



Statement of Results, Final Determination & Order

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

ECS 1 /2017

Issue Date – 17 February, 2017

UTILITIES REGULATION & COMPETITION AUTHORITY

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1 Introduction

This document constitutes the Utilities Regulation and Competition Authority's (URCA) Statement of Results, Final Determination and Order on the Implementation of Mobile Number Portability in the Bahamas.

1.1 Background to this Document

On December 14, 2016 URCA issued its Preliminary Determination on the Implementation of Mobile Number Portability in The Bahamas pursuant to Section 80 of the Communications Act, 2009 [ECS 40/2016] (hereinafter referred to as "the Preliminary Determination"). The Preliminary Determination incorporated the Local Number portability Business Rules ("the LNP Business Rules") and outlined URCA's preliminary views and proposals relative to the launching of Mobile Number Portability (MNP) in the Bahamas.

The Preliminary Determination provided an opportunity for stakeholders to submit written comments to URCA whether in response to the contents of the Preliminary Determination or the annexed LNP Business Rules.

In particular, in the Preliminary Determination URCA highlighted some of the key recommendations made by the Mobile Number Portability Working Group (MNPWG) which comprised of representatives from URCA as well as each licensee licensed to provide cellular mobile services in the Bahamas, namely The Bahamas Telecommunication Company Ltd (BTC) and NewCo (now incorporated as "Be Aliv" and hereinafter referred to as "Aliv"). URCA then set out its:

1. Rationale for a determination on MNP which included the matters for determination, having regard to the deliberations of the MNPWG;
2. URCA's Preliminary Determination and Draft Order; and
3. The Draft LNP Business Rules.

1.2 Responses to the Consultation

The original closing date for the receipt by URCA of responses to the Preliminary Determination was 21 January 2017. This was subsequently extended in the case of BTC, to 31 January 2017.

URCA thanks the respondents for their written submissions and participation in the consultation process. The participation by all respondents was useful and constructive. Copies of all responses and written submissions may be downloaded from URCA's website at www.urbahamas.bs.

Having reviewed and considered the responses from BTC, Aliv and CBL, URCA now provides in this Statement of Results its comments on the responses received and its final decision on the key issues raised.

URCA's lack of response to a particular comment and/or proposal should not be taken to mean that URCA agrees with the comment, has not considered the comment or that it considers the comment unimportant or without merit.

1.3 Structure of the Remainder of this Document

The remainder of this document is structured as follows:

- Section 2 - CBL's, Aliv's and BTC's Responses to the Preliminary Determination and URCA's responses thereto; and
- Section 3 - Final Determination and Order

2 Responses to the Preliminary Determination

In this section URCA summarizes the comments received from respondents to the Preliminary Determination and provides its position in relation thereto.

2.1 General Comments

CBL/SRG

CBL/SRG noted that the LNP Business Rules now apply to both Fixed and Mobile NP, and highlighted that while the obligation on FNP providers to comply with the LNP Business Rules was clearly set out within the body of the Preliminary Determination, the same was not included in the Draft Order. CBL/SRG also welcomed the introduction of penalties to be levied against operators that delay or otherwise frustrate ports.

ALIV

ALIV stated that it looks forward to a timely launch of MNP and welcomes URCA's active participation in the development of the MNP scheme. ALIV notes that the LNP Business Rules as appended to the Preliminary Determination improved upon other previous versions of the Rules which were discussed within the MNPWG.

BTC

BTC expressed the view that the MNP implementation process deviated from the usual processes undertaken by a regulator and focused more on abridging the implementation time period for MNP, resulting in Licensees involved in the process having to discuss issues, implement technical solutions and consult simultaneously.

URCA's Comments

URCA notes CBL's comments and has amended that Order to reflect the fact the LNP Business Rules apply to both Fixed and Mobile Number Portability.

URCA shares Aliv's anticipation of a timely launch of MNP and thanks Aliv for its comment relating to the progress made on the improvement of the LNP Business Rules.

URCA disagrees with BTC that the MNP implementation process deviated from URCA's usual processes. URCA notes that the MNPWG met and/or held extensive communications, correspondence and discussions throughout the process and that URCA has adequately provided for consultation with the issuance of its Preliminary Determination prior to the making of any decisions. URCA reminds BTC that the process undertaken was exactly the same as that used for the implementation of FNP, in which BTC participated. URCA avers that the nature of NP is that it is impossible for the regulator to take a purely documentary approach to implementation because of the extent to which it involves interworking

between licensees, and the extent to which the necessary activities by licensees encompass all parts of the licensee's business.

