Assessment of Significant Market Power in Mobile Call and Short Messaging Termination Services on NewCo2015 Limited's Cellular Mobile Network in The Bahamas under Section 39(1) of the Communications Act, 2009

Preliminary Determination

ECS 17/2016

Issued: 15 July, 2016

Initial Response Date: 15 August, 2016

Comments on Responses Date: 19 September, 2016

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1 Introduction

The Utilities Regulation and Competition Authority ("URCA") is issuing this Preliminary Determination on its assessment of significant market power (SMP)[1] in mobile call termination services (voice and mobile messaging) on NewCo2015 Limited (or "NewCo") cellular mobile network in The Bahamas.

Termination describes the service whereby one operator (the terminating party) accepts traffic that has originated on another network and carries this traffic to customers on its own network. As such, the demand for termination services is derived from retail markets for off-net calls and messaging services to fixed and mobile numbers. In the Bahamian context, call termination is an essential wholesale service that all holders of Individual Operating Licences (IOLs) that provide retail fixed and/or mobile voice and messaging services need to purchase from each other in order to allow their customers to call customers on other public networks (i.e., it ensures *any-to-any* connectivity from and to all retail customers, irrespective of which network the consumer is connected to).

URCA is conducting this assessment under the terms of section 39(1) of the Communications Act, 2009 (Comms Act). Details on how to respond are in Section 1.2.

1.1 Consultation Process

The procedures for making a determination, as contained in the Comms Act at section 99(1)(a) and (b), collectively prescribe that if URCA has reason to believe that a determination is necessary it may , on its own motion, 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 which requires URCA to afford persons with sufficient interest a reasonable opportunity to comment on regulatory or other measures that 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

[1] The concept of SMP is equivalent to the concept of a dominant position established in general competition law. SMP is a necessary condition that must be fulfilled in order for URCA to impose certain *ex-ante* regulatory measures on a licensee as stated in section 40(2)(a) of the Comms Act.

Comms Act. URCA considers the regulatory and other measures consequential to this consultation are of public significance therefore URCA has afforded anyone with sufficient interest the opportunity to comment on URCA's preliminary views and proposals contained therein.

1.2 Responding to this Preliminary Determination

URCA invites responses to this Preliminary Determination from all interested parties. For the purposes of this exercise, URCA has adopted two rounds of public consultation. In the first phase, respondents should submit their representations on and objections (if any) to this Preliminary Determination. The responses 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 15 August 2016
- Reply comments must be submitted to URCA by 5 p.m. on 19 September 2016.

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 Frederick House, Frederick 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.

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.urcabahamas.bs.

URCA 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 URCA's evaluation of the request for confidentiality. URCA may, in its sole discretion, publish or refrain from publishing any document or submission.

1.3 Structure of the Remainder of this Document

The remainder of this document is structured the following way:

- Section 2 - URCA's Preliminary Determination on SMP in Mobile Termination Services on NewCo's Cellular Mobile Network;

- Section 3- Background to this Preliminary Determination;
- Section 4 - URCA's Analytical Framework for Market Reviews
- Section 5- Market Review Stage 1 – Product/Geographic Market Definitions;
- Section 6 - Market Review Stage 2 - Assessment of the SMP in the defined markets;
- Section 7 - Market Review Stage 3 – Proposed ex-ante regulatory measures/SMP remedies to be imposed on NewCo in the defined markets; and
- Section 8 - Conclusion and next steps.

2 URCA's Preliminary Determination on SMP in Mobile Termination Services on NewCo's Cellular Mobile Network

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 parties. URCA's Determination will be addressed to, and will be binding upon, the Licensee 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."*;

(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"[2]), containing criteria relating to the definition of markets in the electronic communications sector, and against which market power may be assessed; and,

On 30 June 2016, URCA granted to NewCo2015 Limited ("NewCo") an Individual Operating Licence (IOL) authorising the operation of an electronic communications network and provision of carriage services, and an Individual Spectrum Licence (ISL) authorising the use of specific blocks of radio frequency spectrum, suitable for the operation of a cellular mobile network and provision of cellular mobile services.

URCA, having conducted a review of mobile termination services (voice and messaging service) on NewCo's cellular mobile network in The Bahamas in accordance with the Communications Act, 2009 and the SMP Methodology (or SMP Guidelines), considered that it is appropriate to make certain determinations regarding the definition of markets, the existence of NewCo having SMP in those markets, and the extent to which *ex-ante* regulation is appropriate and necessary in those markets.

URCA proposes to make the following determination:

1. **Determination of Relevant Market – Wholesale Mobile Termination Services**

   Separate product markets shall be defined for termination of voice and messaging services on NewCo's cellular mobile networks as follows:

[2] Also referred to as URCA's SMP Guidelines.

a) The termination of voice calls on NewCo's cellular mobile network in The Bahamas to numbers which have been allocated to NewCo by URCA pursuant to The Bahamas National Numbering Plan ("Mobile Call Termination on NewCo's Cellular Mobile Network").

b) The termination of multimedia messaging services (MMS) and short messaging services (SMS) services on NewCo's cellular mobile network in The Bahamas to numbers which have been allocated to NewCo by URCA pursuant to The Bahamas National Numbering Plan ("Mobile Message Termination on NewCo's Cellular Mobile Network").

Both relevant markets are national in scope (i.e., the geographic scope of these markets is in line with the area in which NewCo is authorised and obligated to provide these services).

2. SMP Determination

a) NewCo holds SMP in the market for Mobile Call Termination on NewCo's Cellular Mobile Network.

b) NewCo holds SMP in the market for Mobile Message Termination on NewCo's Cellular Mobile Network.

3. Obligations Imposed on NewCo

a) Given the position of strength held by NewCo and in light of the potential challenges to competition which URCA's review has indicated may arise, the following obligations are imposed on NewCo, namely:

i. NewCo shall comply with the non-market specific SMP obligations specified in section 40(4) of the Comms Act and Condition 34 of NewCo's IOL.

ii. NewCo shall be subject to a price control remedy in respect of all the services it provides within its defined Wholesale Mobile Termination service markets. Further details on NewCo's price control, including any interim tariffs, will be set out in URCA's Final SMP Determination.

iii. shall, within five (5) weeks from the issue date of this final determination, publish on its website (and make available upon request through other means on a non-discriminatory basis) the tariff and non-price terms and conditions prevailing for all services it provides within the Wholesale Mobile Termination Service markets. This must cover, at a minimum, the following information:

- price list; and
- the main non-price terms and conditions including:

- advance notification of price changes;
- billing and payment requirements;
- detailed description of the termination service;
- quality of service standards;
- dispute resolution scheme with appropriate reference to URCA where either party is unable to negotiate interconnection based on the proposed terms and conditions; and
- operations and maintenance procedures.

3 Background to this Preliminary Determination

In this Section, URCA provides the context to this Preliminary Determination. It first sets out the current extent of ex ante regulation of wholesale termination services in The Bahamas. This is followed by a background on the cellular mobile liberalisation process in The Bahamas.

3.1 Previous Decisions on Wholesale Termination Services in The Bahamas

On 22 April 2010, URCA published its *"Final Decision on Obligations imposed on SMP Operators"* (ECS 11/2010), in which URCA confirmed that BTC had SMP in several retail and wholesale markets including fixed intra/inter-island call termination and mobile call termination. For a complete list of the markets susceptible to SMP, ECS 11/2010, along with any URCA document referenced in this consultation, can be found on the URCA website at www.urcabahamas.bs.

URCA's finding that call termination on BTC's fixed and mobile termination networks were in the SMP markets triggered the standard regulatory obligations on BTC under section 40(4) of the Comms Act, in respect of which BTC 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, amongst others; and
c) not adopt technical specifications for a network that prevents interconnection and interoperability with a network of a competitor.

As part of its 2010 SMP Decision, URCA also placed the following additional SMP obligations on BTC:

- annual submission of regulatory/separated accounts to URCA;
- publication of a reference access and interconnection offer[3]; and
- price control of fixed and mobile termination rates (cost-based termination rates).

On 21 December 2012, URCA (after consultation) issued ECS 25/2012 ("Setting Regulated Call Termination Charges for BTC Going Forward").[4] This decision set out a glide path for BTC's mobile and fixed termination rates and provides the basis for all current termination rates, including mobile services.

