



**OBLIGATIONS ON BAHAMAS
TELECOMMUNICATIONS COMPANY LTD.
UNDER s. 116(3) OF THE
COMMUNICATIONS ACT, 2009:
*DRAFT REFERENCE ACCESS AND
INTERCONNECTION OFFER (RAIO)***

**RESPONSE TO PUBLIC CONSULTATION
AND FINAL DECISION**

ECS 01/2011

11 January 2011

Table of Contents

1.	Introduction	1
1.1	<i>The Consultation Process</i>	3
1.2	<i>Summary of URCA’s Final Decision</i>	4
1.3	<i>Next Steps</i>	8
1.4	<i>The Structure of the Remainder of this Document</i>	8
2.	Review of the General Terms of the Draft RAIO	9
2.1	<i>The Structure of the Draft RAIO</i>	9
2.2	<i>Call conveyance service descriptions</i>	14
2.3	<i>Joining Circuit Service</i>	24
2.4	<i>BTC’s proposed number of Points of Interconnection</i>	27
2.5	<i>Planning and Forecasting</i>	29
3.	Review of the Proposed Charging Structure for Services	30
3.1	<i>On-island charges</i>	30
3.2	<i>RAIO charges for other “free” retail services</i>	33
3.3	<i>Mobile termination charges</i>	35
3.4	<i>Time of day adjustments to call service charges</i>	37
3.5	<i>Treatment of joining services</i>	38
4.	Detailed Review of BTC’s Proposed RAIO Charges	42
4.1	<i>Tariffs based on BTC’s AS results</i>	42
4.2	<i>Appropriateness of the A/S based RAIO charges</i>	48
4.3	<i>Tariffs based on regional benchmarks</i>	52
4.4	<i>RAIO charges based on retail minus approach</i>	54
4.5	<i>RAIO charges based on internal costing analysis</i>	55
5.	General Comments	58
6	URCA’s Final Decision on Draft RAIO Clauses	66

1. Introduction

URCA issued its Final Decision on SMP Obligations on 22 April 2010¹ that sets out, amongst others, the regulatory obligations to which the SMP operators must adhere. One of these obligations requires BTC to prepare and publish a Reference Access and Interconnection Offer (RAIO), setting out the terms and conditions upon which it will offer access and/or interconnection to Other Licensed Operators (OLOs) in The Bahamas. Alongside the Final SMP Decision, URCA also published its Final Access and Interconnection Guidelines², and Final Accounting Separation and Cost Accounting Guidelines for BTC.³

BTC submitted its draft RAIO (excluding the complete tariff schedule) to URCA on 31 May and submitted the draft tariff schedule on 15 June 2010. Following notification from URCA that the draft RAIO was complete, BTC published the draft RAIO on its website on 2 July 2010.⁴

In line with the compliance process outlined in Section 5.3.3 of the Final Decision on SMP Obligations, URCA on 7 September 2010 published a consultation document⁵ on BTC's draft RAIO. The consultation document contained URCA's preliminary views and proposed amendments to the draft BTC RAIO.

The consultation provided a reasonable opportunity for members of the public, licensees and other interested parties to make written submissions to URCA. The document contained a number of questions to assist respondents in preparing their written submissions on the consultation.

Four companies have submitted non-confidential responses to the consultation paper. Responses were received from:

- Bahamas Telecommunications Company Ltd. (BTC);
- Systems Resource Group Ltd. (SRG);⁶

¹ "Obligations Imposed on Operators with Significant Market Power (SMP) – Final Decision", 22 April 2010 (ECS 11/2010)

² "Final Guidelines – Access and Interconnection – Issued 22 April 2010 (ECS 14/2010).

³ "Final Guidelines – Accounting Separation and Cost Accounting" 22 April 2010 (ECS12/2010)

⁴ www.btcbahamas.com/features/interconnection/notice/index.php.

⁵ "Obligations on Bahamas Telecommunications Company Ltd. under s.116(3) of the Communications Act, 2009 – Draft Access and Interconnection Offer (RAIO)" issued 7th September 2010 (ECS22/2010).

⁶ SRG trades as "IndiGO Networks".

- Cable Bahamas Ltd. (CBL) and Caribbean Crossings Ltd. (joint submissions and collectively referred to hereinafter as “CBL” for convenience); and
- LIME.⁷

URCA wishes to thank all respondents for their written responses and participation in the consultation process. The participation from the respondents was invaluable, the responses were insightful and answers to the specific questions posed in the consultation document were well reasoned.

The first round response period was scheduled to close 19 October 2010 but was extended to 26 October 2010 based on industry representation. Interested parties were allowed a further two weeks (from 27 October until 12 November) to comment on first round responses to the consultation and proposals made by BTC regarding its charges for joining services, and forecasting and planning. The full text of all public responses received can be found at <http://www.urcabahamas.bs>.

This document sets out and describes URCA’s Final Decision on BTC’s draft RAIO. In preparing this document, URCA duly takes into account all the non-confidential comments and submissions received from respondents.

URCA appreciates that the development of a RAIO is a complex and difficult task and recognises that BTC’s first RAIO is generally of a good standard. Although there are a number of comments made by URCA and a number of changes it requires BTC to make to ensure the RAIO is effective and in line with the obligations of BTC, URCA’s comments do not detract from the effort made by BTC.

Further, as experience in other jurisdictions shows, RAIO documents will develop over time to meet the changing needs of the market, issues encountered during implementation and any regulatory changes. URCA has therefore taken a pragmatic approach to the completion of the current version of the RAIO. Without prejudice to any changes URCA may require in future RAIOS, URCA does not propose at this stage of the process to delay the matter further by requiring substantial and unwarranted changes to the RAIO’s structure and conditions. Rather, URCA mandates only those changes that are necessary to ensure that the final RAIO conditions are workable and in conformity with Condition 40 of BTC’s Licence, s.40(1) of the Communications Act (the Comms. Act), URCA’s Final Guidelines on Access and Interconnection, and any other regulatory measures issued by URCA.

⁷ LIME (Landline, Internet, Mobile, Entertainment) is the Caribbean division of Cable and Wireless Communications, plc.

1.1 The Consultation Process

URCA also takes this opportunity to respond to the comments made by BTC regarding URCA's approach to the RAIO consultation/review process. URCA agrees with BTC that the RAIO *"... is not URCA's document, and URCA is not responsible for its detailed implementation."* Notwithstanding this, URCA has clear and unambiguous statutory obligations to ensure that the RAIO does not serve as an impediment to competition and that its conditions are fit for purpose. This requires a thorough and in-depth review by URCA of each clause in the draft RAIO. Where URCA identifies that changes are necessary to ensure compliance by BTC with its RAIO obligation, URCA considers that regulatory best practice would require it to make proposals as to how the relevant clauses should be amended by BTC. URCA rejects the claim that this approach is contrary, in any way, to Government Policy or URCA's statutory remit. In fact, URCA's approach is no different from elsewhere where there is regulatory review of RAIOs. As such, URCA does not believe its approach is "heavy handed" nor unprecedented.