URCA also considers that the objective of timely implementation is a valid and reasonable one having regard to the previous work done and decisions made in relation to MNP in The Bahamas. BTC is reminded that URCA mandated in its First Determination on Fixed Number Portability in the Bahamas [ECS 21/2012], that MNP be implemented and operational in time for the introduction of competition in mobile communications in the Bahamas. Additionally in its Second Final Determination on the Implementation of Fixed Number Portability in the Bahamas [ESC 15/2013], URCA required that the solution implemented for FNP must be technically compatible and adequately robust and scalable to be implemented for MNP. Therefore it was clear from offset URCA intended that the implementation of MNP would be carried out in an efficient and timely manner. This, URCA contends is consistent with the ECS policy objectives, the Government's ECS Policy, and is in the best interests of the public in The Bahamas.

2.2 MNP Launch Date

ALIV

Aliv noted its preference that the launch date should have been available since December at the time ALIV started its commercial operations. Aliv further emphasized the importance of MNP being available and fully functioning by the launch date. Moreover, Aliv suggested that URCA should consider levying penalties on any operator that does not complete the required steps and processes outlined in the Preliminary Determination prior to the launch date.

BTC

BTC did not make any comments regarding the launch date for MNP.

URCA's Comments

URCA thanks Aliv for its comment. URCA notes that while Aliv expressed the importance of MNP being fully functional by the MNP launch date, neither Aliv nor BTC confirmed or assured their readiness to meet the URCA proposed MNP service launch date of 14 February 2017, in their responses to the Preliminary Determination.

In an advice submitted to URCA on 8 February 2017, Laurasia Associates, the URCA appointed advisor to the MNPWG, advised that based on their latest assessment of both BTC's and Aliv's readiness, neither operator is in a position to support the URCA proposed MNP launch date of 14 February 2017. Based on that advice, Laurasia was asked to conduct further readiness assessments during the week commencing on 13 February 2017 which investigations disclosed that both BTC and Aliv had significant work remaining before MNP could be launched with an acceptable degree of confidence in its success.

On the basis of Laurasia's advice, URCA considered it clear that both operators had failed to adequately and effectively plan and prepare for MNP implementation, and to ensure that the persons assigned by both BTC and Aliv as representatives on the MNPWG were in a position to properly and accurately report

progress. URCA expressed its concern and disappointment in this regard to the operators, and required both BTC and Aliv to assess their own readiness based on the schedule of activities and testing required to successfully implement MNP, and to submit their readiness dates to URCA in writing, signed by an authorized officer of the company. Both BTC and Aliv submitted their proposed readiness dates to URCA on 15 February 2017.

Based on the responses received from BTC and Aliv, URCA now considers it infeasible for MNP to be launched in The Bahamas before 14 April 2017, and out of an abundance of caution and having regard to the Easter holiday, URCA has determined that it would be appropriate to set the launch date for MNP for 25 April 2017, in order to allow for the remaining critical activities to be carried out by both operators and for an appropriate buffer to address any further failures by either operator.

2.3 Mobile Porting Timescale

ALIV

Aliv raised concerns related to the two hour timeframe for the completion of porting requests and noted that the starting time for the two hour period differs in the Preliminary Determination and the LNP Business Rules. In comparing the provisions in both documents, Aliv stressed the need for clarity as to both the start and ending time of the two hour period. Additionally, while Aliv notes that the two-hour porting period is welcomed when compared to the original one day period previously discussed by the MNPWG, Aliv urges URCA to review the turnaround time to determine whether it can be shortened, once the new process has become familiar to operators. Aliv reiterated its position that the rules and treatment for pre-paid and post-paid subscribers requesting porting ought to be different.

BTC

In noting the two hour timeframes within which the porting process must be completed, BTC stated that the timeframes provided in the LNP Business Rules are unrealistic and will undoubtedly lead to the issuance of penalties to all licensees in a untested process. BTC compared the two hour porting timeframe stipulated in the LNP business rules to those in some stated other jurisdictions ranging from five days to two days. BTC recommends that a gradual reduction in porting speed is a practical and fair approach and more particularly suggests that at the outset a two day limit be set with a gradual decrease to six (6) hours after one year of the implementation of LNP. BTC is of the view that such an approach would give URCA an opportunity to compile more information regarding the appropriate timeframes and the opportunity to revisit the mobile porting timeframes.

