



**OBLIGATIONS ON BAHAMAS
TELECOMMUNICATIONS COMPANY LIMITED
UNDER SECTION 116(3) OF THE
COMMUNICATIONS ACT, 2009**

Proposed Charging for Interconnection Joining Services

**STATEMENT OF RESULTS ON PUBLIC CONSULTATION AND FINAL
DECISION**

ECS 12/2011

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1 INTRODUCTION

On 15 April 2011, the Utilities Regulation and Competition Authority (URCA) issued a consultation paper on the Bahamas Telecommunications Company Limited's (BTC) revised charging proposals for interconnection joining services. The deadline for submission of responses was 4 May 2011.

The objectives of the consultation were to:

- outline the main joining service charges contained in BTC's revised draft final Reference Access and Interconnection Offer (RAIO) submitted to URCA on 22 February 2011;
- set out URCA's preliminary views and proposed revisions to the charges put forward by BTC; and
- invite comments from other licensed operators (including interconnection seekers).

The consultation paper was issued under the terms of s.11(1), s.13(1) and s.116 of the Communications Act.

In the consultation paper, URCA stated that it was minded to accept the charges proposed by BTC for BTC's initial RAIO, subject to certain revisions and confirmations.

Two companies submitted responses to the consultation, namely:

- Cable Bahamas Limited (CBL); and
- BTC.

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

This document summarises the substantive comments and/or points of clarification raised by the two respondents and sets out URCA's final decision on the structure and level of charges for interconnection joining services to be included in BTC's URCA-approved RAIO.

In preparing this decision document, URCA has duly taken into account all the comments and submissions received from respondents; the requirement for BTC to provide within its RAIO cost based charges for interconnection joining services; and the specific guidance set forth at page 41 of URCA's Final Decision on BTC's RAIO (ECS 01/11 issued on 11 January 2011). For easy reference ECS 01/11 stated that:

“Joining Paths should be mutually planned and constructed, with each party paying for the whole or part which it constructs. Therefore, all the charges set out in Table 1 related to Joining Paths [the draft charges BTC had previously provided to URCA] should be set to zero and not included in the RAIO.

Joining Circuit charges should apply in relation to the use of Joining Circuit capacity for an operator's 'owned' traffic provided on the (Joining Path) facilities owned and constructed by the other party. If the same Joining Circuit is used to carry traffic originating from both parties' networks (i.e., a bidirectional circuit), the cost of the Joining Circuit should be shared between the parties. These T1 Joining Circuit charges should include the T1 terminating card as well as the cost of the T1 port on the exchange it is connected to.”¹

URCA did not ask specific questions in the consultation paper. To facilitate the summary of responses in Section 2 of this decision document, URCA has grouped types of similar comments into categories. Section 2 of this paper sets out these categories along with a summary of the respondents' comments and URCA's views on those comments. Section 3 of this paper sets out URCA's Final Decision on BTC's interconnection joining charges to be included in BTC's URCA-approved RAIO and the next steps for BTC in the compliance process.

¹ See URCA's final decision on Consultation Question #21, ECS 01/2011, 11 January 2011. The Final Decision also clarified the definition of 'joining paths' and 'joining circuits', stating that references to the 'joining path' meant the higher level transmission bearer over which the joining service is carried, with a 'joining circuit' referring to the T1 capacity provided over a point of interconnect.

2 RESPONSES TO THE CONSULTATION

BTC welcomed the opportunity to submit comments on the consultation paper and noted areas of agreement between its approach and URCA's preliminary views.²

CBL stated it had no overall objection to the BTC's 22 February 2011 proposal, given URCA's proposed revisions in the consultation document. It commended URCA for its "*careful review*" of BTC's charging proposals and endorsed many of the proposed revisions outlined in the consultation paper.³

In the remainder of this Section, URCA summarises and responds to the substantive comments and/or points of clarification raised by each of the respondents. URCA's lack of response to a particular comment should not be taken to mean that URCA agrees with the comment, has not considered the comment or that it considers the comment unimportant or without merit.

2.1 Indirect and Common Costs Mark-ups

BTC

In the consultation paper, URCA stated that BTC had failed to provide adequate justification for its proposed charges, particularly in respect of the cost mark-ups BTC had applied to network maintenance/support and for recovering common costs.

