed line, or using messaging or email services in place of a call. However, URCA considers that this type of switching is unlikely to take place in sufficient volume for it to render the price increase unprofitable. This is due in URCA's view to, amongst other things, the functional characteristics of fixed and mobile services (most notably the mobility aspect of mobile services) rendering both services unsubstitutable for a significant number of customers.
- iii. Further, as set out in the fixed call termination product market definition in more detail, URCA is not convinced that SMS or email constitute an effective substitute for a voice call to make a SSNIP unprofitable for the hypothetical monopolist.

### **5.3.3 The Proposed Product Market for Mobile Message Termination on BTC's Mobile Network**

Lastly, URCA considers the breadth of the proposed product market for mobile message termination services (i.e., SMS/MMS). That is, URCA examines whether, based on the evidence available to it, consumers of mobile message termination services on BTC's network would switch to an alternative service, in the event of a SSNIP for the service.

On the basis of this initial analysis, URCA considers that consumers of mobile message termination services on BTC's network would not switch, in sufficient numbers, for a small but significant non-transitory increase in price from the competitive level, to be unprofitable. URCA's preliminary view, therefore, is that mobile messaging termination on BTC's network forms a relevant economic market. URCA has reached this initial view due to the following factors:

---

<sup>46</sup> It is also possible that a retail consumer of mobile services in The Bahamas could switch to using a fixed line, if he receives a large number of incoming international calls and, as a result of the increase in the price of the termination service, sees a reduction in the volume of those calls received, thus reducing the welfare he gains from the mobile service.

- i. Similar to call termination services discussed above, wholesale demand-side substitution for mobile message termination is not, in URCA's view, technically feasible as, at present, once a particular number is contacted, the terminating network to which that number is allocated is the only one that can terminate that message. Similarly, supply side substitution is not in URCA's view possible because it is not feasible for another network to terminate mobile messages to a customer on the network of a third party.
- ii. On a retail level, demand for SMS or MMS could conceivably change following an increase in the price of termination as mobile customers could choose not to send the SMS/MMS to subscribers of the hypothetical monopolist, following the price increase. For example, they could switch instead to calling that person on their mobile handset, or using email services. However, as stated above, URCA does not consider voice calls to be an effective substitute for mobile messaging services.
- iii. In addition, mobile messaging service termination is supplied by the same operator that offers call termination, and therefore in URCA's view the ability to send a SMS/MMS to the mobile customer (in place of a voice call to the same customer) does not represent an effective constraint on the operator when setting termination rates. For some segment of users, sending an email in lieu of sending a SMS/MMS could constitute an effective substitute to make a SSNIP unprofitable for the hypothetical monopolist. However, the sending party must have a smartphone and subscribe to a data plan which imposes additional cost on some customers and makes this option less attractive for some subscribers.

## 5.4 Preliminary Conclusion on Product Markets

Having regard to the arguments presented above, URCA's preliminary view is to define the following six product markets for fixed and mobile termination services as:

- i. fixed voice call termination on BTC's network;
- ii. mobile voice call termination on BTC's network;
- iii. mobile message termination on BTC's network;
- iv. fixed voice call termination on CBL's network;
- v. fixed voice call termination on Last Mile Communications' network; and
- vi. fixed voice call termination on IP Solutions International's network.

**Question 1: Please provide comments on URCA's preliminary views on the relevant product market definitions for fixed and mobile termination services.**

## 5.5 Proposed Geographic Market

Below URCA presents its preliminary views on the proposed relevant geographic markets for call and mobile message termination services in The Bahamas, based on URCA's review of the factors which should be considered in the determination of the relevant geographic market, as stipulated in ECS 20/2011.

### 5.5.1 Past evidence of consumers diverting orders to suppliers in other areas

URCA has no past evidentiary information of retail customers switching their orders to suppliers located elsewhere. Neither is URCA in possession of any current evidentiary information showing that this is presently happening and/or is likely to materialize during the lifetime of this market review.

In the context of wholesale call termination, URCA notes that call termination is generally defined in terms of completing a call/SMS/MMS on the network associated with the called party's number. In this regard, URCA considers that diverting calls to a service provider elsewhere would render the calling party incapable of establishing contact with the telephone number assigned to the intended called party. This is because irrespective of where the called party is located, the telephone number assigned to that person is associated to a particular network. This implies that the called party's number is not available to other service providers, thus the called party could not be reached by ending the call on any network apart from the network the called party's number is assigned to. In short, the call must be terminated on the network to which the telephone number is assigned. This suggests to URCA that the geographic dimension of the relevant economic market cannot be narrower than the areas/region in which the called party's service provider operates terminating facilities and therefore has the capacity to provide termination services.

### 5.5.2 Basic demand characteristics

Regarding demand characteristics, URCA considers that the relevant product in question is wholesale call/mobile message termination which is derived from retail voice markets for fixed and/or mobile calls/SMS/MMS. Call termination ensures that a customer originating a call/SMS ("calling party") is connected to the called party who is the subscriber of a different network. A key demand characteristic of call termination is that it has a very low sensitivity to changes in termination rates. As discussed above, there are in URCA's view no close economic substitutes for termination services on a specific network, thus the own price elasticity of demand for termination is low.<sup>47</sup> This reinforces the point in URCA's view that termination on a given network constitutes an "enduring bottleneck" or monopoly

---

<sup>47</sup> A licensee is in URCA's view in a strong position to raise its prices above (marginal) costs (and thus enjoys market power in an economic sense), the more inelastic the individual demand function is. In a market with more than one product it is true that *ceteris paribus* the more substitutes there are on this market the more elastic the demand is and the lower the price setting scope of the licensee is. In the case of a monopoly market, the individual demand function coincides with the total market demand function.

facility that is incapable of duplication or replication by others. In the context of geographic market definition, a supplier of termination can only provide termination services in areas where it has the facilities. This also means in URCA's view that the geographic dimension of the relevant economic market cannot be narrower than the areas/region in which the called party's service provider operates terminating facilities and therefore has the capacity to provide termination services.

Under the current licensing regime in The Bahamas, persons are licensed to operate electronic communications networks nationally. BTC is the only licensee that operates ubiquitous fixed and mobile networks nationally and therefore has the capacity to provide fixed and mobile termination throughout The Bahamas. CBL and other licensees are also authorised to operate fixed networks nationwide but currently have not demonstrated the capacity to provide fixed termination on the same scale and ubiquity as BTC. This group of licensees appear to URCA to be in the very early stage of network deployment and therefore do not appear to have the infrastructure in place to provide fixed termination on the scale currently offered by BTC. For this reason, URCA considers that these licensees would only be able to provide fixed termination services in areas where they have the facilities. In view of the wide disparities in network coverage, URCA proposes that the relevant geographic market should not be narrower than the area in which the licensee has the facilities to provide fixed termination and not wider than the Commonwealth of The Bahamas.

