



# **Number Portability for The Bahamas**

## **– Statement of Results**

**ECS 20/2011**

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**UTILITIES REGULATION & COMPETITION AUTHORITY**

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# Contents

1. Introduction.....	1
1.1 Public Consultation on Number Portability.....	2
1.2 Structure of this Document.....	3
2. General Responses .....	4
3. Responses to Consultation Questions.....	8
4. Conclusion and Next Steps .....	35
Schedule – Number Portability Working Group Terms of Reference .....	36

## 1. Introduction

Number portability (NP) is defined 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”*.<sup>1</sup>

The introduction of competition in the electronic communications sector is accompanied by the ability of users of electronic communications services to access new and/or existing services or to change the operator from whom they obtain services, which is intended to result in operators providing more and better services at cost reflective prices as they compete to attract customers. The Utilities Regulation and Competition Authority (“URCA”) recognises that the need to change telephone numbers when changing provider, location or service (and losing the identification and any goodwill invested in an existing number) presents a potential inconvenience and barrier to enabling persons to take advantage of the benefits of growing competition in electronic communication services. Those issues may be addressed by the introduction of NP.

NP is expected to deliver the following benefits:

- eliminates the cost and inconvenience of informing others of a number change;
- eliminates the need for callers to consult directory enquiries and/or change entries in their address books;
- lowers the cost of switching operator or service provider;
- results in more efficient allocation of limited numbering resources; and,
- results in a more level competitive environment with lowered barriers to entry and competition.

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<sup>1</sup>See section 2 of the Communications Act 2009 (“the Comms Act”).

## **1.1 Public Consultation on Number Portability**

URCA is required by section 80 of the Communications Act (Comms Act) to consult and make a determination on NP. As its initial step in the fulfilment of this requirement, on 15<sup>th</sup> April 2011, URCA issued a document for public consultation entitled “Number Portability for The Bahamas – Consultation Document” (ECS 8/2011).

The objectives of the consultation paper were to:

- outline URCA’s preliminary proposals on Number Portability; and
- invite comments from licensees and the general public.

The closing date for the receipt by URCA of responses to the consultation was 10<sup>th</sup> June 2011, which was extended at the request of a prospective respondent, to 24<sup>th</sup> June 2011.

By the closing date, URCA received responses from two companies:

- Bahamas Telecommunications Company Limited (BTC); and
- Cable Bahamas Ltd. (CBL) (CBL responded on behalf of itself and its affiliated companies Caribbean Crossings Ltd. and Systems Resource Group Limited).

Mindful of the significant impact of NP, and in order to ensure that the consultation process afforded parties the maximum opportunity to participate, URCA published the responses received on URCA’s website ([www.urbahamas.bs](http://www.urbahamas.bs)), and allowed a further period of two (2) weeks (up to 8<sup>th</sup> July 2011) for interested persons to provide further comments, including comments on the responses received.

On 30<sup>th</sup> June 2011, URCA received a response from IP Solutions International Ltd. (IPSI) to the Consultation Document. No other responses were received before the close of the period for responses to the Consultation Document.

URCA wishes to thank stakeholders for their comments and their commitment to continued involvement in URCA’s processes for the implementation of NP in The Bahamas.

Having reviewed and considered the responses from BTC, CBL and IPSI, URCA now provides, in this Statement of Results, its comments on the responses received and its proposed further action on each consultation issue.

## **1.2 Structure of this Document**

This document contains the following sections:

- Section 1: Introduction;
- Section 2: General Responses – Summary of the general responses made by respondents to the consultation, and URCA’s comments;
- Section 3: Responses to Consultation Questions – Summaries of the responses to each consultation question, and URCA’s comments and proposed further action.
- Section 4: Conclusion and Next Steps.

## **2. General Responses**

Each of the parties who responded to the consultation made general comments on the implementation of NP, as summarised below. URCA identifies and responds to these general comments in this section.

In the case where a particular comment mirrors the specific responses to a question posed by the consultation document, URCA's responses to the comment are made in its responses to that question in Section 3. URCA's lack of response to a general comment should not be taken to mean that URCA has not considered the comment or that it is unimportant or without merit.

### **BTC**

BTC supported the commencement of URCA's process regarding NP, noting that NP appropriately deployed would enhance competition within the electronic communications sector and therefore introduce cost savings to customers. BTC expressed the view that despite its technical and economic feasibility concerns the customer's experience would be further enhanced with the single number and personal mobility concept.

BTC cautioned, however, that although it embraces URCA's proposal to introduce the concept of NP, BTC is mindful of the fact that any proposal must be subject to technical and economic feasibility and introduced in a robust fashion. BTC advised that its expectation with regard to URCA's NP initiative, are that it will inevitably result in competition advancement and in the customer's experience being enhanced through choice and flexibility. BTC noted that the customer will be the principal beneficiary with the emergence of this added dimension in the evolution of the communications sectors.

### **CBL**

CBL commended URCA for its thorough assessment of the issues and options relevant to the implementation of NP, particularly service provider NP. CBL expressed the view that the efficient deployment of a suitable NP system for fixed telephony services is as important as the activation of interconnection agreements between other licensed operators and BTC. CBL indicated that it

considers it of critical importance for URCA to oversee the efficient roll-out of a pragmatic NP solution that will enable business and residential customers to switch from one fixed operator to another, without losing their phone number, before the end of 2011.

CBL argued that *“it is well established, based on the past experience of many other countries, that service provider NP, along with interconnection and access, is essential for the development of competition in the fixed telephony market.”* CBL argued that because of the importance of NP incumbent telephone companies have an incentive to resist the adoption and implementation of NP schemes, particularly in the early stages of market opening, and that URCA will therefore need to play a pro-active role to ensure that a pragmatic, efficient and effective NP solution is accepted and implemented by BTC without delay.

### **IPSI**

IPSI indicated that it agreed with URCA on the benefits that are expected from NP.

IPSI commended URCA on the survey conducted however it noted that the interpretation of the results in the absence of choice may be problematic.

IPSI indicated that while it supports NP and recognizes the advantages it is *“acutely aware of the major issues that many world class providers like AT&T experienced deploying NP.”* IPSI supported a detailed cost benefit analysis being undertaken which would enable the best assessment of whether a proposal is in the public interest or not. IPSI noted that the time to implement could vary from one year and six months to almost three years, with associated network costs being similarly varied.

### **URCA’s Comments and Proposed Further Action**

URCA notes the general support of all respondents for the implementation of NP in The Bahamas, with a focus on service provider NP, while also noting that significant differences remain in relation to the details of implementation.

BTC’s comments demonstrated a significant concern for the mechanics of NP implementation, with BTC throughout its comments, urging caution and careful deliberation by URCA to ensure

that in seeking to implement NP, URCA carefully considers the burdens that the implementation will place on service providers. BTC seems to prefer a single robust scalable solution which would suit both fixed and mobile NP.

BTC's comments can be contrasted with those of CBL which strongly advocated for a drive by URCA towards implementation of fixed NP as soon as possible and in any event by the end of 2011 using an onward routing solution. CBL's approach leaned toward treatment of fixed NP as an immediate necessity, almost regardless of the cost and other regulatory implications of the approaches that might be chosen in the interest of expediency. CBL therefore supported implementation of a quick solution for fixed NP, with the mobile NP solution (and any other matter which proved incapable of short term resolution) being deferred to later deliberations.

URCA notes that IPSI's approach was to support the implementation of NP while acknowledging the burdens and challenges that would undoubtedly accompany implementation.