On pages 1 to 2 of its response document, BTC noted and discussed the basis for its charging proposals. It stressed that transparency, cost recovery, and efficiency are the key principles underpinning BTC's charging proposals, as well as achieving compliance with instructions issued by URCA.

BTC underscored the need for it to adequately recover the incurred cost of providing joining services to interconnection seekers. While acknowledging that BTC does not

² BTC's response to URCA's Consultation Document on Proposed Charging for Interconnection Joining Services – ECS 07/2011, 4 May 2011.

³ Comments of Cable Bahamas Ltd. in response to URCA's Consultation Document on BTC's Proposed Charging for Interconnection Joining Services – ECS 07/2011, 4 May 2011.

“... currently have detailed cost estimates of indirect costs incurred by the business ...”, it noted that URCA’s own analysis of indirect and common cost mark-ups in another jurisdiction demonstrated that BTC had underestimated these cost elements and added that “URCA should not have a bias towards under-recovery ...” Following on from this, BTC put forward a new revised set of charges for joining services within Table 4 (page 6) of its response document and stressed that further analysis is required on these charges on a going forward basis to take account of industry experience, amongst others.

BTC’s new revised charging for Joining Services are reflected in Table 1 below:

Table 1. New Revised Tariffs for Joining Services Proposed by BTC (May 4, 2011),

	One-off (BS\$)	Monthly recurring (BS\$)
Intra-island joining circuit segments		
Distance dependent charge per mile for duct		2,154
OC3 per unit (per T1 circuit)		10.23
DS3 per unit (per T1 circuit)		15.04
Footway box (per box)	3,951	53
Inter-island joining circuit segments		
Submarine tariff / T1 link		1,744
Testing charges (Per man hour)		
Service testing charge		23.47

Source: BTC’s Response to “Consultation Document on Proposed Charging for Interconnection Joining Services” – ECS 07/2011, 4 May 2011.

The new revised tariff proposal differs from the original proposal in the following respects:

- (i) the new revised charges are based on T1 units rather than OC3 and DS3 units as proposed by URCA in the consultation paper;⁴ and
- (ii) include higher monthly recurring charges for duct, inter-island joining circuit segments, and footway boxes.

The higher charges reflect:

- a 25% mark-up on costs to account for spare capacity; and
- significantly higher indirect and common costs mark-ups.

⁴ See Section 3.2 of “Consultation Document on Proposed Charging for Interconnection Joining Services” – ECS 07/2011 issued 15 April 2011.

Table 2. Original Tariffs for Joining Services Proposed by BTC (February 23, 2011)

	One-off (BS\$)	Monthly recurring (BS\$)
Intra-island joining circuit segments		
Distance dependent charge per mile for duct		1,620
OC3 per unit	3,003	506
DS3 per unit	2,402	237
Footway box (per box)	3,951	38
Inter-island joining circuit segments		
Submarine tariff / T1 link		1,370
Testing charges (Per man hour)		
Service testing charge		23.47

Source: See Table 1 of "Consultation Document on Proposed Charging for Interconnection Joining Services" – ECS 07/2011, 15 April 2011.

URCA's Further Action/Comments

As noted earlier, BTC's new revised proposal contained revised mark-ups for indirect and common costs. URCA disagrees with BTC's revised mark-ups. In its original submission, BTC estimated appropriate mark-ups for indirect and common costs from bottom-up models (of joining services) developed by its consultants for other jurisdictions. In contrast, URCA's analysis presented in the consultation document sought to provide a sense check to BTC's cost estimates, by comparing on a like-for-like basis, assumptions used in general (bottom-up) models of telecommunications networks with the assumptions employed by BTC. However, URCA's analysis has been used by BTC to justify the increased charges contained in Table 1 above.

URCA emphasises that it was never URCA's intention to substitute the analysis in the consultation for BTC's own analysis. URCA does not believe it is better placed than BTC to estimate the costs that BTC would face in providing a service. Therefore, in the absence of information that would demonstrate clearly that BTC's proposals were incorrect (or that URCA's assumptions were likely to be more accurate), URCA does not believe it would be appropriate to replace BTC's assumptions with its own. As such, URCA will not accept BTC's revised mark-ups for indirect and common costs.

URCA will thus review BTC's allocation methods and principles for identifying indirect and common costs in future updates of the RAIO and on the basis of actual and verifiable cost information for joining services obtained from BTC. Where URCA is satisfied this actual cost information is characteristic of the costs that would be incurred by an efficient operator providing the service, those costs should be reflected in BTC's RAIO tariff schedule going forward.