[3] BTC's RAIO can be found at: https://files.btcbahamas.com/2014/07/04/final-btc-urca-approved-raio-revised-july-2014.doc
[4] http://www.urcabahamas.bs/download/084192400.pdf

URCA carried out a further review of the wholesale call termination services in 2013. This review was wider than the 2010 review in that it included BTC, Cable Bahamas Ltd. ("CBL" including SRG) and IP Solutions International Ltd. ("iPSi").[5] URCA's findings were that CBL and iPSi both hold SMP in the termination of voice calls on their respective fixed network while BTC still holds SMP in the termination of voice calls on its fixed network and SMP in the termination of voice calls, SMS and MMS on its cellular mobile network. It is worth noting that the 2013 SMP determination did not result in any changes to the 2010 obligations imposed on BTC. However, it resulted in URCA imposing the following obligations on CBL and iPSi, namely:

- the non-discriminatory requirements specified in section 40(4) of the Comms Act and Condition 34 of the standard IOL.
- a requirement to publish on their respective websites (and make available upon request through other means on a non-discriminatory basis) the tariff and non-price terms and conditions prevailing for all services it provides within their defined wholesale fixed call termination market.
- CBL and iPSi shall be subject to a price control remedy in respect of all the services they provide within their defined wholesale fixed call termination market. Details on the price control were determined (after consultation) by URCA in 2014.[6]

As a consequence of URCA's 2014 Determination on the price control for CBL's and iPSi's wholesale fixed call termination services:

- CBL's and iPSi's fixed call termination rates were set with reference to the BTC URCA-approved cost-oriented fixed termination charges (i.e., so that fixed termination rates would be symmetric across all licensees).[7]

- To achieve symmetry, CBL and iPSi were required to reduce their fixed call termination rates via a glide-path beginning 1 August, 2014. CBL's and iPSi's rates became symmetric to BTC's rates in October 2014.

- Table 1 below outlines the current regulated fixed termination rates that apply to BTC, CBL and iPSi.

[5] On 22 August 2013, URCA published *"Assessment of Significant Market Power in Call Termination Services in The Bahamas under Section 39(1) of the Communications Act, 2009"* (ECS 13/2013).
[6]See *Wholesale Fixed Call Termination Price Control for SMP Licensees* (ECS 12/2014) available at http://www.urcabahamas.bs/download/085881400.pdf.
[7]See Table 3 of the document *"Setting Regulated Interconnection Charges of Bahamas Telecommunications Limited (BTC) Going Forward"* (ECS 25/2012) at http://www.urcabahamas.bs/download/084192400.pdf.

Table 1: Current Symmetrical Fixed Termination Rates for all licensees (BSD cent/min)

Fixed Call Termination services	BSD cents/min
On-island fixed call termination	0.75
Off-island fixed call termination	1.13

3.2 Mobile Termination Rates

As shown in Table 2 below, the current regulated termination rate (4.61 c/min) for mobile calls 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 Receiving Party Pays (sometimes termed Mobile Party Pays) basis and hence no termination charge applies. Instead, BTC's mobile customers pay an airtime retail charge to receive fixed to mobile calls. Because there was no second mobile operator at the time, there is currently no regulated mobile-to-mobile call termination rate. However, with the advent of a second cellular mobile licensee, URCA is consulting separately on the need for and level of mobile termination rates for domestic mobile call and SMS/MMS termination services on BTC's cellular mobile network (See ECS 09/2016).[8]

Table 2: Current Mobile Termination Rates for BTC (BSC cent/min)

Mobile Call Termination services	BSD cents/min
International inbound mobile termination	4.61
Fixed to mobile call termination	Zero Termination Rate

3.3 Mobile Liberalisation

NewCo is the second cellular mobile licensee in The Bahamas. Following a competitive selection process, on 30 June 2016, URCA, pursuant to its licensing functions under section 114 of the Comms Act and in accordance with section 5.2 of the RFP, granted NewCo the IOL and ISL. Each licence is national in scope and is for a period of fifteen (15) years.

The IOL authorises the licensee to establish, maintain and operate an electronic communications network and provide carriage services. The IOL is a technology and service neutral authorisation, which authorises

[8] http://www.urcabahamas.bs/download/055474300.pdf

the licensee to establish its network using any technology or combination of technologies, and to provide any electronic communications services in The Bahamas. The ISL authorises the exclusive use of specified bands of premium spectrum. The ISL is also technology neutral and unrestricted in that it will permit the use of the assigned spectrum for the deployment of any network technology.

This Preliminary Determination is intended to satisfy the requirement of the Government, as set out in the Electronic Communications Sector Policy (or the ECS Policy[9]) for URCA:

> *"to ensure that all regulatory measures necessary for cellular liberalisation, are met and fulfilled in accordance with the timetable set for such liberalisation*." (Paragraph 89)

Indeed, in the ECS Policy, the Government further exhorted URCA to *"take steps to equip itself with the necessary regulatory tools required to effectively regulate a competitive cellular mobile market in the best interests of The Bahamas, after the expiry of BTC's exclusivity period."*

Given its legislative mandate in section 4 of the Comms Act to facilitate competition, URCA is issuing this Preliminary Determination on whether NewCo holds SMP in call/SMS/MMS termination services on its cellular mobile network. This review's main purpose is to support the development of efficient and effective competition in The Bahamas' cellular mobile markets. As previously noted, BTC holds SMP in, amongst others, retail (downstream) mobile service markets and in wholesale (upstream) markets for call and SMS/MMS termination services on its cellular mobile network. With the advent of NewCo's market entry, BTC would need to access the terminating facilities on NewCo's cellular mobile network in a timely and efficient manner and at a reasonable price. However, the structure of termination markets suggests to URCA that a new mobile entrant is likely to have SMP in call termination services on its cellular mobile network. Under the terms of section 39(1) of the Comms Act, it is expressly stated that "*URCA may at any time determine that a licensee is an SMP licensee".* URCA must ensure that access to the termination facilities on NewCo's cellular mobile network will be met in a way which promotes competition between service providers. Any SMP licensee will further be subject to the non-market specific obligations in section 40(4) of the Comms Act as well as potential further SMP obligations determined by URCA, including amongst others, charge controls. In the remainder of this document, URCA presents its preliminary views on NewCo's SMP position in the markets for wholesale mobile call and messaging termination services on its cellular mobile network. It further discusses the proposed SMP obligations for NewCo in these markets.

It should be noted that URCA is currently consulting under separate cover on other regulatory matters relating to mobile liberalisation. In particular:

- ECS 09/2016 determines the required changes to BTC's RAIO due to mobile liberalisation.
- ECS 10/2016 sets URCA's review of the wholesale market for national roaming services and the proposed SMP obligations in this market.

[9] Extraordinary Official Gazette published on 23 April 2014.

- ECS 16/2016 covers out the proposed amendments to the ex-ante regulation of BTC's retail mobile services, as set out in the Retail Pricing Rules for Non-Price Capped Services.

4 URCA's Approach to Conducting This Review

In conducting market reviews, URCA must take account of specified procedures in the Comms Act[10] 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")*.[11]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 the Market Review Process

The review is presented in three stages:

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

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 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.

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[10]Section 39(1) and (2).
[11]Issued 13 October 2011 and available at http://www.urcabahamas.bs/download/059384700.pdf.

Product Market Definition

In defining the relevant economic markets, URCA shall follow the principles of the SSNIP (Small but Significant Non-transitory Increase in Price) 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, these alternative products are included in the same market as the product under consideration.

- When assessing ***demand-side substitutability***, the question is whether the price increases provoke a 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, which is not the hypothetical monopolist, 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 be usefully 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.

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.

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".*[12]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."*

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 shall consider can be found in Section 3.2 (p.6 to 7) of ECS 20/2011 and reflect the approach taken in URCA's 2013 SMP assessment of the wholesale termination markets for BTC, CBL (SRG) and iPSi.

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.[13] 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

[12] Section 39(3)(a) of the Comms Act.
[13] 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.

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.

5 Market Review Stage 1 – Market Definitions

As noted above, there are two dimensions to any market definition:

- the products that comprise a relevant economic market ('the product market' dimension); and
- the geographical area within which the relevant products are offered ('the geographic market' dimension).

