

The Bahamas Telecommunications Company Ltd.

P. O. BOX N-3048 NASSAU, BAHAMAS

TEL: (242) 302-7000



October 18, 2013

Mr. Stephen Bereaux
Director Policy & Regulation
Utilities Regulation & Competition Authority
UBS Annex Building
East Bay Street
Nassau, Bahamas

Dear Mr. Bereaux,

Re: BTC's Submission on Tariffs for Local Number Portability

Pursuant to the URCA's Preliminary Determination on Tariffs for Local Number Portability: The Implementation of Fixed Number Portability in The Bahamas pursuant to Section 80 of the Communications Act, 2009 – ECS 11/2013 dated July 30th 2013, The Bahamas Telecommunications Company Limited (BTC) hereby submits its response.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Felicity L. Johnson', followed by a long horizontal line extending to the right.

Felicity L. Johnson
Senior Vice President, Legal & Regulatory
& Company Secretary

FLJ/ksw

Atch.

**The Bahamas Telecommunications Company
Limited**

Submission on:

Tariffs for Local Number Portability

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

ECS 11/2013

Legal & Regulatory Division

October 18, 2013

Developing cost-oriented LNP tariffs
A submission by BTC

1	EXECUTIVE SUMMARY	3
2	APPROACH	5
2.1	INTRODUCTION	5
2.2	SINGLE PORTS AND BULK PORTS	5
2.3	GEOGRAPHIC AND NON-GEOGRAPHIC NUMBERS	5
2.4	SUCCESSFUL AND UNSUCCESSFUL PORTS	6
3	BENCHMARKING	7
3.1	EUROPEAN UNION	7
3.2	CARIBBEAN	9
3.3	SUCCESSFUL AND UNSUCCESSFUL PORTS	10
3.4	SINGLE AND NUMBER BLOCK PORTS	10
3.5	CONCLUSION FOR BENCHMARK	11
4	COST MODELLING	12
4.1	COSTING METHODOLOGY	12
4.2	DESCRIPTION OF THE PORTING PROCESS	13
4.3	DETERMINING COST-ORIENTED TARIFFS	16
4.4	LNP TARIFFS IN THE BAHAMAS AND HOW THEY COMPARE WITH OTHER COUNTRIES	20

1 Executive Summary

BTC welcomes this opportunity to propose reciprocal tariffs for Local Number Portability (LNP), as part of the implementation of Fixed Number Portability in The Bahamas pursuant to Section 80 of the Communications Act, 2009.

As noted by URCA in its preliminary decision on this topic (ECS 11/2013) issued 30th July 2013, tariffs for LNP should be cost-oriented and reflect fully efficient business practices relevant to the provisioning of the service in The Bahamas. BTC has therefore designed a cost allocation approach where the projected incremental costs associated with the service are attributed to individual LNP services in a transparent and defensible manner. BTC has followed the instructions provided by URCA through ECS 11/2013 on the identification of relevant costs and as result the costs used in the development of LNP tariffs are largely personnel-related. As a consequence, the proposed LNP tariffs do not include any depreciation costs or a rate of return component.

In addition to this costing methodology, BTC has conducted a benchmarking exercise to further inform the decision on tariffs for LNP. This benchmarking exercise has revealed that there is a wide range of tariffs for this service in other markets, in all likelihood related to differences in methods of calculation, the extent to which processes are undertaken manually or automatically, and volumes of ports. Given this wide range found, BTC believes more weight should be given to costing information obtained from operators in the local market, as indeed appears URCA's intention in its preliminary decision on this topic.

BTC proposes to keep the tariff structure as simple as possible and to introduce three different one-off tariffs for LNP services, as follows:

	One-off charge per CLI (\$)
Unsuccessful ports	4.00
Successful single ports	14.00
Successful bulk ports	30.00

The three porting services require different levels of activity within BTC and a different tariff for each service for each service is therefore justifiable. In particular the single ports use an automated process, while the bulk ports depend on a manual process. BTC proposes that additional differentiation, for example for geographic and non-geographic numbers, is not necessary as these porting services are provided through identical processes.