2.2 Charging for Joining Paths

CBL

CBL noted that within the context of the specific guidance on charging for Joining Paths at page 41 of URCA's Final Decision on BTC's RAIO (ECS 01/11 issued 11 January 2011):

"No costs related to the construction, operation or maintenance of the transmission equipment or physical transmission links constituting a Joining Path should be charged to the Access Seeker for the portion that it constructs."

URCA's Further Action/Action

URCA has noted CBL's comment and can confirm that its interpretation of the charging regime for Joining Paths is correct.

2.3 Charging for Ducts

CBL

In relation to ducts, CBL noted that the following potential situations should be recognised:

"If one party constructs and operates the entire Joining Path, the costs of the ducts (and submarine links) should be supported equally by the two parties and therefore the costs split in half;

If each party constructs its own Joining Path between the two networks termination points, in order to have more robustness and resilience, each party should bear its own costs (including installation and maintenance); and

If the Joining Path is mutually constructed – that is if each party constructs a share of the Joining Path up to a meeting point (e.g. footway box), as in the case of in-span handover – then each party should support the installation and maintenance costs of its part of the Joining Path from its network termination point to the footway box at the meeting point."

CBL then suggested that where BTC is required to include a duct cost per mile within its RAIO, the aforementioned charging principles should be specified within BTC's URCA-approved RAIO.

CBL also proposed alternatives on how the charges for duct should be implemented within BTC's RAIO, arguing that:

- (i) where BTC installs the entire Joining Path, the associated duct costs should be charged on a one-off basis rather than as a recurring monthly charge as proposed by BTC; and

- (ii) charges for duct should be location specific.

URCA's Further Action/Comments

URCA acknowledges the suggestion by CBL on the treatment of duct cost per mile within BTC's final RAIO. URCA has reviewed BTC's proposals and is satisfied that the charge per mile for duct within both of BTC's proposals is in line with the Final Decision on the RAIO and other relevant principles.

URCA also notes that any future revisions to BTC's charging structure will generally be subject to a consultation process and requires URCA's prior approval before coming into effect. URCA reminds the industry that Section 7 of the Final Access and Interconnection Guidelines (ECS 14/2010, 22 April 2010) sets out the process for making changes to an approved RAIO, where it is stated that:

"... the SMP operator must give at least thirty (30) business days advance notice in writing to URCA and other licensees with whom it has an existing interconnection agreement or negotiating one of any proposed changes to an approved RAIO. If URCA does not challenge the amendment within that period, the SMP operator may proceed with the amendment. If URCA notifies the SMP operator in writing that it disagrees with the proposal, then the SMP operator shall not proceed with the proposed change unless URCA withdraws its objection or until after URCA has publicly consulted on the issue and URCA issued a final determination/decision on the process."

In light of the above, URCA does not believe it would be necessary for BTC's initial RAIO to include the changes suggested by CBL at this time.

In relation to the alternatives put forward by CBL on how the charges for duct should be recovered, URCA responds as follows:

- (i) URCA considers that where BTC installs the entire joining paths, it might be reasonable and proper for BTC to recover the associated cost of duct as a recurring monthly charge rather than a one-off charge. URCA recognises that there are different approaches to cost recovery that BTC could potentially employ and still remain compliant with the overall principle of cost recovery and the specific guidance set out in ECS 01/2011. However, URCA also believes that the cost recovery process should not create potential barriers to entry in the market.

CBL's proposal to apply a one-off charge would have a more significant impact on smaller Other Licensed Operators (OLOs). This could potentially

act as a barrier to entry for smaller providers. In light of this concern, URCA has decided it is reasonable to maintain BTC's proposed recurring charges for duct charges. However, URCA will review the charging structure in future updates of the RAIO and on the basis of relevant information and sector policy objectives.

- (ii) URCA believes that, in principle, the proposal that charges for duct should be location specific is not unreasonable. However, implementation of this proposal is not critical to the finalisation of BTC's initial RAIO given the limited number of interconnection points. Further, implementation of this proposal within the current BTC RAIO might delay its finalisation and also might impede entry. For these reasons, URCA will not make this a requirement of BTC's current RAIO but will review this matter as the interconnection markets develop in The Bahamas.