URCA notes that the positions of the parties are unsurprising when reviewed against the background of their respective positions within the markets for electronic communications services in The Bahamas. URCA is of the view that the variances between the respondents' positions underscore both the importance and urgency of service provider NP in The Bahamas, and the need to ensure that the solution implemented is optimal for The Bahamas.

URCA, has already indicated and maintains the position that there remains no doubt that NP will bring real benefits to the electronic communications sector in The Bahamas, and that those benefits are essential to the development of competition. Indeed, this conclusion is supported by respondents to the consultation document and URCA's survey on number portability. Additionally, the benefits of NP have been examined by competent regulatory authorities in the US (FCC), Canada (CRTC), UK (Ofcom, the former UK telecommunications regulator), and OFTA (Hong Kong). In all instances it has been demonstrated that the benefits of portability outweigh the costs. Similar findings have been reached in the Cayman Islands, where the telecommunications regulator, ICTA, proceeded to implement number portability on the basis that the likely benefits would outweigh the likely costs of implementation. URCA has been unable to identify a single instance in which it has been demonstrated that the costs of portability outweigh its benefits. However, URCA accepts and underscores that pursuant to



section 5 of the Comms Act, in implementing NP in The Bahamas URCA must have due regard to the costs and implications of implementing NP and must ensure that the NP is implemented in a manner which will not impose a disproportionate burden on relevant providers.

### 3. Responses to Consultation Questions

Respondents were invited to and submitted responses to each individual question in the Consultation Document. Summaries of the responses to each question and URCA's comments and proposed further action are set out in this section.

#### Question #1

Do you agree with URCA's proposal to introduce service provider number portability for fixed communications services as soon as economically and technically feasible and, subject to further consultation with interested parties, for mobile communications services in time for the introduction of competition in mobile communications? If you disagree, please provide reasons.

#### BTC

BTC indicated that its view is that while a formal cost/benefit analysis is required to answer this question, it might be more cost effective to implement both fixed and mobile number portability at the same time. BTC, while noting URCA's statement that its *"broad objective is to achieve fixed number portability as quickly as possible ..."* a 2003 memorandum by Neustar personnel noted that *"Implementation of NP within a national telephony infrastructure entails potentially significant changes to numbering administration, network element signaling, call routing and processing, billing, service management, and other functions"*. On the basis of that statement, BTC cautioned URCA to consider carefully all options, prior to advancing a particular solution.

BTC also indicated that it agrees with the Neustar statement and notes that it has been advised that this is consistent with the experience of BTC's sister company in the Cayman Islands. BTC advances that the Cayman Islands experience highlights that every segment or department of operations would, in some way, be impacted by the implementation of Number Portability. BTC argues that this is why section 80(1) of the Comms Act requires URCA to consider number portability, and issue a determination on number portability as the rules for regulation in section

5 of the Comms Act would then come into effect, in particular the requirement that the regulatory measure introduced is efficient, proportionate for its purpose and introduced in a manner that is transparent, fair and non discriminatory (per section 5(c)).

In particular, BTC advises, the telephone number, traditionally a hierarchical physical routing address, must see its two functions separated, and must be transformed into a virtual address for dialing purposes separate from the network routing address. BTC argues that this represents a fundamental change in the basic use and administration of a telephone number and will not be a simple matter to implement.

BTC indicated its agreement with URCA that there are significant aspects of Mobile Number Portability which cannot be defined with any level of assurance until additional entrant(s) are in the market. BTC therefore stated that *"... it is agreed that MNP should be introduced when new entrants are in the market"*.

BTC's conclusion on this consultation question stated that *"BTC's conclusion is not that [Fixed Number Portability] can be introduced without reference to [Mobile Number Portability]. Bearing in mind that what could work on a fixed network might not be operable on a mobile network, BTC submits that it is important that URCA and operators minimize the chances for future duplication of effort and costs."* BTC continues *"Since Fixed Number Portability ... is projected to precede [Mobile Number Portability] there is the potential for [Fixed Number Portability] to be more costly, because the relevant costs can only be recovered from fixed line customers. It is worth contemplating introducing FNP and MNP at the same time in order to minimize the costs. In as much as URCA has taken the position that a formal cost/benefit analysis is not required, it is worth reconsidering the effect of how cost can be minimized for the industry and customers, generally."*

### **CBL**

CBL urged URCA to mandate the introduction of service provider NP for fixed communications services as soon as possible, and before the end of 2011. CBL stated that it considers short-term implementation of NP in The Bahamas not only possible using an Onward Routing technical

solution (see discussion under Question 5 for more details) but also a key element of the development of the fixed marketsegment.

CBL argued that given that the mobile market will remain in a monopolistic situation until at least 2015 and that NP is essential and urgent for the development of the fixed line market, it would be inappropriate to use operators' scarce resources, time and effort to define a NP solution adapted for the mobile market. CBL therefore believes that mobile NP should be discussed at a later stage.

### **IPSI**

IPSI agreed with URCA's proposal, while noting the difficulties in predicting the level of churn in the absence of choice, as attempted by URCA's survey.

### **URCA's Comments and Proposed Further Action**

URCA does not agree that a formal cost/benefit analysis is statutorily required, for the reasons stated in the Consultation Document which have not been disputed by BTC. As noted earlier, the benefits of portability have been examined by competent regulatory authorities around the world and in all instances it has been demonstrated that the benefits of portability outweigh the costs. URCA is unable to identify a single instance when this has not been the case. The clear evidence from URCA's survey on Number Portability demonstrate that there is a clear benefit both to competition and consumers to be gained from the introduction of Number Portability. Further, there is no statutory requirement for URCA to quantify the benefits of portability or any other regulatory measure. URCA agrees, however, that in making determinations in relation to NP URCA must have due regard to the costs and implications of the implementation of NP on the persons affected. URCA will therefore, in introducing measures to implement NP seek relevant information from parties on the applicable costs and implications, and aim to achieve a balance between the likely benefits to the ECS and the relevant costs and implications.

In relation to the specific question, on URCA's proposal for fixed NP to be implemented as soon as is economically and technically feasible, to be followed by mobile NP in time for the introduction of competition in that market, URCA notes BTC's suggestion that consideration be given to addressing fixed and mobile NP together, while maintaining that the prospective new

entrant(s) to the mobile market should have input to the solution to be implemented for mobile NP. URCA's proposed approach would seek to ensure fixed NP as soon as practicable while laying the foundation for successful mobile NP. BTC proposed that URCA start deliberations now, but delay fixed NP until after competition is introduced in the mobile market, so that fixed and mobile NP can be introduced together. URCA notes with concern that this would delay the implementation of fixed NP for a period of at least three years, the effect of which URCA considers may undermine the benefits of fixed telephony competition in The Bahamas.

In contrast to BTC's approach, CBL proposes a complete focus on fixed NP now with the issues relevant to mobile NP being addressed only when competition in that market is introduced. CBL supports this approach with the contention that fixed NP by the end of 2011 is both a possibility and a necessary target. URCA notes that the absolute volume of numbers in the mobile market exceeds that in the fixed market by a factor of almost 3 to 1. As such, although research demonstrates that the percentage of fixed porting (number of fixed ports against total fixed subscriptions) is often greater than that applicable to mobile porting<sup>2</sup> the absolute porting volumes relevant to mobile NP may significantly impact the relevant costs per port. Further, the implementation of a fixed NP solution, followed by the later introduction of a (possibly different) mobile NP solution resulting in either two totally separate technical solutions or the need to migrate fixed porting to a new platform, appears to involve certain inefficiencies which may be inconsistent with the principles set out in section 5 of the Comms Act.