### **5.5.3 Barriers to switching**

The third element considers the barriers associated with switching demand to potential substitutes. URCA considers that even if barriers associated with switching at the retail level do not exist, such barriers may still exist at the wholesale level. As mentioned above, it is technically infeasible to terminate a call or message to a called party on Network A by terminating the call on Network B instead. This is because the called party could not be reached by completing the call on a separate and distinct network. In other words, termination is characterised by absolute barriers to switching. In the context of geographic market definition, URCA interprets this to mean that it would not be technically feasible to terminate a call or message to a called party in Region X of The Bahamas by terminating the call or message in Region Y as the called party would not be reached. In other words the called party must travel to Region Y to receive the call or message.

### **5.5.4 Views of third parties**

URCA is required to consider the views of third parties on all stages of the market review process. In responding to a previous consultation ( "Methodology for the Assessment of Significant Market Power (SMP) - ECS 09/2011), representations were made by BTC and CBL in respect of geographic market definition. Thereunder CBL<sup>48</sup> commented that the criteria proposed by URCA are relevant for defining

---

<sup>48</sup>Response of Cable Bahamas Ltd., Systems Resource Group Ltd. and Caribbean Crossings Ltd. to URCA's Consultation Document on Methodology for Assessment of Significant Market Power (SMP) Under Section 39(2) of the Communications Act, 2009 and available at [www.urcabahamas.bs](http://www.urcabahamas.bs).



the geographic scope of the relevant market and it expressed the view that two additional criteria should be considered, namely:

- the area covered by the networks of the service providers; and
- the existence of legal and other regulatory instruments.

BTC<sup>49</sup> suggested that URCA should group islands based on the existence of network infrastructure and competition and then classify geographic areas into those that are ‘competitive’, ‘prospectively competitive’ and ‘uncompetitive’. BTC believed its suggestion, if adopted, would provide homogenous markets from the perspective of supply and demand substitution which in turn would result in proportionate and targeted regulatory intervention, where necessary.

In URCA’s Statement of Results on Consultation Document ECS 19/2011, URCA addressed the above points raised by BTC and CBL. URCA will not repeat its responses here but refers to Section 3.2 of ECS 19/2011 wherein URCA responded to suggestions put forward by both companies and stated its approach to geographic market definition.

URCA considers that its proposal on geographic market definition in call termination is pragmatic and fit for purpose. However, URCA considers that given the dynamic nature of electronic communications markets there might be other factors and information accessible to existing and potential licensees that may have a bearing on the boundaries of the relevant geographic market for call termination services. As such, URCA reiterates that it is keen to receive written submissions from interested parties on all aspects of this Preliminary Determination for URCA’s review and consideration.

### **5.5.5 Preliminary Conclusions on Geographic Market**

Given the analysis presented on the four factors above, URCA has come to the preliminary view that the geographic market of the relevant product should not be narrower than the area in which the licensee has facilities to provide the product.

**Question 2: Please provide comments on URCA’s preliminary view on the relevant geographic market definition in relation to fixed and mobile call termination services.**

## **5.6 Preliminary Conclusion on Market Definition**

Having regard to the analysis presented above on its proposed product and geographic market definitions, URCA sets out below its preliminary position on the relevant economic markets for call termination services.

---

<sup>49</sup> Response to Public Consultation Paper on Methodology for Assessment of Significant Market Power (SMP) under Section 39(1) of the Communications Act, 2009” dated 29 June 2011 and available at [www.urcabahamas.bs](http://www.urcabahamas.bs).

URCA proposes to determine that the relevant market includes voice call and mobile message termination as follows:

- a) The wholesale market for fixed voice call termination provided by Bahamas Telecommunications Company Ltd. (BTC) over its fixed networks in The Bahamas.
- b) The wholesale market for mobile voice call termination provided by BTC over its mobile networks in The Bahamas.
- c) The wholesale market for mobile message service termination provided by BTC over its mobile networks in The Bahamas.
- d) The wholesale market for fixed voice call termination provided by CBL over its fixed networks in The Bahamas.
- e) The wholesale market for fixed voice call termination provided by IP Solutions International Ltd. over its fixed network in The Bahamas.
- f) The wholesale market for fixed voice call termination provided by Last Mile Communications Ltd. over its fixed network in The Bahamas.

## 6 Market Review Stage 2 – SMP Assessment

Having defined the relevant product and geographic market for wholesale call and mobile message termination services, the next step (Step 2) in the market review process is for URCA to examine the extent of competition in the wholesale markets that it proposes to define. The analysis of competition in a relevant economic market seeks to identify SMP firms or suppliers in that market. As noted above, the Comms Act defines an SMP licensee as a licensee that,

*"... individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers."<sup>50</sup>*

In conducting this assessment, the list of relevant criteria considered are the mandatory criteria dictated by section 39(3)(a), (b), (c), and (d) of the Comms Act, and other criteria considered relevant by URCA pursuant to its powers under section 39(3)(e). Overall, in its assessment of market power in the wholesale markets that it proposes to define, URCA considered, to the extent of their applicability, the following criteria:

- the licensee's market share;
- the licensee's ability to influence market conditions;
- the licensee's access to financial resources;
- the licensee's experience in providing products to the market;
- barriers to entry and expansion;
- countervailing buyer power;
- overall size of the undertaking;
- control of infrastructure not easily duplicated; and
- number of active competitors.

URCA considers that the aforementioned criteria affect new market entrants as well as established firms, small or otherwise, in the proposed market. URCA is satisfied that these criteria are the most important contributors to SMP in the electronic communications sector and notes that regulators and competition authorities in overseas markets (e.g., Malta, BVI, Gibraltar, UK, Turkey, Liechtenstein) have relied on these factors when assessing SMP at the wholesale level.

Below URCA presents its preliminary analysis in turn on each of the criteria above.

### 6.1 Licensee's Market Share

The Comms Act does not specify a market share threshold for SMP. However, within ECS 20/2011, URCA established a presumption of SMP where a licensee has a market share in excess of 40%.<sup>51</sup> URCA

---

<sup>50</sup> Section 39(1) of the Comms Act.

<sup>51</sup> URCA may adopt one or more measures of market share, including total gross revenues, total subscribers, total traffic volumes (bulk or otherwise) and/or total capacity.

considers that there is a very strong presumption of SMP in respect of termination on individual networks. This presumption is derived from the fact that the licensee of the called party's network has 100% market share in respect of terminating traffic to telephone numbers assigned to customers on that particular network. As explained above, the functional characteristics of termination are such that the calling party's service provider has no choice but to terminate the call/SMS/MMS on the network where the called party's telephone number resides. As such, the calling party's service provider has limited opportunities to bypass the terminating facilities operated by the called party's service provider and must purchase termination from that licensee. This suggests to URCA that any licensee supplying a call termination service enjoys a monopoly position in respect of termination of all calls and mobile messaging services to numbers assigned to subscribers on its network. Consequently, URCA preliminarily concludes that there is a strong presumption of SMP by the licensees identified in respect of call (including mobile messaging service) termination on their individual networks in The Bahamas.<sup>52</sup>

URCA considers that the foregoing analysis is unaffected by competition in downstream markets (i.e., at the retail level). In that case, in URCA's view a licensee with zero or a relatively small retail market share of subscribers will still be in a dominant position in the supply of termination services on its network, as other licensees wishing to terminate calls and mobile messaging services to that licensee's subscribers will face no alternatives to that licensee's termination service. URCA is unaware of any existing or forthcoming substitution possibilities to terminate a call to the called party other than on the network to which the called party's number is assigned.

