



PRELIMINARY DETERMINATION

The Implementation of Mobile Number Portability in The Bahamas pursuant to Section 80 of the Communications Act, 2009

ECS 40/2016

Issue Date – 14 December 2016

Response Date – 16 January 2017

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1 Introduction

This document comprises a Preliminary Determination providing for the implementation of Mobile Number Portability in The Bahamas, issued pursuant to section 99 of the Communications Act, 2009 (Comms Act) and in accordance with the requirements of section 80 of the Comms Act.

1.1 How to Respond

Consistent with the procedure set out in section 100 of the Comms Act, interested parties are advised as follows:

1. Should an interested party wish to make representations on any matter contained in this Preliminary Determination it may do so in writing to URCA. Such representations must be received by URCA by no later than **20 January 2017**.
2. URCA shall consider any representations made and make its Final Determination and any appropriate Order.
3. URCA may request from any affected party such additional information as is reasonably required to make a final determination.
4. Representations should be submitted to:

Director of Electronic Communications,
URCA,
Frederick House,
Frederick Street,
P.O. Box N-4860
Nassau, The Bahamas

Email: info@urcabahamas.bs

Fax: 242.393.0237

1.2 Structure of this Document

The remainder of this document is structured as follows:

- Section 2 – Background: providing an overview of the context, legislative provisions, and processes within which URCA makes this Preliminary Determination;
- Section 3 – NPWG Deliberations on the Business Rules: providing information regarding the matters deliberated upon by the Mobile Number Portability Working Group (MNPWG) appointed by URCA to consider and make recommendations relating to Mobile Number Portability implementation;
- Section 4 – URCA’s Rationale for the Second Determination on Number Portability: discussing URCA’s rationale and reasons for the determination which URCA proposes to make in this document;
- Section 5 – Preliminary Determination: setting out the terms of the determination which URCA proposes to make; and
- Section 6 – Draft Order: setting out the terms of the Order which URCA proposes to make concurrently with any determination.

2 Background

2.1 Legislative Mandate for Number Portability

“Number Portability” is defined by the Comms Act as *“a facility whereby subscribers who so request can subject to the numbering plan retain their telephone number on a public network, independently of the licensee providing the service at the network termination point of a subscriber”*¹. Number Portability (NP) therefore enables a person to keep their telephone number(s) when switching providers, and is often seen as a key enabler of robust competition in that it removes one of the barriers which customers perceive to switching their provider of telephone services, that is, the need to change their telephone number.

Section 80 of the Comms Act requires URCA to issue a consultation and make a determination on NP, and further mandates that licensees shall provide to the extent technically feasible, operator-to-operator number portability when required to do so in accordance with the requirements prescribed by URCA.

URCA’s power and process for making determinations is contained in sections 99 through 102 of the Comms Act. These sections of the Comms Act require that URCA first issue and consult on a Preliminary Determination, allowing at least one (1) month for the submission of representations by interested persons, and thereafter, having taken into account any representations made, URCA may issue its Final Determination. URCA’s Final Determination may also, where appropriate, be accompanied by an Order (issued under and in accordance with sections 95 through 98 of the Comms Act).

2.2 URCA’s Consultation on Number Portability

On 15 April 2011, URCA issued a consultation document entitled *“Number Portability for The Bahamas”*² inviting comments from interested persons on the issues pertaining to the introduction of NP in The Bahamas. Having considered the comments received in response to that consultation document, on 16 November 2011, URCA issued its Statement of Results on NP³. URCA’s *Final Determination on the Implementation of Number Portability in The Bahamas* (ECS

¹ Section 2, Communications Act, 2009

² ECS 8/2011, available at <http://www.urcabahamas.bs/publications.php?cmd=view&id=74&pre=y>

³ ECS 20/2011, available at <http://www.urcabahamas.bs/publications.php?cmd=view&id=98&pre=y>

21/2012) was issued on 3rd August, 2012 (the “First FNP Determination”) which addressed inter alia, the timing for the implementation of Mobile Number Portability (MNP) in The Bahamas, and the obligation for relevant licensees to comply with that timing. It was mandated that MNP be implemented and operational in time for the introduction of competition in mobile communications in The Bahamas.

2.3 Introduction of Competition in Cellular Mobile Services

Consequent to the conduct of a competitive selection process undertaken by the Government of The Bahamas, NewCo2015 Limited (NewCo) was selected as the second cellular mobile operator for The Bahama. On 30 June 2016, URCA issued an Individual Operating Licence (IOL) and Individual Spectrum Licence (ISL) to NewCo authorising it to provide cellular mobile services, in competition with the incumbent operator, the Bahamas Telecommunications Company Ltd. (BTC). The grant of this licence triggered URCA’s determination regarding the introduction of MNP.