URCA does not accept that the establishment of an absolute target for fixed NP of the end of 2011 is appropriate at this stage, as the assumptions made by CBL in proposing that target as feasible may require URCA to act in an arbitrary manner in certain respects. URCA is required by section 5 of the Comms Act to have regard to the costs and implications of NP. The process for doing so requires that URCA obtain information regarding those costs and implications, and that URCA engage with affected stakeholders prior to making its decisions. CBL's proposal would prejudice the required information gathering and consultation, as it is unlikely that URCA would

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<sup>2</sup>See CEPT Electronic Communications Committee (ECC) Report 155 – *“Number Portability Efficiency; Impact and Analysis of Certain Aspects in Article 30.4 of the Universal Service Directive and General Remarks on NP Efficiency”*

have adequate time to both collect the information, and to consult adequately, before making the necessary decisions to achieve the proposed timeline. CBL has suggested certain ways in which URCA could resolve this difficulty. Firstly, CBL proposes that URCA should adopt a *pragmatic and easy-to-implement* technical solution (onward routing) because it is the quickest and least disadvantageous solution to implement. In addition, if necessary to achieve the timeline CBL calls upon URCA to:

- set prices based on international benchmarks, or a relevant proxy, so as not to be delayed by the costing of NP (see response to Question 11); and,
- use an interim bilateral clearinghouse/database solution if necessary to achieve the timelines, though CBL acknowledges that a centralised solution is most appropriate (see CBL's response to Question 7).

Notwithstanding the foregoing however, URCA agrees that there are substantial benefits to be gained through fixed NP, and that implementation should not unduly be delayed. URCA also accepts that if necessary URCA may have cause to adopt some of the measures proposed by CBL to reduce the time taken to implement NP (for example the use of appropriate benchmarks). However, in such an instance URCA would still be required to adopt the proper process. URCA cannot endorse an approach which does not have due regard to the costs and implications to affected parties. URCA is concerned that CBL's proposal may have a limited adverse effect on CBL (as it is currently a fixed only operator) but might be prejudicial to BTC which would have to facilitate mobile NP at the appropriate time. URCA is of the view that to adopt a course which may have such an outcome without specific discussion with interested parties and a proper consideration of the relevant costs and implications would be discriminatory.

URCA notes IPSI's comments regarding the usefulness of the survey conducted by URCA, in light of the current absence of real alternatives to BTC's telephony services. URCA clarifies that the purpose of the survey was not to predict the likely churn in a competitive market, but to gauge the public interest in service provider NP. URCA believes that the survey has provided useful results and achieved its purpose.

Having considered the parties' comments, URCA remains of the view that it would be beneficial for fixed service provider NP to be implemented in The Bahamas as soon as is practicable, and that the stage should be set at that time for implementation of mobile NP, concurrent with the introduction of competition in that market. Submissions by all respondents have underscored and reinforced URCA's views that there are real and significant benefits to be gained from service provider NP and that while there are costs and implications to implementation, these are wholly expected and accepted as necessary by operators, subject to URCA exercising appropriate judgment regarding the choice of solution.

URCA believes that while there are aspects of mobile NP which will of necessity have to await the input of new entrants, BTC is in a position to advocate for a solution which will ultimately work for its own mobile network, and sufficient international expertise is available for URCA to ensure that the interests of a potential new entrant are not unduly prejudiced by that operator having to adapt to whatever solution is chosen. URCA consider that the preferable solution for fixed NP would be robust, scalable, readily adaptable for mobile NP use, and achievable in the shortest practicable time.

To that end, URCA's way forward on this issue is as follows:

- URCA shall mandate that service provider NP for fixed communications services be implemented and operational as soon as economically and technically feasible, having regard to all the relevant circumstances.
- URCA shall mandate that service provider NP for mobile communications be implemented and operational in time for the introduction of competition in mobile communications. Accordingly, the solution implemented for fixed NP must be technically compatible and adequately robust and scalable to be implemented for mobile NP.
- URCA will appoint a joint regulator/industry working group, the Number Portability Working Group (NPWG) to consider issues relating to the implementation of NP in The Bahamas. The NPWG will have as its initial deliverable the review of all material information and the recommendation to URCA of an appropriate solution or

appropriate solutions to achieve the above objectives, as well as the appropriate timeframes and work plans that should be undertaken, following which, URCA will make a determination on the detailed way forward for service provider NP in The Bahamas. See Section 4 for further details on the NPWG.

**Question #2**

Do you agree that location portability should be mandated at the Local Charging Area level?  
If you disagree, please provide reasons.

**BTC**

BTC's position is that Location Portability should be mandated at the Local Charging Area only after a technical assessment of the ability of the companies to provide the service.

**CBL**

CBL agrees that location portability should be mandated at the local charging level.

**IPSI**

IPSI agreed with URCA's proposal.

**URCA's Comments and Proposed Further Action**

URCA notes that BTC is the only respondent which qualified its agreement with URCA's proposal. While URCA accepts that the implementation of location portability within a Local Charging Area may require adjustments to a provider's network, URCA considers that it should be for any operator which resists implementation to prove to URCA's satisfaction that same is not technically feasible and continues to be unfeasible, having regard to the network changes that URCA is aware are ongoing in network technologies both available and implemented in The Bahamas.



URCA's has therefore reached the following conclusions:

- URCA shall mandate that location (geographic) portability within any Local Charging Area (that is, any area situated on a single Island in The Bahamas and in which calls between numbers on the operator's network are free, or charged at a flat, per call rate) be implemented for all operators in The Bahamas within six months of URCA's determination on this issue.
- An operator which cannot comply with this requirement shall be required to prove to URCA's reasonable satisfaction by the implementation deadline and every six months thereafter (until implemented), that it is technically not feasible to implement location portability within a local charging area on its network.

**Question #3**

Do you agree with URCA's proposal that number portability at the National level should be left to the discretion of the Operator and subject only to the Operator's ability to satisfy URCA that the user will be able to identify the charges for calls to ported numbers? If you disagree, please provide reasons.

URCA noted in respect of this question that there seemed to be a lack of clarity among some respondents as to the scope of the portability referred to in the wording of the question itself, and URCA apologises for any inconvenience caused. URCA confirms that the question referred to geographic or location portability at the national level, that is, the ability for a customer (without changing type of service or service provider) to move from one Local Charging Area within The Bahamas to another (most often from one island to another) while retaining their telephone number. URCA's response below treats with the responses to this question accordingly.

## **BTC**

BTC does not agree with URCA's proposal. BTC noted that even such an apparently "internal" transaction could affect the design of inter-operator number portability or affect other operators. BTC cited as examples the impact of allowing a customer to port a number from one operator who does not offer national portability to a second who does, and then to port back to the first operator after having moved their number out of the local calling area while with the second operator. BTC felt that these matters should be left to the NPWG to consider.

## **CBL**

CBL indicated that it does not consider location portability at the national level to be a pressing issue for The Bahamas at this time.

## **IPSI**

IPSI disagreed with URCA's proposal to allow the Operator to choose the deployment of number portability at the National level.<sup>3</sup>

## **URCA's Comments and Proposed Further Action**

URCA notes that BTC objected to location portability at the National level being left to the discretion of the operator on the grounds that such portability requires detailed rules for implementation, in order to address certain inter-operator issues which may arise in certain readily foreseeable circumstances. URCA considers that BTC's objections do not present an obstacle to making location portability available nationally in The Bahamas, but merely to the need to establish clear provisions governing the implementation of such portability.