In reaching its Final Decision URCA, having taken into account the current state of the market, has balanced the needs of all stakeholders in the market (users and operators) and in particular, the requirement to ensure that a fit-for-purpose RAIO is introduced as soon as possible in order to facilitate the development of competition in the market. A number of the issues raised by respondents over the course of the consultation relate not just to the preparation of the RAIO but more broadly to the development of the market and 'cut across' other areas of URCA's proposed work plan which will have to be dealt with over time. Whilst at all times compliant with its statutory duties, URCA's Final Decision therefore also takes account of practical considerations to ensure an appropriate RAIO, compliant with URCA's Access and Interconnection Guidelines, is put in place without undue delay. For the avoidance of doubt, URCA retains the right to require BTC to make amendments to the RAIO in the future to reflect market demands and developments, in order to ensure that the RAIO complies with legal and regulatory developments and meets the needs of the market.

1.2 Summary of URCA's Final Decision

In this Section, URCA provides a high level summary of its Final Decision on BTC's draft RAIO. A detailed description of the scope and nature of each high level Final Decision is further set out in the relevant Sections of this document.

General Terms of the draft RAIO (Section 2)

1.2.1 URCA will not require, on this occasion, a clearer split between BTC's draft interconnection contract and the draft RAIO.

1.2.2 BTC must remove from its RAIO:

- (i) any obligations on OLOs which are inappropriate and unnecessary to manage the interconnection regime in The Bahamas; and
- (ii) all reciprocal charging obligations from its RAIO.

For the avoidance of doubt, reciprocal clauses should only be maintained as mandatory obligations on the other operators where there is an objective and legitimate justification to do so.

URCA recognises the trend in other jurisdictions for regulators to consider each operator as having a position of SMP in the provision of call termination services on its network, together with the increasing move towards the introduction of reciprocal charges. URCA will, therefore, assess call termination markets in 2011. In the meantime, URCA will monitor interconnection negotiations and, if necessary, will use its *ex post* competition powers to intervene in any cases where OLOs may be engaging in anti-competitive behaviour.

1.2.3 BTC must remove the restriction in Clause A.1.1 of its RAIO and delete from its RAIO any references that specifically exclude OLOs from terminating calls from international origins. Instead, BTC shall allow for the ability of OLOs in The Bahamas to terminate incoming international calls on BTC's network.

1.2.4 URCA accepts that BTC's definition of the international call transit service is reasonable. Accordingly,

- (i) BTC is not required to include the relevant international settlement rate as part of its international call transit service; and
- (ii) it is no longer necessary for URCA to undertake a formal process of monitoring settlement rates and ensuring that such charges are passed on to OLOs at cost.

1.2.5 BTC is required to provide within its RAIO a call termination service to freephone numbers on BTC's network, but shall not charge OLOs to terminate such calls.

- 1.2.6 BTC is required to provide the international call transit RAIO service to OLOs wishing to terminate calls to premium rate numbers in other countries. However, and for the avoidance of doubt:
- (i) BTC is no longer required to include the relevant international call termination service as part of a specific RAIO service for terminating calls on behalf of OLOs to premium rate numbers in other countries;
 - (ii) OLOs are free to negotiate their own bilateral call termination arrangements with foreign carriers, or request inclusion, on a commercial basis, in BTC's carrier agreements.
- 1.2.7 BTC is not required to offer cascade accounting arrangements in its current RAIO.
- 1.2.8 BTC must remove all call handover requirements from its RAIO, and further clarify in its revised RAIO how calls to emergency services will be treated when the PoI (at which near-end handover takes place) is not on the same island where the call originated.
- 1.2.9 BTC must apply the following terms in its RAIO:
- Joining Circuits, meaning the T1 capacity provided over a POI;
 - Joining Path, meaning the higher level transmission bearer; and
 - Interconnect Traffic Route, meaning the group of 64kbit/s channels over which a given type of interconnect traffic is directed.
- 1.2.10 The RAIO must reflect the principle that Joining Paths should be mutually planned and constructed, with each party paying for the whole or part that it constructs and that no charges will be rendered to the other party. Charges shall apply in relation to the use of Joining Circuit capacity for an operator's 'owned' traffic provided on the facilities owned and constructed by the other party. Where a Joining Circuit is shared, the cost of the Joining Circuit should be shared between the parties.
- 1.2.11 BTC must provide, upon request, Points of Interconnection at any point which is technically and economically feasible.
- 1.2.12 Where BTC withdraws a PoI from an island that an OLO had, up to that point, interconnected at, then BTC must provide, at its own cost, a Joining Path (e.g., a backhaul circuit) to the nearest remaining interconnection switch.
- 1.2.13 BTC must amend the forecasting and capacity planning system described in its RAIO in line with BTC's proposed amendments as set out in its comments to the consultation. URCA will further monitor the performance of BTC in this area and, if necessary, require BTC to make additional amendments to its system as the market develops.

Charging Structure for RAIO Services (Section 3)

1.2.14 BTC is allowed to levy a per minute cost oriented charge for intra-island call termination service.

1.2.15 BTC must specify a cost oriented charge within its current RAIO for terminating calls to emergency services in The Bahamas, and each licensed operator should recover the cost of providing free emergency call services to their retail customers from their general revenues.

1.2.16 BTC is required to:

- (i) retain non-zero RAIO charges for calls to directory enquiries (DQ) and automated ancillary services; and
- (ii) submit retail proposals for calls to DQ and automated ancillary services to URCA within thirty (30) business days from the date of the publication of this Final Decision document.

URCA will review such proposals within the context of key regulatory principles and any other relevant regulatory measures issued by URCA.

In the absence of URCA receiving proposals from BTC within this time period, URCA will review the situation and, if appropriate, it could mandate BTC to remove the non-zero charges for terminating calls to DQ and automated ancillary services originating from other operators; or require such retail pricing changes as may be appropriate to ensure fair competition between OLOs.

1.2.17 BTC is required to set a:

- (i) zero rated mobile termination charge for all traffic terminating on BTC's mobile network that originates in The Bahamas; and
- (ii) non-zero rated cost oriented mobile termination charge for all incoming international calls terminating on BTC's mobile network (delivered via an OLO in The Bahamas).

However, BTC must not recover costs from OLOs that it already reflects in its retail charges.

1.2.18 BTC must set a single charge for each call conveyance service in the RAIO (i.e., applicable across all times of the day and week).

1.2.19 BTC should revise its proposed charges for Joining Services in accordance with the principles set out above in Section 1.2.10 and elsewhere in this Final Decision. It must provide these revised charges to URCA within thirty (30) business days of the date of the publication of this Final Decision document,

1.2.20 URCA requires that BTC must not restrict the RAIO to Internet Protocol (IP) interconnection only.

BTC's RAIO Charges (Section)

- 1.2.21 BTC is required to develop revised RAIO charges based on URCA's final decision on the allocation of PoI specific assets and operating costs and all of the services thereby affected.
- 1.2.22 BTC is required to include in its RAIO the charges based on its revised 2009 A/S results.
- 1.2.23 BTC is to apply its current draft RAIO charges for calls to Directory Services in the final RAIO. However, in subsequent years (2010 and onwards), BTC must develop revised charges for this service, based on the relevant A/S unit cost results.
- 1.2.24 BTC is required to include in its final RAIO the following charges for its automated ancillary and other services:
- 1.10 cents per call for its weather automated ancillary service (915);
 - 0.62 cents per call for its time of day automated ancillary service (917);
 - 0.75 cents per minute for international call transit services; and
 - \$1.91 per data entry.