BTC proposes to introduce these tariffs from the launch of the service in The Bahamas and to conduct a tariff review 6 months later. At that stage key assumptions, for example on volumes of ports, should be verifiable through actual operational data and adjustments can then be made, if necessary.

Developing cost-oriented LNP tariffs

A submission by BTC

BTC would welcome comments from URCA on the proposed methodology and resulting tariffs and we are of course available for further discussion as and when required.

BTC wishes to note that this submission is for fixed number portability only, and does not consider its comments or proposals here to be binding on any comments or proposals that it may wish to make for mobile number portability, as and when that service is introduced in The Bahamas.

2 Approach

2.1 Introduction

BTC has designed a methodology to estimate the costs associated with local number portability, consisting of a bottom-up estimate of resource requirements to support the process and a benchmark of the resulting unit cost estimates against experiences in other countries. BTC is of the view that it is important to rely where possible on experience in The Bahamas to ensure that the specific operational circumstances which drive efficiently incurred costs are appropriately captured. At the same time it is recognised that LNP is a new service to The Bahamas and international experience can be used to supplement local cost estimates to ensure they are not out of step with experience elsewhere.

BTC also proposes to introduce reciprocal maximum rates to allow operators with lower stated costs than the final tariffs to charge lower tariffs for LNP.

In order to be able to make robust estimates of the costs associated with LNP, BTC has first considered the various types of LNP requests, and how they will be dealt with. The various permutations considered by BTC include:

- Single ports and bulk ports. OLOs (Other Licensed Operators) may request single ports (i.e. a single number or CLI) or blocks of numbers. The latter are typically associated with enterprise customers.
- Geographic and non-geographic numbers. As agreed, OLOs may require porting of numbers from geographic and non-geographic numbering ranges
- Successful ports and failed or unsuccessful ports. BTC has considered whether different charges depending on the outcome of the porting process may be appropriate.

BTC proposes to keep the pricing structure as simple as possible and to only introduce separate tariffs for services if such variations can be justified on the grounds of cost differences.

2.2 Single ports and bulk ports

BTC proposes to have separate charges for single and bulk ports, on a per-CLI (Calling Line Identification) or per-number basis. The reason for this is that the process for single or individual ports is expected to be fully automated (with manual intervention to deal with exceptions), while the process for porting blocks of numbers is semi-manual and therefore puts increased demands on BTC resources.

2.3 Geographic and non-geographic numbers

BTC proposes a single tariff for both geographic and non-geographic numbers. While the volume of ports for non-geographic numbers is likely to be small, the process for both types of ports is identical, and there is therefore no need for the introduction of separate tariffs.

Developing cost-oriented LNP tariffs

A submission by BTC

2.4 Successful and unsuccessful ports

At this stage of the introduction of the service (i.e. pre-launch) it is difficult to estimate the proportion of porting requests that may fail validation. While generally speaking, BTC favours a tariff structure that is as simple as possible, BTC proposes to have separate tariffs for successful and unsuccessful porting requests. The inclusion of a separate charge for unsuccessful calls provides an appropriate incentive for participants to the porting process to ensure that the information they provide is accurate before the porting process begins, thus ensuring resources allocated to the process are efficiently utilised.

Experience in other countries with centralised databases shows that even with a computerised system, some manual intervention may be necessary to resolve porting requests rejected by the automatic processes. These ports are investigated by staff, and may be accepted or rejected, depending on the circumstances. Hence manual intervention may be necessary for both successful and unsuccessful ports, and these costs have to be reflected in the prices charged per port.

3 Benchmarking

In its Preliminary Determination on fixed number portability, URCA stated its willingness to base the charge per port on charges in comparable markets in the absence of local cost data (page 41). BTC has therefore carried out a benchmark of per port charges in the European Union and in the Caribbean region.

The data presented in this benchmark is for fixed number portability only. BTC considers the use of mobile number portability benchmarks inappropriate for setting tariffs for local fixed number portability. The process, systems used and service volumes are different for fixed and mobile number portability and it would therefore not be appropriate to use mobile number portability tariffs to set fixed number portability rates.