URCA notes that neither CBL nor IPSI expressly objected to URCA's proposal, and therefore, URCA's determination on this issue will permit location portability at the National level subject

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<sup>3</sup>URCA notes from IPSI's response to this question that it may have been unclear to IPSI that the reference was to location portability at a National level, and not to service provider portability.

to the requirement that the operator be required to prove that National location portability will not result in a lack of clarity with regard to call charges and to satisfy URCA that provisions are in place to address any other inter-operator issues that may arise.

**Question #4**

Do you agree with URCA's proposal not to introduce the porting of numbers between fixed and mobile communications services at this time? If you disagree, please provide reasons.

**BTC**

BTC agreed with URCA's proposal.

**CBL**

CBL agreed with URCA's proposal. CBL reiterated, as stated in relation to question 1, that mobile NP should be discussed at a later stage, and that the current focus should be on fixed NP.

**IPSI**

IPSI agreed with URCA's proposal.

**URCA's Comments and Proposed Further Action**

All respondents agreed with URCA's proposal and therefore URCA's determination will prohibit service portability (that is, porting between different services such as mobile and fixed).

**Question #5**

Which of the methods of service provider number portability would be most suitable for implementation in The Bahamas?

## **BTC**

BTC indicated that in its view it is premature to say which method of service provider number portability is most suitable for implementation in The Bahamas and that this determination should be made by the NPWG. BTC referred to URCA's analysis of the various methods available and, noting that the All Calls Query (ACQ) method using a centralized database is the most commonly deployed and is a superior approach, argued that the NPWG would be best equipped to make recommendations for the most suitable technical solution.

## **CBL**

CBL proposed that "for the purpose of realising a pragmatic and easy-to-implement solution, onward routing is the preferred short to medium term solution for fixed NP and should be implemented as soon as possible in The Bahamas. CBL argued that onward routing is more efficient and straightforward than call forwarding.

CBL noted that onward routing consists of a simple transit service whereby the original number range holder's network onward routes a call to a ported number directly to the recipient network. CBL contrasted this with call forwarding in which the recipient number must use a shadow number rather than the original Calling Line Identifier (CLI).

CBL also highlighted the possibility that an operator, through optimising internal routing on their own networks, could avoid unnecessary tromboning by using an on-net all calls query approach, which would ensure that calls to numbers that had been ported on to their networks are routed directly rather than tromboning via the Donor network. CBL felt that introduction of these mechanisms on a voluntary basis could increase efficiency, but URCA should not allow such optimisation to be used as an excuse to delay implementation.

## **IPSI**

IPSI suggested that the ACQ model should be implemented because it is highly efficient and scalable. IPSI noted that *"the majority of the established and upcoming mobile NP solutions across the world are based on the ACQ/CDB [centralised database]method of call routing."*

### **URCA's Comments and Proposed Further Action**

URCA notes that BTC declined to propose a specific solution, although its submission seemed to indicate a general preference for an ACQ solution with a centralised database (CDB). Such a solution was also supported by IPSI.

URCA notes that CBL proposed an onward routing solution, which proposal was premised upon CBL's (absolute) assertion that fixed service provider NP must be implemented by the end of 2011. URCA has rejected this absolute assertion as being inconsistent with the principles set out in section 5 of the Comms Act, further, notwithstanding the UK example of onward routing implementation, URCA's research and considerations have not disclosed any jurisdiction in which onward routing has been considered to be a preferred solution, except on an interim basis. While URCA appreciates CBL's reasoning behind its proposal for onward routing on an interim basis, URCA is concerned that such a solution may result in only a modest improvement in delivery time, while necessitating significant additional effort to develop a sustainable long term solution.

URCA considers that the selection of a solution would have to be based on detailed discussions of the advantages and disadvantages of the possible solutions in the context of the likely porting volumes (for both fixed and mobile NP) the likely time to implement the proposed solutions, and the required ready date for mobile NP. URCA is of the view that these discussions would best be undertaken by the NPWG. URCA stresses, however, that reference to the NPWG should not be seen as an opportunity to delay the implementation of NP, and to that end, clear and concrete timelines for the NPWG's deliberations have been established and mechanisms put in place for URCA to make decisions along the way, should the NP not make timely recommendations on any issue.

Accordingly, URCA considers that further consultation on this matter is appropriate and URCA refers the matter to the NPWG to deliberate and make recommendations to URCA.

#### **Question #6**

In the event that call forwarding is not considered an appropriate long-term solution, would it be appropriate, having regard to the stated desire for number portability to be implemented as soon as possible, to implement number portability using call forwarding as an interim solution?

#### **BTC**

BTC disagreed with the use of call forwarding as an interim solution, and argued that call forwarding is a *“disappointing, inferior solution for delivering number portability in both the long term and as an interim solution.”* BTC noted that an interim solution for number portability can only be implemented with reference to the implementation date for the long term solution stating that *“until there is a reasonable understanding of how long it will take to implement FNP properly, one cannot implement call forwarding, because it is meant to be a temporary solution”*.

BTC argued against the implementation of call forwarding as an interim solution based also on the potential costs, noting that it is conceivable that at the same time resources are being invested in call forwarding, resources will also have to be invested in the long term solution, and added that implementation of a short term solution would deplete resources available to invest in the long term solution, thereby running the risk that both solutions would be implemented poorly. BTC considered such expenditure to be disproportionate and inconsistent with section 5 of the Comms Act.

BTC endorsed the disadvantages of call forwarding identified in the Consultation Document noting in addition that:

- decisions would have to be made in relation to porting of numbers without Calling Line Identification (CLI), and other issues relating to caller ID delivery;
- technical solutions to facilitate billing of international calls to ported/forwarded numbers would have to be worked out; and

- call forwarding would result in calls to ported numbers being subject to a worse service after porting than before due to the inherent limitations.

BTC referred to those countries which originally implemented call forwarding solutions as an interim solution, noting that this solution has fallen into dis-use.

Finally, BTC argued that the use of call forwarding for number portability was inconsistent with section 79(2)(c) of the Comms Act, in that it represented an inefficient use of numbering resources.

### **CBL**

CBL indicated that it considered that onward routing should be implemented rather than call forwarding.

### **IPSI**

IPSI disagreed with URCA's proposal and suggested that this issue be part of the NPWG's terms of reference.

### **URCA's Comments and Proposed Further Action**

URCA notes the comments made, and considers that the issues to be considered are closely aligned with the issues to be considered in respect of question 6. Accordingly, URCA considers that further consultation on this matter is appropriate, and URCA refers the matter to the NPWG to deliberate and make recommendations to URCA.

**Question #7**

Do you agree with URCA's analysis and proposal that the issue of whether a clearinghouse should be established locally, outsourced to an external third party, or in partnership with regional regulators and operators in other Caribbean jurisdictions, should be considered and recommended by the NPWG? If you disagree, please provide reasons.

**BTC**

BTC considered this to be a commercially driven decision, and expressed uncertainty that a mandate determining who can own the database and where it can be located, would achieve URCA's objectives. BTC advanced that the important issue should be that a competent database vendor (whoever, and wherever situated) provide the services.

**CBL**

CBL indicated a preference for a clearing house solution where there are more than two operators in the market, but argued that if this would delay implementation beyond the end of 2011, a bilateral solution should be implemented as a fallback.

CBL also indicated agreement that the NPWG should make recommendations to URCA regarding operational implementation of the clearing house.

**IPSI**

IPSI agreed with URCA's proposal.