5.1 Product Market Definition

URCA notes that wholesale markets are ones in which wholesale services or inputs are purchased and sold by service providers rather than retail customers. Service providers then use these inputs to provide services to customers in downstream (retail) markets. Given the link between retail and wholesale markets, it is necessary that the product dimension of wholesale markets is in alignment or consistent with the corresponding retail markets. This is critical from a market analysis standpoint because competitive dynamics at the retail level are critical to identifying the breadth or scope of the wholesale products that service providers must have in order to compete in downstream/retail markets.

The first step in defining the relevant 'product market' involves identifying the group of products or services against which demand and supply-side substitutability will be assessed. In this regard, URCA has given utmost consideration to the approach taken by established regulators in other jurisdictions and its previous assessments of SMP in call termination markets in The Bahamas. In all cases the relevant call termination products against which demand and supply-side substitutability tests have been assessed are commonly:

a) Mobile Voice Call Termination; and
b) Mobile Messaging Service Termination (i.e., SMS and MMS).

Mobile termination 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 the supply of off-net SMS and MMS.

Consistent with its previous reviews of call termination markets, URCA considers that the product definition for call termination should not distinguish where the call originates. This is because terminating a call on a cellular mobile network essentially utilizes the same functional elements irrespective of whether the call originated on another cellular mobile network, fixed network or from abroad (i.e., where the call is made by a subscriber in another country).

However, call termination on a licensee's network is normally, considered different from the perspective of a user of call termination services. This is because if a user of Network A wishes to call a user 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 is typically not a suitable alternative.

Technology Neutrality

In common with its previous reviews of call termination markets, URCA proposes to adopt a technology neutral approach to market definition for NewCo. That is, the product market definition is independent of the underlying technology to be employed by NewCo to provide the mobile call termination service in question. For example, in a mobile environment, operators generally 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 URCA's view this lack of retail price differentiation lends itself to a technology neutral approach when defining termination markets. Within its previous review of Wholesale Call Termination on BTC's cellular mobile network, URCA noted that it would be the mobile terminating operator, and not the originating fixed or mobile operator, that decides whether the call is terminated on its 2G or 3G network. URCA understands that regulators around the world (for example, in the EU, and the Caribbean) have employed a similar approach. In conclusion, URCA proposes that there should be no difference in the treatment of mobile termination on the basis of the technology used by a cellular mobile network operator to terminate a call or message on its network. This means that the product market for mobile termination on NewCo's network would include all possible technologies capable of provisioning termination on the cellular mobile network in question.[14]

The Impact of a Common Pricing Constraint

In common with the European Commission's recommendations, URCA considers that mobile termination markets should be defined in terms of termination (including SMS and MMS) on individual cellular mobile networks, rather than termination to individual customers. That is, termination markets are not generally defined on a subscriber by subscriber basis. The basis for this thinking is that termination on a given network is usually provided on a homogenous basis and is subject to a common pricing constraint. In other words, the condition relating to the supply of mobile termination does not differ on the basis of the

[14]This reasoning is consistently applied when defining termination markets on fixed networks. Accordingly, URCA also considers that there should be no technological difference in 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 product market for fixed termination in The Bahamas would include all possible technologies employed by fixed network operators to provide termination on fixed networks.

particular number/subscriber called and mobile termination rates are the same irrespective of the mobile number/subscriber called. Thus, URCA proposes that the relevant mobile termination market on NewCo's network should include the provision of mobile call termination to all subscribers of a given cellular mobile network.

5.2 Summary of Provisional Findings Regarding Reference Products for Conducting the SSNIP Test

URCA's preliminary view is that the product descriptions set out above capture the essential characteristics or elements of the narrowest product market definition of mobile termination. In Section 5.3, URCA examines whether the defined reference products should be included in markets on their own or as part of wider markets including other products or services. In examining this, URCA has applied the SSNIP test described in Section 4.

5.3 Relevant Product Markets

The relevant product markets are as discussed below:

- the product market for mobile voice call termination on NewCo's cellular mobile networks; and
- the product market for mobile message termination on NewCo's cellular mobile network.

5.3.1 The Product Market for Mobile Call Termination on NewCo's Cellular Mobile Network

In this Section, URCA examines whether, based on relevant factors, consumers of mobile call termination services on NewCo's cellular mobile network would switch to an alternative service, in the event of a SSNIP for the service.

On the basis of this initial analysis and in line with international precedence, URCA concludes that consumers of mobile call termination services on NewCo's network would not switch, in sufficient numbers, because of a small but significant non-transitory increase in price from the competitive level, to be unprofitable. URCA's preliminary view, therefore, is that mobile call termination on NewCo's network forms a relevant economic market. URCA has reached this preliminary view due to the following factors:

- Absence of supply/demand-side substitutes; and
- Indirect constraints

<u>Absence of demand/supply-side substitutes</u>

At the wholesale level, there are **no effective demand-side substitutes** for call termination on NewCo's cellular mobile network Given the requirement for "any to any" connectivity, a service provider faced with a SSNIP in the price for terminating calls on a given network would have no choice but to continue to send calls to that network for termination. Similarly, there is **no supply-side substitution** as a service provider, who has originated a call, has no technical alternative but to terminate the call on the network of the service provider to which the called party is a customer. This means an alternative provider cannot enter that market to also offer termination services to the particular downstream customer, without taking over the customer relationship.

<u>Indirect constraints</u>

i. 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 present Receiving Party Pays (RPP) regime in fixed-to-mobile calling, the only demand-side substitution to consider is whether the calling parties (i.e., a consumers based abroad calling NewCo's mobile customer) would choose not to place calls to NewCo's mobile subscribers, following the price increase.[15] Instead they could switch to calling that person on either a fixed line, or using messaging or email services in place of a call. It is URCA's position that this type of switching is very unlikely to take place in sufficient volume for it to render the price increase unprofitable in fixed-to-mobile calling. This is due to, amongst other things, the functional characteristics of fixed and mobile services (most notably the mobility aspect of mobile services) rendering both services to be not substitutable for a significant number of customers.

ii. In terms of mobile-to-mobile calling, which has a Calling Party Pays (CPP) regime, retail demand for off-net calls could change following an increase in the price of mobile termination for two reasons: the called party could switch to another cellular mobile network (e.g., BTC); or the calling party could change its behaviour. The called party may switch to another network because he/she values receiving calls and the hypothetical monopolist increasing the price of mobile termination could increase the cost of other consumers calling his/her subscribers. This could lead to a reduction in the volume of calls such a customer receives. Therefore, this could lead these affected customers to switch to a network on which it is cheaper for their contacts to call. However, URCA considers it unlikely that consumers would switch in sufficient number to make such a price increase unprofitable due to the CPP regime in mobile-to-mobile calling means that such consumers not having to directly face the cost of call termination on their network.

iii. Another potential scenario is whereby calling parties could 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 fixed line, or using messaging or email service in place of a call. However, as stated in previous determinations on call termination, URCA does not consider fixed lines to be a substitutable service for mobile lines, largely due to the mobility aspect of

[15]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.

mobile phones, hence there would not be a sufficient number of subscribers switching away from calling the mobile subscribers to result in the price increase not be profitable.

iv. Further, URCA does not consider SMS and MMS to be an effective demand side 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. URCA, however, is not convinced that the number of customers switching to SMS/MMS would be sufficiently large enough to make the increase in mobile call termination rates unprofitable for the hypothetical monopolist. Firstly, customers may not be able to transfer all of the information that could be imparted through a call within one message due to restrictions regarding the number of characters (160) that can be sent in an individual SMS. Secondly, mobile messages are sent on a 'store and forward' basis which means that communication may not be immediate due to a delay in the recipient receiving the message. Conversely, voice communication is immediate and occurs at the point when the called party answers the incoming call. For these reasons, URCA considers that sending an SMS is not a convenient substitute to making a call to a mobile customer for the vast majority of subscribers.

v. 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. 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. Moreover, the called party must have a smartphone and subscribe to a data plan or have access to wireless internet in order for this substitution to occur. A data plan subscription imposes additional costs on some customers and wireless internet may impose additional costs in some cases and may not always be accessible especially when the user is mobile hence this option may be unattractive to some subscribers.

5.3.2 The Product Market for Mobile Message Termination on NewCo's Cellular Mobile Network

In this Section, URCA considers the breadth of the product market for mobile message termination services (i.e., SMS/MMS). That is, URCA examines whether, based on the relevant factors, consumers of mobile message termination services on NewCo's network would switch to an alternative service in the event of a SSNIP for the service.