In subsequent years (2010 and onwards), BTC must develop cost oriented RAIO charges for these services, based on the relevant A/S results.

- 1.2.25 URCA accepts BTC's draft RAIO charges for its Operator Assistance service, but requires BTC to remove a minimum call duration (of three minutes) from this service.
- 1.2.26 Within thirty (30) business days from the date of the publication of this Final Decision document, BTC must develop separate charges for all its PoI facilities and provide these to URCA for URCA's approval. BTC is also required to include location-specific accommodation cost estimates in these charges, which must reflect the current utilization of the relevant facilities (i.e., an average cost per square foot charge, weighted by the share of commercial and office space).

In Section 6 of this Final Decision document, URCA has identified the main clauses in the draft RAIO that BTC must amend (including those relating to reciprocity). URCA stresses that when preparing its revised RAIO, BTC must remove all unjustifiable reciprocal clauses from its revised RAIO (including, but not limited to, those in Section 6 below), together with any other obligation BTC now considers inappropriate, in light of URCA's Final Decision. Upon submission of the revised RAIO document, URCA will then review the document to ascertain that all required changes have been made by BTC. When reviewing BTC's revised RAIO, URCA

reserves the right to amend, modify or delete all remaining reciprocal clauses it considers to be unjustifiable or inappropriate.

1.3 Next Steps

Within thirty (30) business days from the date of the publication of this Final Decision document, BTC is required to amend its draft RAIO to reflect URCA's Final Decision on BTC's draft RAIO and resubmit the amended RAIO document to URCA.

Upon receipt of BTC's resubmission, URCA shall review the entire document to ensure that BTC has satisfactorily implemented all of the changes mandated in this Final Decision on BTC's RAIO. URCA will also review the document and remove any remaining obligations imposed on other operators that are either inappropriate or unnecessary to manage the interconnection regime in The Bahamas.

Once URCA completes its review of the resubmission, URCA will inform BTC whether or not it needs to make any additional amendments to the RAIO. If no further amendments are needed, BTC can then request confirmation from URCA that BTC has complied with its RAIO obligation, including listing the website URL where licensees and members of the public can access the documentation.

1.4 The Structure of the Remainder of this Document

The remainder of this Final Decision document is structured as follows:

- URCA's reasoning and Final Decision on:
 - the general terms of the draft RAIO(Section 2),
 - the structure of BTC's charges for interconnection services and enabling components (Section 3), and
 - the level of the RAIO charges (Section 4);
- URCA's responses to general comments on the RAIO consultation (Section 5); and
- URCA's reasoning and Final Decision on the required changes to individual clauses in the draft RAIO (Section 6).

2. Review of the General Terms of the Draft RAIO

2.1 The Structure of the Draft RAIO

Question 1

Consultation question:

Do you agree that BTC should be required to provide a clearer split between its draft interconnection contract and the draft reference access and interconnection offer? Please detail your response in full.

URCA's response to comments received

BTC disagreed with the view taken by URCA that a clearer separation is required between BTC's draft interconnection contract and the draft RAIO. BTC considers that what is proposed is clear and that no change is required. BTC relies on the fact that including reciprocal terms and conditions in the RAIO provides a quick way by which operators can enter into an interconnection agreement.

BTC acknowledges that it could replace reciprocal terms with "BTC", thus making the draft Interconnection Agreement a statement of BTC's rights and obligations. However, it considers that this would create problems in that each operator would then need to negotiate its terms, conditions, rates, etc., with BTC, thus delaying the entry of the new operator and creating unnecessary duplication. BTC further argues that it has designed the RAIO and draft Interconnection Agreement so that BTC and the other operators can quickly negotiate an Interconnection Agreement, whilst it ensures that the terms are equitable and reasonable because they apply to both sides.

URCA considers that the comments raised demonstrate the need for clarity between the general terms and conditions of interconnection and BTC's offer. If the two were made more distinct it would be easier for another operator to:

- a) agree to interconnect with BTC on the same or similar terms and conditions (if they so wish); and
- b) then attach to the main contract its "annexes" that describe the services, terms and prices relating to each service that it is prepared to offer to BTC.

At the same time, although URCA accepts that BTC is not obliged to accept the terms and conditions offered by other licensees, URCA wishes to make it very clear that, if the other licensee accepts the approved RAIO, BTC cannot delay entering into and providing those services that it is mandated to provide under the RAIO because there is no reciprocal arrangement in place.

SRG agreed with URCA that contractual terms need to be separated from service terms and requested clarification on the method that should be adopted in terms of services to be offered by the other operators to BTC (i.e., whether they should be incorporated in the same agreement or whether there should be a separate agreement). In its response on the comments, SRG accepts that some clauses in any interconnection agreement arising from the final RAIO will need to be reciprocal in nature; for example, equal rights with respect to filing of disputes, or credit and collections. However, it states this does not extend to services or termination rates.

URCA considers that the views of SRG are consistent with the concerns URCA has raised, as well as URCA's comments on BTC's views above. URCA considers it is open to OLOs to adopt whichever approach they consider best for offering interconnection services to BTC. However, it anticipates that OLOs will be making offers to BTC along similar contractual terms to those offered by BTC, but with their own service schedules setting out the conditions and rates for which each interconnection service is offered. Thus, the two interconnection contracts can be the same or similar in a number of respects. However, they may be very different if the OLO wishes to offer services on its own terms and conditions. For the avoidance of doubt, URCA would like to stress that in the event of a dispute between BTC and an OLO in relation to the terms and conditions upon which the OLO is prepared to offer interconnection services to BTC, URCA will apply the requirements of the law and the licences as they apply to each licensee, keeping in mind the different obligations that apply between licensees that have been declared as having SMP and those that have not.

CBL considers that BTC should be required to structure the RAIO in a way that minimises its ability to abuse its position of dominance in fixed voice services (by attempting to extract unreasonable terms and conditions from OLOs for termination on their networks in return for implementing BTC's unilateral offer). CBL disagreed with URCA's suggestion that the interconnection and access agreement could be more "bilateral in nature" than the RAIO itself. CBL considers that both the RAIO and actual agreement between BTC and an OLO should consist primarily of a unilateral offer by BTC, but may include a limited number of mutual or OLO-specific commitments that are essential to BTC's ability to fulfil its commitments under the RAIO (for example, with respect to cooperation on fraud detection, traffic forecasting, etc.).

In responding to CBL's points, URCA refers to the comments made above in relation to the nature of the agreement and the format that offers by other licensees may take. The RAIO, as the title states, is an offer to other parties to provide them with certain services at certain prices. When the other party accepts the offer, the terms of the offer are included in an agreement that binds the two parties. In the light of the obligations imposed on BTC, it was required to provide an offer to OLOs setting out the interconnection services, prices and terms upon which it is mandated to offer interconnection, in conjunction with the framework text of a contract, which would include the general terms of the agreement. This approach is in line with that

taken in other jurisdictions such as the United Kingdom, Bahrain, Hong Kong and Singapore where SMP licensees provide a main contract for the parties, to which the interconnection services to be obtained by an OLO are added as Annexes. URCA considers that BTC appears to fail to appreciate the fact that the current RAIO relates to BTC's obligations. As set out above, BTC states *"the terms are equitable because they apply to both sides, the terms are reasonable because they apply to both sides"*. However, URCA considers that the equity or fairness of the terms does not depend on applying the same terms and conditions to both the parties where one of the parties is subject to different regulatory obligations from the other.