**URCA's Comments and Proposed Further Action**

URCA notes that BTC is of the view that this is not an issue on which a determination by URCA is needed, however, URCA considers it is necessary because there are policy decisions in relation to regional cooperation, data integrity, and costs, which might be impacted by the location of the database.



URCA also notes CBL's position, which follows from its support of onward routing, that a bilateral approach might be appropriate where there are only two operators in the market, or also if a database approach cannot be achieved by CBL's proposed 2011 deadline. URCA has already indicated that it will not make decisions relating to NP based on an unduly rigid and unfeasible deadline which might result in URCA giving inadequate consideration to the relevant costs and implications of URCA's decisions.

In any event, URCA believes that this decision is also closely aligned with the decisions to be made under questions 5 and 6, and that therefore further consultation under the auspices of the NPWG is appropriate. Accordingly, URCA refers the matter to the NPWG to deliberate and make recommendations to URCA.

**Question #8**

Do you agree that service provider number portability in The Bahamas should be Recipient initiated? If you disagree, please provide reasons.

**BTC**

BTC noted that it was common for the porting process to be recipient led, but did not agree or disagree with the proposal noting only that BTC's position was that whether the process is donor or recipient led, the customers' instructions to port should be fulfilled in the agreed timeframe.

**CBL**

CBL supports URCA's position that service provider NP in The Bahamas should be Recipient initiated.

**IPSI**

IPSI agreed with URCA's proposal.

### **URCA's Comments and Proposed Further Action**

URCA notes that other than BTC (which did not express an opinion), all respondents agreed with URCA's proposal. URCA's determination will therefore mandate that service provider NP should be Recipient initiated.

#### **Question #9**

Do you agree with URCA's proposal to prohibit the Donor from contacting the customer for retention purposes for a period of at least two (2) years following the introduction of service provider number portability?

#### **BTC**

BTC indicated that it finds URCA's proposal unacceptable. BTC is of the view that URCA's proposal is "*egregious*". BTC indicated uncertainty as to whether URCA's reference to the Donor is to the original Donor or to any Donor operator, since a customer can port multiple times from operator A to B then onward etc. BTC recognizes that winback should be prohibited during the porting process and in some instances for a period of weeks thereafter.

BTC notes that URCA's proposal is very specific to the Donor, yet it notes that in a robust Fixed Number Portability environment all operators will receive the information that the number has been ported to another network, and BTC questioned whether this meant that the customer could port to another operator, but not to the original one. BTC felt that as all operators were trying to compete on quality, service and price and that customers have the option to avail themselves of the best service for them, to prohibit the original Donor from trying to winback a customer denies the customer the opportunity of a greater choice.

#### **CBL**

CBL agreed with URCA's proposal to prohibit the Donor from contacting the customer for retention purposes from the moment that the porting request is initiated and during a period of

two years following the introduction of service provider number portability. CBL also urged URCA to look at the issue of contract lock-in as well as winback to avoid the locking in of customers prior to the introduction of NP.

### **IPSI**

IPSI agreed with URCA's proposal.

### **URCA's Comments and Proposed Further Action**

URCA notes and has considered BTC's strong disagreement with URCA's proposal, however, URCA still believes that some restrictions on winback may be appropriate, particularly in the early stages of NP and competition generally.

URCA does not agree that the consumer would necessarily be denied the ability to access the benefits of competition because the proposed restriction would not have prevented the consumer porting back to the original operator, it would merely prevent the operator from harassing the customer in attempts to winback the business, and from offering anti-competitive inducements (if the operator had the requisite market power). BTC's other objections relate to matters which should be capable of resolution through appropriate provisions in any detailed determination by URCA. URCA clarifies that the proposed restriction would refer to any operator away from whom the customer had ported during the restricted period. URCA reiterates that the proposed restriction would not prevent customers from coming back should they be dissatisfied (relatively or absolutely) with their new provider. It would merely prevent the operator from making winback communications.

URCA's proposal anticipated that after the restricted period (2 years from the introduction of Number Portability) has elapsed, URCA would review the appropriateness of the restriction.

URCA notes the agreement of the other respondents to its proposal, and notes CBL's comment regarding contract lock-in. URCA considers that matter to be outside the ambit of Number Portability, but notes that it is addressed to some extent in the Individual Operating Licences, and may also be considered by URCA in relation to other Consumer Obligations.

In any event, URCA's research indicates that the approach has varied across the countries that have implemented Number Portability and that there are various details to be discussed in relation to winback as well as several possible models for any restriction. URCA considers that this issue would benefit from further deliberation by the NPWG. Therefore, although URCA considers based on its review of the responses to this question that some level of restriction on "winback" is appropriate, the issue of the actual provisions to be applied is one which would benefit from further discussion by the NPWG. URCA will refer this matter to the NPWG for its further consideration and recommendations to URCA.

**Question #10**

Do you agree that maximum timeframes for service provider porting should be implemented and mandated by URCA, and that the NPWG should be tasked with making recommendations to URCA on those timeframes? If you disagree, please provide reasons.

**BTC**

BTC noted that for porting benefits to be delivered uniformly there must be agreement on a definitive porting timeframe, and that a maximum timeframe for porting can then be extrapolated from the definitive porting timeframe to allow for exceptional circumstances. BTC felt, however, that porting timeframes depend on a number of factors internal to operators which URCA is not likely to fully know, BTC agreed that the NPWG would be best placed to make this recommendation to URCA.

**CBL**

CBL interpreted the question as being applicable to two different timeframes: (i) the time for the industry to implement NP via an onward routing solution; and (ii) the average or maximum

time that it takes for the Donor and Recipient operators to verify and execute a customer's service change and porting request, and addressed both issues in its response.<sup>4</sup>

In relation to the time to implement a NP solution via onward routing CBL argued that a NP solution can and should be operational before the end of 2011.

In relation to time to verify and execute a customer's service change and porting request, CBL urged URCA to establish average and maximum time periods for executing service provider portability.

CBL indicated that international benchmarks indicated that for residential customers an average of 2 days and a maximum period of 5 days are appropriate levels at which URCA should set the timeframes. CBL also added that it felt the maximum time for the Donor's response to a porting request should be 1 business day, in accordance with the timeframe established by the European Commission.

CBL acknowledged in relation to corporate customers that the complexity of the porting request might result in longer timeframes, on the basis of the more complex needs of a corporate customer who often have groups of access lines and telephone numbers. CBL proposed that the timeframes for such porting should be more flexible and based on agreement between the operators and the customer.

CBL agreed that the detail of these matters should be left to the NPWG.

### **IPSI**

IPSI agreed with URCA's proposal.

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<sup>4</sup>URCA confirms that the second interpretation is the correct one for this question, which URCA submits was clear from the question and the detailed discussion which preceded the question.

## **URCA's Comments and Proposed Further Action**

URCA notes that all respondents agreed with URCA's proposal, and therefore URCA refers the matter to the NPWG to deliberate and make recommendations to URCA.

### **Question #11**

Do you agree with URCA's proposal that the relevant principles for cost recovery should be cost causation, relevant cost, cost minimisation, reciprocity, effective competition, practicability, and distribution of benefits? If you disagree, please provide reasons.

### **BTC**

BTC indicated that it agrees that the principles for cost recovery should include cost causation, relevant costs, and cost minimization, but that it has concerns about using the principles of reciprocity, effective competition, practicability and distribution of benefits as *"these are notoriously difficult to quantify and the tendency for regulators is to cause the operators to absorb a significant amount of these costs as benefits."* BTC cites Table 6 of the Consultation Document as demonstrating that regulators in Finland, France, the Netherlands and Sweden, have focussed on *"principles which can be quantified"*.