3.1 European Union

Number portability has been mandated in fixed networks in all the countries of the European Union under the Universal Service Directive, and has been in operation for a maximum of 17 years (United Kingdom) and a minimum of 5 (Bulgaria and Romania). With the notable exception of the United Kingdom, a centralised database solution has been implemented for both fixed and mobile number portability in EU all countries.

In most countries a per-port charge is made to the recipient operator, and we show this amount in Figure 1. This data is published by the European Union, and we have updated it to 2013 where possible.

Figure 1: Per port charge in the European Union in 2012/13 (USD)

	2012/13
Austria	29.42
Belgium	6.33
Bulgaria	12.42
Cyprus	22.37
Czech Republic	21.05
Finland	54.00
Greece	0.92
Hungary	7.04
Ireland	5.43
Italy	5.81
Latvia	11.67
Malta	4.66
Netherlands	2.70
Poland	8.35
Portugal	6.20
Romania	10.53
Spain	4.19
Sweden	2.39
Slovakia	67.49
UK	38.22
Average	16.06

Source: <https://ec.europa.eu/digital-agenda/en/news/electronic-communications-market-indicators/>
Exchange rate of 1 euro = 1.35 USD

In seven countries¹ a zero charge is made for ports, and these are not included in the table above. The zero charge is either because the national regulatory authority has decided not to implement such a charge, or because the operators consider that it is not worth raising a separate charge as the volumes of ports are similar from one operator to another. This is more likely to be the case in a market structure where operators of equal size (in terms of active numbers) compete with each other, a situation that does not exist in The Bahamas. In Germany a charge is made to the porting customer rather than to the recipient operator. The average per port charge is USD 16.

As the graph shows, there is wide variation in these per port charges, which range from over \$60 to under \$1. We expect that this range reflects differences in methods of calculation, the extent to which processes are undertaken manually or automatically, and volumes of ports. In some countries separate charges are made for geographic and non-geographic ports, and for single and number block ports. In

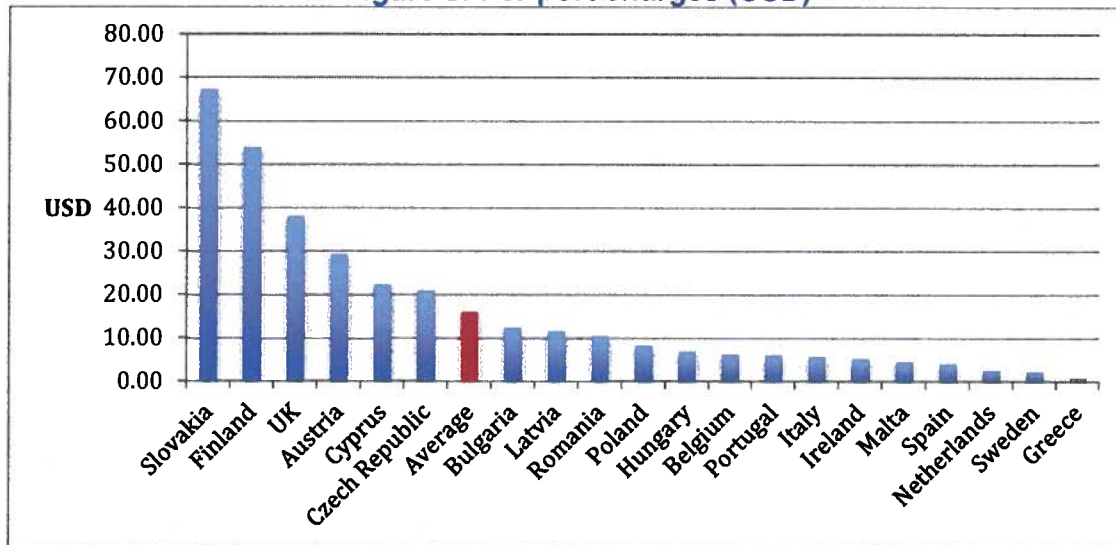
¹ Denmark, Estonia, France, Germany, Lithuania, Luxemburg and Slovenia.

Developing cost-oriented LNP tariffs

A submission by BTC

other countries they are bundled into a single average charge, again contributing to the wide range shown in the table above.