2.4 Appointment of the MNP Working Group

Consistent with its approach to the implementation of FNP, URCA commenced the process to implement MNP by convening a Mobile Number Portability Working Group (MNPWG) comprising representatives from URCA (one of whom was appointed as its chair), and representatives of each licensee which has been granted a licence to provide cellular mobile services, and mobile telephone numbers by URCA namely, BTC and NewCo.

As in the case of FNP, URCA appointed Laurasia Associates of the UK as the consultant advisor to the MNPWG due to its extensive experience gained in international jurisdictions on the implementation of number portability, as well as the local experience in the implementation of FNP.

The MNPWG held its inaugural meeting on 12 August 2016 and has continued to hold meetings and/or conference calls on a regular basis to date.

The MNPWG is empowered to deliberate on matters pertaining to MNP and make recommendations to URCA.

2.5 Selection of the MNP Service Provider

Consistent with the Second FNP Determination, Porting Access BV (“Porting XS”), a company based in the Netherlands, was selected as the provider of the clearinghouse and database

services for MNP. Porting XS is also the provider of the clearinghouse and database services for FNP, and the FNP service will, consistent with URCA's Second FNP Determination, be scaled to accommodate MNP.

3 NPWG Deliberations

3.1 MNPWG Meetings

During the period 12 August 2016, to the date of this Preliminary Determination, the MNPWG met (either in person or via conference call) eight (8) times, on the following dates:

- 12th August, 2016
- 9th September, 2016
- 20th September, 2016
- 29th September, 2016
- 25th October, 2016
- 1st November, 2016
- 8th November, 2016
- 23rd November, 2016

At those meetings, the MNPWG deliberated on several issues related to operator readiness and achieving key milestones with a view to all parties reaching an agreement on the Business Rules. The key matters deliberated on by the MNPWG are discussed in the following section.

3.2 MNPWG Deliberations

3.2.1 MNP Business Rules

In August 2016, the MNPWG commenced consideration of a draft document titled URCA Local (Fixed & Mobile) Number Portability Ordering Process Specifications (“LNP Business Rules”). This document builds on the Business Rules that were established and determined by URCA in respect of the implementation of FNP, in order to simplify the process and to ensure conformity between the processes. The document also sets out the rules and conditions which apply in respect of all aspects of the processes which will govern both FNP and MNP in The Bahamas that either:

- a) Involve exchanges between the operators via the central clearinghouse; or,
- b) Involve actions by one operator that have to be trusted by another operator, for example the customer order validation process.

The provisions of the LNP Business Rules apply to both FNP and MNP (collectively referred to as Local Number Portability (LNP)), and cover the LNP ordering process from the point when a

subscriber requests a new account with the “Recipient” network utilising LNP to the point when the subscriber has an active account on the Recipient network using the subscriber’s number from the “Donor” network; the account on the “Donor” network has been closed; and all other operators have been informed.

The LNP Business Rules are a significant regulatory measure required to ensure that the processes for fixed and mobile NP in The Bahamas are clearly delineated and allow for effective implementation of FNP and MNP in The Bahamas.

The MNPWG conducted detailed deliberations on the LNP Business Rules, seeking to arrive at proposed rules which would achieve the overall objectives of MNP, be consistent with the determinations made by URCA in the First and Second FNP Determinations, and would be acceptable to and implementable by all involved operators. The final LNP Business Rules, as agreed by the MNPWG, was submitted to URCA on 24 November 2016.

Some key recommendations made by the MNPWG which are reflected in the LNP Business Rules include:

- **Porting Process Identification Requirements**
 - The porting process in The Bahamas is “Recipient Led” that is, the subscriber requests porting by visiting or meeting with their selected new (or “Recipient”) operator; that operator is responsible for contacting the existing (or “Donor”) operator to facilitate porting the subscriber’s number to their new account.
 - Currently in order to access fixed NP, the subscriber is required to present a form of Bahamas government issued picture identification (Passport, Drivers Permit or Voter’s Card), and a recent copy of a bill for the subscriber’s existing account from which the number is to be ported.
 - The MNPWG deliberated as to whether the requirement for identification issued by the Bahamas Government was too stringent a restriction.
 - The MNPWG agreed that the photo identification used need not be issued by the Government of The Bahamas.
- **Porting Timeframe:**
 - The MNPWG deliberated on possible timeframes for porting. The group debated periods ranging from one (1) days to two (2) hours. The MNPWG settled and agreed to recommend that the porting process for mobile numbers in The Bahamas should be set at 2 hours from the date on which the request to port is initiated by the subscriber. This is with the expectation that some specific ports

may take longer, due to unanticipated challenges and therefore although the expected timeframe is 2 hours, trouble tickets relating to delayed ports will not be raised until one (1) day after the request.