2.4 Charging for OC3 and DS3

CBL

CBL agreed with URCA's preliminary view that charging for Joining Circuits should be measured and charged based on T1 units, rather than OC3 and DS3 units as proposed by BTC, and that such charges should collectively cover installation and maintenance costs for T1 ports and the cost of the terminating card only.

BTC did not agree with URCA's preliminary view that charges for OC3 and DS3 units should be removed from the RAIO and replaced with a charge per T1. BTC contended that it is not appropriate to charge for joining circuits on this basis. It also noted that it is inappropriate to rely on charging principles used in the UK given the maturity of the UK industry. However, in its new revised charging proposals of 4 May 2011, BTC maintained URCA's proposed tariff structure whereby charges for OC3 and DS3 units are replaced with a charge per T1, inclusive of a 25% mark-up on costs to account for spare capacity.

In commenting further, BTC requested further elaboration from URCA on the treatment [presumably in the UK] of unutilised capacity in BT's joining service tariffs, and challenged URCA's statement that an *"OLO faces similar costs at its end of the Joining Path and BTC is therefore not disadvantaged."*

URCA's Further Action/Comments

URCA acknowledges CBL's support for the proposed revisions to BTC's charging structure for Joining Circuits as described in the consultation document. URCA is satisfied that this revision is reasonable and notes that despite the claim by BTC that

a T1 charging structure cannot be implemented, BTC has nonetheless provided charges that support URCA's proposed charging structure.

With respect to benchmarking, URCA does not believe it is unreasonable to follow charging principles established in other markets, such as the UK. URCA acknowledges that the interconnection regime in the UK is well established and that the volume of interconnection traffic in The Bahamas may, at least in the short term, be subject to greater uncertainty than that in the UK. However, URCA notes that the forecasting processes defined within the RAIO are intended to reduce that uncertainty and provide a basis upon which BTC can plan interconnection capacity. Further, URCA firmly believes that its proposals are fair, with each licensee having to provide the transmission terminating equipment at its end of the Joining Path. Indeed, BTC appears to acknowledge this point when it states that there is a risk that OLOs might *"pay for unnecessarily high spare capacity if there is no restriction in the tariff calculations"*.⁵ Including an arbitrary mark-up on charges for spare capacity, with no justification for the level of an appropriate mark-up, would not, in URCA's view, make the tariffs more appropriate or more reflective of the costs incurred by an efficient operator.

It is also not clear to URCA why BTC might be relatively more affected by URCA's proposed charging structure than OLOs. Although more OLOs may seek direct connectivity with BTC than with other OLOs, it is not clear to URCA that this means BTC will require a relatively higher degree of spare capacity than other operators. Indeed, any spare capacity can also be used by BTC to provide its Joining Circuits to OLOs, as well as vice versa.

URCA is not aware of the costs of underutilized capacity being included in charges for Joining Services in the UK. Rather, as URCA stated in the consultation document, BT's joining circuit tariffs in the UK are charged at the 2Mbit/s level.⁶ However, URCA does accept that BTC may have a legitimate concern that OLOs could exit the market, leaving BTC with stranded assets the costs of which would not have been fully recovered. URCA therefore proposes to closely monitor the development of the interconnection market, to ensure that no individual party faces undue costs from the provision of interconnection services and will, if necessary, revisit this charging structure during future reviews of BTC's RAIO.

2.5 Other Comments

CBL

CBL made a number of additional comments, as follows:

- *"URCA and/or BTC"* should provide details on how the charges at Table 3 in the consultation paper have been calculated, particularly the time period

⁵ BTC response to the consultation, page 5.

⁶ In contrast, URCA is aware that charging for partial private circuits (PPC) in the UK does reflect the physical capacity of the system at the customer end.

over which the installation and maintenance cost of T1 units and terminating cards is spread. CBL noted that 5 years for ports and cards is considered best practice in the European Union;

- the recurring monthly charge (\$38.00) for footway boxes is out of alignment with the charging arrangement for a similar service in Jamaica;
- Access Seekers should only pay for footway boxes needed to establish interconnection and this principle should be reflected within BTC's URCA-approved RAIO.

CBL enquired whether BTC's cost proposals take account of any outside plant that BTC may provide by means of aerial facilities.