Figure 2: Per port charges (USD)



In some countries these charges are set by the national regulatory authority, and in others the per-port charge is set by the operators, but is subject to a constraint that they must be cost oriented.

We have correlated the price per port charge in the European Union with the average volume of ports and with the percentage of fixed lines that are being ported for 2011 and 2012. Our analysis shows that there is no significant relationship between the price per port and either variable. This appears a reasonable finding, particularly as in most of these countries large fixed investments related to IT systems and networks have been excluded from the calculations, as is the case in The Bahamas.

3.2 Caribbean

Number portability is under consideration in a number of countries in the English-speaking Caribbean, but in only two have charges for porting been decided. The position is summarised in Figure 3 below.

Developing cost-oriented LNP tariffs

A submission by BTC

Figure 3: Fixed number portability in the Caribbean

Jurisdiction	Fixed NP introduction	Per port charges
Bermuda	March 2014	USD 6
Cayman Islands	Feb 2012	CI 85 cents per month chargeable to all customers (USD 12.7 per year)* Recipient operator may charge porting customer CI \$10 (USD 12.4)*
ECTEL	Public consultation carried out in June 2011	
Jamaica	MNP in May 2014	Per port charges permitted, but not yet set
Trinidad and Tobago	Public consultation carried out in Sept 2012	Per port charges permitted, but not yet set
Turks and Caicos	Public consultation carried out in April 2012	Per port charges permitted, but not yet set

**We understand that these charges are not levied in practice*

Hence the only inter-operator per port charge is that set in Bermuda, at USD 6 per successful port, which will be introduced in 2014.

3.3 Successful and unsuccessful ports

In at least three countries a charge is also made for unsuccessful ports, as shown below:

Figure 4: Charges for successful and unsuccessful ports (USD)

Jurisdiction	Charge for successful ports	Charge for unsuccessful ports	Unsuccessful ports as % of successful ports
Bermuda	6.00	3.00	50%
Ireland	5.43	1.55	29%
Malta	4.66	1.62	35%
Average	5.36	2.06	38%

On average unsuccessful ports are charged at about 40% of the charge for successful ports.

3.4 Single and number block ports

In a number of countries, separate charges are made for single ports and for number block ports, which are used for businesses with multiple lines. These requests, which are less frequent than single ports, may depend on a manual system. In the table below one example is shown, from Ireland, where all charges vary according to the size of the number block being ported.

Figure 5: Per port charges in Ireland (USD)

Transaction Type – Per CLI	1 CLI	2-5 CLIs	6-30 CLIs	31-100 CLIs	101+ CLIs
Normal Hours Validated and Rejected	1.55	3.77	2.93	1.67	0.62
Normal Hours Completed	5.43	15.21	11.84	6.76	2.54
Outside Of Normal Hours Completed	8.14	22.82	17.75	10.14	3.81
Normal Hours Completed Deferred Port 2 HR	6.52	18.25	14.20	8.11	3.04
Outside Normal Hours Completed Deferred Port 2 HR	9.77	27.38	21.30	12.18	4.56
Normal Hours Completed Deferred Port 2 Day	7.60	21.30	16.56	9.46	3.55
Outside Normal Hours Completed Deferred Port 2 Day	11.41	31.95	24.85	14.20	5.32
Normal Hours Cancel	1.55	3.77	2.93	1.67	0.62
Normal Hours Emergency Cancel	5.43	15.21	11.84	6.76	2.54
Out of Normal Hours Emergency Cancel	8.14	22.82	17.75	10.14	3.81

Source: ComReg. Setting a maximum fixed and mobile number portability charge. Response to consultation and final specification. D01/09, 29 January 2009. Page 29

In Ireland the automated process deals only with single CLI ports, and multiple CLIs are handled manually (as proposed for The Bahamas). Hence multiple ports are charged at a higher rate per CLI than single ports.