## 6.2 Barriers to Entry and Expansion<sup>53</sup>

Where barriers to entry and/or expansion are absent, any pricing strategy above cost-based levels will provoke new and existing suppliers to expand output, thus making the initial price increase unprofitable. In other words, rival operators (both existing and new firms) will respond to a price increase imposed by another service provider by undercutting the price rise and selling more output than previously, thus undermining the attempt by the original supplier to raise prices profitably. Because of the operational characteristics of termination, this is not economically or technically feasible in this case. This results from the fact that termination markets are characterised by absolute barriers to entry and expansion. As

---

<sup>52</sup> In *Hoffmann-La Roche*, the ECJ held: "[...] **very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position**". Similarly in *AKZO*, the ECJ added: "with regard to market shares the Court has held that **very large market shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position.**"

<sup>53</sup>A barrier to entry is any legal, economic, financial, natural or technical factor that prevents a licensee outside the defined wholesale markets from imposing a constraint on the exercise of market power within the market through the threat of entry. Similarly, a barrier to expansion is any legal, economic, financial, natural or technical factors that prevent a licensee already in a market from being able to quickly and cheaply increase its output. In electronic communications, the most important barriers to entry and expansion which restrict the number of suppliers are:

- exclusive right to provide a given product or service and intellectual property rights (i.e., legal barriers to entry);
- spectrum scarcity (natural barriers to entry); and
- economic barriers to entry and expansion which include economies of scale and scope, sunk costs, control of an infrastructure not easily replicated by other firms, limited or total lack of access to financial resources, economies of density, and size and flexibility of investment.

such, it is technically infeasible for other operators to duplicate the terminating infrastructure and facilities operated by rival companies. The inability of Operator A to duplicate termination on BTC's networks is because the characteristics of termination make it an enduring bottleneck or monopoly service and the call and mobile messaging service must be completed using the called party's host network only. This for URCA is compelling evidence that the infrastructure employed by each operator in The Bahamas to terminate a call cannot be duplicated or replicated by other licensees providing a substitutable termination product or service.

### **6.3 Countervailing Buyer Power (CBP)**

CBP (or demand-side bargaining power) refers to the relative strength of the buyer in negotiations with prospective sellers. Countervailing buyer power could limit the ability of providers of termination services to engage in monopolistic pricing and hence to behave independently of buyers and ultimately of consumers. URCA considers that the conditions conducive to CBP<sup>54</sup> generally do not apply to the proposed call termination markets identified in Section 5.4 above. As discussed earlier, termination on a given electronic communications network is an enduring "bottleneck facility" that is incapable of duplication by any other licensees. Accordingly, URCA is of the preliminary view that each of the licensees identified above has an effective monopoly in the supply of termination services on their respective network. The implications of this for URCA are that another network operator wishing to establish a communication with a subscriber on IPSI's network, for example, has no alternative but to buy termination service from IPSI.

As noted by Oxera in a Report prepared for OPTA (Independent Post and Telecommunications Authority of the Netherlands), for countervailing buyer power to be effective, buyers of termination services must be able to exert a sufficiently strong influence on the seller preventing the latter from behaving independently of competitors and consumers to an appreciable extent.<sup>55</sup> In doing so countervailing buyer power can prevent excessive prices and constrain prices at a level consistent with effective competition. Hence, it can benefit the buyer of termination services and ultimately retain customers.

URCA has no information suggesting that, at the present time, BTC or any other licensee is able to exercise countervailing buyer power in respect of termination of calls to other fixed networks in The Bahamas. URCA considers that even if this is presently the case there is a very strong possibility that this situation may change going forward as new operators enter the market and existing ones expand.

In any event, URCA considers that the requirement to interconnect as set out in Condition 11.1 of the standard IOL prevents the calling party's network exercising countervailing buyer power as it depends

---

<sup>54</sup> The conditions conducive to countervailing buyer power include the following:

- the buyer has alternative sources of supply;
- the buyer is well-informed, especially about alternative sources of supply;
- the buyer could switch to alternative sources of supply without incurring significant costs;
- the buyer could produce the service itself or could sponsor new entry by another supplier; and
- the buyer is an important outlet for the seller.

<sup>55</sup> Research on countervailing buyer power for mobile call termination: The Dutch case Available at <http://www.oxera.com/Oxera/media/Oxera/Research-on-countervailing-buyer-power.pdf?ext=.pdf>.

on the ability of one operator to refuse to interconnect which is contrary to the current interconnection framework.

#### **6.4 Control of Infrastructure not Easily Duplicated**

Having control of an infrastructure which is not easily duplicated can make it feasible for a licensee to behave independently of other licensees, customers and subscribers. As call and mobile message termination can only be provided using the terminating infrastructure of the called party's network provider, it would not be technically feasible for another operator to duplicate or replicate such facilities on its network. This implies to URCA that the termination markets identified in Section 5.4 above are characterised by high non-transitory barriers to entry. This also means, in URCA's view, that a supplier of call (or SMS/MMS) termination has absolute control over the underlying infrastructure competitors in downstream (retail) markets need to provide off-net communications services. This monopolization or exclusive control over an essential facility is, in URCA's view, reinforced by the fact that termination rates can be a principal revenue stream for some companies and a key cost component of the tariffs (under a CPP regime) other licensees charge retail customers for off-net communications services.

#### **6.5 Licensee's ability to influence market conditions**

The above factors<sup>56</sup> suggest to URCA that the wholesale markets that URCA proposes to define in Section 5.4 above are conceivably devoid of effective competitive pressure and providers of this critical input are effectively in a position of economic strength to behave to an appreciable extent independently of other licensees, consumers or subscribers. The implication of this to URCA is that, absent regulatory intervention, individual suppliers of termination effectively have the capacity to influence market conditions at both the wholesale and retail level. A supplier of termination services has complete and exclusive control over the infrastructure and systems required to complete calls and messaging services to telephone numbers assigned to customers on its network.

Given the monopolistic structure of termination markets, an operator providing termination is conceivably in an extremely strong position to influence entry and competition in the marketplace by denying requests to supply termination (an essential input) to other licensees in a timely manner, thereby inhibiting the competitive structure in retail markets to the detriment of customers and competition.<sup>57</sup>

---

<sup>56</sup> Market share, presence of barriers to entry and expansion and absence of countervailing buyer power.