4 URCA's Rationale for a Determination on Mobile Number Portability

In the course of making its First FNP Determination, URCA noted that the implementation of NP would of necessity also involve the making of regulatory decisions on several matters. While the MNPWG would be responsible for making appropriate recommendations to URCA on these matters, it would be necessary for URCA to ensure the compliance of all relevant parties by making one or more additional Determinations to facilitate the launch of MNP.

Having had regard to the deliberations of the MNPWG, URCA considered the following matters for determination as discussed in the following sections.

4.1 General Provisions for Mobile Number Portability in The Bahamas

URCA has considered, and discussed with the MNPWG and proposes to make determinations upon various matters pertaining to the implementation of MNP in The Bahamas as follows:

4.1.1 Operator Readiness and Launch Date for Mobile Number Portability

The MNPWG includes those licensees that are required to implement mobile NP in The Bahamas and through the MNPWG URCA has monitored their readiness for the launch of mobile NP. URCA anticipated a timeframe which would have resulted in mobile NP becoming available during the fourth quarter of 2016. However, recognising that preparations could conceivably require more time than originally estimated, URCA has not made a determination as to the launch date for mobile NP.

URCA has monitored the licensees' readiness for mobile NP on an on-going basis through a series of conference calls and meetings with the MNPWG and, based on revised estimates and express written commitments made by the licensees, URCA now considers it reasonable to require that the licensees required to implement mobile NP ensure that they are fully ready for MNP launch by **10 February 2017** (the "MNP Ready Date").

Accordingly, URCA proposes to make a determination requiring all licensees of mobile telephone services in The Bahamas to be fully ready for the launch of MNP by no later than **10 February 2017**, and that mobile NP will be launched and available for the public in The Bahamas on **14 February 2017** (the "MNP Launch Date").

4.1.2 Addition of New Operators

URCA notes the provisions made in the contractual arrangements with Porting XS for the inclusion of additional fixed and mobile operators. URCA has already determined that any licensee that is authorised to and wishes to provide telephone services to the public in The Bahamas shall provide LNP to its current and prospective customers based on the arrangements established by the MNPWG and set out in the LNP Business Rules. The trigger for the obligation to provide LNP is the grant by URCA of telephone numbers.

4.1.3 Operator Obligations for Mobile NP Implementation

URCA recognises that in order to achieve MNP readiness by the MNP Ready Date, all licensees required to provide MNP must install the required systems and processes in their networks and operations, execute the Number Portability Administration Service (NPAS) Agreement with Porting XS (the “LNP Service Provider”), integrate the relevant systems with the LNP Service Provider, design and implement revised business processes in accordance with the applicable business rules, and conduct exhaustive testing to ensure that the MNP process works effectively and seamlessly.

To that end, URCA proposes to make a determination requiring relevant licensees to carry out all tasks required to implement mobile NP in The Bahamas in accordance with the timeframes set out above, including but not limited to the following:

4.1.3.1 Establishment of the Number Portability Administration Service

URCA proposes that licensees required to implement and provide MNP shall use their best efforts to ensure the update of the NPAS to support the operation of the mobile NP service and the timely integration of the NPAS with their networks and implementation of the LNP Business Rules, in accordance with the NPAS Agreement.

4.1.3.2 Network Connectivity and Processes

URCA proposes that licensees required to provide mobile NP shall:

- Establish and maintain robust and diverse connectivity with the MNP Service Provider servers;
- Establish and maintain secure and robust facilities to allow customers to validate their porting requests by sending SMS validation messages via the Donor network to the NPAS

and to enable the NPAS to send porting process progress update SMS messages to the customer via the Donor network;

- Implement “Loop Back” protection into their core networks;
- Establish processes for weekly checking and maintaining synchronisation of their local routing infrastructure and databases with the databases maintained by the MNP Service Provider; and,
- Provide onward routing of international incoming traffic to the correct terminating network on a non-discriminatory basis.