3.5 Conclusion for benchmark

Clearly the benchmark shown in Figures 1 and 3 above show significant variations in per port charges, which reflect different processes, volumes and charging principles used in different countries. In order to provide some guidance to URCA on what would be a reasonable charge in The Bahamas based solely on benchmarks, we have:

- Ignored the Caribbean benchmark because only one country (Bermuda) has set a charge
- Ignored the countries with a zero porting charge from the European Union benchmark because operators in these countries have decided (or have been required by the regulatory authority) to recover their porting costs in other ways
- Calculated a charge for unsuccessful ports based on the average of a benchmark of 40% shown in table 4.

The resulting international benchmark rates are \$16 per successful port, and \$6.40 per unsuccessful port.

4 Cost Modelling

4.1 Costing methodology

In its preliminary decision (ECS 11/2013) URCA recognises the following cost categories:

- i. **Internet set-up costs** – these are the one-off costs incurred by NP operators for IT and other network/systems upgrades, the costs of training staff to enable NP, as well as the costs incurred in creating an agreed porting procedure and determining commercial terms and procedures.
- ii. **Common industry system costs** – These relate to the common costs of the equipment/system for the NP Administration Service (comprising a centralized database solution for porting numbers between operators) and ancillary services.
- iii. **Costs per port** – This comprises the “per order” handling or administrative costs incurred in implementing NP for individual subscribers and involves the cost of complying with the agreed porting procedures, activating ported numbers, testing, and communicating the necessary call routing information to other participating operators.
- iv. **Additional conveyance costs** – These involve the incremental costs incurred in routing a call to a subscriber with a ported number relative to the costs involved in routing a call to a subscriber with a non-ported number.

The below relates exclusively to category iii described and any costs associated with IT systems upgrades or investments, network upgrades or investments, service assurance and service delivery process development, training, additional routing costs, database costs etc. have been excluded from the calculations.

The resulting relevant costs are limited to the incremental (volume-dependent) administrative cost to BTC of per-CLI enabling and transaction costs, based on a fully efficient number porting process. As a result of excluding all investment costs from the calculations, these costs are exclusively labour-related and do not include depreciation costs or a reasonable rate of return. Relevant costs relate to activities by BTC’s porting, network and IT teams during the porting process.

In its Draft Decision URCA states that “In the absence of operator specific information, URCA is prepared to consider other information, including reasonable benchmarking from comparable jurisdictions [emphasis added]”. In general BTC considers that this implies that costing information provided by the operators in the market, which should reflect specific local circumstances including the use of a manual process, should take priority over benchmarking data which may be based on other costing approaches, porting processes and service volumes. However in this case, where the operators in The Bahamas have no prior experience of fixed number portability, there are no hard costs available and cost estimates may be usefully supported by benchmarking.