<sup>57</sup> A supplier of termination may choose to raise termination rates consistently and profitably above competitive levels, thereby:

- inducing an increase in retail tariffs paid by subscribers on other networks to make off-net calls/mobile messages as the originating operator would most likely seek to recover the termination rate increase from its own retail customers.
- resulting in a large differential in retail tariffs for off-net and on-net calls which in turn may encourage customers to make more on-net calls and reduce their consumption of off-net calls.
- causing customers to take subscription from more than one licensee, which may likely be an inconvenience for some customers and additional retail charges may have to be incurred.
- inhibit growth and expansion of smaller operators because of the additional cost linked to off-net communications.

This could also mean that, absent SMP regulation, a supplier of termination services has the ability to exert an appreciable influence on the conditions under which competition will develop in the ECS markets in The Bahamas.

## **6.6 Number of active competitors**

URCA understands that there is no correlation between the number of active providers of termination services and the ability of individual licensees to exert market power. URCA's concerns about excessive charging for termination services would hold true irrespective of the number of active operators in the market. This is because, to URCA's knowledge, the termination service of a new provider has no impacts on the structure of the existing (monopoly) termination market and constitutes its own market in turn. As explained previously (Section 6.4 above), the licensees identified are considered to exert absolute and complete control over terminating facilities on their networks, and for this reason the termination services offered on each network is not susceptible to competitive pressure. In URCA's view, this would mean that, absent SMP regulation, a licensee has unrestricted freedom when negotiating termination arrangements with other licensees. In light of this, URCA considers that an increase in the number of active providers of termination is not a limiting factor on the price setting behaviour of the operators in the relevant markets identified. In fact, an increase in the number of active providers of termination similarly increases the number of entities with the ability to exercise monopoly power over terminating facilities. This view is in line with the practical experience from other jurisdictions.

## **6.7 Other factors**

URCA has also considered other factors in conducting its SMP assessment, namely:

- licensee's access to financial resources;
- the overall size of the licensees; and
- their experience in providing services to the market.

However, URCA considers that none of these factors affect its preliminary conclusions on SMP, set out above. Regardless of a licensee's access to financial resources, its overall size or experience, URCA considers that the economic and technical characteristics of termination services remain and effectively mean that each of the licensees identified is able to act, to an appreciable extent, independently of competitors, customers and ultimately, consumers.

## **6.8 Conclusion on Preliminary SMP Assessment**

URCA preliminarily assessed the extent of competition within the defined wholesale termination markets against a range of structural and behavioural factors. URCA, having considered amongst other criteria, operator's market shares in each defined markets, coupled with high barriers to entry and expansion and the absence of countervailing buyer power preliminarily concludes that the wholesale markets defined are devoid of effective competition within the timeframe of this market review. Significantly, URCA preliminarily finds that the wholesale markets in question are characterized by (i) high and non-transitory barriers to entry/expansion, and (ii) there are no current or emerging

substitution possibilities to overcome such barriers within the timeframe of this market review. URCA considers that this would mean that the markets in question do not tend towards effective competition within the relevant time horizon.

URCA is unaware of any new economic thinking or technological advancement in existence or on the horizon that would, within the review period, allow existing and/or aspiring licensees to circumvent or bypass the called party's service provider to terminate a call or mobile message to a subscriber's telephone number on a different network.

As such and pursuant to section 39(1) of the Comms Act, URCA has reached the following preliminary position regarding licensees with SMP in call and mobile message termination services on networks in The Bahamas.

URCA proposes to determine that:

- a) BTC has SMP in the wholesale market for fixed voice call termination on its fixed network in The Bahamas.
- b) BTC has SMP in the wholesale market for mobile voice call termination on its mobile networks in The Bahamas.
- c) BTC has SMP in the wholesale market for mobile message termination on its mobile networks in The Bahamas.
- d) CBL has SMP in the wholesale market for fixed voice call termination on its fixed networks in The Bahamas.
- g) IP Solution International Ltd. has SMP in the wholesale market for fixed voice call termination on its fixed network in The Bahamas.
- i) Last Mile Communications Ltd. has SMP in the wholesale market for fixed voice call termination on its fixed network in The Bahamas.

For the avoidance of doubt, any reference above to a licensee shall, in accordance with section 21(1) of the Comms Act, be taken to include both the licensee and any subsidiary undertaking of the licensee listed in the application for a licence or notified to URCA from time to time in accordance with section 21(2) of the Comms Act.

**Question 3: Please provide comments on URCA's preliminary views that the licensees identified have SMP in relation to the wholesale supply of call and/or mobile message termination services on their respective networks.**



## 7 Competition Problems and Impacts on Competition and Consumers

In this Section, URCA identifies and discusses the main competition problems or market failures that it considers could arise from a licensee having SMP in respect of call and/or mobile message termination on its own network. Having identified the main potential competition problems that are likely to arise from SMP in termination services, absent regulation, URCA then considers the likely potential impacts such competition problems may exert on one of the overall objectives of the Comms Act which is to:

*“Further the interests of consumers by promoting competition ... in particular ... to encourage, promote and enforce sustainable competition.”<sup>58</sup>*

### 7.1 Competition Problems

Economic theory suggests where a firm enjoys a position of economic strength it has the ability and motivation to hinder the maintenance of effective competition on the relevant market by behaving to an appreciable extent independently of its competitors, consumers and subscribers. Two competition problems or market failures that URCA considers may arise from SMP in termination services on individual networks are:

- Excessive charging; and
- Refusal or denial to supply critical wholesale inputs.

These potential competition concerns are common to both fixed and mobile termination markets.

#### Excessive Charging

Excessive charging at the wholesale level is a main competition concern of regulatory and competition authorities. In part, this is because high wholesale charging can lead to higher retail tariffs for customers. Excessive pricing occurs when the SMP licensee is able to earn greater profits (super normal profits) than would otherwise be possible in a competitive market.<sup>59</sup> Excessive pricing at the wholesale level can also potentially lead to margin squeeze concerns in related downstream markets, as alternative operators may not be able to replicate the SMP operator’s retail pricing offers given the prevailing wholesale prices.

---

<sup>58</sup> Section 4 (a)(iii) of the Comms Act.

<sup>59</sup> In *United Brands* the Court of Justice of the European Union held that “charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied...would be...an abuse”. See Case C 27/76 *United Brands v Commission* [1978] ECR 207, [1978] 1 CMLR 429, para. 250.

## **Refusal to Supply**

Refusal to deal and/or denial of access occurs where a SMP operator in a wholesale market attempts to leverage its market power by denying access to, or refusing to deal with, competitors in the retail (downstream) market. This could amount to anti-competitive behaviour if, for example, the SMP operator controls a wholesale input or inputs which are essential for other players to be able to operate and/or compete in the downstream market and which are technically or economically difficult to replicate. If the ability to replicate the SMP operator's wholesale product is limited, a refusal to deal may lead to foreclosure of the retail market.