4.1.3.3 Testing

URCA proposes that licensees required to provide MNP shall carefully plan, rigorously execute and collaborate with other stakeholders, in accordance with the testing schedule established by URCA in respect of the following:

- Inter-operator testing readiness collaboration;
- Acceptance testing for the NPAS;
- Internal and inter-operator porting testing;
- Internal and inter-operator routing testing;
- Testing of All Call Query (ACQ) live traffic migration to ensure seamless traffic migration with minimal disruption to normal traffic and service delivery; and
- Inter-operator testing of the End-to-End NP process.

4.2 The LNP Business Rules

4.2.1 Development of the LNP Business Rules

The LNP Business Rules address the rules and conditions which apply in respect of the order and provisioning process of NP for fixed and mobile subscribers in The Bahamas that either:

- a) Involve exchanges between the Operators via the central clearinghouse; or,
- b) Involve actions by one Operator that have to be trusted by another Operator, for example the customer order validation process.

The MNPWG conducted detailed deliberations on the appropriate provisions specifically related to MNP to be contained in LNP Business Rules for The Bahamas and a substantially agreed version was produced and circulated to members of the MNPWG on 31st October, 2016.

The agreed LNP Business Rules have been discussed with the MNPWG, reviewed and amended by URCA as appropriate; URCA proposes in this Preliminary Determination to adopt them in the form set out in Annex A. URCA also proposes to determine that all licensees subject to a MNP requirement are required to fully comply with the LNP Business Rules in respect of all MNP transactions.

4.2.2 Penalties for Failure to Comply with LNP Business Rules

URCA considers it an imperative that the consumer's NP experience meets the expected standards established in the LNP Business Rules for time to port numbers, the notification and information requirements, and consistency with regard to reason for rejection of ports by the Donor operator, among others. Therefore, URCA considers breaches of the LNP Business Rules are likely to be highly prejudicial to the successful implementation and operation of mobile NP in The Bahamas.

URCA has noted that there have been several instances where licensees involved in FNP have failed to comply fully with the FNP Business Rules (now superseded by the LNP Business Rules) and ports have as a result failed or been unacceptably delayed.

URCA notes that the delay or failure of ports has the impact of undermining public confidence in LNP. URCA notes that failed or delayed ports are often a direct result of a failure to comply with the business rules, and therefore considers it appropriate to directly link compliance with the LNP Business Rules, with successful porting in accordance with the agreed and established timelines. URCA notes that a delayed or failed port may have the following impact:

- As the LNP regime is "Recipient led" the Subscriber's only interaction is with the Recipient Operator and is therefore disproportionately likely to assign fault to the Recipient. This has not only an immediate effect but can, over time, undermine the reputation of the Recipient Operator;
- Failed or delayed porting undermines confidence in LNP and in the regulatory framework generally;
- Failed ports may result in the Subscriber deciding not to proceed with switching, which directly prejudices the Recipient Operator to the benefit of the Donor Operator.

4.2.2.1 Fixed Penalties

URCA has considered the implementation of a system of fixed penalties for breaches of key provisions of the LNP Business Rules. URCA is of the view that considering the repeated cases of failed ports by licensees, the establishment of a fixed penalty regime would be appropriate.

Section 95(1)(a) of the Comms Act gives URCA the power to issue an order concurrently with a determination ordering a licensee to *“do or refrain from doing such things as are specified in the order to remedy, prevent or rectify the breach or anticipated breach which is the subject matter of the determination”* and, if appropriate, section 95(1)(b) provides that such an order may impose *“an objectively justified and non-discriminatory fine on the licensee”*.

URCA has a discretion regarding the level of any fine that might be imposed on a licensee or non-licensee contravening any provision of the Comms Act or a licence condition. However, that discretion is fettered under the Comms Act by the requirement that any fine imposed must be objectively justified and must be imposed in a manner that is non-discriminatory.

When should a fixed penalty be imposed?

URCA has already noted above that its concern is that failure by licensees to comply with the LNP Business Rules may have the effect of either delaying or causing the failure of ports requested by customers. URCA considers therefore, that a fine should only be imposed if the licensee’s breach of the LNP Business Rules has the effect of delaying a port or causing failure.

Proposed quantum of fixed penalties

URCA is of the view that the most serious breach would be one which results in the port failing outright, while the seriousness of breaches which do not cause failure would be related to the length of the delay caused. In this regard, URCA considers that ports which impair the effectiveness of the port (for example, where a number is ported but all calls are not able to successfully be routed to the new number) should be considered “delayed” until the impairment is completely rectified. URCA therefore considers that the most significant fine should be imposed for a breach which causes the failure of a port, while the quantum of the fine for breaches which cause delay should be derived based on the length of delay caused.