URCA's Comments

URCA disagrees with Aliv's comments that there is a discrepancy between the two hour porting period as set out in the LNP Business Rules and the Preliminary Determination. In response to Aliv's comment however, and for the purpose of clarity, the relevant section of the LNP Business Rules at paragraph 3.1.13 has been amended to read *"The total time for completion of the defined stages involved in the NPC managed porting process (i.e. from the point the NPC passes the validated porting request to the Donor*

network for approval to the sending of the Routing Update(E184) Broadcast Message by the NPC to all networks) of a) a single mobile number shall not exceed two (2) working hours;...” . URCA considers that this amendment clarifies any ambiguity as to when the two (2) hour time period starts and ends.

In relation to BTC’s comments, URCA does not agree that the two (2) hour timeframe is unrealistic and considers it to be entirely reasonable, provided that all licensees adopt an appropriately committed approach to MNP. URCA further considers that a longer timeframe would unnecessarily and inappropriately disadvantage and inconvenience customers. URCA stresses that mobile customers are accustomed to and entitled to service within a very short timeframe and considers there to be no justifiable reason why MNP should result in a less satisfactory customer experience by making the customer wait days to port their number. URCA considers that this would represent an unnecessary and unacceptable barrier to switching, which is contrary to the ECS policy objectives. URCA notes that BTC may face challenges however URCA considers that appropriate systems and training would alleviate these challenges in all except a few isolated and justified cases, which can be addressed appropriately through the LNP Business Rules. Additionally, URCA advises that no decision has been made with regard to the fixed penalties at this time however URCA is currently considering delaying implementation of the penalties as they relate to MNP for a period of at least the first six months of the MNP implementation.

2.4 Documentation

ALIV

In its comments Aliv expressed its position that it is unnecessarily onerous to require pre-pay customers to provide identification and that the identification be retained for six months. It further puts forward the suggestion that this requirement be reviewed after a period of time to determine its usefulness.

BTC

BTC noted the type of identification document required under the LNP business rules and stated that many of the forms of identification are hand written in some jurisdictions and as such, operators in the Bahamas would be unable to test the validity and legitimacy of the documents. BTC recommended that the photo identification should be restricted to a valid passport only.

URCA’s Comments

URCA notes both BTC and Aliv comments in relation to the required identification documentation.

In relation to Aliv’s comments, URCA disagrees that it is onerous to require identification from pre-paid customers. It is URCA’s view that such a requirement will assist in minimizing any fraudulent activities on the part of the customer. URCA also, without making any decision on this issue, has significant concerns regarding the creation and encouragement of an environment in which communications transactions can routinely be carried out without proper identification.

With respect to BTC’s comments, URCA agrees that there may be difficulty in verifying the legitimacy of internationally issued documents. As such, URCA has determined that for non-Bahamian nationals, the

acceptable form of identification will be restricted to a valid passport. Bahamian and residents may use any officially recognized form of Bahamian photo identification which at the time of issuance of this document includes a voter's card, drivers licence or permit, new style national insurance card or passport. This change is reflected in the LNP Business Rules annexed hereto.

2.5 Penalties

URCA thanks both Aliv and BTC for their comments relative to the proposed fixed penalties scheme. URCA does not reproduce or summarize those comments in this document as URCA considers that it will not address the issue of penalties in this Final Determination. Rather, URCA intends to utilize the full 30 day consultation period to properly consider and fully respond to the comments made by both BTC and Aliv to this aspect of the Preliminary Determination. At this time, therefore, a decision on penalties is expected to be issued in mid-March.

2.6 Detailed comments of the LNP Business Rules

Aliv

Aliv provides a list of comments on the Business Rules comprising of corrections to typographical errors, inconsistencies and clarifications relating to the porting process and in particular the inconsistencies between the NACK codes used by Porting XS and the codes contained in the LNP Business Rules.

URCA's Comments

URCA notes Aliv's comments and have addressed these issues by amendment within the LNP Business Rules annexed hereto.

2.7 Porting Hours, Batch Processing and Batch Limits

BTC

In relation to the fixed timeframes for the porting window and Donor Operator's response time, BTC noted the difference between the operating hours of the Recipient Operator and the Donor Operator. BTC is of the view that setting the timeframes outside of the Donor Operator's working hours would create a delay and result in the Donor Operator's inability to comply with the LNP Business Rules. BTC suggest that the processing of porting transactions fall within the standard working hours of 9:00am to 5:00pm. Further BTC recommends that the fixed timeframes for the porting window and Donor Operator response should be replaced with a response within 24 hours on the next porting working day. Additionally BTC recommended that the processing of porting transactions and addressing porting problems and queries should fall within the standard working hours of 9am to 5pm.