Developing cost-oriented LNP tariffs

A submission by BTC

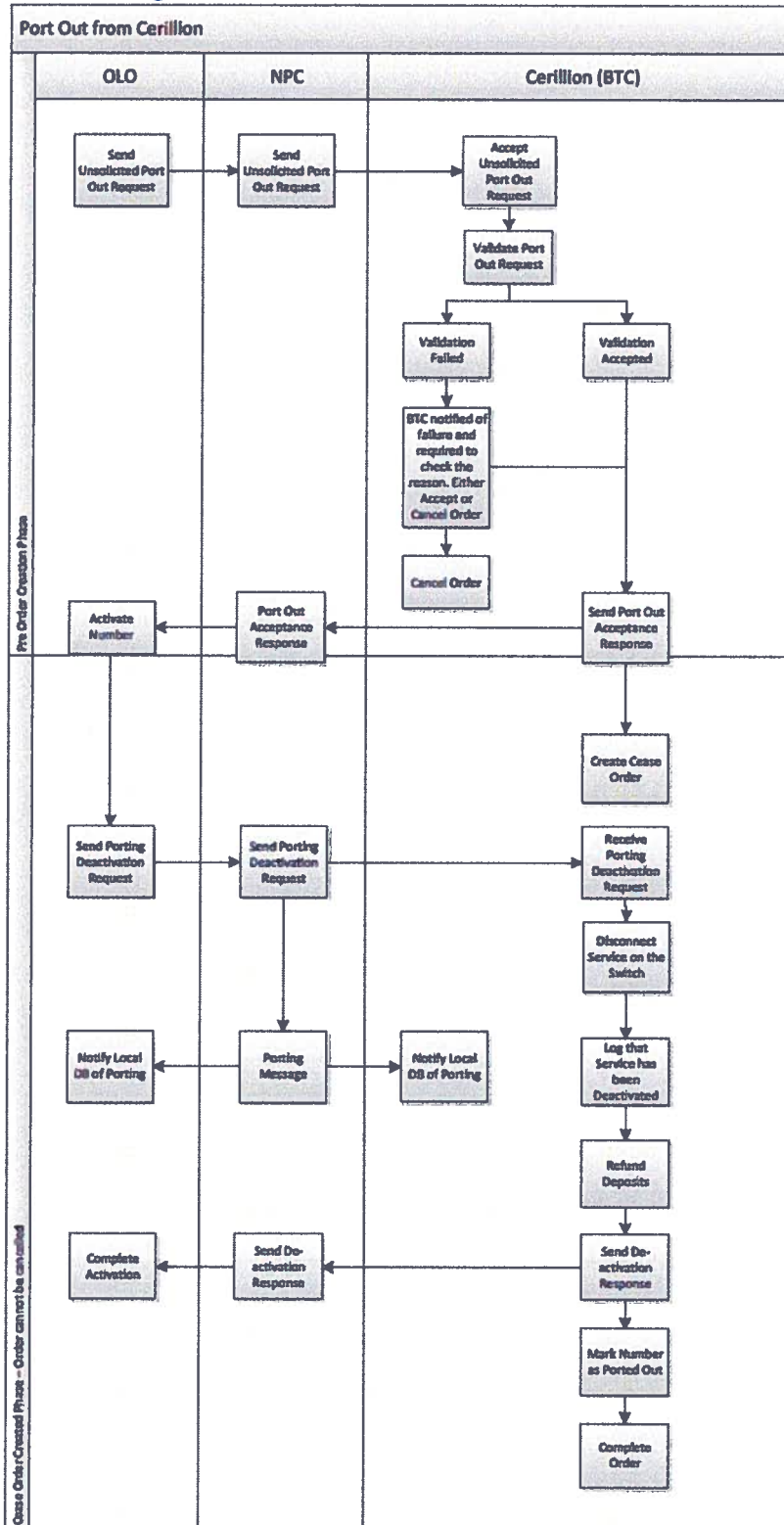
4.2 Description of the porting process

BTC has designed a porting process taking based on Section 4.4 and Annex C on “The FNP Business Rules” as detailed in URCA’s Preliminary Decision. The process is tailored to BTC’s internal processes and is designed to meet the various SLA’s on service delivery as determined by URCA.

A customer who wishes to transfer their service from BTC to another Operator will first contact the operator (OLO). The OLO will initiate an ‘unsolicited port out request’ to the NPC (Number Portability Clearinghouse). Once the NPC has performed an initial validation, a Porting Approval Request will be sent to BTC. BTC will then initiate the port out process.

The port out process at BTC is described in the below flow chart.

Figure 6 – Overall LNP Port-Out Process



Developing cost-oriented LNP tariffs

A submission by BTC

Step 1: Pre-order Creation Phase

On receipt of a Porting Approval Request, BTC's billing system Cerillion will perform validation on the account to which the number belongs and check if:

- ✓ The number exists in Cerillion and that it is a current service
- ✓ The service and/or associated DSL service is not currently suspended.

If the above conditions are met, Cerillion will send a port out acceptance response to the NPC.

If the above conditions are not met, BTC staff will be informed of the reasons for the failure and will check for the reason. For example, a number of conditions may apply:

1. The request may be rejected because the account has been suspended at the request of the subscriber
2. The request may be rejected because in the case of a request for multiple number ports the numbers are not held under the same account (used in multiple number ports only)
3. The request may be rejected because the subscriber is already subject to suspension for reasons unrelated to payment (used in single and multiple number ports).

BTC staff will review such cases to assess whether a solution is possible within the timeframes agreed. If BTC decides the Porting Request should not progress due to a validation failure, BTC will contact the NPC and cancel the request through the NPC system. In this case the order will be cancelled manually by BTC staff.