URCA has therefore developed the following formulae for the calculation of fines. All proposed penalties will be based on a multiple of the Average Daily Revenue Per User for either fixed networks in respect of fines related to FNP (ADRP^f) or cellular mobile networks in respect of

finances related to MNP (ADRPUM) during the previous 12-month period.⁴ The ADRPU shall be calculated as follows:

$$\text{ADRPUM} = \frac{\text{Total Annual Cellular Mobile Revenues}}{\text{Daily Average Number of Cellular Mobile Subscribers} \times 365}$$

$$\text{ADRPUF} = \frac{\text{Total Annual Fixed Revenues}}{\text{Daily Average Number of Fixed Subscribers} \times 365}$$

The revenues used for each calculation are the total for all operators in the relevant market, and include all services.

URCA proposes that in respect of a breach of the LNP Business Rules which causes a delay to the port but where the port is eventually successfully completed, the penalty should be the relevant ADRPU times a disincentive multiplier of five (5) multiplied by the actual number of days delay.

In the event of a breach causing porting failure the penalty is the relevant ADRPU times a disincentive multiplier of thirty (30).

URCA proposes that the total of all fines levied in a calendar year against a single licensee under this provision will be subject to a cap of 1% of the licensee's relevant turnover from the relevant (fixed or mobile) networks.

Information regarding the breaches will be derived from the reports provided to URCA by the LNP Service Provider monthly, and from URCA's resolution of LNP complaints. Pursuant to section 95(4), URCA will from time to time notify any licensee that has committed a breach of the LNP Business Rules which is subject to a fine, identifying all such breaches during the period under consideration, and the quantum of the proposed fines based on above calculation. URCA will afford the licensee an opportunity to make representations on the proposed fines or to rectify any breaches which are capable of rectification, before imposing the fine.

Breaches to which fixed penalties apply

URCA proposes that the following breaches of the LNP Business Rules will be subject to fixed penalties:

	Provision Breached
1.	Failure to submit a porting request on behalf of each qualified requesting customer
2.	Submitting a porting request without customer consent on an approved and completed porting request form
3.	Donor modification of the account status of a customer after the customer has sent a validation SMS to the NPAS
4.	Donor modification of the account status of a customer after receiving a porting request in respect of their number (except for terminating account in the case of a successful port)
5.	Failure to incorporate broadcast messages from the NPAS into the local routing database immediately and automatically
6.	Failure to route customer validation messages according to the NPAS and porting progress update messages from the NPAS to the customer
7.	Failure to keep local routing database synchronized with the central NPAS database
8.	Failure to adhere to incoming international SMS routing directive
9.	Failure to permit customers to send free SMS to the NPAS at the assigned short code (7PORT/77678) unless entire account is barred
10.	Donor failure to submit a porting approval response, or delay beyond the permitted interval after transmission of the porting approval request
11.	Rejection of a porting approval request without citing a true and permitted basis
12.	Donor contacting a porting customer prior to completion of the porting process

13.	Recipient failure to send porting deactivation request, or delay beyond the permitted interval
14.	Donor failure to deactivate a ported number, or delay beyond the permitted interval
15.	Failure to submit porting approval requests as and when initially generated

In each case, the quantum of the breach will be based on whether the breach caused porting failure or delay, and where delay is caused, the length of the delay. URCA considers the above penalties to be reasonable and proportionate to the relevant breaches.

4.2.2.2 Variable Penalties

It should be stressed that not all breaches of the LNP Business Rules will be subject to fixed penalties. URCA reserves the right to issue a further Preliminary Determination or other appropriate regulatory measure in respect of any suspected contravention of the Comms Act, any licence, rule, provision or regulation which URCA has implemented in respect of LNP, and to impose the penalties set out in the Comms Act where a licensee or any person has been found to have committed a contravention.

5 Preliminary Determination

This is a Preliminary Determination issued by the Utilities Regulation and Competition Authority (“URCA”) pursuant to section 99 of the Communications Act, 2009:

WHEREAS section 80 of the Communications Act, 2009 provides:

- “(1) URCA shall issue a consultation and make a determination on number portability.*
- (2) Licensees shall provide, to the extent technically feasible, operator to operator number portability when required to do so in accordance with the requirements prescribed by URCA so that subscribers who have been allocated a telephone number or telephone numbers may retain that number or those numbers when switching to the carriage services of an alternative licensee ...”; and,*