URCA's final decision

URCA will not require, on this occasion, a clearer split between the draft interconnection contract and the draft reference access and interconnection offer. However, in mandating changes to the proposed RAIO, it will keep in mind the comments received and the concerns identified to ensure that the RAIO complies with the s.40(1)(b) of the Comms Act, Condition 40 of BTC's licence and the Final Access and Interconnection Guidelines published by URCA.

URCA will also monitor the implementation of the interconnection agreements between licensees so that any issues that may arise can be dealt with in future RAIOs or through appropriate regulatory intervention.

Question 2

Consultation question:

Do you agree that the BTC should remove any obligations on other operators which are inappropriate and unnecessary to manage the interconnection regime in The Bahamas? Please detail your response in full.

URCA's response to comments received

BTC, in its response, considers that it has prepared the RAIO and draft Interconnection Agreement so that it is readable, workable and as short as possible. It does not believe that any of its terms are inappropriate or unnecessary, and does not consider that URCA has produced any real examples of such terms. However at the same time it accepts, for example, that Clause 6.1 "should be removed", even though it then expresses reservations over the impact of removing this clause (see Question 4, below).

It further considers that URCA is overstating the number of clauses that give rise to practical problems and that URCA is in danger of taking an extreme position on the reciprocity issue.

URCA considers that any terms and conditions that are inappropriate or unnecessary need to be removed, regardless of the number of these clauses. The question is not

a matter of the number of clauses but it is a matter of ensuring that the RAIO is in compliance with the obligations of BTC and that it does not impose any terms and conditions on third parties that are not necessary. Whether, as a result of free negotiations, other parties might agree to such terms is not relevant for present purposes. The fact that interconnection agreements may be complicated by OLOs wishing to offer services on their own terms and conditions is not by itself grounds upon which BTC can seek to impose its terms and conditions on these OLOs.

SRG agreed with URCA that BTC should remove any obligations on OLOs that are inappropriate and unnecessary to manage the interconnection regime in The Bahamas. CBL also stated that it agrees with URCA's proposals and that the RAIO and actual interconnection and access agreements between BTC and OLOs should reflect the asymmetric nature of BTC's SMP obligation.

In its submission, LIME was of the view that BTC should not be required to remove clauses that impose reciprocal charging on the access seeker and access provider, as each operator has a monopoly on call termination services to its customers. It further considered that OLO pricing should be justified by costs, in the same way as BTC, and that the most appropriate benchmark for these costs are BTC's approved rates. URCA refers to its response below to Question 4.

URCA's final decision

URCA is satisfied that any obligations on OLOs that are inappropriate and unnecessary to manage the interconnection regime in The Bahamas should be removed from the RAIO. As part of its detailed review of the draft RAIO clauses, presented in Section 6 of this Final Decision document, URCA has identified the main clauses in the draft RAIO that BTC must amend. When preparing its revised RAIO, BTC is therefore required to remove all of the relevant obligations on OLOs highlighted in this Section as unnecessary, together with any other obligation it now considers inappropriate, in light of URCA's Final Decision. Upon submission of this revised document, URCA will then review the document to ascertain that all required changes have been made by BTC.

Question 3

Consultation question:

Do you agree that the BTC should fully justify any reciprocal clauses that remain in the RAIO? Please detail your response in full.

URCA's response to comments received

In line with its responses to Questions 1 and 2, BTC states that it does not agree with URCA. BTC believes that reciprocal clauses should be used in the RAIO and draft Interconnection Agreement unless there are good reasons for using unilateral clauses. BTC considers that reciprocal clauses:

- represent an equitable approach as both operators have the same rights and obligations,
- act as a brake on the proposing party, because the same obligations apply to it as to the other side,
- make the management of interconnection easier because both parties follow the same procedures and standards, and
- recognise that in interconnection, an operator has the role of both the provider of facilities and the seeker of facilities, and that reciprocal terms capture this duality more effectively than non-reciprocal terms, resulting in clearer legal agreements.

BTC also considered that the requirement to “fully justify” each reciprocal clause was excessive and onerous in the light of the “500 plus clauses in the RAIO” that are reciprocal.

As set out above, URCA does not consider that BTC’s comments concerning achieving equity and fairness towards BTC through reciprocity are relevant here. This is because only BTC is obligated at this point to offer a RAIO. This does not mean, however, that URCA would choose to not intervene if an OLO sought to offer unreasonable terms and conditions to BTC for the interconnection services it provides to BTC.

With regards to whether URCA’s request is onerous, URCA considers the fact that BTC considered it appropriate or necessary to include 500 plus reciprocal clauses in its RAIO are, by itself, of concern. This is because the RAIO should describe BTC’s obligations. However, URCA accepts that in some cases it is necessary to have reciprocal obligations such as in the case of fraud prevention, dispute resolution, etc. With that in mind, URCA invited BTC to justify what it considered necessary so that these clauses could be approved. BTC has decided not to accept this invitation. In those circumstances, URCA had to examine the terms and conditions based on the material provided to date and formed its own view, based on the evidence available to it, on what are objectively justified in terms of reciprocal obligations and what are not.

LIME also was of the view that the reciprocity of terms should remain, in particular concerning the termination rate provisions.

CBL and SRG agreed with URCA that there should be justification for reciprocal clauses. CBL stated that the asymmetric nature of BTC’s SMP obligations means that the number and scope of any reciprocal obligations should be limited to the following cases:

- Where BTC could demonstrate that imposing the obligation was necessary to the fulfilment of BTC’s SMP obligations, and

- Where imposing the same obligation on the OLO as that which applies to BTC can be justified on the basis that BTC and the OLO are similarly situated as to the relevant costs, technical arrangements and any other factors relevant to assessing the reasonableness of imposing a reciprocal obligation on OLOs.

URCA's final decision

In the light of the comments received, URCA is satisfied that reciprocal clauses should only be maintained as mandatory obligations on the other operators where there is an objective and legitimate justification to do so. The RAIO is a result of the obligations on BTC to offer services to the other operators and URCA accepts that there are some cases where BTC must impose obligations on the other party. As mentioned above, URCA has identified in Section 6 of this Final Decision document the main clauses in the draft RAIO that BTC must amend (including those relating to reciprocity). When preparing its revised RAIO, BTC is therefore required to remove all reciprocal clauses from its revised RAIO that are not objectively justifiable (including, but not limited to, those listed in Section 6 below). Upon receiving the revised RAIO, URCA will then review the document to ascertain that all required changes have been made by BTC and remove any remaining obligations that are either unnecessary or inappropriate.

2.2 Call conveyance service descriptions

Question 4

Consultation question:

Do you agree that BTC should remove from its RAIO any reciprocal charging obligations on other operators? Please detail your response in full.