Additionally BTC, in addressing the one (1) hour timeframe within which the Donor Operator is required to respond after receiving the Porting Approval Request and Porting Deactivation Request recommended

that the timeframe be extended to 24 hours on the next porting day in the event of any unforeseen challenges that the Donor Operator may experience the previous day or the time the response is due.

URCA’s Comments

URCA notes BTC’s comments. URCA considers that as both BTC and Aliv have implemented and will be operating fully automated mobile porting systems, then sub 2-hour porting timeframes should not be an issue. Experience from Jamaica and Trinidad & Tobago where mobile operators are using similar automated porting systems shows that sub 20 minute porting times are consistently achievable with Donor operators typically responding to requests within 1 minute or less

Additionally, URCA considers that the difference between the operating hours of the Recipient Operator and the Donor Operator has no bearing on the porting transactions since automated porting systems are available twenty-four hours a day. Moreover, and with respect to the handling of issues, URCA has allowed for porting issues to be dealt with outside of the 2 hour timeframe as Recipient Operator is not allowed to escalate within 24 hours of the fault.

As it relates to extending the 1 hour timeframe for response to Porting Approval/Deactivation Requests, URCA is of the view that such an extension is not warranted where the automated systems will ensure that the SLA is met.

2.8 General Considerations

BTC

BTC noted the obligation on the Recipient Operator to advise the subscriber to ascertain early termination penalties with the Donor Operator prior to signing the Porting Request Form as well the stipulation that early termination charges be paid by the subscriber to the donor Operator after the porting process has been completed. BTC seeks clarification as to how URCA intends to enforce these specific obligations and notes the absence of any penalties associated with failure to meet these obligations.

BTC further raises the issue of Subscribers being allowed to port their numbers without satisfying outstanding debt with the Donor Operator. BTC states that such a practice is not consistent with the porting rules in the region, namely Jamaica, Trinidad & Tobago nor the proposed rules in ECTEL. BTC is of the view that licensee’s businesses would be exposed to unnecessary financial risks especially considering that The Bahamas has no credit bureau to offer protection from unscrupulous subscribers. BTC suggests that subscribers be required to satisfy the terms of their contract prior to porting. In particular, BTC proposes that postpaid customers be allowed to port if their total billed and unbilled account balance is less than the deposit held by their current operator.

URCA’s Comments

URCA notes BTC’s comments. URCA considers that this issue is addressed by the use of the porting form which requires customers to acknowledge the debt provisions and obligations (i.e. early termination

obligations and payment of charges up to the point the port occurs). URCA reminds BTC that the Donor Operator or if necessary, URCA, can request sight of the porting form at any time.

In relation to the satisfaction of outstanding debt prior to porting, URCA maintains that such a requirement will act as a barrier to MNP. URCA reminds operators that the number issued to customers is not the property of the operator, but the property of the Government, and that the subscriber develops value in the number which is entirely unrelated to and not attributable to the operator from whom the subscriber obtains services. URCA also reminds operators that it is open to a customer to switch operators without porting their number, and in such cases the operators must implement effective methods of credit control and recovery. URCA therefore considers it inappropriate if through the implementation of MNP, operators are afforded an additional lever through which they can improve their credit control practices, by holding hostage a number which does not belong to the operator, and in fact which is more likely to be considered the property of the subscriber, who is the only entity who pays for the use of the number. The approach taken by URCA in this matter is also consistent with the approach taken after extensive consultation for Fixed Number Portability.

2.9 Recipient Operator Subscriber Handling and Initial Verification

BTC

BTC stated that the neither the Preliminary Determination nor the Business Rules specifically refer to any penalties for breaches of the pre-porting process, namely the obligation on the Recipient Operator to educate the subscriber and to provide the necessary information prior to porting.

BTC in referring to the obligation on subscribers to appoint the Recipient Operator as their agent for the purpose of porting their number from the Donor Operator and closing their account, seeks clarity as to how the Recipient Operator will satisfy a balance on account, which BTC submits is necessary to close the account.