WHEREAS on 15th April 2011, URCA issued a consultation on Number Portability by way of its consultation document “Number Portability for The Bahamas” (ECS 08/2011) and subsequently issued its Statement of Results” (ECS 20/2011) on 16th November 2011 mandating that Number Portability for mobile communications be implemented and operational in time for the introduction of competition in mobile communications in The Bahamas;

WHEREAS on 3rd August 2012 URCA issued its Final Determination on the Implementation of Number Portability in the Bahamas (ECS 21/2012);

WHEREAS on 29th October 2013 URCA issued its Second Final Determination implementing Fixed Number Portability (FNP) in the Bahamas, ECS15/2013 (the “Second FNP Determination”);

WHEREAS on 3rd December 2015, FNP was implemented in The Bahamas pursuant and in accordance with URCA’s Second FNP Determination;

WHEREAS competition in the mobile sector commenced with the granting of a second mobile licence to NewCo2015 Limited (NewCo) by the Government of the Bahamas;

WHEREAS URCA appointed a joint regulator/industry working group, the Mobile Number Portability Working Group (the MNPWG) to consider and make recommendations to URCA on various matters pertaining to the implementation of Mobile Number Portability in The Bahamas;

WHEREAS the MNPWG conducted deliberations on various matters relating to Mobile Number Portability implementation and reached agreement on various matters, and URCA has considered those deliberations, matters and the accommodations reached;

WHEREAS URCA, having implemented FNP in 2013 considers that certain aspects of the FNP system require refinement or the implementation of additional regulatory measures in order to achieve the electronic communications policy objectives and proposes to incorporate such refinements and additional measures together with the implementation of MNP; and

NOW URCA, having reviewed and considered recommendations made and deliberations taken by the MNPWG, and representations made by Bahamas Telecommunications Company Limited (BTC) and NewCo makes the following Determination pursuant to section 80 of the Communications Act, 2009 and in accordance with section 99 of the Communications Act, 2009:

1. Readiness and Launch Date for Mobile Number Portability

Every licensee providing mobile voice services to the public in The Bahamas shall, from 14 February 2017, ensure that customers of mobile voice service have access to Number Portability for mobile voice services (“MNP”) on any island within The Bahamas where mobile voice services are available from more than one licensee. Every such licensee must ensure that it has installed and tested the required systems and processes for the implementation of MNP by no later than 10 February 2017.

2. Licensee Obligations for MNP Implementation

Every licensee providing mobile voice services in The Bahamas shall use its best efforts to undertake and complete all tasks required to implement MNP in The Bahamas in accordance with the timeframes set out in paragraph 1 of this Preliminary Determination (“Readiness and Launch Date for Mobile Number Portability”), including but not limited to the following:

a. Establishment of the Number Portability Administration Service

Every licensee required to implement and provide MNP shall execute and comply with the NPAS Agreement between all LNP operators and Porting Access BV (the “LNP Service Provider”), and shall ensure the timely integration of the Number Portability Administration Service (NPAS) provided by the LNP Service Provider with their networks, and the implementation of the URCA Local (Fixed & Mobile) Number Portability Ordering Process Specifications appended as Annex A to this

Determination (the “LNP Business Rules”) in accordance with the NPAS Agreement.

b. Network Connectivity and Processes

Each licensee required to provide MNP shall:

- i. Establish and maintain robust and diverse connectivity with the NP Service Provider servers;\
- ii. Establish and maintain secure and robust facilities to allow customers to validate their porting requests by sending SMS validation messages via the Donor network to the NPAS and to enable the NPAS to send porting process progress update SMS messages to the customer via the Donor network;
- iii. Implement “Loop Back” protection into their core networks;
- iv. Establish processes for weekly checking and maintaining synchronisation of their local routing infrastructure and databases with the databases maintained by the LNP Service Provider; and,
- v. Provide onward routing of international incoming traffic to the correct terminating network on a non-discriminatory basis.

c. Testing

Each licensee required to provide MNP shall carefully plan, rigorously execute and collaborate with other stakeholders, in accordance with the testing schedule established by URCA and appended hereto at ANNEX B – MNP Testing Schedule, and otherwise as directed by URCA having regard to the timeframes for MNP implementation set out in Paragraph 1 above:

- i. Inter-operator testing readiness collaboration;
- ii. Acceptance testing for the NP Administration Service;
- iii. Internal and inter-operator porting testing;
- iv. Internal and inter-operator routing testing;
- v. Testing of All Call Query (ACQ) live traffic migration to ensure seamless traffic migration with minimal disruption to normal traffic and service delivery; and
- vi. Inter-operator testing of the End-to-End NP process.