Given the analysis presented below, URCA concludes that consumers of mobile message termination services on NewCo's network would not switch, in sufficient numbers, for a SSNIP from the competitive level, to be unprofitable. URCA's preliminary view, therefore, is that mobile messaging termination on NewCo's network forms a relevant economic market. URCA has reached this initial view due to the following factors:

- Absence of supply/demand-side substitutes; and

- Indirect constraints.

Absence of supply/demand-side substitutes

Similar to mobile call termination services discussed above, wholesale **demand-side substitution** for mobile message termination is technically unfeasible. This is because, once a particular number is contacted, the terminating network to which that number is allocated is the only one that can terminate that message. In the same vein, **supply-side substitution** is not possible because it is not feasible for BTC to terminate mobile messages to a customer on NewCo's cellular mobile network.

Indirect Constraints

On a retail level, demand for SMS or MMS could change following an increase in the price of SMS 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, using an OTT-based messaging service or using email services. In addition, mobile messaging service termination is supplied by the same operator that offers call termination, therefore 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 or have access to wireless internet. As stated earlier, a data plan subscription imposes additional costs on some customers and access to wireless internet can impose an additional costs on customers in some cases or wireless internet may not always be readily available hence both options may be unattractive 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 two product markets for mobile termination services:

(i) mobile call termination on NewCo's cellular mobile network; and
(ii) mobile message termination on NewCo's cellular mobile network.

Question 1: Please provide comments on URCA's preliminary view on the relevant product market definition for mobile termination services on NewCo's cellular mobile network.

5.5 Geographic Market

Below, URCA presents its preliminary views on the relevant geographic markets for mobile voice call and mobile message termination services on NewCo's network in The Bahamas. This is 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 and considered in URCA's previous SMP assessments of wholesale termination markets.

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 (12-24 months).

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, 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, as noted previously, 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 other words, 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

The relevant product in question is wholesale call/mobile message termination services are derived from retail mobile services. Retail mobile call services have been defined as being national (see ECS 11/2010). Termination services ensure that a customer originating a call/SMS ("calling party") is connected to the called party.

In the context of geographic market definition, NewCo can only provide termination services in areas where it has or will have the facilities. This also means 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. NewCo's ISL requires NewCo to establish its cellular mobile network throughout virtually all populated areas in The Bahamas, and therefore NewCo's facilities will be national in scope.

Given this, URCA is of the preliminary view that the markets for call and messaging termination services on NewCo's cellular mobile network are national in scope. This is in line with the geographic scope of the mobile termination markets on BTC's cellular mobile networks and international precedent.

5.5.3 Barriers to Switching

URCA notes that even if barriers associated with switching at the retail level do not exist, such barriers may still exist at the wholesale level. As previously stated, it is technically infeasible to terminate a call or message to a called party on NewCo's network by terminating the call on BTC's network instead. This is because the called party could not be reached by completing the call on a separate and distinct network. Accordingly, termination on NewCo's network is characterised by absolute barriers to switching. In the context of geographic market definition, this means it would be technically infeasible 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 Other Factors

URCA notes that there is further compelling evidence to suggest the market it proposes to define is national in scope. Most notably, a national market is supported by the market definition for retail mobile services adopted as part of URCA's 2010 SMP Decision. In addition:

- BTC and NewCo will compete for customers in one territory, being the entire Commonwealth of The Bahamas;
- the spectrum and operating licences granted to NewCo are nationwide in scope; and
- a national market is consistent with the geographic boundaries of the wholesale termination markets previously identified for BTC, SRG and iPSi.

Further, URCA has no reason to think that the wholesale mobile market under consideration warrants a narrower definition than the other wholesale markets previously identified. Given the above, the geographic scope of the wholesale mobile market URCA proposes to define is a single national market.

5.5.5 Preliminary Conclusions on Geographic Market

Given the above, URCA has come to the preliminary view that the geographic market of the relevant product markets for mobile call termination on NewCo's cellular mobile network and mobile message termination on NewCo's cellular mobile network should not be narrower than the area in which NewCo 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 mobile termination services on NewCo's cellular mobile network.

5.6 Preliminary Conclusion on Market Definition

Having regard to the analysis presented above on its proposed product and geographic market definitions, URCA proposes to determine that the relevant market includes mobile voice call and mobile message termination as follows:

a) *The wholesale market for mobile voice call termination provided by NewCo over its cellular mobile networks in The Bahamas.*
b) *The wholesale market for mobile message service termination provided by NewCo over its cellular mobile networks in The Bahamas.*

6 Market Review Stage 2 – SMP Assessment

Below URCA assesses the competitive dynamics in the wholesale markets it proposes to define. As mentioned 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."*[16]

In conducting this assessment of market power, 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 understands that these criteria are the most important contributors to SMP in termination markets and notes that its own previous reviews of termination markets as well as regulators and competition authorities in overseas markets (e.g., Malta, BVI, Gibraltar, UK, Turkey, Liechtenstein) have relied on these factors when assessing SMP in similar wholesale markets.

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

6.1 Licensee's Market Share

In ECS 20/2011, URCA established a presumption of SMP where a licensee has a market share in excess of 40%. URCA considers that there is a very strong presumption of SMP in respect of termination services on NewCo’s cellular mobile network. This is because NewCo will have 100% market share in respect of terminating traffic to telephone numbers assigned to customers on its 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 of the called party's service provider and must purchase termination from NewCo. This leads URCA to conclude that NewCo will enjoy a monopoly position in respect of termination of all calls and mobile

[16]Section 39(1) of the Comms Act.

messaging service to numbers assigned to subscribers on its network. URCA further concludes that there is a strong presumption of SMP by the licensee identified in respect of call (including mobile messaging service) termination on its cellular mobile network in The Bahamas.

Readers should note that the foregoing analysis is unaffected by competition in downstream (retail) markets. In that case, a licensee with a relatively small retail market share of subscribers will still be in a dominant position in the supply of wholesale termination services on its cellular mobile network, as other licensees wishing to terminate calls and mobile messaging services to that licensee's subscribers will have 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

Where barriers to entry and/or expansion are absent, any pricing strategy above cost-based levels will trigger new and existing suppliers to expand output, thus making such a pricing strategy no sustainable. 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. Given the characteristics of termination service markets, this is not economically or technically feasible in this case. In particular, termination service markets are characterised by absolute barriers to entry and expansion. Given the scope of these markets (i.e., termination on NewCo's cellular mobile network), further entry is technically not possible.

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 others. The conditions conducive to CBP[17] generally do not apply to the termination markets identified in Section 5.6 above. As discussed earlier, termination on a given communications network is an enduring "bottleneck facility" that is incapable of duplication by others. The implications of this is that another network operator wishing to establish a communication with a subscriber on NewCo's network has no alternative but to buy termination service from NewCo.

[17] 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.

URCA has no information suggesting that, at the present time, any buyer of termination services in The Bahamas is able to exercise countervailing buyer power in respect of termination services to existing networks in The Bahamas.

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 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 others. As termination services on a cellular mobile network can only be provided using the terminating infrastructure of that network, it would be technically infeasible for another operator to duplicate or replicate such facilities on its network. This implies that the termination markets identified in Section 5.6 above are characterised by high non-transitory barriers to entry. Further, a supplier of termination services has absolute control over some of the underlying infrastructure competitors in downstream (retail) markets need in order to provide any-to-any off-net communications services. This monopolization or exclusive control over an essential facility is reinforced by the fact that termination rates can be a principal revenue stream for some operators 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[18] suggest that the defined wholesale markets (Section 5.6) are devoid of effective competitive pressure and providers of this critical input are in a position of economic strength to behave to an appreciable extent independently of others. The implication of this is that, absent regulation, NewCo has the capacity to influence market conditions. 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, absent regulation, an operator providing termination is 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.

This also means that, absent ex-ante 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.

[18]Market share, presence of barriers to entry and expansion and absence of countervailing buyer power.

6.6 Other Factors

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

- Licensee's access to financial resources;
- Number of active competitors;
- The overall size of the licensee; and
- Licensee's experience in providing services to the market.

However, URCA concludes 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, the economic and technical characteristics of termination services remain and mean that each of the licensees identified is able to act, to an appreciable extent, independently of competitors, customers and ultimately, consumers.