URCA's Comments

URCA does not, within its proposed fixed penalty scheme, set out a specific penalty for failure to provide the required information and to educate the consumer prior to porting. URCA considers that the standard porting form contains the information required and by signing the same, the customer acknowledges being made aware of that information. Further, the proposed fixed penalties relate solely to impediments or delays within the porting system that results in frustrating a system of successful ports. The fixed penalty scheme in no way replaces URCA's general power to address, investigate and if necessary impose fines for any other breach.

Regarding the Recipient's Operator's role as the agent of the subscriber, URCA reminds BTC that the porting form gives the Recipient Operator a limited power of attorney and the customer acknowledges that they are responsible for settling outstanding account and any early termination charges with the Donor Operator after porting.

2.10 Non-personal Accounts

BTC

BTC recommended that in circumstances where a Donor Operator has reason to suspect that a porting request has been submitted fraudulently, and a request for information i.e., copies of the porting form and authorization letter has been made, that port should not be completed until the investigation is completed.

URCA's Comments

URCA disagrees with BTC in this regard. URCA sees no difficulty in the port being resent or reversed if it is proven to be inappropriate or unauthorized. The ID requirements requires operators to be vigilant at the outset of the porting process. In any event URCA considers that allowing the ports to wait until the completion of an investigation leaves room for abuse of such a provision where it would take nothing more than a suspicion to halt the porting of a number.

2.11 Win-Back

BTC

BTC recommends reducing the number of day prior to win –back from 60 days to 15 days. BTC states that a sixty (60) days period is too long having regard to the nature of mobile services and the customers' changing needs in response to offers and promotions.

URCA's Comments

URCA disagrees with BTC and considers that sixty (60) days is not unreasonable and is aligned with similar timeframes in other jurisdictions in the region, for example, Jamaica and ECTEL.

3 FINAL DETERMINATION

This is a Final 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), Be Aliv Limited (formerly NewCo) and Cable Bahamas Limited (CBL) 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 25 April 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 14 March 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 Final 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 FNP and 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 synchronization 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

- a. Every licensee required to provide FNP and MNP shall fully comply with the LNP Business Rules in respect of all FNP and MNP transactions.
- b. 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 Final Determination, URCA also issues the attached Order. Failure to comply with this Determination may result in URCA imposing sanctions in accordance with Part XVII of the Comms Act.

Dated this 17th day of February 2017



Stephen Bereaux

Acting CEO and Director of Electronic Communications

4 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 Final Determination on the Implementation of Mobile Number Portability (MNP) in The Bahamas.

WHEREAS by Final Determination made on 15 February 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 Aliv shall, from 25 April 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 14 April 2017.

2. Licensee Obligations for MNP Implementation

Each of BTC and Aliv 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 synchronization 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 **Error! Reference source not found.** 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

Every Licensee providing Fixed and Mobile Services shall use the services of the NP Service Provider licensed by URCA for the implementation of Mobile NP.

4. LNP Business Rules

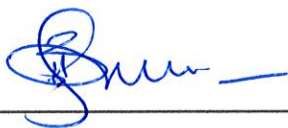
Every Licensee providing Fixed and Mobile Services shall fully comply with the LNP Business Rules appended as **Error! Reference source not found.** to the MNP Determination in respect of all Mobile (and Fixed) NP transactions.

5. Public Awareness

- a. During the period commencing with URCA's public announcement of Mobile NP (17 February 2017) until such time as URCA directs otherwise in writing, neither BTC nor Aliv 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 Aliv 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.

A failure by any Licensee to comply with this Order or any part thereof may result in a fine not exceeding ten per cent (10%) of the Licensee's relevant annual turnover or any other penalty determined by URCA in accordance with section 109 of the Comms Act.

Dated this 17th day of February 2017



Stephen Bereaux
Chief Executive Officer (Acting) and
Director of Electronic Communications

ANNEX A – LNP Business Rules (Separate document)

ANNEX B – MNP Testing Schedule

Porting Testing

Acceptance testing of the Porting XS NPC to be completed by 03 March 2017

Operators ready to start Inter-operator porting testing by 20 March 2017

Inter-operator porting testing to be completed by 31 March 2017

Porting Testing Sign-off to be completed by 03 April 2017

Routing Testing

Operators ready to start Inter-operator routing testing by 06 March 2017

ACQ Live Traffic Migration to be completed by 20 March 2017

Routing Testing Sign-off to be completed by 27 March 2017

End 2 End Testing

Operators ready to start Inter-operator End-2-End testing by 03 April 2017

End-2-End testing to be completed by 14 April 2017

Operators and Porting XS to cleanse porting and routing test data by 24 April 2017

MNP public service launch on 25 April 2017