URCA's response to comments received

CBL and SRG both agree with URCA's proposal, namely that any reciprocal charging obligations on OLOs should be removed from BTC's RAIO. For example, CBL states that OLOs should be, "*free to negotiate commercial agreements with BTC for the termination of BTC's traffic on their networks, as well as other access and interconnection services*".⁸

In its response, BTC acknowledges that its SMP designation results in it facing some obligations which OLOs do not. It therefore accepts that it cannot impose reciprocal charging obligations on OLOs and so states that it is prepared to remove reciprocal charging obligations from its RAIO. However, BTC states that, in its view, not

⁸ CBL response to consultation question 4.

regulating the termination charges of OLOs could have a significant effect on the market, as it believes that each OLO would have SMP in the market for call termination on its own network and hence could set termination rates above the competitive level. It therefore proposes that URCA should fully review call termination markets as an urgent priority.

LIME disagrees with URCA's proposal and argues that BTC should be able to include reciprocal charging obligations in its RAIO. Its position is based on a similar advancement of the points presented by BTC in its response to this question.

URCA acknowledges the representations made by LIME and BTC regarding the trends in other jurisdictions for call termination charges of all networks to be regulated. Indeed, URCA recognised this point in Section 2.1.2 of the consultation. However, under s.116 of the Comms Act, only BTC is deemed to have SMP in fixed voice and mobile voice and mobile data markets in The Bahamas. The obligation on BTC to publish a RAIO has been made pursuant to s.116. This section of the Act does not provide URCA – or BTC – with powers to impose regulatory obligations on OLOs in the fixed and mobile voice markets. Therefore, at this point, there is no legal basis for BTC or URCA to impose reciprocal charging obligations on OLOs.

Furthermore, it is important to distinguish between the requirements for SMP operators to set cost oriented termination charges (as a remedy for having SMP in the market for call termination on its own network) and reciprocal termination charges for all network operators in a particular jurisdiction. Whereas the former is a common occurrence in many jurisdictions, it is not necessarily the case that the resulting obligations result in symmetric termination rates. Instead, many regulatory authorities move to symmetric termination charges over a longer time period.

URCA's final decision

Following its review of the consultation responses, URCA requires BTC to remove reciprocal charging obligations from its RAIO. This is because, under the current SMP designations, OLOs do not face the same obligations as BTC and therefore cannot, on an *ex ante* basis, be required to set interconnection rates at a cost oriented level.

Nevertheless, URCA recognises the trend in other jurisdictions for regulators to consider each operator as having a position of SMP in the provision of call termination services on its network, together with the increasing move towards the introduction of reciprocal charges. URCA will, therefore, assess call termination markets in 2011. In the meantime, URCA will monitor interconnection negotiations and, if necessary, will use its *ex post* competition powers to intervene in any cases where OLOs may be engaging in anti-competitive behaviour.

Question 5

Consultation Question:

Do you agree that BTC should include in its RAIO the ability of OLOs in The Bahamas to terminate incoming international calls on BTC's network? Please detail your response in full.

URCA's response to comments received

SRG and CBL both agreed with URCA's proposal. Both stated that the call termination service in question was identical to the termination of domestic calls and that BTC has SMP in the provision of call termination services. They therefore argue that terminating incoming international calls on BTC's network should be provided at cost. SRG further noted that without having access to cost oriented termination for incoming international calls, OLOs such as SRG would *"find it difficult, if not impossible, to negotiate agreements with Tier 1 international carriers"*.⁹

In contrast, LIME and BTC disagreed with URCA's proposal and argued that this service should be provided on a commercial basis only. BTC therefore proposed to make the service available on commercial terms (i.e., not cost oriented terms). It argued this approach would benefit all licensed operators in The Bahamas, for example, by maintaining revenues from international call termination, and quoted Jamaica as an example of a jurisdiction following this approach. In its response, LIME gives further details of the situation in Jamaica, providing estimates of the amount of 'hard currency' lost to the Jamaican economy as settlement rates fell. It argues that setting termination rates for incoming international calls at cost will result in OLOs becoming 'margin gatherers' who will exit the market as settlement rates are reduced and not provide any long term benefits to Bahamian consumers. Finally, LIME states that if URCA goes ahead with its proposal, it should restrict the availability of cost based interconnection to OLOs who have invested in network development.

URCA believes that the case of Jamaica, highlighted by both BTC and LIME, is instructive. However, URCA does not believe that this alone provides sufficient basis for enabling a non-cost oriented charge for incoming international termination. Settlement rates in Jamaica were in large part reduced due to the intervention of the Federal Communications Commission (FCC) in the United States, whilst the relative importance of inbound call revenues in Jamaica is much greater than it is in

⁹ SRG response to consultation question 5.

The Bahamas.¹⁰ For this reason, URCA agrees with CBL that the US-Bahamas traffic balance is quite different than the US-Jamaica traffic balance

In its further submission on the consultation, BTC states that URCA has differentiated between the termination of calls that originate locally and those that originate internationally. URCA refutes this suggestion. In its SMP documents and other correspondence with BTC, URCA clarified that it did not intend to regulate directly the international settlement rates charged by BTC to operators licensed outside The Bahamas. However, URCA did not differentiate calls delivered by OLOs in The Bahamas for termination on BTC's network into those that originate in The Bahamas and those that originate abroad. URCA believes that such a differentiation would be inappropriate. This is because OLOs can only terminate incoming international calls on BTC's network with access to BTC's call termination service. BTC controls a bottleneck in the provision of call termination services to its customers, regardless of whether calls are originated in The Bahamas or abroad. Thus, to compete with BTC in the provision of incoming international call services to BTC's customers, OLOs must have cost oriented access to BTC's network.

URCA's final decision

Following its review of the consultation responses, URCA requires BTC to remove the restriction in Clause A.1.1 of its RAIO and delete from its RAIO any references that specifically prevent OLOs terminating calls from international origins on BTC's network. Instead, BTC shall allow for the ability of OLOs in The Bahamas to terminate incoming international calls on BTC's network.

URCA acknowledges the concerns raised by some respondents regarding the potential impact of requiring BTC to offer at cost the ability for OLOs to terminate calls originated overseas on BTC's network. Nevertheless, URCA believes that there are sufficient safeguards in place in the framework governing interconnection to ensure that 'pure margin gatherers' do not engage in arbitrage without delivering some commensurate benefits to Bahamian consumers (for example, through offering a full range of services). By its nature, an interconnection service is only available to operators who have deployed some network infrastructure in The Bahamas (at a minimum and in the context of incoming calls, to land traffic in The Bahamas and convey it to the PoI with BTC). Furthermore, only operators awarded an Individual Licence by URCA are able to take interconnection services from BTC on the terms and conditions set out in the RAIO. This will, in practice, limit the number of operators who are able to take the relevant RAIO service.

¹⁰ See CBL's further submission on the RAIO consultation.

Question 6

Consultation question:

Do you agree that the international call transit RAIO service should be made available to OLOs and that the charge should be based on:

- a cost based charge for call conveyance on BTC's network (including BTC's international facilities); and
- the relevant international settlement rate, passed on to OLOs at cost?

Please detail your response in full.