The concept of refusal to supply covers a wide range of practices, including a refusal to supply essential inputs to an existing or new competitor, a refusal to provide interface information, or more generally a refusal to grant access to an essential (bottleneck) facility or network. Refusal to supply also includes offering trading conditions so unreasonable that they amount to a constructive refusal to supply. Constructive refusal could, for example, take the form of unduly delaying or degrading the supply of a product, or involve the imposition of unreasonable conditions in return for the supply or charging unreasonably high prices for the products and services.

### **7.2 Potential Impacts on the Objectives of the Comms Act**

Excessive charging by the SMP operator is possible in URCA's view as the terminating operator has absolute control of the terminating facilities on its network and countervailing buyer power is either limited or absent. This would in URCA's experience result in higher input prices to other licensees which in turn could lead to higher retail tariffs to customers on different networks.

Excessive charging at the wholesale level may also result in URCA's view in large differentials in retail tariffs charged for off-net calls relative to on-net calls, thereby encouraging customers to make more on-net calls and discourage consumption of off-net calls. Customers may also be forced to take subscription from more than one licensee. URCA considers that this would not be welfare-enhancing for customers given the additional retail charging and inconvenience some customers may experience. Excessive wholesale charging may deter expansion of smaller operators because of the additional cost linked to off-net communications. Further, the excess profits derived from wholesale termination services may be used by the monopolist to cross-subsidize retail tariffs in other retail markets. Ultimately, these pricing strategies may lead to inefficient consumption at the retail level and stifle growth and development of the market.

A provider of termination may also influence conditions in the marketplace by refusing to supply essential inputs in a timely manner, or outright denial of access. Such behaviour would hamper the competitive structure in downstream markets to the detriment of customers and competition. Refusal to supply critical inputs to competitors in downstream markets where the SMP operator is also a participant is a major consideration for regulators. Absent regulation on access and interconnection, URCA is of the view that the SMP operator may engage in exclusionary conduct to the detriment of

competition and customers thereby hindering the growth and development of the overall ECS market. There is also the potential for discriminatory conduct to favour affiliates or a third party operator or group of operators to the detriment of other licensees. Other exclusionary conduct may include delay in negotiation of access and interconnection agreements in a timely manner, and adopting technical interfaces that prevent interconnection or interoperability between networks.

### **7.3 Conclusion on Competition Problems**

Overall, URCA considers that the two competition problems discussed above would have detrimental effects on the development of competition which, in turn, impacts on the interests of consumers who may face (among other things) higher prices, lower quality products and less product differentiation. In this regard, URCA's primary objective in preliminarily determining whether to impose obligations on SMP operators is to enable fair and effective competition in the communications sector and to further the interests of consumers through the promotion of sustainable competition. In addition to seeking to prevent market foreclosure through the imposition of regulatory obligations, URCA is concerned with the ability of an SMP operator to abuse its position of dominance to the detriment of consumers. URCA considers this as particularly relevant in termination markets in which an SMP operator has exclusivity or absolute control over the terminating facilities on its network and is therefore not subject to constraints caused by competition or potential new market entry. In these circumstances, URCA is concerned that an SMP operator of termination has an incentive to engage in behaviour that exploits its position of market power by, for example, charging excessive termination rates to other licensees who have no choice but to accept those rates or discontinue using the product in question. Consequently, URCA is proposing to prevent the (actual or potential) ability of an SMP operator to engage in behaviour that constitutes an abuse of its market power position. This is further discussed in the next Section, where URCA sets out its proposed regulatory obligations for SMP operators in the wholesale termination markets.

**Question 4: Please provide comments on URCA's preliminary views on the main competition problems or market failures that could arise from a licensee having SMP in the provisioning of wholesale call and/or mobile message termination services on its own network.**

## 8 Market Review Stage 3 – Proposed SMP Remedies

In this Section, URCA reviews the selection of proposed remedies that URCA considers appropriate to the preliminary findings contained in this Preliminary Determination. As a first step, however, URCA considers whether the wholesale markets as proposed to be defined are susceptible to SMP regulation. In URCA's preliminary view, and supported by evidentiary information from other jurisdictions, a preliminary finding of SMP in fixed and/or mobile termination service provisioning generally indicates to URCA the potential for competition problems to arise in the defined economic markets, thereby providing justification for the imposition of *ex-ante* regulation on SMP licensees. In most, if not all the case studies cited above (Section 4.2), regulators have concluded that, without regulatory oversight, an SMP provider of call termination would have the motivation and capacity to behave to an appreciable extent independently of its competitors, consumers and subscribers by engaging in exploitative and/or exclusionary conduct.

Given the above, URCA has considered the various alternative regulatory remedies relevant to overcome, mitigate or prevent the adverse effect on competition and any detrimental effect on customers so far as it has resulted from, or may be expected to result from, the adverse effect on competition. It bears repeating that the purpose of *ex-ante* regulatory measures is to address predictable (actual or potential) competition problems that have their origin in structural and behavioural factors in the market.

URCA notes that under the EU framework<sup>60</sup> markets susceptible to *ex-ante* regulation:<sup>61</sup>

- a) are characterised by high non-transitory barriers to entry;
- b) do not tend towards effective competition during the time horizon; and
- c) are ones where, by itself, competition law would be insufficient to remedy, mitigate and/or overcome the competition challenges (or market failure) identified.

### 8.1 Susceptibility of the Defined Markets to SMP Regulation

URCA considers that an ideal starting point to evaluate whether a market is susceptible to *ex-ante* regulation is from the structure of the market. URCA recognizes that in economic theory, the concept of perfect competition is used to characterize an unregulated market where the interplay of market forces drive down prices to the level of production costs, and societal welfare is optimized. Perfectly competitive markets exhibit the following conditions: sufficiently large numbers of independent buyers and sellers; free and easy entry and exit of suppliers; and full visibility of market conditions. If none of these conditions are fulfilled, the market cannot by itself optimize production, leading to sub-optimal societal welfare. In this case, regulatory intervention can be warranted to facilitate the functioning of the market more closely to the optimal condition.

---

<sup>60</sup> Dated 17 December 2007 (2007/879/EC).

<sup>61</sup>This is known as the EU Three Criteria test and is applied cumulatively. This means that failure to meet any one of them would indicate that a market should not be identified as susceptible to *ex ante* regulation.

It is URCA's preliminary conclusion that the defined wholesale termination markets are characterized by imperfect competition due to structural and behavioural characteristics which render it infeasible (absent any regulatory intervention) for sustainable competition to emerge and develop. The implication of this to URCA is that the defined wholesale termination markets are devoid of effective competition within the relevant time horizon, the main reason being, in URCA's view, the wholesale markets under consideration are found to have:

- (i) high and non-transitory barriers to entry/expansion;<sup>62</sup> and
- (ii) there are no current or emerging demand/supply-side substitution possibilities to overcome the barriers identified.<sup>63,64</sup>

Moreover, URCA considers that the use of *ex post* competition law powers in the Comms Act would be insufficient to tackle abuse of an SMP position. The absence of countervailing buyer power, coupled with the presence of absolute barriers to entry and expansion in URCA's view render it infeasible for existing or newcomers to the market to duplicate wholesale termination services on other fixed or mobile networks. Therefore, URCA preliminarily concludes that *ex post* competition law power is unlikely to be sufficient to remedy, mitigate or overcome the market failures identified.