3. LNP Business Rules

Every licensee required to provide MNP shall fully comply with the LNP Business Rules in respect of all MNP transactions.

The LNP Business Rules shall also apply to all Fixed Number Portability (FNP) transactions, and shall in this regard supersede and replace the FNP Business Rules issued in accordance with the Second FNP Determination. Every licensee required to provide FNP pursuant to the Second FNP Determination shall fully comply with the LNP Business Rules.

4. Public Awareness

- a. During the period commencing with URCA's public announcement of the launch date for MNP until such time as URCA directs licensees otherwise in writing, no licensee required to provide MNP shall conduct any marketing or publicity relating to MNP, or make any public comments relating to MNP save in accordance with b. below.
- b. A licensee shall ensure that its marketing and any publicity issued by or on behalf of the licensee is consistent in all material aspects with the Public Awareness Guidance developed by URCA in coordination with the MNPWG.

In connection with this Preliminary Determination, URCA also intends to issue the attached draft Order.

Persons interested in the matters above are invited to make representations to URCA in writing, which must be received no later than 10 January 2017. Representations should be submitted to:

The Director of Electronic Communications,
URCA,
Frederick House,
Frederick Street,
P.O. Box N-4860
Nassau, The Bahamas

Email: info@urcabahamas.bs

Fax: 242.393.0237

URCA will consider and deliberate on any representations received, before making its final Determination.

A handwritten signature in purple ink, appearing to read "Bereaux", is positioned above a horizontal line.

Stephen Bereaux
Director of Electronic Communications

6 Draft Order

This Order is issued by the Utilities Regulation and Competition Authority (“URCA”) pursuant to section 95 of the Communications Act, 2009 (Comms Act) concurrently with URCA’s Determination on the Implementation of Mobile Number Portability (MNP) in The Bahamas.

WHEREAS by Final Determination made on XX XXXX 2017 (the MNP Determination), URCA has made certain determinations providing various regulatory decisions and principles in respect of the implementation of Mobile Number Portability (MNP) in The Bahamas pursuant to section 80 of the Communications Act and in accordance with Section 95 of the Comms Act, and the amendment of the Fixed Number Portability (FNP) processes in The Bahamas.

NOW IT IS HEREBY ORDERED that:

1. Readiness and Launch Date for Mobile Number Portability

Each of BTC and NewCo shall, from 14 February, 2017, ensure that the customers of mobile voice service have access to Number Portability for cellular mobile voice services (“MNP”) on any island within The Bahamas where cellular mobile voice services are available from more than one licensee. Each of BTC and NewCo must ensure that it has installed and tested the required systems and processes for the implementation of MNP by no later than 10 February, 2017.

2. Licensee Obligations for MNP Implementation

Each of BTC and NewCo shall use its best efforts to undertake and complete all tasks required to implement MNP in The Bahamas in accordance with the timeframes set out in paragraph 1 of this Order (“Readiness and Launch Date for Mobile Number Portability”), including but not limited to the following:

a. Establishment of the Number Portability Administration Service

Ensure the update the NPAS to support the operation of the mobile NP service and timely integration of the NP Administration Service with their networks and the implementation of the LNP Business Rules; in accordance with the NPAS Agreement; and, as directed by URCA from time to time.

b. Network Connectivity and Processes

Establish and maintain robust and diverse connectivity with the NP Service Provider servers, including without limitation;

- i. Secure and robust facilities to allow customers to validate their porting requests by sending SMS validation messages via the Donor network to the NPAS and to enable the NPAS to send porting process progress update SMS messages to the customer via the Donor network;
- ii. Implement “Loop Back” protection into their core networks;
- iii. Establish processes for weekly checking and maintaining synchronisation of their local routing infrastructure and databases with the databases maintained by the NP Service Provider; and,
- iv. Provide onward routing of international incoming traffic to the correct terminating network on a non-discriminatory basis.

c. Testing

Carefully plan, rigorously execute and collaborate with each other, the NP Service Provider and URCA, in accordance with the testing schedule established by URCA and appended at ANNEX B – MNP Testing Schedule to the MNP Determination, and otherwise as directed by URCA having regard to the timeframes for MNP implementation set out in paragraph 1 of this Order:

- i. Inter-operator testing readiness collaboration;
- ii. Acceptance testing for the NP Administration Service;
- iii. Internal and inter-operator porting testing;
- iv. Internal and inter-operator routing testing;
- v. Testing of All Call Query (ACQ) live traffic migration to ensure seamless traffic migration with minimal disruption to normal traffic and service delivery; and
- vi. Inter-operator testing of the End-to-End NP process.