6.7 Preliminary Conclusion on SMP Assessment

URCA assessed the extent of competition within the defined wholesale mobile termination markets against a range of structural and behavioural factors. Having considered amongst other criteria, operators' market shares in each defined market, coupled with high barriers to entry and expansion and the absence of countervailing buyer power, URCA concludes that the wholesale markets defined are not likely to become effectively competitive within the timeframe of this market review. Significantly, URCA 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. This means 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 and operators 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 position regarding NewCo with SMP in mobile voice call and mobile message termination services on its network in The Bahamas:

URCA has preliminarily determined that:

a) *NewCo has SMP in the wholesale market for mobile call termination on its cellular mobile network in The Bahamas.*
b) *NewCo has SMP in the wholesale market for mobile message termination on its cellular mobile network in The Bahamas.*

Question 3: Please provide comments on URCA's preliminary views that NewCo has SMP in relation to the wholesale supply of mobile voice call and/or mobile message termination services on its cellular mobile network.

7 Market Review Stage 3 – Ex Ante Regulatory Remedies

In this Section, URCA reviews possible remedies that it considers appropriate in the light of the findings contained in this Preliminary Determination.

The overall objective of regulation is to mimic competition in those markets in which competition has not yet emerged, and is unlikely to emerge, and to put remedies in place where there is the potential for SMP operators to abuse their market position ("market failures"). As such, in Section 7.2 below, URCA identifies the specific competition concerns to be addressed and the potential consumer harm which may result, absent any *ex-ante* regulatory intervention in the termination markets considered in Sections 5 and 6 above. URCA then provides an overview of the proposed SMP obligation in each relevant market considered within this review (Section 7.3).

Prior to this, URCA briefly confirms the need for ex-ante regulation in the context of the markets under consideration.

7.1 The need for ex-ante regulation

URCA is required 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 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.[19] However, as a general principle, market forces should be relied upon as much as possible and regulatory measures should be introduced by URCA only when necessary. In general, this means that regulation is only imposed on an operator with the ability to abuse its SMP position in a market.

Establishing the need for *ex-ante* regulation should be based on the (EU) Three Criteria Test. This states that *ex-ante* obligations can be necessary if the defined market is found to have the following three characteristics:[20]

a) high non-transitory barriers to entry/expansion;
b) no tendency towards effective competition; and
c) a structure such that *ex- post* intervention by itself is unlikely to be sufficient to tackle or mitigate abuse of an SMP position.

Whilst the Three Criteria Test provides a helpful framework to ensure that *ex-ante* regulatory remedies are targeted, URCA notes that, in practice, the first two criteria are covered in the SMP assessment. In

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[20]The EU Three Criteria Test 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.

particular, as set out in Section 6, both relevant markets under consideration within this review are characterized by **high non-transitory barriers to entry and expansion.** Further, when assessing the competitive dynamics within each of the relevant markets, URCA has considered both the current level of competition and any expected changes to the **level of competition** within that market in the foreseeable future.[21] Given this, in URCA's view, once an operator has been found to have SMP, the three criteria test primarily requires an assessment on whether ex-post intervention under Part XI of the Comms Act, would be sufficient to remedy any abuses.

URCA finds that its powers under Part XI are likely to be insufficient to investigate and remedy anti-competitive behaviour in these relevant markets. Given that NewCo controls termination access to its own customers, *ex-ante* remedies are likely to be required to ensure that NewCo offers termination services at a reasonable price. Without ex-ante regulation, including on prices, NewCo may have the incentive to restrict access to its network, or set prices above the competitive level. Further, ex-post investigations can only remedy an abuse after it has taken place. The process of identifying potentially abusive behaviour, verifying whether it constitutes an abuse and then remedying the abuse is a time and resource intensive exercise. This may lead to considerable harm to those who have been affected by the abusive behaviour. As such, URCA is of the view that it is important to prevent any abusive behaviour by NewCo from taking place in the first instance.

Because all three criteria have been cumulatively met, URCA preliminary concludes that the wholesale markets defined are susceptible to *ex-ante* SMP regulation. Thus, absent SMP regulation, the market failures identified will result in an abuse of dominance by NewCo, thereby limiting the development of competitive markets, with negative effects on competitors and ultimately consumers.

Question 4: Please provide comments on URCA's preliminary view that the wholesale termination markets identified are susceptible to ex-ante regulation.

7.2 Expected Competition Problems and Consumer Harm

The key objective of any ex-ante obligation is to remedy the particular market failures that occur in each market, in absence of any ex-ante intervention, in order to prevent any SMP operator from abusing its market power to the detriment of consumers and the Bahamian economy more widely. Below, URCA identifies the specific market failures that could arise within the context of the relevant markets considered as part of this market review.

Given NewCo's position of SMP in the relevant termination markets, URCA believes that NewCo could be in a position to either set excessive prices in the market and/or to refuse to supply downstream rivals:

[21] This is due to NewCo's current market share and its control over the essential facilities in these relevant markets.

Excessive Charging

Excessive charging at the wholesale level is a key concern of regulatory and competition authorities in the electronic communications sector. Excessive pricing occurs when the SMP operator is able to set its prices above the efficient cost of providing these services and thus earn greater profits (super normal profits) than would otherwise be possible in a competitive market.

Excessive wholesale charging can lead to higher retail tariffs for end users in related downstream markets. It can also potentially lead to margin squeeze concerns in related downstream markets, as alternative operators which depend on the SMP operator's wholesale services for their retail service offerings may not be able to replicate the SMP operator's retail pricing offers, given the prevailing wholesale prices.

As such, excessive charging by NewCo is possible given its absolute control of the terminating facilities on its network and the limited degree of countervailing buyer power that access seekers have. This would result in higher input prices for the competing network which in turn could lead to higher retail tariffs to customers on different networks.

Excessive charging at the wholesale level may also result 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 a subscription from more than one licensee. This would not be welfare-enhancing for customers given the additional retail charging and inconvenience some customers may experience.

Refusal to Supply

Refusal to supply occurs where a SMP operator in a wholesale market attempts to leverage its market power from the wholesale market into the relevant (retail) downstream market by denying, either explicitly or constructively, access to its network, or refusing to deal with, competitors in the 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 supply may lead to foreclosure of the relevant downstream market.[22]

Absent regulation on access and interconnection, 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

[22]The concept of refusal to supply covers a wide range of anti-competitive 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.

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.

URCA considers that both of the competition problems identified above could have detrimental effects on the level of competition in the communications sector which, in turn, impacts the interests of consumers who may face (among other things) higher prices, lower quality products and less product differentiation. In this regard, URCA is concerned with the ability of an SMP operator to abuse its position of dominance to the detriment of end users. This is 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, the SMP operator 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. Hence, URCA is seeking 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 it proposed regulatory obligations for SMP operators in the wholesale termination markets.

Question 5: Please provide comments on URCA's preliminary views on the main competition problems or market failures that could arise from NewCo having SMP in respect to the provisioning of wholesale call and/or mobile message termination services on its own cellular mobile network.

7.3 Proposed SMP Remedies

Under the statutory framework of the Comms Act, URCA is obliged to impose on SMP operators a range of appropriate and proportionate regulatory obligations permitted under section 40 of the Comms Act or may maintain or amend such obligations where they exist.

URCA has considered regulatory measures to remedy, mitigate or prevent any potential abusive behaviour by NewCo in the wholesale termination markets it proposes to define.

As a first step, URCA notes that a determination that a licensee has SMP in a relevant market triggers the non-market specific obligations in section 40(4) of the Comms Act and Conditions 34 and 35 of its IOL. As such, these will automatically apply to NewCo if the preliminary SMP findings set out in this document are confirmed in URCA's Final Determination.

Given the structural characteristics of termination markets, URCA considers that the legal obligation to offer termination under Condition 11.1 of NewCo's IOL and the section 40(4) obligations by themselves would be insufficient to achieve the overall objectives of the Comms Act. As stated previously, the section 40(4) obligations provide the minimum, but not a sufficient, level of protection against a SMP operator behaving anti-competitively. In the context of call termination markets, URCA is of the view that the section 40(4) obligations would not be sufficient in promoting the objectives of the Comms Act given that these obligations do not guard against excessive charging for an essential "bottleneck facility". Further, visibility of the proposed price and non-price terms for termination cannot be assured hence there can be no guarantee to the wider market that the non-discrimination obligation is being complied with. To this end, URCA considers that it would be appropriate and proportionate to impose additional SMP conditions on NewCo.