Because all three criteria have been cumulatively met, URCA has preliminarily concluded that the wholesale markets defined are susceptible to SMP regulation. In other words, absent SMP regulation, the market failures identified will result in an abuse of dominance by licensees, thereby limiting the development of competitive markets, with negative effects on competitors and ultimately consumers.

URCA therefore proposes to determine that the wholesale termination markets identified above are susceptible to SMP regulation.

**Question 5: Please provide comments on URCA's preliminary view that the wholesale termination markets identified are susceptible to SMP regulation.**

## 8.2 Obligations on SMP Licensees

Below URCA sets out the proposed regulatory measures to remedy, mitigate or prevent any adverse effect on competition, and ultimately to safeguard the interest of customers, arising from the licensees identified as having SMP in the proposed wholesale termination markets identified above.

---

<sup>62</sup> Each of the licensees identified has a 100% market share of wholesale termination to end-users on its network. Further, there is currently and prospectively, no likely demand or supply-side substitution in the call termination market. For these reasons, URCA considers that there are high and non-transitory barriers to entry into each individual network market during the market review period.

<sup>63</sup> Each operator has, in URCA's view, a monopoly power and, to URCA's knowledge, there are currently no feasible supply or demand-side substitutes for the provision of wholesale call termination services to end users on a given network. Technically, it is not at present possible to terminate a call to an end-user without the cooperation of the operator to which the end user subscribes. This means there is a lack of existing competition in these individual network markets.

<sup>64</sup> This would also conceivably mean that the markets in question are non-contestable in that because barriers to entry or expansion are prohibitively high, the threat of entry by newcomers or expansion in production by existing suppliers does not constitute a credible threat and is therefore insufficient to restrain prices to competitive levels.

Firstly, URCA notes that a determination that a licensee has SMP in any of the defined wholesale markets triggers the regulatory obligations established in section 40(4) of the Comms Act. In respect of those provisions, the SMP licensees identified shall -

- "(a) not unduly discriminate against particular persons or a particular description of persons in relation to the electronic communications services offered;*
- (b) provide technical specifications, or other relevant information about any interconnection essential facilities or other mandated wholesale electronic communications services on a reasonable and timely basis, when the information is required by another licensee to provide its licensable services and when the information is not readily available from other sources; and*
- (c) not adopt technical specifications for a network that prevents interconnection or interoperability with a network of a competitor."*

The foregoing conditions are intended to prevent SMP operators from behaving anti-competitively by promoting transparency and non-discrimination in the supply of call termination. It is also noteworthy that the obligations are not discretionary, in that once a licensee is determined by URCA as having SMP in any relevant market(s), the obligations become applicable to that licensee who must remain compliant with them at all times. These obligations are already applicable to BTC's fixed and mobile call termination by virtue of URCA's April 2010 Final Decision on SMP Obligations, and by virtue of this Preliminary Determination, URCA's proposes that they will continue to apply to BTC on a going forward basis.

URCA therefore proposes to determine that the SMP licensees identified should, at a minimum, be obligated to comply with the SMP obligations specified in section 40(4) of the Comms Act.

**Question 6: Please provide comments on URCA's preliminary view that the SMP licensees identified should, at a minimum, be obligated to comply with the SMP obligations specified in section 40(4) of the Comms Act.**

Secondly, a determination by URCA of SMP in any of the wholesale markets that URCA proposes to define may also trigger one or more of the listed SMP obligations under section 40(1) of the Act. Because of structural and behavioural considerations, URCA does not consider the mandatory obligations under section 40(4) of the Comms Act, by themselves, would be sufficient to achieve the overall objectives of the Comms Act. To this end, URCA considers that it would be appropriate and proportionate to impose additional SMP conditions on the SMP licensees identified.

In making this Preliminary Determination, URCA has given utmost consideration to relevant legal specifications.<sup>65</sup> URCA notes that BTC is required to publish a RAIO and is subject to price control of wholesale termination rates by virtue of URCA's April 2010 Final Decision on SMP Obligations. The

---

<sup>65</sup> Sections 5 and 40(2) of the Comms Act.

preliminary finding of this document would mean that both obligations will remain applicable to BTC on a going forward basis. URCA is obligated under section 5(c) of the Act to exercise its powers, *inter alia*, in a non-discriminatory manner, whilst under section 40(1)(j), URCA may impose “*such other obligations as URCA may consider necessary in pursuance of the electronic communications policy objectives and the sector policy.*” As URCA proposes that the aforementioned obligations will remain applicable to BTC’s wholesale termination services on a going forward basis, URCA considers it appropriate to extend similar obligations to the other fixed SMP licensees identified. However, URCA must also take notice of the costs to the industry of any remedies it proposes and ensure that the remedies it proposes are the minimum necessary to resolve the competition problems identified. In applying appropriate remedies to other SMP operators URCA therefore proposes to also take into account the principle of proportionality so as not to impose a form of regulation on a licensee which could create an unfair burden on that party, given its overall position in the broader sector.

### **8.2.1 Publication of Tariffs and Non-price Terms**

It is URCA’s preliminary view that each of the SMP licensees identified shall make available wholesale termination services and publish the tariff and non-price terms and conditions on which these services are provided (i.e., by publishing such details prominently on its website and additionally making such information otherwise available in other formats upon request). In proposing this obligation, URCA is endeavouring to promote efficiency, transparency and non-discrimination in interconnection negotiations to ensure that all current and potential licensees will have timely access to essential inputs on transparent and non-discriminatory terms, thereby fostering competition and optimizing benefits for customers.

In proposing the imposition of this remedy, URCA notes that there is an existing obligation on BTC to publish a RAIO in accordance with established guidelines. The RAIO obligation is also linked to BTC’s position of SMP in the provision of other wholesale services and URCA proposes that it should therefore be maintained going forward. As a result, BTC must continue to publish the tariffs and non-price terms and conditions of its wholesale termination services as part of its RAIO, in line with URCA’s prevailing Guidelines.

In making its proposal, URCA has considered whether the alternative option of commercial offerings between licensees would suffice by ensuring efficiency in interconnection negotiations. The alternative option of commercial negotiation is akin to a pure market-based approach to interconnection. International experience suggests that this approach is very unlikely. It is the international experience<sup>66</sup> and URCA’s own experience that leaving the provision of wholesale calls/interconnection services to be addressed through commercial negotiation does not always result in the timely implementation of URCA’s decisions and suitable solutions which support the development of sustainable competition. Indeed, where commercial negotiations have been used in The Bahamas as the first step in the process of developing the obligations to address these products and market failures, it is URCA’s experience that

---

<sup>66</sup> <http://www.telecommission.tc/content/root/files/20100719112927-TCI-MTR-Consultation-Document- July-19-2010.pdf>.

the negotiations have almost invariably failed and the matter subsequently referred to the regulator for resolution. URCA therefore considers that, given that no sustainable competition could be introduced in voice services without an interconnection agreement in place, it is unlikely that commercial negotiations would meet URCA's objectives or would effectively address the market failures identified.