BTC indicated therefore that it is of the view that URCA's proposed principles for cost recovery *"is just a proposal since as indicated previously there are other legitimate options which are more practical in application."* BTC argued that discussion of the costing principles, or in any event, those that are contentious should be reserved for the study of the NPWG.

### **CBL**

CBL agreed with URCA's proposed principles for cost recovery. CBL also reiterated that negotiation over the appropriate charges should not be permitted to delay NP implementation. CBL suggested that if the relevant cost data are unavailable or in question, URCA should impose an interim solution based on international benchmarks.

CBL also set out its position on the recovery principles for the main cost items for NP identified by URCA in the consultation document.

### **IPSI**

IPSI agreed with URCA's proposal, but said that it would *"like to leave room for any other component that may arise."*

### **URCA's Comments and Proposed Further Action**

URCA notes the concerns raised by BTC and stresses that it has no desire to harm or impose a disproportionate burden on any particular operator or group of operators. URCA has a remit to encourage, promote, and enforce sustainable competition and promote overall customer interest. In the context of NP, URCA must also ensure that there is a level playing field across the entire sector for sustainable competition to flourish. It remains URCA's position that the cost recovery principles identified and discussed in the consultation paper can usefully guide a regulatory authority when determining cost recovery schemes. Indeed, these principles are well established and have been applied by respected and competent regulatory and competition authorities from around the world in various cost recovery schemes for indirect access, and number portability. URCA has also applied these principles in other regulatory proceedings in The Bahamas such as URCA's detailed review of BTC's proposed RAIO charges.<sup>5</sup> In all instances the principles have been applied in a fair, transparent and proportionate manner.

Further, URCA recognizes that not all the principles are equally applicable in all instances and some principles are not easily quantifiable as noted by BTC. However, URCA wishes to assure BTC that URCA will be guided by the relevant global experience in the application of these principles in regulatory proceedings. Having regard to the foregoing and after careful deliberation, URCA does not consider the arguments by BTC sufficient to alter URCA's proposal

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<sup>5</sup> See Section 4 "Obligations on Bahamas Telecommunications Company Ltd. Under s.116(3) of the Communications Act, 2009: Draft Reference Access and Interconnection Offer, Response to Public Consultation and Final Decision" - ECS 01/2011 issued 11 January 2011.

*“that the relevant principles for cost recovery should be cost causation, relevant cost, cost minimisation, reciprocity, effective competition, practicability, and distribution of benefits.”* Consequently, URCA will not refer the cost recovery principles for further study by the NPWG.

URCA welcomes and acknowledges CBL’s position on the recovery principles for the main cost items for NP identified by URCA in the consultation document. Given the importance of this matter to the successful implementation of NP, URCA believes that CBL’s proposal warrants further deliberation when the main cost items associated with the preferred technical solution for implementing NP have been identified and considered by the NPWG. In particular, CBL’s proposal that operators should be responsible for their own set-up costs (for example the internal costs incurred in modifying, setting up routing/business systems, porting administration functions/processes etc.) is one which URCA considers might be appropriate for The Bahamas. URCA’s preliminary view is that such costs should not be recoverable from other operators or customers. URCA also agrees at least in part with CBL’s suggestion that clearinghouse set-up costs should be shared amongst operators, though it looks forward to further input from the NPWG on the more precise details of such sharing arrangements.

Notwithstanding this, URCA has established the basic principles to be applied, but will refer the detailed consideration of specific items (as set out in CBL’s proposal) to the NPWG which will then make recommendations and proposals to URCA for consideration.

URCA’s way forward on this issue is therefore as follows:

- URCA shall mandate that the relevant principles of cost recovery should be cost causation, relevant cost, cost minimisation, reciprocity, effective competition, practicability, and distribution of benefits.
- The recovery principles for the main cost items associated with the preferred technical solution for NP have been referred to the NPWG which will make recommendations and proposals to URCA.



**Question #12**

Do you agree that detailed consideration of the actual costs and consideration of detailed mechanisms for cost recovery should be referred to the Number Portability Working Group which should make detailed recommendations to URCA consistent with the principles set out in the consultation document? If you disagree, please provide reasons.

**BTC**

BTC agreed that the consideration of the detailed costs and the mechanism for recovery should be referred to the NPWG.

**CBL**

CBL agreed that the NPWG should be tasked with studying the detailed mechanisms for cost recovery and providing URCA with recommendations. However, CBL reiterated that URCA should not permit costing matters to be used as an excuse to delay NP implementation which, CBL again argued, should be based on onward routing. In the case of delay CBL agreed that a *“pragmatic approach based on relevant proxy (such as RAI0 transit charge for onward routing transit) and relevant benchmarks should be used to set the price until a cost assessment can be completed.”*

**IPSI**

IPSI agreed with URCA's proposal.

**URCA's Comments and Proposed Further Action**

URCA welcomes the feedback from respondents on its proposal. As all respondents agreed with URCA's proposal, URCA refers the matter to the NPWG to deliberate and make recommendations to URCA.

URCA agrees with CBL that costing issues should not be used to delay and hinder the implementation of NP. However, URCA cannot agree to or offer meaningful comment on the

*“pragmatic approach”* set out in CBL’s response at this time. URCA considers that it would be premature for it to do so without full information and inputs from interested parties, which will be best achieved through deliberation on the issue by the NPWG.

**Question #13**

Do you agree with the appointment, the composition and the Terms of Reference of the Number Portability Working Group as proposed by URCA? If you disagree, please provide reasons.

**BTC**

BTC indicated that it considered URCA’s proposed framework for the NPWG acceptable. BTC suggested that URCA make explicit provisions for:

- the formation of and appointment of representatives to sub-committees;
- the protocol for raising issues and exchanging and documenting positions and recommendations;
- the establishment of rules regarding how the NPWG can resolve deadlock; and
- the providers to invite members of their organization to any meeting of the NPWG where that employee is an expert in the matter under discussion.

BTC also suggested that where deadlock is resolved by voting, care must be taken to ensure that the voting mechanism is equitable and does not disadvantage any stakeholder.

**CBL**

CBL expressed concerns regarding the terms of reference for the NPWG as proposed by URCA, as follows:

- CBL believes that the NPWG should be constituted immediately and have as its focus the implementation of a workable service provider NP solution before the end of 2011;

- CBL argued that URCA’s involvement and responsibilities within the NPWG should be more extensive than as currently described in the Terms of Reference, with CBL proposing that URCA should act as Mediator but should also be in a position to impose solutions and procedures instead of having to wait for recommendations. CBL stressed that the NPWG should act as an advisor to URCA as decision maker.
- CBL viewed the proposed timeframe for the NPWG’s action and report (6 months) as *“far too long and would result in further delay to the NP Launch date. The NPWG should be constituted immediately and URCA should establish critical milestones with a view to implementing an onward routing solution by the end of 2011.”*

CBL proposed the following as *“key principles”* which the *“members of the NPWG should consider and follow:*

- *Commitment – all parties commit to working towards a satisfactory conclusion;*
- *Compromise – all parties recognise that each cannot get everything they want;*
- *Co-operation – all parties agree that they must co-operate to implement an effective, efficient and economical solution; and*
- *Communication – all parties ensure that information necessary for them, individually and jointly, to take decisions is shared on a timely and appropriate basis.”*

### **IPSI**

IPSI agreed with URCA’s proposal, and indicated that it would be interested in participating in the NPWG.