3. NP Service Provider Licence

BTC and NewCo shall use the services of the NP Service Provider licensed by URCA for the implementation of Mobile NP.

4. LNP Business Rules

BTC and NewCo shall fully comply with the LNP Business Rules appended as ANNEX A – LNP Business Rules to the MNP Determination in respect of all Mobile (and Fixed) NP transactions.

5. Public Awareness

- a. During the period commencing with URCA’s public announcement of Mobile NP (** December 2016) until such time as URCA directs otherwise in writing, neither BTC nor NewCo shall conduct any marketing or publicity relating to Mobile NP, or make any public comments relating to Fixed NP beyond the simple restatement of URCA’s public awareness messages.
- b. BTC and NewCo shall each ensure that its marketing and any publicity issued by or on behalf of the licensee is consistent in all material aspects with the Public Awareness Guidance developed by URCA.

6. Penalties for Breach of this Order

- a. Failure by any Licensee to comply with this Order or any part thereof may result in a fine not exceeding ten percent of the Licensee’s relevant turnover or any other penalty determined by URCA in accordance with section 109 of the Comms Act.
- b. Without prejudice to the generality of the foregoing, a licensee who repeatedly commits any of the specific contraventions of the LNP Business Rules set out in the Table below, shall attract a fixed penalty based on the delay or harm caused to any port because of the licensee’s breach, calculated in accordance with the following formulae:

Breach resulting in Port Failure

Penalty = ADRPU x 5 x Number of Days Delay

Breach resulting in Port Delay

Penalty = ADRPU x 30

Where, ADRPU is the Average Daily Revenue Per User for the relevant service (i.e. fixed or cellular mobile) across all operators.

	Contravention of LNP Business Rules
1.	Failure to submit a porting request on behalf of each qualified requesting customer
2.	Submitting a porting request without customer consent on an approved and completed porting request form
3.	Donor modification of the account status of a customer after the customer has sent a validation SMS to the NPAS
4.	Donor modification of the account status of a customer after receiving a porting request in respect of their number (except for terminating account in the case of a successful port)
5.	Failure to incorporate broadcast messages from the NPAS into the local routing database immediately and automatically
6.	Failure to route customer validation messages according to the NPAS and porting progress update messages from the NPAS to the customer
7.	Failure to keep local routing database synchronized with the central NPAS database
8.	Failure to adhere to incoming international SMS routing directive
9.	Failure to permit customers to send free SMS to the NPAS at the assigned short code (7PORT/ 77678) unless entire account is barred
10.	Donor failure to submit a porting approval response, or delay beyond the permitted interval after transmission of the porting approval request

11.	Rejection of a porting approval request without citing a true and permitted basis
12.	Donor contacting a porting customer prior to completion of the porting process
13.	Recipient failure to send porting deactivation request, or delay beyond the permitted interval
14.	Donor failure to deactivate a ported number, or delay beyond the permitted interval
15.	Failure to submit porting approval requests as and when initially generated

Stephen Bereaux
Director of Electronic Communications

ANNEX A – LNP Business Rules

(Separate document)

ANNEX B – MNP Testing Schedule

MNP Testing/ Technical Activity	Start Date	Finish Date
Development of Routing Test Specification & Schedule	09 September 2016	09 December 2016
Exchange of Testing Resources	09 September 2016	09 December 2016
Porting XS deliver test NPC for assessment	21 November 2016	06 December 2016
Operators complete acceptance testing of test NPC	06 December 2016	16 December 2016
Operators complete connectivity with main & back-up sites, including SMSC connections	09 September 2016	02 December 2016
Porting XS deliver NPC training	23 November 2016	09 December 2016
Operator Internal Porting Testing	06 December 2016	13 January 2017
Inter-Operator Porting Testing	16 January 2017	27 January 2017
Porting Testing Sign-Off	27 January 2017	27 January 2017
Routing Testing Readiness - Deadline	24 November 2016	06 January 2017

Operator Internal Routing Testing - Test Traffic	01 November 2016	06 January 2017
Inter-Operator Routing Testing - Test Traffic	09 January 2017	27 January 2017
Complete ACQ Migration readiness preparations	03 January 2017	27 January 2017
ACQ Live Traffic Migration	27 January 2017	29 January 2017
Routing Testing - Live Traffic	30 January 2017	03 February 2017
Routing Testing Sign-Off	03 February 2017	06 February 2017
End-2-End Testing	30 January 2017	10 February 2017
Readiness to Launch MNP Service	10 February 2017	13 February 2017