URCA's preliminary position is that where an SMP licensee does not face an existing obligation to publish a Reference Access and Interconnection Offer (RAIO) inclusive of call termination services, it shall be required to publish prominently on its website (and make available upon request through other means) the tariff and non-price terms and conditions prevailing for its termination service. For the avoidance of doubt, URCA proposes that existing obligations on any licensee to publish a RAIO shall remain in force.

**Question 7: Please provide comments on URCA's preliminary view regarding publication of tariff and non-price terms and conditions governing supply of wholesale termination services.**

### **8.2.2 Wholesale Price Controls**

Given concerns about excessive termination rates, URCA considers whether wholesale termination rates should be subject to a formal system of price control against the alternative option of no price regulation. After careful deliberation, URCA has preliminarily determined that a formal system of wholesale price control is warranted. This is because URCA is firmly of the view that prevailing structural and behavioural factors operating in the markets are such that, absent regulation, SMP operators have weak incentives to set a tariff for termination on their respective networks at a level which could prevail in a competitive market.

Under the option of no regulation, URCA considers that termination rates would be set through a process of bilateral negotiations between operators. URCA considers that, relative to a formal regulatory process of price control, this approach would not be appropriate as it would expose competitors and customers to monopolistic pricing on the part of the SMP licensees. Based on international experience, the presence of SMP could make a negotiated outcome sub-optimal from a consumer welfare perspective. This is because providers of termination have the incentive and motivation to set termination rates excessively above efficiently incurred cost and a reasonable rate of return. URCA also considers that it would be absolutely necessary for it to guard against 'collusion' (explicit or tacit) in which call termination payments between operators are able to mutually increase in order to inflate consumer prices to excessive levels. In view of the foregoing, URCA strongly considers that regulatory intervention would be necessary to ensure termination rates are appropriate and reasonable for the benefit of customers.

URCA proposes to determine that the SMP licensees identified in this preliminary determination should be subject to a formal regulatory process of wholesale price control.



**Question 8: Please provide comments on URCA’s preliminary view regarding price regulation of call termination services.**

URCA notes that the options for establishing a method of wholesale price control are:

- ‘bill and keep’ (also known as ‘sender-keeps-all’);
- benchmarking; and
- cost orientation.

Under ‘bill and keep’ arrangements operators bill their retail customers for the calls/SMS/MMS they make and keep the revenue. They do not charge each other fees for termination (i.e., the termination rate is set at zero). Where traffic is symmetric between operators, a zero termination rate eradicates the need for measuring and billing for traffic and ultimately for making identical payments between operators.

As explained by the BVI regulator, where one operator terminates more traffic than another operator, it may be argued that one operator may be disadvantaged by bearing a proportionately greater network cost. In turn, this may create the incentive for operators to not terminate traffic, which would not be in compliance with the existing regulatory framework which mandates interconnection. To overcome this problem, operators may devise commercial solutions such as retail offers which encourage customers to make rather than receive calls so that any extra cost of termination is not borne.

URCA could not find any record of Bill and Keep being imposed by a regulatory authority. It appears to URCA to generally result from voluntary agreement between interested parties, which in certain circumstances choose to set these fees at zero, particularly where the net financial settlements are equal to or close to zero. It is argued that Bill and Keep obviates the need for regulatory intervention and based on the foregoing arguments, ‘bill and keep’ is not considered best practice regulation. That particular approach in URCA’s view is not the best method for promoting a competitive environment and would not be consistent with the broad policy framework governing interconnection in The Bahamas. The adoption of ‘bill and keep’ in The Bahamas would be a marked departure from the current practice in The Bahamas whereby operators charge each other fees for termination.

URCA considers that there are instances whereby it would be appropriate to set termination rates on the basis of comparable benchmarking, for example, in the absence of robust costing data.<sup>67</sup> In emerging markets sufficiently reliable information might not be readily available especially for smaller operators. This has led many regulators to adopt benchmarking and other information on an interim basis for setting interconnection rates. The ITU, which is the global standard setting body for the electronic communications industry, also favours the use of benchmarks to set charges when country specific information is either unavailable or unreliable. As further noted in the ICT Regulation Toolkit on best practice regulation:

---

<sup>67</sup>URCA recognizes that interconnection charges based on benchmarks may not allow URCA to achieve all of its objectives. In particular, adopting a benchmarking approach may not ensure that the resulting interconnection charges are fully reflective of BTC’s cost of providing these services or an efficient cost level.

*“In some markets the detailed information required may not be available. Regulators in many jurisdictions have used benchmarking to set ... interconnection rates (for example Botswana, New Zealand).”<sup>68</sup>*

The Comms Act does not preclude the use of international benchmarks to set access and interconnection charges. However, URCA does not consider this approach should be the primary basis for setting termination rates.

By contrast, cost based rates are considered the best method for promoting a competitive environment. Cost based termination rates should reflect the economic costs of termination and is the method most compatible with competitive markets. Cost based rates provide operators with sound ‘make or buy’ investment signals, allow economically efficient pricing, which can be fair to both the seller and buyer of termination, encourage competitive entry and promote the overall objectives of the Comms Act.

It bears repeating that BTC is already required to set cost based fixed and mobile termination rates. URCA has specified guidelines<sup>69</sup> and other inputs on a system of cost accounting for determining fixed and mobile call termination on BTC’s networks. The cost base is Historic Cost Accounting (HCA) and the methodology is Fully Distributed Cost (FDC). Under this Preliminary Determination, URCA proposes that the current principle of cost based fixed and mobile termination rates obligation on BTC shall remain applicable to BTC on a going forward basis.

### **8.2.3 Asymmetric versus Symmetric Fixed Termination Rates**

In Europe (and elsewhere), an increasing number of regulators have imposed reciprocal termination rates where all operators are declared dominant in a market for call termination services on their network and hence face regulatory obligations.<sup>70</sup> In fact, reciprocal termination rates are now a key part of the European Commission’s access and interconnection framework. URCA also notes that where reciprocal rates have been imposed, the basis for its imposition is that non-reciprocal charging:

- can have negative impacts on operators' billing systems;
- make the retail tariffs less transparent to the public;
- provide operators with weak incentives to minimize the cost of termination; and
- put a strain on the regulator's resources to determine the costs of termination on each licensee's network.

In the Bahamian context, there would be the concern for URCA that some operators (especially small start-up entities) may view an obligation to derive cost based termination rates using their own network data and by developing their own cost accounting system as overly burdensome and a significant drain

---

<sup>68</sup> <http://www.ictregulationtoolkit.org/en/Section.2130.html>.