Step 2: Cease Order Created Phase

Once Cerillion has sent a porting approval response, the OLO will activate the number on its network and send a porting deactivation request to BTC, through the NPC. BTC will then create an order to cease the voice service. There will be one work order to cease the voice service and all linked equipment items (such as features) and one work order to cease the DSL service, if applicable.

The cease order will automatically perform the following steps:

1. Disconnect the service from the switch
2. Log that the service has been disconnected
3. Refund Deposits
4. Send Deactivation Response
5. Mark the Number as ported out
6. Complete the order.

In the majority of cases for single ports, the above process will be fully automated and require no manual intervention by BTC staff. However, experience in other countries suggests that in 20-30% of cases, BTC porting, IT and engineering staff may need to intervene in the process to ensure porting requests are dealt with appropriately. In addition to involvement in the above exceptions, this may include

Developing cost-oriented LNP tariffs

A submission by BTC

data or system errors in BTC's billing system, switching/routing issues and support on the LNP service provisioning systems. Additional IT support may be necessary if a porting issue arises which is of a technical nature and it is therefore necessary to escalate the issue to the IT support staff for resolution. This may result in a successful or in an unsuccessful port.

Unlike for single ports, the process for bulk ports is only semi-automatic and involves manual intervention by BTC staff in the mediation system and interfacing with the NPC portal. This manual process is designed to ensure smooth handling of blocks of numbers, typically associated with enterprise customers for use in PABX (Private Automatic Branch Exchange) systems.

4.3 Determining cost-oriented tariffs

In order to provide an estimate of the costs per port incurred by BTC to support the process described in the previous section, the following methodology has been applied:

1. Step 1: Estimate of total direct LNP labour costs per month
2. Step 2: Estimate of the total ports and porting attempts per month
3. Step 3: Estimate of costs per type of porting by CLI.

Step 1: Estimate of total direct LNP labour costs per month

In this first step, BTC has estimated the total personnel costs that are incremental to the service. There is very little manual intervention expected on the IT/engineering side for the LNP service. IT/engineering involvement is limited to software application/maintenance, but largely the porting process on the IT/engineering side is automated and these costs have therefore been excluded from the calculations.

On the residential side, BTC intends to dedicate 1.5 full-time equivalent staff members to the porting process. On the enterprise side BTC is looking to recruit the same level of resources for the porting process. A manager will spend half his/her time supervising these staff. Salary costs have been obtained from BTC's HR department and equate to \$60k per annum for managers and \$25k per annum for porting specialists.

The total incremental costs associated with the LNP process are therefore as follows.

Figure 7 – Estimated total direct labour costs

	Salary/ Month [\$]	# Empl.	Cost/ Month [\$]
Manager	5,000	0.5	2,500
Porting specialist (residential)	2,083	1.5	3,125
Porting specialist (enterprise)	2,083	1.5	3,125
Total		4	8,750

Developing cost-oriented LNP tariffs

A submission by BTC

BTC would welcome comments from URCA on these estimates. If URCA believes these staff numbers to be too high, BTC would be happy to recruit fewer personnel to support the process, but this may result in the porting process taking longer to complete.

Step 2: Estimate of the total fixed ports and porting attempts per month

LNP is a new service to The Bahamas and there are therefore no existing statistics on the number of ports, or on the distribution of the type of ports. BTC has therefore collected the following data from the EU, where the service is widely available on similar terms to the Bahamas.