In making this Preliminary Determination, URCA has given utmost consideration to relevant legal specifications.[23]As part of this review, URCA refers to Annex A of its 2013 Final Determination on the regulatory options for addressing market failures in call termination markets in The Bahamas.[24] Given this review and the principles laid down in section 5 of the Comms Act, URCA now proposes to impose the following SMP conditions on NewCo:

- NewCo shall be under an obligation to publish tariffs and non-price terms and conditions for all the services that fall within the SMP markets discussed in this document; and
- NewCo termination services shall be subject to wholesale price control.

<u>Publication of Tariffs and Non-price Terms and Conditions</u>

It is URCA's preliminary view that NewCo 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.

The published information should include, at the minimum, the following:

- the price list; and
- the main non-price terms and conditions including:
    - advance notification of price changes;
    - billing and payment requirements;
    - detailed description of the termination service;
    - quality of service standards; and
    - details of a dispute resolution scheme with appropriate reference to URCA where either party is unable to negotiate interconnection based on the proposed terms and conditions; and

[23]Sections 5 and 40(2) of the Comms Act.
[24]ECS13/2013 available at http://www.urcabahamas.bs/download/067809100.pdf

- operations and maintenance procedures.

For the avoidance of doubt, NewCo will be responsible for ensuring that published terms and conditions are compatible with the statutory framework of the Comms Act, relevant licence conditions, the Electronic Communications Sector Policy and all relevant regulatory and other measures issued by URCA from time to time.

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

Wholesale Price Controls

Given concerns about excessive termination rates, URCA has considered whether NewCo's 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 these markets are such that, absent regulation, NewCo has weak incentives to set a tariff for termination services on its cellular mobile network at a level which could be expected to prevail in a competitive market. That is, there is a concern that NewCo could engage in excessive pricing.

Under the option of no ex-ante regulation, NewCo's termination rates would be set through a process of bilateral negotiations between NewCo and other operators (including BTC). URCA considers that, relative to a formal regulatory process of price control, this approach would not be appropriate. . URCA considers there to be a high risk that bilateral negotiations between NewCo and BTC may not lead to an efficient outcome, especially not within a reasonable period of time. This is due to the competing incentives of both licensees, with NewCo having an incentive to use its SMP in the market for termination on its network to achieve high termination rates, BTC may aim to use any bargaining power arising from its overall market position to achieve low termination rates.

Given this, URCA proposes to determine that NewCo should be subject to a formal regulatory process of wholesale price control for termination services on its network.

Question 8: Please provide comments on URCA's preliminary view regarding price regulation of termination services on NewCo's cellular mobile network.

7.4 Principles of setting Mobile Termination Rates for NewCo

Below, URCA sets out its preliminary views on the key principles that should be applied when determining the regulated charges for termination services offered by NewCo on its cellular mobile network. In doing so, URCA has taken due regard of its previous relevant regulatory decisions and international precedent.

However, at this time, URCA is not consulting on the specific level of any charge control to be applied to NewCo termination services. This is because it wishes to consult firstly on the underlying principles and then determine the resulting termination rates for NewCo. Linked to this, URCA is also currently undertaking a review of BTC's charges for termination services on its cellular mobile network, with URCA's proposals in that regard having been consulted on under separate cover.[25] Once the review of BTC's reference offer (including the charges for mobile termination services) is completed, URCA will determine the level of NewCo's mobile termination rates, taking into account its final position on the underlying principles discussed below and BTC's termination rates.

Specifically, in this Section URCA considers how the principles of cost orientation and symmetry should be applied in the determination of NewCo's rates.

Cost orientation

Under section 40(1) and section 116 of the Comms Act, URCA may impose specific conditions on SMP licensees, including requiring tariffs for services in which the licensee has SMP to be based on the licensee's costs. The Comms Act and URCA's Access and Interconnection Guidelines further make reference to the fact that cost oriented interconnection charges should only reflect the efficiently incurred costs of providing these services.[26]

Setting regulated termination rates reflective of the underlying efficient level of cost of providing these services is a commonly accepted principle. This is because such an approach should mimic the price level that should arise in a competitive market. Cost based rates provide licensees with sound 'make or buy' investment signals, allow economically efficient pricing, which can be fair to both the seller and buyer of termination services, encourage competitive entry and promote the overall objectives of the Comms Act. In particular, cost oriented charges can lead to allocative and productive efficiency.

- **Allocative efficiency** occurs when the price of a marginal unit of a good equals the marginal cost of producing that unit. If price was greater than marginal cost, consumption would be below the optimal level and neither producer nor consumer surplus would be maximized. Thus, if the termination rate is set above cost and this is reflected in higher retail prices for calls to that network, this could lead to higher average call prices for consumers and could reduce the overall

[25] "*Consultation on proposed changes to the Reference Access and Interconnection Offer published by the Bahamas Telecommunications Company Ltd*." ECS 09/2016, available at: http://www.urcabahamas.bs/download/055474300.pdf

[26] "Final Guidelines - Access and Interconnection " (ECS 14/2010), available at: http://www.urcabahamas.bs/download/024581000.pdf

level of traffic. Instead, if termination rates were set equal to marginal cost, traffic volumes could rise to an optimum level, thereby ensuring allocative efficiency. In reality, a telecoms network is characterised by a high proportion of fixed and common costs and therefore, setting all prices equal to marginal costs is not likely to be appropriate (as this would prevent a licensee from recovering all its efficiently incurred costs and earning a reasonable rate of return). Nevertheless, within this constraint it is still reasonable for a regulatory authority to seek to maximise allocative efficiency.

- **Productive efficiency** occurs when a firm produces its output at minimum average cost, or lowest cost. In the context of termination rates, productive efficiency would be achieved if the relevant operator lowered its costs to the level of a hypothetical efficient operator.

Cost oriented termination charges which are reflective of the efficient cost of providing these services can facilitate efficient market entry. As such, they may facilitate **dynamic efficiency**. Whilst setting above-cost termination rates may provide stronger incentives for further entry, such rates also run the risk of attracting inefficient entry, whereby a provider is able to enter the mobile market even though it is less efficient than existing providers.

Cost orientation currently applies to all regulated wholesale access and interconnection charges in the Bahamian communications sector. In particular:

- As part of an initial SMP assessment in 2010, URCA imposed the requirement on BTC to, amongst others, prepare and publish a Reference Access and Interconnection Offer (RAIO) with cost-oriented charges for call termination and other wholesale charges for which it holds SMP. This includes the fixed and mobile termination services contained in BTC's RAIO.[27] Whilst URCA has subsequently reviewed the level of BTC's termination rates and is currently assessing the required amendments to BTC's RAIO in light of mobile liberalisation, it has proposed that the cost orientation requirement for termination charges should remain in place.
- As part of its Final Determination on "Wholesale Fixed Call Termination Price Control on SMP Licensees" (ECS 12/2014)[28], URCA concluded that BTC, CBL and iPSi all hold SMP in the respective markets for fixed and mobile call termination on their individual networks. Within the Final Determination URCA further imposed a charge control on SRG's and iPSi's fixed termination rates, with a view to ensuring these are cost oriented.

Therefore, in line with its previous determinations on call termination, URCA considers that it is logical to apply the principle of cost orientation when determining such charges for termination services on NewCo's network. Cost-based termination rates should reflect the economic costs of termination and are

[27]Note that in absence of mobile liberalisation and due to the prevailing retail pricing regime for fixed-to-mobile calls, the mobile termination rate contained in BTC's reference offer currently only applies to internationally incoming calls termination on BTC's mobile network. However, URCA is currently consulting separately on the required amendments to BTC's reference offer arising from mobile liberalisation.

[28]http://www.urcabahamas.bs/download/085881400.pdf

most compatible with mimicking competitive market outcomes. Cost-based rates provide operators with sound 'make or buy' investment signals, allow economically efficient pricing fair to both the seller and buyer of termination, encourage competitive entry and promote the overall objectives of the Comms Act.

Question 9: Please comment on URCA's preliminary proposal to apply the principle of cost orientation to NewCo's mobile termination rates. If respondents consider that cost oriented mobile termination rates are not appropriate for NewCo, the relevant respondent should describe its preferred alternative approach, with supporting rationale.