<sup>69</sup> ECS 12/2010 "Separated Accounting and Cost Accounting for Bahamas Telecommunications Company Limited" available at [www.urcabahamas.bs](http://www.urcabahamas.bs).

<sup>70</sup> This does not mean a single rate is imposed for fixed and mobile termination. Rather, a reciprocal rate card is set for fixed termination and another reciprocal rate card is set for mobile voice termination.

on their limited resources. URCA considers that licensees with limited access to regulatory resources may find reciprocal charging an attractive and cost effective and timely proposition.

For this reason, URCA is seeking inputs from the market on whether the principles relating to reciprocity of fixed termination rates which are applied in Europe and elsewhere should also be reflected in the Bahamian sector. Preliminarily, URCA considers that under a reciprocal charging regime, and in the absence of industry bottom-up cost models to estimate the costs incurred by hypothetical operators in providing termination services, BTC's regulated (and approved) termination charges, set on the basis of its cost accounting data and benchmark information (where deemed appropriate by URCA), should form the basis for such reciprocal rates. URCA considers this to be the most appropriate solution as it will impart least cost on the sector, whilst as the most pervasive national network, the cost of terminating a call on BTC's network may provide the most reasonable estimate of the cost of terminating calls across The Bahamas. As such, under this proposed regime, the SMP licensees identified will be required to set their fixed termination rates to be equal to the tariffs set out and approved by URCA in BTC's RAI0.

However, URCA accepts that there are other factors to consider before reciprocity of charges could be adopted in the Bahamian sector and would welcome constructive feedback from interested parties on its proposed approach to reciprocal charging for fixed termination. In particular, URCA seeks views on whether differences in fixed network typology between fixed operators should be reflected in termination charges. For example, Oftel<sup>71</sup> thoroughly investigated how the principle of reciprocity could be best implemented in the UK and noted that implementation should reflect the following objectives and principles:

- promote effective competition by ensuring competitive neutrality;
- providing operators with sound make or buy investment decision;
- giving operators strong incentives to minimize the cost of termination; and
- choosing an approach that is practical to implement.

URCA accepts that the above are best practice principles that would be relevant and appropriate should it determine that reciprocal charging for fixed termination is adopted in The Bahamas.

URCA reiterates its desire to receive written submissions from interested parties on any aspect of this document, including URCA's propositions in respect of cost based charging and reciprocal fixed termination charging.

To limit the regulatory burden on smaller SMP operators, URCA proposes to determine that wholesale call termination charges be set equal to BTC's regulated wholesale termination charges (as determined by URCA) for all SMP operators.

**Question 9: Please provide comments on URCA's preliminary proposal to set wholesale call termination charges equal to BTC's regulated wholesale termination charges for all SMP operators. If**

<sup>71</sup> [http://www.ofcom.org.uk/static/archive/oftel/publications/1995\\_98/pricing/nccjulap.htm](http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/nccjulap.htm).

respondents consider that reciprocal charging is not appropriate, respondent should describe their preferred alternative approach, with supporting rationale.

## 9 Conclusion and Proposed Next Steps

This Preliminary Determination sets out URCA's preliminary position on the regulation of proposed wholesale termination services. The purpose of a market review is to identify the relevant economic markets and then assess the level of competition within each market, including the identification of SMP operators. If operators are found to have SMP, the relevant regulatory obligations to mitigate any impact of SMP on market outcomes need to be determined. As such, the market review framework employed in this Preliminary Determination is prospectively applied in that it seeks to identify all relevant competitive constraints operating in a market within a foreseeable time period (i.e., until the next market review will take place).

This enables URCA to consider the dynamic nature of the marketplace resulting from rapid technological change and possibilities to overcome economic or technical obstacles to entry and sustainable competition within the relevant time horizon should also be taken into consideration when carrying out a forward-looking market analysis.

Overall, the framework embodies well-established economic principles and tests to define markets, such as the SSNIP test to assess demand/supply-side substitution. It considers relevant factors to determine the level of competition, such as market share, the presence of barriers to entry and expansion, and examines whether countervailing buyer power is present. Overall, the tools and principles employed by URCA are similar to those utilized by regulators and competition authorities in other jurisdictions.

Based on its preliminary analysis, URCA has preliminarily concluded the following (for further details on each preliminary determination please refer to the relevant Sections above):

- Each of the licensees identified is found to have SMP in providing wholesale termination services on their own network;
- Where an SMP licensee does not face an existing obligation to publish a RAIO inclusive of call termination services, it shall publish prominently on its website (and make available upon request through other means) the tariff and non-price terms and conditions prevailing for its termination service. For the avoidance of doubt, existing obligations on any licensee to publish a RAIO shall remain in force; and
- Wholesale termination rates will be regulated. To limit the regulatory burden on smaller SMP operators, wholesale call termination charges will be set equal to BTC's regulated wholesale termination charges (as determined by URCA) for all SMP operators.

### Proposed Next steps

Initial responses to the consultation paper are due on or before **17 June 2013**. This will be followed by comments on responses due **17 July 2013**. URCA is encouraging all interested parties, including the

licensees identified to make written submissions on the consultation. URCA will consider and review all responses and comments received to the consultation and issue a Statement of Results and Final Determination. URCA considers that should its preliminary proposals be adopted, it might be necessary for URCA to issue other regulatory measures consequential to a Final Determination in which licensees are determined to have SMP in call termination on their networks to ensure effective implementation of its final determination. URCA will consult with interested parties on any proposed changes to existing or new measures resulting from this proceeding.

Below is a list of the consultation questions for easy reference:

**Question 1:** Please provide comments on URCA's preliminary view on the relevant product market definitions for fixed and mobile termination services.

**Question 2:** Please provide comments on URCA's preliminary view on the relevant geographic market definition in relation to fixed and mobile call termination services.

**Question 3:** Please provide comments on URCA's preliminary views that the licensees identified have SMP in relation to the wholesale supply of call and/or mobile message termination services on their respective networks.

**Question 4:** Please provide comments on URCA's preliminary views on the main competition problems or market failures that could arise from a licensee having SMP in the provisioning of wholesale call and/or mobile message termination services on its own network.

**Question 5:** Please provide comments on URCA's preliminary view that the wholesale termination markets identified are susceptible to SMP regulation.

**Question 6:** Please provide comments on URCA's preliminary view that the SMP licensees identified should, at a minimum, be obligated to comply with the SMP obligations specified in section 40(4) of the Comms Act.

**Question 7:** Please provide comments on URCA's preliminary view regarding publication of tariff and non-price terms and conditions governing supply of wholesale termination services.

**Question 8:** Please provide comments on URCA's preliminary view regarding price regulation of call termination services.

**Question 9:** Please provide comments on URCA's preliminary proposal to set wholesale call termination charges equal to BTC's regulated wholesale termination charges for all SMP operators. If respondents consider that reciprocal charging is not appropriate, respondent should describe their preferred alternative approach, with supporting rationale.