Figure 8 – EU porting experience (2012)

	Number of ports	Number of fixed lines
Austria	na	na
Belgium	161,670	5,987,778
Bulgaria	33,382	2,384,429
Cyprus	3,213	401,625
Czech Repub	na	na
Denmark	301,582	2,084,609
Estonia	10,212	928,364
Finland	49,980	892,500
France	na	na
Germany	na	na
Greece	402,256	4,978,601
Hungary	18,349	2,933,416
Ireland	66,569	1,305,275
Italy	1,270,684	21,762,130
Latvia	na	na
Lithuania	4,545	684,006
Luxembourg	3,540	279,180
Malta	2,460	234,286
Netherlands	901,610	6,440,071
Poland	334,127	10,138,952
Portugal	307,460	8,309,730
Romania	62,047	4,772,846
Spain	1,264,094	19,054,821
Sweden	189,939	4,316,795
Slovenia	49,645	1,654,833
Slovakia	159,498	2,680,639
UK	na	na
Totals	5,596,862	102,224,885
Average	5.5%	

Source: <https://ec.europa.eu/digital-agenda/en/news/electronic-communications-market-indicators>

The table above shows the number of fixed network ports carried out in 2012, and the number of fixed lines. In some countries the number of ports is not available, and these countries are shown as “na”. The average of this sample is 5.5%.

The total installed base of active fixed CLIs at BTC is 110,950 and the anticipated number of unsuccessful ports is 20% (this is an estimate obtained from eircom). Taking these numbers together provides an estimated number of porting attempts (successful plus unsuccessful ports) per annum of 7,323 or 610 ports per month.

Developing cost-oriented LNP tariffs
A submission by BTC

Step 3: Estimate of costs per type of port

As described previously, BTC proposes to put in place a simple tariff structure for unsuccessful ports, successful single ports and successful bulk ports, by CLI. It is difficult to estimate the split between successful single and bulk ports at this stage and BTC has therefore simply taken the existing split of residential versus business lines. While it could be expected that business customers make more use of the porting service, a high proportion of BTC’s business customers are single line customers and we therefore believe this estimate to be reasonable.

The following calculations are then applied:

1. The estimated break-down for types of ports is multiplied with the total for estimated porting attempts
2. In order to obtain an estimate for the variation in resource requirements associated with the types of ports, we have taken eircom’s tariffs for unsuccessful, successful single and successful bulk ports (6 - 10 CLIs) from Figure 5. The 6 - 10 CLI benchmark was taken because the vast majority of BTC enterprise customers have less than 10 numbers allocated to them. eircom has been chosen because it uses a similar cost allocation process to the one used for this submission
3. These weighing factors, together with the service volumes, then allow for calculations of total costs by service
4. Finally the cost per port is calculated, this cost is multiplied with a 15% common cost mark-up, the percentage accepted by URCA during the consultations on proposed charging for interconnection joining services (see ECS 12/2011).

The detailed calculations are presented in the following table.

Figure 9 – LNP per port cost calculations

% type of ports					
Unsuccessful ports				20%	
Accepted single ports				52%	
Accepted bulk ports				28%	
Total				100.0%	<i>OK</i>

	# of ports	Weigh Factor	Total weight	Total Costs [\$]	Common Costs [%]	Costs/Port [\$]
Unsuccessful ports	122	1.55	189	422	15%	4.0
Successful single ports	319	5.43	1,732	3,862	15%	13.9
Successful bulk ports	169	11.84	2,003	4,466	15%	30.4
Total	610		3,925	8,750		

The proposed tariffs as per this table are therefore:

Developing cost-oriented LNP tariffs

A submission by BTC

	One-off charge per CLI (\$)
Unsuccessful ports	4.00
Successful single ports	14.00
Successful bulk ports	30.00

4.4 LNP tariffs in The Bahamas and how they compare with other countries

The cost based charges derived above are consistent with the benchmarks, as shown in the table below. The single port charge, at \$14.00, is \$2 lower than the EU average of \$16 per port, while the charge for unsuccessful ports is \$2.40 less than the EU benchmark. We do not have sufficient information to compare the bulk ports with other countries, but as stated the ratio of the tariffs is based on cost-based LNP tariffs published by eircom.

BTC therefore concludes that its cost based charges are consistent with, and indeed lower than, international benchmarks.

5 Reservation of Rights

BTC has addressed the issues but reserves the right to comment at any time on all issues and states categorically that the decision not to respond to any issue raised in this Consultation and responses by Other Licensed Operators in whole or in part does not necessarily represent agreement in whole or in part with URCA's position, nor does any position taken by BTC in this consultation mean a waiver of any of BTC's rights in any way. BTC expressly reserve all its rights.