### **URCA’s Comments and Proposed Further Action**

URCA notes general agreement by all respondents to URCA’s proposal for the formation of the NPWG. The Schedule to this document sets out the final provisions for the formation of the NPWG, including its detailed Terms of Reference.

URCA has noted the comments made by parties regarding URCA's role within the working group, and has therefore adjusted the proposed Terms of Reference to clarify that the NPWG is a consultative – and not a decision making - body, whose recommendations will be taken into account by URCA in arriving at its determination under section 80.

URCA also sought to ensure that the decision making process for the NPWG ensures URCA's ability to keep to the most expeditious timeframes reasonably possible for implementing Service Provider NP in The Bahamas. URCA repeats that it does not accept the suggestion by CBL that the NPWG should be tasked with a deadline of 31<sup>st</sup> December 2011 for the implementation of service provider NP.

URCA has, as reflected below, set certain timeframes which will ultimately depend on the decisions made by URCA, once it has received the NPWG's recommendations regarding the implementation of an interim solution and the appropriate technical solution for the final NP solution.

URCA notes CBL's proposed "principles" for the NPWG and while it hopes that those principles embody the spirit in which participants will approach the NPWG's deliberations, it does not consider it appropriate to put in place specific principles, though the Terms of Reference will be designed to ensure that the NPWG works efficiently. In this regard URCA notes that the NPWG is a consultative group which will assist URCA in making its decisions in relation to the implementation of NP in The Bahamas, and URCA considers that such cooperation is likely to result in a determination which best reflects the needs of all relevant parties. However, URCA cautions that, in the event that any party's cooperation is not forthcoming, URCA will not hesitate to make its determination without the benefit of such cooperation.

#### **4. Conclusion and Next Steps**

Interested persons will note that URCA has taken certain definitive positions arising out of the Consultation Document, but URCA has deferred several matters to be deliberated upon by a NPWG to be established as an outcome of this consultation. The NPWG will then make recommendations to URCA on those matters. The deliberations of the NPWG represent further consultation by URCA with the stakeholders who would be most involved in and affected by the implementation of NP.

The results of this consultation as well as the deliberations and recommendations of the NPWG, will eventually inform URCA's Determination on NP to be made in accordance with section 80 of the Comms Act. URCA expects that more than a single determination will be required to address the various matters relevant to NP in a timely and effective manner. Currently, URCA expects to make two determinations, though this may change as the process evolves through the deliberations and recommendations of the NPWG. Consistent with the process for making determinations set out in section 100 of the Comms Act, where a determination is necessary, URCA will publish a Preliminary Determination on Number Portability on which interested persons will have the opportunity to comment, before a final Determination is issued.

URCA therefore establishes the NPWG as a joint industry-regulator working group, to consider and make recommendations on matters relating to the implementation of Service Provider NP in The Bahamas. The Terms of Reference for the NPWG are contained in the Schedule to this Statement of Results.

The NPWG shall be chaired by a person appointed by URCA who shall be an employee of URCA, and other members shall be representative of stakeholders active in relevant markets within the electronic communications sector appointed by URCA in accordance with the guidelines set out in the Schedule. The NPWG shall deliberate on and make recommendations to URCA on the matters specified in the NPWG's Terms of Reference set out below. Actual appointments to the NPWG will be made by way of correspondence with those persons identified in the Terms of Reference as being entitled to make nominations.

## **Schedule – Number Portability Working Group Terms of Reference**

The Number Portability Working Group (NPWG) is a joint Regulator/Licensee working group established by URCA to consider issues related to the implementation of Service Provider Number Portability in The Bahamas in fixed and mobile electronic communications networks, and to make recommendations to URCA thereon.

The NPWG shall conduct investigations, research and enquiries, and shall accept input from stakeholders as appropriate and required for the making of its recommendations to URCA.

URCA may also, with the agreement of the NPWG, assign further matters to the NPWG in relation to the implementation of service provider NP in The Bahamas.

### **A. Formation of the NPWG**

- (1) URCA will establish the NPWG, which will be subject to URCA's general direction and jurisdiction.
- (2) The group shall be appointed by URCA as follows:
  - a. Two (2) "Licensee representatives" nominated by each holder of an Individual Operating Licence which has been assigned a block of numbers for the provision of telephony services by URCA (a "Licensee"), each of whom should have full power and authority to represent and vote on behalf of the Licensee in relation to the deliberations and recommendations of the NPWG.
  - b. No less than two (2) and no more than four (4) members of URCA's staff ("URCA representatives"), one of whom shall be appointed as the Chair of the NPWG.
  - c. Such other persons as URCA may consider necessary or appropriate based on their qualifications and expertise relevant to the implementation of number portability ("Technical Experts"). Technical Experts shall not be entitled to vote.

- d. Where two or more Licensees are affiliated, the group of Licensees shall be entitled to nominate a total of two Licensee representatives, who must be authorised to speak on behalf of all Licensees in the group.
- (3) Invitations to nominate participants in the NPWG will be sent by URCA to the relevant stakeholders. Where a stakeholder chooses not to participate, or not to take its full membership it may subsequently request inclusion in the NPWG by written request to URCA nominating its representatives.
  - (4) During the absence of the Chair for any reason, any URCA representative shall be designated by the NPWG or by URCA (in default of the NPWG doing so) to serve as the acting Chair.
  - (5) The NPWG may appoint subgroups to address any matter of NP implementation. A subgroup may be comprised of members of the NPWG as well as Technical Experts appointed under (5) below.
  - (6) A Licensee may from time to time by written request to the Chair, request that URCA appoint additional Technical Experts to participate in the NPWG's deliberations. Such Technical Experts:
    - a. May be employees of the Licensee or external consultants but must have specific knowledge and expertise relevant to the NPWG's deliberations.
    - b. May be appointed for a specific meeting or for deliberations on a particular aspect of NP implementation.
    - c. Shall be appointed solely at the discretion of URCA, which shall take in to account the extent to which any other Licensee should be given the opportunity to have appointed a Technical Expert with expertise equivalent to the Technical Expert appointed by another Licensee.

**B. Deliberations of the NPWG**

- (7) The NPWG shall meet as often as required to make recommendations to URCA on the matters within these Terms of Reference (as may be amended by URCA from time to time)

in an expeditious manner and in accordance with any timelines set by URCA, and in particular shall endeavour to meet once every two weeks until such time as initial recommendations are made by URCA as envisaged by paragraph (15) below.

(8) The NPWG may conduct its deliberations and decision making:

- a. At meetings, which may be held in person or via teleconference;
- b. By email between NPWG members, subject to procedures established by the NPWG; or,
- c. In any other unanimously agreed forum or manner.

(9) The date and time of meetings of the NPWG shall be determined either by prior decision at a properly convened meeting, or by the giving of at least one (1) week prior notice (or less by unanimous agreement) from the Chair, sent by email to all members.

(10) Any member may propose that any matter be addressed by way of “papers only”, that is the submission of written position papers to the NPWG for its consideration. Such consideration shall be subject to timeframes as agreed, which shall not be permitted to delay the deliberations of the NPWG beyond the timeframe set by URCA for the matter.

### **C. Decision Making**

#### Procedural and General Matters

(11) Decisions of the NPWG on procedural and general matters, including matters relating to the agenda of the group’s deliberations (including but not limited to the timing of ballots on recommendations), scheduling and format of meetings, formation of subgroups, and “papers only” deliberations, shall be made by vote requiring a simple majority of all persons present and voting, with the Chairman having a casting vote to resolve deadlocks.