Regarding the first bullet point, URCA is unable to meet the request as to do so would require disclosure of confidential information supplied by BTC. However, URCA can confirm that, based on its review of information obtained from BTC, the time periods over which the costs are spread are broadly in line with industry practices.

Regarding the second bullet point, as set out by CBL in its response, the footway box charges proposed by BTC are above those included in the latest public version of C&W Jamaica's reference offer.⁷ URCA does not believe that this provides sufficient justification on its own to amend the proposed charges for this service. This is because there is no evidence available to URCA at this point that BTC's proposed charges are not cost oriented. Furthermore, BTC believes that setting charges according to benchmarks must be done carefully and is only appropriate where it is not possible to estimate cost oriented charges using data from The Bahamas, and when a full range of benchmarks is used. Nevertheless, URCA does accept that the difference between BTC's proposed charges and the benchmark identified by CBL is substantial. In future reviews of BTC's RAIO, URCA will therefore again assess these charges, and will require BTC to further substantiate its proposed charges.

Regarding the third bullet point, URCA agrees with CBL that access seekers should only pay for footway boxes needed to establish interconnection. This is in line with the cost causality principle. URCA will not require BTC to reflect this principle within its final RAIO. However, URCA advises that BTC and OLOs should reflect this principle in their agreements for access and/or interconnection.

⁷ <http://our.org.jm/images/stories/content/Telecommunications/Filings/RAIO/RAIO%20Tariff%20Schedule%20-%20RAIO%205A1%20May%202007.pdf>

Finally, URCA has reviewed BTC's charging information and did not find any evidence that it included the cost of outside plant.

BTC

In response to URCA's requests, BTC confirmed that:

- the per T1 charge for an inter-island link is based on the cost of two T1 equivalents; and
- no costs have been incurred for T1 ports in the exchange as part of BTC's tariff calculations.

3 URCA's FINAL DECISION AND NEXT STEPS

3.1 Charging for Interconnection Joining Services

Having regard to:

- all the comments and submissions received from respondents;
- the requirement for BTC to provide cost based charges for interconnection joining services within its RAIO;
- the specific guidance set forth at page 41 of URCA's Final Decision on BTC's RAIO; and
- data and other information constraints,

URCA has now determined that BTC must specify the charges set out in Table 3 below in its final RAIO:

Table 3. Final Tariff schedule – Interconnection Joining Circuits

	One-off (BS\$)	Monthly recurring (BS\$)
Intra-island joining circuit segments		
Distance dependent charge per mile for duct		1,620
OC3 per unit (per T1 circuit)		6.70
DS3 per unit (per T1 circuit)		10.10
Footway box (per box)	3,951	38
Inter-island joining circuit segments		
Submarine tariff / T1 link		1370
Testing charges (Per man hour)		
Service testing charge		23.47

Source: URCA calculations

URCA will review these charges in future updates of the RAIO and on the basis of actual and verifiable cost information obtained from BTC. The timing for such a review will ultimately depend on the availability of relevant and verifiable information within BTC and would normally be subject to a public consultation process. As such, URCA urges BTC to ensure that the required cost information is gathered and maintained on an ongoing basis.

URCA emphasises that it takes seriously its mandate to foster fair and sustainable competition and will vigorously enforce the competition provisions of the Communications Act to ensure a level playing field for competition to flourish for the benefit of consumers and the Bahamian nation as a whole.

3.2 Next Steps

As part of the compliance process outlined in Section 5.3.3 of URCA's Final Decision on BTC's SMP Obligations dated 22 April 2010, the next steps are as follows:

- BTC must amend Annex G of its draft final RAIO to reflect the charges specified in Section 3.1 above.
- BTC must resubmit the amended RAIO document (including an amended tariff schedule) to URCA on or before 6 June 2011. BTC should note that this is the same deadline date set by URCA for BTC to implement other required changes to its RAIO and resubmit the complete document to URCA for further review.
- URCA shall review the resubmission to ensure that BTC has satisfactorily implemented URCA's 22 February 2011 Final Decision on BTC's draft RAIO and the final charges set out above. Once URCA is satisfied that BTC has fully implemented all changes required by URCA, URCA may issue a confirmation of compliance with BTC's RAIO obligation for the purposes of s.116 of the Communications Act.
- Upon such confirmation of compliance, BTC would then be required to publish the final (approved) RAIO within ten (10) days online on its website.