URCA's response to comments received

All of the respondents to the consultation agreed that the international call transit service as drafted by BTC was sufficient for the purposes of the RAIO. This is because OLOs would only need to negotiate international termination with a small set of foreign operators who would then, through their own agreements with other carriers, enable Bahamian operators to terminate calls in all countries. Given this structure, respondents do not consider that the international termination element of outgoing international calls from The Bahamas constitutes an economic bottleneck over which BTC has market power.

URCA's final decision

Given the views of the respondents to the consultation, URCA proposes to modify the proposals it set out in the consultation document. It does not believe it is appropriate to impose unwarranted regulation on the market and, taking into account the views of respondents, proposes therefore not to require BTC to include the relevant international settlement rate, passed on to OLOs at cost, as part of its international call transit service. For the avoidance of doubt, however, BTC is free to offer this service on a commercial basis.

Without prejudice to other issues considered in the consultation and Final Decision document, URCA therefore accepts that BTC's definition of the international call transit service is reasonable.

Question 7

Consultation Question:

Do you agree that URCA should periodically review the relevant international settlement rates charged by BTC to OLOs for the international call transit RAIO service, to ensure that such charges are passed on to OLOs at cost?

Please detail your response in full.

URCA's response to comments received

Based on their responses to Question 6, respondents felt that it would be unnecessary for URCA to review settlement rates in the manner proposed. Indeed, SRG and LIME both pointed out that such a review could be impractical, given the complex and dynamic nature of international settlement arrangements.

URCA's final decision

Given URCA's final decision on Question 6, above, it no longer considers it necessary to undertake a formal process of monitoring settlement rates and ensuring that such charges are passed on to OLOs at cost.

Question 8

Consultation Question:

Do you agree that BTC must:

- (i) add a RAIO call termination service for calls to freephone numbers on its network; and
- (ii) remove the RAIO charge for call origination from BTC's mobile network to freephone numbers on an OLOs network if BTC charges for such airtime?

Please detail your response in full.

URCA's response to comments received

As discussed in Section 2.2.3 of the consultation, the SMP Final Decision imposed an obligation on BTC to specify a call termination service for freephone numbers on the BTC network. Within its draft RAIO, BTC instead defined a call origination service to freephone numbers. In line with URCA's SMP Decision, URCA requested BTC to provide OLOs with the ability to terminate calls to freephone numbers and required BTC to specify such a service within the next version of its RAIO.

CBL and SRG both agree with URCA's proposal in Question 8(i). In BTC's responses, BTC advised that it intends to offer the call termination service but would withdraw the call origination service from the RAIO. URCA welcomes BTC's agreement to provide a RAIO call termination service for calls to freephone numbers on BTC's networks.

URCA accepts that the call origination service in the draft RAIO was not an obligation imposed on BTC. As such, BTC is free to withdraw the call origination service from the RAIO as it sees fit. Nevertheless, URCA understands BTC's rationale for including the call origination service in the draft RAIO and does not require it to be removed. This is because the party originating calls to freephone numbers does not receive any of the retail revenue from these calls and, therefore, should receive some

compensation from the terminating party (who receives the retail revenues) for the costs it incurs in providing the originating leg of the call.¹¹ URCA further notes that as part of negotiations with BTC, OLOs may request the inclusion of a call origination service for calls to freephone numbers, if it is not included in the RAIO. URCA will also continue to monitor the development of interconnection services associated with calls to freephone numbers.

The payment flow for freephone calls does not mean, however, that there is no requirement for BTC to include a call termination service for calls to freephone numbers. Although BTC should not charge for such a service (as it receives the said retail revenues), including the service in the RAIO will ensure that customers of OLOs have the ability to place calls to BTC's freephone customers. In these cases, a payment should be made by BTC to the OLO to cover the costs incurred by the OLO in originating the call.

URCA's final decision

Given the responses to the consultation, BTC is required to include the ability for OLOs to terminate calls to freephone numbers on BTC's network. However, BTC shall not charge for terminating such calls on its network.

Question 9

Consultation Question:

Do you agree that BTC must include a service for terminating calls from OLOs to premium rate numbers in its RAIO? Please detail your response in full.

URCA's response to comments received

In responding to Question 6, BTC has noted that URCA's proposal "... is based on a misunderstanding of the market for outbound international calls." BTC believes that it does not have market power in the termination of outbound international calls from The Bahamas as evidenced by the following:

- any operator can negotiate arrangements with a small number of international hubbing providers for the termination of outbound international calls;
- barriers to providing the service are insignificant; and

¹¹ URCA notes this is not the case for freephone calls originated from BTC's mobile network, if it levies an airtime charge on the retail party originating the call. In such cases, BTC should not receive any compensation from the OLO terminating the freephone call.

- BTC has no control over the terminating network in the foreign country.

BTC's position is supported by the other respondents. As discussed in URCA's responses to Questions 6 and 7, all respondents agreed that the international termination element of outgoing international calls from The Bahamas does not constitute a bottleneck over which BTC has market power.

BTC was also unclear as to whether URCA's proposal applies to calls to premium rate services in other countries and those in The Bahamas. As there are no premium rate services in The Bahamas currently, URCA's proposal relates only to calls to premium rate services in other countries.

URCA's final decision

In line with URCA's final decision on Questions 6 and 7, it no longer requires BTC to terminate calls on behalf of OLOs to premium rate numbers in other countries. Instead, OLOs are free to make their own arrangements for the termination of outbound international calls to premium rate numbers.

For the avoidance of doubt, BTC remains obliged to provide the international call transit RAIO service to OLOs for the purposes of transiting calls to the foreign terminating operator on behalf of OLOs.

Question 10

Consultation Question:

Do you agree that BTC should offer both direct accounting arrangements and cascading account arrangements for its call transit service? Please detail your response in full.

URCA's response to comments received

BTC disagrees with URCA's proposal that it should offer cascade accounting arrangements, as well as direct accounting arrangements. This is because it believes the number of operators using BTC's transit service is likely to be small (and hence the benefits to OLOs of offering cascade billing would be limited). Furthermore, BTC also states that to offer cascade billing it would need to amend its billing system.

CBL states that it would "*not object*" to BTC providing only direct accounting arrangements in its current RAIO, with this clause potentially being reviewed in future versions of the RAIO. This is because CBL does not consider that cascade

accounting is likely to be necessary in the short or medium term and therefore proposes that URCA focuses on other higher priority areas.¹²

SRG agrees with URCA's proposal that BTC should offer cascade accounting, with an option for direct accounting, "*in the event that the two OLOs concerned develop a separate relationship*".¹³ SRG has not, however, set out its reasoning for it preferring a cascade accounting approach.

URCA's final decision

In light of the comments received, URCA will not require BTC to offer cascade and direct accounting arrangements in its current RAIO. This is because the likely limited number of OLOs entering the market in the short term means that direct accounting arrangements should not unduly add to the costs of establishing interconnection arrangements. URCA therefore concludes that, at this time, it is sufficient for BTC to include only direct accounting arrangements in its RAIO.

However, URCA proposes to continue to review the suitability of the accounting arrangements included in the RAIO to ensure that these remain appropriate as competition emerges and the number of OLOs increases.

Question 11

Consultation Question:

Do you agree that BTC should remove any call handover requirements from the RAIO and that BTC should amend the relevant section in the RAIO to the wording proposed by URCA? Please detail your response in full.