Symmetry in mobile termination rates

In ECS 13/2013 URCA set out its view that, in line with international precedents and best practices, fixed termination rates for all SMP licensees should reflect the cost of a hypothetical efficient operator and should therefore, absent exceptional circumstances, be symmetric (i.e., all SMP operators should charge the same rates for termination services on their respective networks). This was further confirmed in ECS 12/2014 where, after having considered the case for (a)symmetric fixed termination rates for SRG and iPSi in more detail, URCA concluded that it was most appropriate to apply symmetry between the fixed termination rates of SRG, iPSi and BTC. URCA further considered that in the absence of it undertaking an exercise to estimate the costs a hypothetical network operator would incur in providing termination services, BTC's regulated termination charges should form the basis for the symmetric fixed termination rates. This approach is broadly consistent with that applied in the UK, where Ofcom sets fixed termination rates equal to BT's termination rate.[29] Following this decision, iPSi and SRG were given ninety (90) days to reduce their termination rates to be in line with BTC's.

Similarly, in Europe (and elsewhere) an increasing number of regulators have imposed reciprocal (i.e., symmetric)[30] termination rates where all operators are declared dominant in a market for call termination services on their network and hence face regulatory obligations.[31] In fact, reciprocal termination rates are now a key part of the European Commission's access and interconnection framework.

As such, URCA remains of the view that termination rates should generally be set reciprocally. However, URCA recognises that there may be instances where symmetric termination rates may not be appropriate, at least for a certain period of time. In particular, if there are significant differences in the efficient level of costs that each provider incurs in offering termination services, and these are outside the control of operators, the temporary use of asymmetric termination charges might be appropriate. Asymmetric rates

[29]Fair and reasonable charges for fixed geographic call termination, Statement and final guidance, Ofcom, para 1.4, available at http://stakeholders.ofcom.org.uk/binaries/consultations/778516/statement/fair-reasonable-statement.pdf (the "Ofcom FTR decision")

[30] For simplicity, URCA uses 'reciprocal' and 'symmetric' interchangeably throughout this document.

[31]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.

have also been used to temporarily support new entrants to establish themselves in the market, especially where there are exogenous cost differences between them and the incumbent operators.[32][33]

However, whilst asymmetric rates have been used to facilitate further market entry (where the late entrant is able, for a period of time, to charge a higher termination rate than the incumbent operators), the potential drawbacks from asymmetric rates in the longer term are also well recognised. Most notably, such asymmetries can lead to productive or allocative inefficiencies as prices diverge from efficient costs. As such, it is generally accepted that regulatory authorities should only allow any termination rate asymmetry to apply for a limited period of time.[34]In addition, it is important to ensure that any asymmetry will benefit consumers, (i.e., it will lead to a demonstrable increase in consumer welfare over the medium to longer term due to, for example, enhanced competition that would likely outweigh any additional cost or market distortion arising from the asymmetry in termination charges).

Therefore, in line with the economic principles and the international regulatory precedent, URCA considers that any asymmetry in mobile termination rates must be justified by reference to a number of factors and conditions in the local market. In ECS 12/2014, and in line with international precedent, URCA set three conditions, of which at least one needed to be fulfilled in order to support some form of asymmetry in charges:

1. **Exogenous and objective differences in the cost of termination**. Higher termination rates might be justified if there are objective and exogenous cost differences between operators and as a result, the efficiently incurred termination cost of another SMP licensee is higher than BTC's cost. In other words, only cost differences that are outside the control of other SMP licensees should be considered as relevant for determining the scope for potentially higher termination charges. This means that, for example, cost differences due to other SMP licensees having differently sized customer bases will not be considered relevant, as the appropriate comparison of termination costs should consider the costs faced by a hypothetical operator of an efficient scale[35]. The same holds for other factors that might impact the unit cost of call termination, but are driven by

[32]For example, in its Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC), (the "EC Recommendation"), the European Commission reiterated the importance of symmetric rates based on cost models, with allowances for exogenous cost differences across carriers. They also refer to the possibility of granting asymmetric rates for new entrants for a transitional period of up to four years upon entry, which, according to the Commission, is an adequate period by which an entrant can achieve a minimum efficient scale, characterized by a market share of between 15% - 20%.

[33]Further, where there are now substantial differences in termination rates between licensees, there may be a need to gradually introduce reciprocal termination rates over a period of time (i.e. via a multi-year glide path) to allow all licensees to adjust to the new levels of termination charges.

[34]See, for example, pages 5/6 of ERG(07) 83 final 080312, available at: http://berec.europa.eu/doc/publications/erg_07_83_b_report_mtr_ftr_cp_12_03_08.pdf

[35]EC Recommendation, para 16

commercial and strategic decisions of other SMP licensees. Finally, any cost incurred as a result of inefficient operations cannot be considered relevant.

2. **Barriers to entry and expansion that impede the ability of other SMP licensees to reach sufficient scale and lead to them facing a higher unit cost for termination**. Higher termination rates might be justified if another SMP licensee is facing higher unit termination costs due to its late entry in the market and an inability to reach sufficient scale and scope, as a result of it facing significant barriers to entry and expansion. In other words, if the higher costs are driven by the smaller scale of the other SMP licensee, but there are significant barriers preventing the other SMP licensee reaching an efficient scale, then a temporary termination rate asymmetry might be justified. URCA notes that the EC recommendation considers 15-20% market share is required to reach minimum efficient scale in mobile markets.[36]

   However, for this condition to point to the introduction of asymmetric termination rates, it is necessary to demonstrate also that the asymmetric rates will improve the entrant's ability to grow its customer base and reach the efficient scale, thus improving its ability to compete in the long-run. Otherwise, the asymmetric termination rates might not be an optimal regulatory tool and other measures lowering the existing barriers to expansion might be required and ultimately, be more effective.

3. **Significant traffic imbalances that impede the ability of other SMP licensees to compete in the long-term**. If there are significant traffic imbalances between operators that have resulted from the specific pricing strategies of the incumbent operators, it might be justifiable to allow a smaller operator to charge higher termination rates for a limited period of time and help it overcome any potential disadvantage arising from its smaller customer base. This would only be the case, however, if it can be shown that the traffic imbalances are driven by pricing strategies of the larger operator and that they are negatively affecting the smaller operator.

   For instance, if a late market entrant has a much smaller subscriber base, then it is possible, in the presence of significant on-net/off-net differentials, that the volume of calls from the large network operator that are terminated in the network of a small operator could be significantly lower than the volume of calls coming from the network of the smaller operator into the network of a larger operator. Under symmetric termination rates this could lead to net-losses from interconnection for the smaller operator. If a smaller operator is not able to recover these losses elsewhere, e.g. by setting higher retail prices, it is possible that the interconnection imbalances could impede the ability of the smaller operator to compete, grow its customer base and gradually overcome any disadvantages arising from a smaller size.

   However, URCA considers that, for this condition to support asymmetric termination charges, three further criteria all need to be fulfilled:

[36] EC Recommendation, para 17

- First, the significant traffic imbalances should be negatively impacting the late entrant(s);
- Second, BTC's termination rates should be significantly above cost; and
- Finally, the temporary termination asymmetry should generate demonstrable consumer benefits that outweigh the cost of this asymmetry.

In URCA's view, only objective cost differences that are outside the control of other SMP licensees might justify asymmetric termination rates on a more permanent basis (i.e., for as long as these cost differences prevail). URCA considers that the other two conditions, if fulfilled, would only justify the introduction of asymmetric rates for such a transitional period as was necessary to support a later entrant to establish itself in the market.

URCA recognises the difficulty of assessing the above criteria for NewCo's mobile termination service. Most notably, prior to NewCo launching its services there is no evidence available on its operational or financial performance. Indeed, any such information will only become available in the coming months. As such, in the below, URCA has undertaken an initial assessment of the possible circumstances in which any of the above criteria may make it appropriate to allow NewCo to charge a higher mobile termination rate than BTC. In doing so, URCA has taken into account international precedence and the current approach to setting mobile termination rates in The Bahamas. In particular, whilst BTC's current mobile termination rates are cost-oriented, they are not fully reflective of the efficient cost of providing these services (i.e., they not based on a LRIC estimate of a hypothetical efficient operator). URCA notes that in absence of an URCA led bottom-up cost modelling exercise this is expected to continue to be the case. In URCA's view, all other things being equal, this will place a higher burden of proof on justifying any asymmetry in mobile termination rates. This is because there will be less risk that BTC's mobile termination rates will be below the efficiently incurred cost of any alternative operator (including NewCo).