(12) At least three fourths of the members of the NPWG, including at least three Licensee Representatives shall comprise a quorum for voting purposes on procedural and general matters.



## Recommendations to URCA

- (13) A decision of the NPWG to make a recommendation to URCA on any matter pertaining to NP shall be made by vote requiring a simple majority of all Licensee Representatives present and voting. For the avoidance of doubt, no URCA staff member shall vote (original or casting) on the adoption by the NPWG of any recommendation to URCA. At least three Licensee Representatives shall comprise a quorum for voting purposes on recommendations to URCA.
- (14) A vote on the making of a recommendation to URCA shall only be conducted subject to the giving of seven (7) days advance notice (or less by unanimous agreement) to all members of the NPWG, unless such notice has expressly been waived by all members of the NPWG. The notice shall specify the matter or matters on which the recommendation is to be made.
- (15) Any person who voted against a recommendation submitted to URCA may, within seven (7) days of the vote thereon, submit a "minority representation" to URCA. URCA will give due consideration to such minority representations within the context of the majority approval of the recommendation.
- (16) Where a resolution to make a recommendation to URCA results in a deadlock, the Chairman of the NPWG shall immediately, unless the time set by URCA for consideration of the matter has elapsed, move the NPWG to vote on whether or not to continue deliberation on the matter or to declare it deadlocked (which vote shall be procedural in nature). The decision to continue deliberation shall expressly include a specific time for further deliberation. The time for deliberation may not be extended for more than a cumulative period of fourteen (14) calendar days, or past the time provided by URCA for consideration of the matter, without the approval of URCA.
- (17) Where a vote on the making of a recommendation to URCA is declared by the NPWG to be deadlocked, the NPWG shall immediately notify URCA and deliberations on that matter shall be closed. Any Licensee represented in the NPWG may, within seven (7) days of the deadlocked vote make written representations to URCA on the specific issue on which the

NPWG is deadlocked, and URCA shall consider those representations in making its determination on the issue.

(18) Where the NPWG fails to make a recommendation to URCA on any matter within the time set by URCA for such recommendations, any licensee represented in the NPWG may within seven (7) days of the date on which the recommendation was due make written representations to URCA on the specific issue. URCA shall consider those representations in making its determination on the issue.

**D. Terms of Reference**

(19) Having reviewed the comments by stakeholders in response to URCA's Consultation Document on Number Portability issued on 15 April 2010, and having researched experiences with implementation of Number Portability in other jurisdictions, URCA considers that an appropriate target timeframe for implementing Number Portability in fixed networks in The Bahamas, would be no later than sixty four (64) weeks of the establishment of the NPWG (the "NP Implementation Target"). The NPWG shall propose a detailed work-plan for achievement of this outcome, having regard to the proposal contained in the Appendix, which shall be submitted to URCA with its initial recommendations within sixteen (16) weeks of its formation. URCA will seek to issue a determination establishing the NP Implementation Target and the work-plan for achievement thereof following its receipt of such recommendations, and may revise it at any time by determination. For the avoidance of doubt, the NP Implementation Target referred to in this document is indicative only, and subject to URCA's further deliberations having regard to the recommendations of the NPWG.

(20) The NPWG shall use its reasonable endeavours to achieve number portability by the NP Implementation Target.

(21) The NPWG shall consider and make recommendations to URCA on the following matters within the timeframes determined by URCA, which recommendations shall be considered by URCA in the making of any determinations on Number Portability made by URCA in accordance with section 80 of the Comms Act:

- a. The technical solution for service provider number portability for both fixed and mobile services to be implemented in The Bahamas. In considering this question, the NPWG shall have regard, inter alia, to:
  - i. The costs of implementing service provider NP;
  - ii. The likely volume of numbers which would be ported; and,
  - iii. The time to implement the proposed solution.
- b. The database solution to be implemented.
- c. The method of selection of the vendor (if appropriate) for any clearinghouse proposed, including preparation of detailed terms of reference and relevant specifications.
- d. The detailed costs of the implementation of number portability using the recommended technical solution.
- e. Having regard to the costing principles to be established by URCA, the detailed allocation of the costs of service provider NP using the recommended technical solution and the manner in and extent to which such costs may be recovered from customers.
- f. The administrative arrangements for the implementation of service provider NP in The Bahamas, including any necessary operator and customer documentation that would be required.
- g. The maximum and average timeframes for service provider porting, including as a minimum:
  - i. The time from the customer's request to change service provider and port a number, to the activation of service with the ported number on the new provider's network; and,
  - ii. The time from the Recipient network's initial communication regarding a porting request, to the response from the Donor network.

- h. Whether or not winback attempts should be restricted by URCA, and if so, to what extent.

(22) Subject to URCA's consideration of the recommendations made in its initial report, and in accordance with the Determination made by URCA, the NPWG may also be required by URCA to:

- a. Work with URCA in the coordination of the implementation of service provider NP.
- b. Formulate procedures and processes for URCA's approval and adoption, including but not limited to:
  - Authorisation and validation of customers, and customer requests for porting;
  - Treatment of requests for porting;
  - Assessment, allocation and recovery of costs;
  - Quality of service;
  - Porting settlement arrangements;
  - Test plans;
  - Time limits for activities;
  - Recovery of debts and fulfilment of other obligations;
  - Reasons for refusal of porting requests; and,
  - Collection and Publication of Number Portability Statistics.
- c. Prepare number portability guidance and procedures documentation for users and operators, for URCA's approval and issuance.

(23) URCA may at any time request that the NPWG consider any additional matter relating to NP which shall be appended to these Terms of Reference subject to the agreement of the NPWG (excluding the URCA representatives).

(24) URCA may at any time upon application by any licensee or the NPWG in its sole discretion amend the timeframe provided for the consideration of any matter or the doing of any thing by any person under these Terms of Reference.

## APPENDIX – NPWG DELIVERABLES

	Recommendations	Detailed Deliverables	Due Date (from NPWG formation) <sup>6</sup>
1.	Recommendations on Number Portability Solutions and Timelines	<ul style="list-style-type: none"> <li>i. Recommend solution for NP, suitable for both fixed and mobile networks, including:               <ul style="list-style-type: none"> <li>a. Network Routing Solution;</li> <li>b. Database solution, i.e. centralised or decentralised, local or outsourced;</li> <li>c. NP clearinghouse vendor selection approach.</li> </ul> </li> <li>ii. Recommend detailed work plan including timelines for future work streams, as follows:               <ul style="list-style-type: none"> <li>1. Detailed technical recommendations;</li> <li>2. NP clearinghouse vendor selection;</li> <li>3. Costing and cost recovery recommendations;</li> <li>4. Administrative procedural recommendations;</li> <li>5. Documentation recommendations;</li> <li>6. Implementation work plan and timeframes.</li> </ul> </li> </ul>	16 weeks
2.	NP Technical Recommendations	All relevant parameters for NP solution, as directed by URCA Determination.	[32 weeks]
3.	NP Costing and Pricing Recommendations	All relevant parameters for NP solution, as directed by URCA Determination.	[32 weeks]
4.	NP Administrative Recommendations	All relevant parameters for NP solution, as directed by URCA Determination.	[32 weeks]
5.	NP Documentation	Drafts of all relevant documentation for NP solution submitted to URCA.	[40 weeks]

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<sup>6</sup> Due dates in [square brackets] are proposed timeframes, subject to further determination by URCA having regard to the recommendations of the NPWG.

6.	NP Implementation (“NP Implementation Target”)	All required deliverables for implementation of NP solution as directed by URCA Determination.	[64 weeks]
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