URCA's response to comments received

CBL stated that it agreed with URCA's proposal, including URCA's proposed RAIO wording of the call handover requirements. SRG and BTC also agreed with URCA's proposal that call handover requirements could be removed from the RAIO. However, SRG and BTC each offered two caveats that they believed should be reflected in the revised RAIO.

SRG stated that:

- re-routing to an alternative PoI must be permissible in the event of congestion or unplanned joining circuit outages; and

¹² CBL response to RAIO consultation question 10. Note in this response, CBL also focuses on arrangements for interconnection with BTC's mobile network. This issue is covered separately.

¹³ SRG response to RAIO Consultation Question 10.

- calls handed over at a non-local PoI must be rated as intra-island calls in all cases where the originating and terminating numbers are on the same island.

BTC stated that:

- near-end handover should still apply for calls to the emergency services, to ensure the call goes direct to the emergency centre on the correct island; and
- the words, “at any technically and economically reasonable point” should be replaced by “at any PoI”.

URCA notes the general agreement with its proposals and therefore continues to believe that the call handover requirements should be removed from the RAIO. Responding specifically to the points raised by SRG and BTC:

- URCA agrees that re-routing of calls must be permissible in the event of congestion, or unplanned outages. Without prejudice to URCA’s other comments on the draft RAIO, it believes that Annex D.3 of the draft RAIO deals suitably with this point.
- URCA agrees that RAIO charges for call termination should be based on the originating and terminating numbers. URCA notes BTC’s comment that this is already provided for in Clause G.1 of the RAIO.
- URCA, in principle, accepts BTC’s proposal on calls to the emergency services. However, URCA requires BTC to further clarify in its revised RAIO how calls to emergency services will be treated when the PoI (at which near-end handover takes place) is not on the same island where the call originated.
- URCA agrees that the wording it has proposed to replace the call handover requirements could be amended, as put forward by BTC, to refer to handover at any PoI, rather than at any ‘technically and economically reasonable point’. However, for the avoidance of doubt, this does not by itself imply that URCA believes that it is reasonable for BTC to offer only two PoIs. This issue is dealt with further below in respect of Question 14.

URCA’s final decision

In light of the comments received on the consultation, and with the exception of the emergency call service, URCA requires BTC to remove all call handover requirements from its RAIO. Instead, BTC must add the following wording in the relevant clause of its RAIO:

“Traffic may be handed by the Access Seeker to the Access Provider at any POI. The Access Provider shall provide to the Access Seeker, for each geographic number range, the closest POI for call termination.

For the avoidance of doubt, unless otherwise agreed between the parties, the Access Seeker can hand over traffic at any POI it chooses. The Access Seeker shall notify the Access Provider of the POI it proposes to use for each type of traffic and shall only change such handover POI provided that it gives written notice to the Access Provider of no less than 2 calendar months.”

BTC must further clarify in its revised RAIO how calls to emergency services will be treated when the PoI (at which near-end handover takes place) is not on the same island where the call originated.

2.3 Joining Circuit Service

Question 12

Consultation Question:

Do you agree that the following terms should be incorporated in BTC’s RAIO:

- Joining Circuit, meaning the T1 capacity provided over a PoI;
- Joining Path, meaning the higher level transmission bearer; and
- Interconnect Traffic Route, meaning the group of 64kbit/s channels over which a given type of interconnect traffic is directed. A Traffic Route will usually be carried over two diverse Joining Paths for security and may even have an overflow via another PoI to cope with unusual traffic flows? Please detail your response in full.

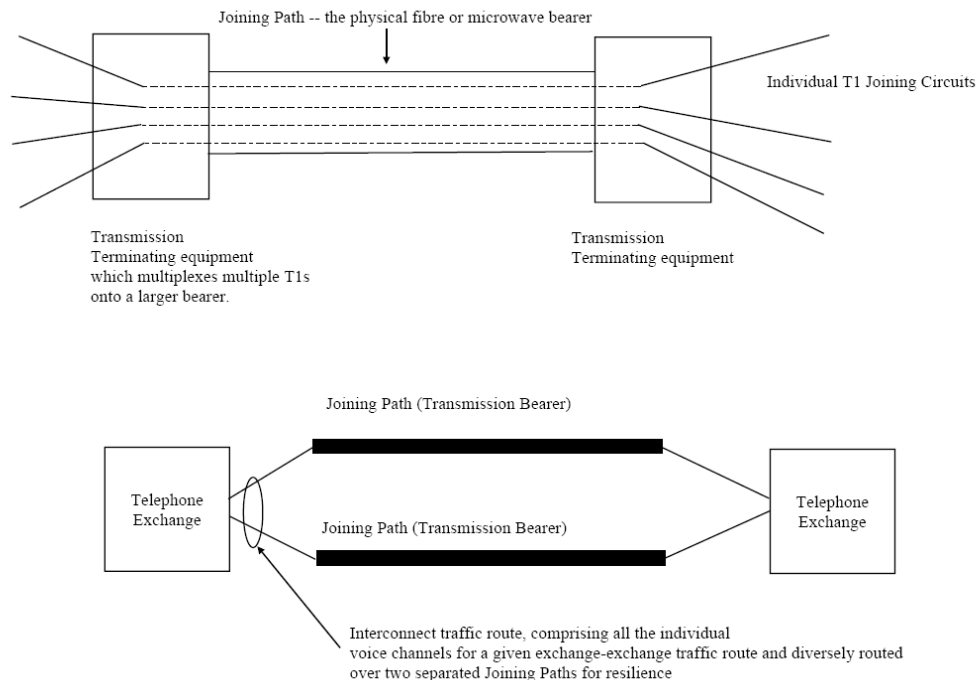
URCA’s response to comments received

All respondents agreed that it would provide greater clarity within the RAIO if the terms Joining Circuit and Joining Path were used in the way that URCA had suggested in the consultative document. That is, Joining Circuit being a T1 capacity circuit, with Joining Path referring to the higher level transmission bearer.

Most respondents also believed that the term “Interconnect Traffic Route” would add clarity, but BTC thought that it was not relevant in an NGN environment. The BTC draft RAIO did not include IP interconnection; only in its responses to the consultation did BTC suggest IP interconnection.

For the avoidance of doubt, the terms proposed by URCA are illustrated in the following diagram:

Figure 1. Joining Service definitions



Source: URCA

URCA's final decision

To ensure clarity in the RAIO, URCA concludes that BTC should revise the RAIO to use these three terms where appropriate. Concerning BTC's reservations about Interconnect Traffic Route, URCA believes that this is still essential, for two reasons:

- Firstly, URCA does not accept that all interconnection will use IP. If other operators still have legacy TDM networks then BTC will have to provide interconnection using TDM/SS7.
- Secondly, even within an NGN environment, operators will need to know how a given traffic flow is to be routed and to be assured that there is sufficient capacity and resilience. Capacity may no longer be measured in 64kbit/s units, but whatever codecs are agreed to for calls between networks, there will be a notional bandwidth imputed by each call. The parties will need to be sure that this capacity will provide an adequate grade of service for the offered traffic and that any other class of traffic on the same Joining Path (e.g., bursty data) cannot squeeze out the required capacity needed for voice. This may require

the provision of dedicated capacity for voice, so the concept of traffic route is still valid.