Below, URCA sets out its preliminary assessment of each criteria and through this consultation, invites the views of stakeholders on the same. In summary, URCA recognises that NewCo may face justifiably higher unit costs than BTC's mobile business, at least in the initial phase of its operations. While this may justify some level of termination rate asymmetry for a limited period of time, URCA remains of the view that, ultimately, symmetric termination rates, based on the costs of a hypothetical network operator in a two-player market, should apply.

- **Exogenous and objective cost differences**. URCA has considered the different drivers of the cost of mobile termination services. From this review, URCA has preliminarily concluded that while there are a number of factors influencing the unit cost of termination services, the majority of these costs are likely to be within the control of the SMP licensee and therefore cannot be considered exogenous.

  URCA has, however, identified four potentially exogenous factors that might significantly impact NewCo's initial unit cost of termination relative to BTC's unit costs. This does not include the potential impact of economies of scale on the cost of termination, as this is discussed separately as part of the second criterion:

- Network topology /technology - NewCo could decide to deploy a different network technology to that of BTC's cellular mobile network. While this could lead to differences in the cost of termination services, URCA considers that, in reality, this is unlikely. Indeed, given continued technological advancements, NewCo could expect to have a relatively more efficient network than BTC. Furthermore, NewCo's choice of network technology is not an exogenous factor beyond NewCo's control. NewCo could, however, be reliant on access to BTC's fixed network infrastructure in order to provide its backhaul services. If BTC does not provide this access on a timely basis, and on non-discriminatory and cost oriented terms, this could place NewCo at a disadvantage. However, URCA considers that this can be dealt with through existing access and interconnection regulations on BTC and that allowing a termination rate asymmetry would be an inefficient response to such a situation as it would not remedy the underlying cause of the cost differential.

- Geographic footprint of the networks - During NewCo's initial network roll-out phase, it will have a smaller geographic footprint than BTC. This, in turn, may impact its unit cost of termination services if it limits NewCo's ability to attract customers. However, NewCo's licence requires it achieve population coverage of 99% on New Providence and population coverage of 80% on Grand Bahama within three (3) months of its licence being granted, with 99% population coverage across all major islands to be achieved within 12 months, and full coverage of all populated islands within two years. As such, any potential impact of the reduced geographic footprint relative to BTC would only occur for a limited period of time whilst other URCA measures (most notably around national roaming) should also serve to limit any such disadvantage for NewCo.

- Access to sites - Due to planning and building regulations, new entrants may have difficulties in gaining access to a similar range of sites for deploying mobile masts and towers, compared to the incumbent mobile operator. All other things equal, this could increase the entrant's costs of deploying its radio access network. However, URCA expects this factor should not apply to NewCo, as it has already secured access to a range of sites and will have access to CBL's existing sites. Further, URCA notes that its Infrastructure Sharing Regulations (ECS 04/2015)[37] aim to facilitate access to existing sites, where technically and economically feasible.[38]

- Spectrum holdings and associated fees - An asymmetry in mobile termination rates may be justified based on cost differences that arise from mobile operators holding different amounts of spectrum, or spectrum in different bands. Any such cost differences need to

[37] http://www.urcabahamas.bs/download/035843400.pdf

[38] URCA recognises that for technical or practical reasons, sharing of several existing BTC's sites may be limited.

drive material differences in the underlying efficient cost of delivering termination services. However, URCA does not consider this to be relevant in the case of NewCo, as it holds a similar amount of spectrum across the same bands as BTC. While the (annualised) amount each licensee pays for their spectrum may differ, URCA does not consider that this affects the marginal costs of providing termination services.

- **Barriers to entry and expansion**. URCA has considered if it is possible that NewCo might have a higher unit cost of termination as a direct result of its later entry into the sector and its inability to reach sufficient scale and scope, as a result of barriers to expansion in the retail market for mobile services. Such barriers to expansion can be driven by supply side factors (such as network capacity constraints, insufficient bandwidth or numbering blocks) and/or demand side factors (such as customer inertia).

  Based on its assessment to date, URCA recognizes that the retail market for mobile services could be characterised by some high barriers to entry and expansion. Given the spectrum and numbering blocks allocated to (and/or reserved for) both licensees, any such barriers are most likely to relate to demand side factors. In particular, URCA considers it likely that there will be some customer inertia, at least in the initial months after NewCo's service launch. However, given the prevailing share of pre-paid connections in total mobile connections and the current minimum contract length of BTC's post-paid mobile plans of one year or less, it does not appear that these barriers are significant enough to effectively prevent NewCo from reaching an efficient scale in a reasonable period of time. This is in line with the information contained in NewCo's application for its mobile service and associated spectrum licence. However, URCA recognises that in the initial period after service launch, NewCo may not be operating at an efficient scale, which could result in incurring, for that period of time, higher unit termination costs.

  As such, URCA considers that this may justify allowing NewCo to charge, for an interim period, a mobile termination rate above the rate applied to BTC (which in turn proxies the costs faced by an efficient provider). While it remains difficult to determine, ahead of time, when NewCo will reach the 15-20% market share threshold for minimum efficient scale in mobile markets, URCA is guided by NewCo's own expectations on its market share as set out in its business plan submitted during the mobile spectrum licence tender process. Based on this, URCA is of the preliminary view that it could be reasonable to allow NewCo to charge mobile termination rates above those of BTC on an interim basis.

- **Significant traffic imbalances**. Prior to NewCo's service launch, there is no information to suggest whether or not there could be an imbalance in termination traffic between it and BTC. As such, URCA cannot assess, at this point in time, whether this would justify any temporary asymmetry in termination rates. However, in line with its arguments set out in the context of fixed termination rates (see ECS 13/2013), URCA considers it unlikely that all the conditions necessary for this criteria to apply would hold.

Therefore, given the potential barriers to expansion in the retail market, URCA considers that it is possible that NewCo could, at least initially, face higher unit costs for termination services than BTC and that these barriers to expansion could, potentially, support some limited termination rate asymmetry in favour of NewCo. However, URCA considers that any asymmetry should be time-limited, after which symmetric in termination rates should apply.

However, URCA also recognises the potential implications of asymmetric mobile termination rates on the retail prices for mobile services. In particular, if BTC faces higher costs for sending calls off-net to NewCo's cellular mobile network than it faces in completing on-net calls, it would be reasonable to allow it to reflect such a difference in its retail pricing. That is, a termination rate asymmetry could actually lead to on-net/off-net pricing differentials which in turn, under certain circumstances, could favour BTC as the larger operator in the market. URCA also recognises that international precedence increasingly suggests rates should be symmetric, at least in the medium – long term and that the factors which would normally be required to justify an asymmetry may not have been clearly met in this instance. Therefore, given the above, URCA seeks the views of stakeholders on the merits of allowing a temporary asymmetry in mobile termination rates (i.e., whether to allow NewCo to temporarily charge higher termination rates than those contained in BTC's RAIO and if so, the appropriate level and time period of any asymmetry in mobile termination rates).

Question 10: Please comment on the merits of allowing NewCo to temporarily charge higher mobile termination rates than those contained in BTC's RAIO. As part of your response please further comment on the appropriate level and time period of any asymmetry in mobile termination rates.

8 Conclusion and Next Steps

Within the previous Sections, URCA has set out its preliminary position on the status of competition and any resulting requirements for ex-ante regulation in the market for wholesale termination services on NewCo's cellular mobile network. In particular, based on its preliminary analysis, URCA has concluded the following (for further details on each preliminary determination please refer to the relevant Sections above):

- NewCo has been found to have SMP in providing wholesale termination services on NewCo's cellular mobile network;
- NewCo will be subject to a price control for its wholesale termination services. URCA is seeking stakeholders' view on whether to allow NewCo to temporarily charge higher mobile termination rates than those contained in BTC's RAIO and if so, the appropriate level and time period of any asymmetry in mobile termination rates; and
- NewCo 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 services.

Next steps

URCA invites interested parties to comment on its preliminary position by responding to the consultation questions set out in this document. In particular:

- Initial responses to the consultation paper are due on or before 15 August, 2016.
- This will be followed by URCA's publication of the responses received, and submission of any comments on those responses which will be due by 19 September, 2016.

URCA is encouraging all interested parties to make written submissions on the consultation. URCA will review all responses and comments received to the consultation and issue a Statement of Results and Final Determination. URCA will consult with interested parties on any proposed changes to existing or new measures resulting from this proceeding.