Question 13

Consultation Question:

Do you agree that further details need to be included in the RAIO on how decisions relating to the planning, construction and provision of the Joining Path are achieved and Annex G should reflect the appropriate charges of the chosen cost-recovery system? Please detail your response in full.

URCA's response to comments received

Most of the respondents understood that in the light of the proposed terminology changes discussed above, there would be an opportunity to provide greater clarity about the charging for Joining Circuits and Joining Paths. However, no respondent suggested what these should be, and BTC only referred to the fact that URCA would determine and/or agree the price of Joining Circuits.

URCA's final decision

As URCA described in the consultation document, while it is clear that the party 'owning' a given traffic flow should pay for the Joining Circuits used (assuming no bi-directional traffic routes), there is no single right way to charge for Joining Paths which may be carrying traffic flows of both parties. URCA therefore concludes that Joining Paths should be mutually planned and constructed, with each party paying for the whole or part which it constructs and no charges will be rendered to the other party.

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. For example, if each party constructed the Joining Path from its switch to the Point of Interconnect, each party would not pay for the Joining Circuit(s) it uses to carry its traffic from its switch to the Point of Interconnect. Each Party would, however, pay for Joining Circuit capacity used to carry its traffic over that part of the Joining Path owned and constructed by the other party. If the same Joining Circuit is used to carry traffic originating from both parties' networks, the cost of the Joining Circuit should be shared between the parties.

2.4 BTC's proposed number of Points of Interconnection

Question 14

Consultation Question:

Do you agree that the current number of PIs provided by BTC and its proposed approach to review interconnection requests at new PIs are feasible? Please detail your response in full.

URCA's response to comments received

Both SRG and CBL suggested that the proposed two (2) PIs would be unacceptable, as it would raise costs for their handling of intra-island traffic on islands without PIs. BTC suggested that this was not the case, as intra-island charges would apply irrespective of the actual routing taken when a call originated and terminated on the same island. However, this statement does not appear to be consistent with BTC's other statement that the longer Joining Circuits to other islands should be paid for in the usual way by the operator concerned. SRG suggested they were using a PI in Abaco, yet BTC stated that it had closed it in 2009.

URCA believes that some of the confusion surrounding this point may be due to the term 'Point of Interconnection' (PI) being used to mean the switch where interconnection traffic is switched, whereas the PI is typically defined as the regulatory boundary between two networks. This need not be collocated with a switch. So it is possible to have a PI on a given island connected to an interconnection switch on another island via a backhaul circuit provided by the switch owner.

In its responses, BTC has confirmed that, at this stage, its two existing PIs are the only ones that it believes are economically and technically feasible. Although other respondents have suggested that BTC should be required to offer more PIs, they have not demonstrated that these would be technically and economically feasible. Therefore, at this point in time, URCA proposes to accept the current number of PIs proposed by BTC for the initial RAIO. However, URCA notes that OLOs may, in the course of negotiating interconnection agreements, seek additional PIs, at which point BTC would need to assess the technical and economic feasibility of these points. The Final Decision of URCA on whether, for the purposes of approving the current draft RAIO, the current offer of two PIs is acceptable, is without prejudice to any applications that BTC may receive from other operators with a view to establishing additional PIs and any view that URCA may take, based on the facts of any case, following the possible refusal for such a request by BTC. URCA cannot fetter its discretion, when considering future cases, in deciding whether additional PIs are appropriate or not.

However, as set out above, OLOs have raised concerns that a limited number of PoIs will raise the costs they incur in handling intra-island traffic. In response to this, BTC clarified that, given Clause G.1 of its RAIO defines intra-island calls as calls between numbers on the same island, intra island call termination charges would apply irrespective of the actual routing of the call.¹⁴

Whilst URCA welcomes this clarification, it also notes that BTC is not proposing to cover all the costs of any circuits required from an OLO's network to the PoI, and hence an OLO would still face some additional (backhaul) costs as a result of having to link to one of BTC's interconnection switches on another island. URCA is of the view that in those circumstances, the OLO might find it difficult to compete for on-island retail call services with BTC.

URCA believes this situation could be of particular concern in situations where BTC withdrew a PoI from an island (for example, as a result of changes to its network structure) where an OLO had installed a switch and had – up to that point – interconnected with BTC. This is because the OLO may have undertaken its investment taking into account the network structure and PoIs offered by BTC.

As such, URCA is of the view that where BTC withdraws a PoI from an island which an OLO had up to that point interconnected at, BTC must provide, at its own cost, a Joining Path (e.g., a backhaul circuit) to the nearest remaining interconnection switch

URCA's final decision

BTC must provide, upon request, a PoI at any point in its network that is technically and economically feasible. For the purposes of approving the draft RAIO, URCA accepts the PoIs proposed by BTC. This is without prejudice, however, to any future disputes regarding the technical and economic feasibility of other possible PoIs, upon which URCA may be called to adjudicate.

Where BTC withdraws a PoI from an island which an OLO had up to that point interconnected at, BTC must provide, at its own cost, a Joining Path (e.g., a backhaul circuit) to the nearest remaining interconnection switch.

¹⁴ See page 13 of BTC's second submission, dated 10 November 2010.

2.5 Planning and Forecasting

Question 15

Consultation Question:

Do you agree with the following recommendations by URCA:

(i) BTC should, in responding to this consultation document, provide an appropriate forecasting and capacity planning system, reflecting the scale of local operations.

(ii) The agreed forecasting and capacity planning system should be reflected in BTC's RAIO which, before being concluded, must be reviewed and approved by URCA.

Please detail your response in full.

URCA's response to comments received

In its response to the consultation, BTC proposed to amend its forecasting and planning capacity system to recognise the need for the exchange of information between operators so that requirements for additional port capacity could be built into the budgeting process. BTC then further provided a description of its proposed system. Otherwise, it rejected the need for a detailed system as outlined in the consultation.

In its initial response to the consultation, CBL stated that it supported URCA's recommendation. However, upon reviewing BTC's consultation response, it has subsequently stated that it does not object to BTC's proposals, subject to URCA closely monitoring this aspect of the RAIO.

In its consultation response, SRG agreed that a system appropriate to the local market should be included in BTC's RAIO, although it stated that the process outlined in the consultation might be too onerous on new operators in the fixed market.

URCA's final decision

Following a review of the submissions received on the consultation, URCA requires BTC to amend the forecasting and capacity planning system described in its RAIO in line with BTC's proposed amendments as set out in its comments to the consultation. URCA will further monitor the performance of BTC in this area and, if necessary, require BTC to make additional amendments to its system as the market develops. Furthermore, URCA also reserves the right to use its ex post competition powers to investigate any complaints it may receive regarding potential anti-competitive behaviour by BTC in the area of forecasting and planning.

3. Review of the Proposed Charging Structure for Services

In this Section, URCA reviews the responses to its proposals relating to the charging structures proposed in the public consultation document.

3.1 On-island charges

Question 16

Consultation Question:

Do you agree that BTC should continue to offer free local calls given the non-zero RAIO charge for intra-island interconnection?
Please detail your response in full.

URCA's response to comments received

As stated in the consultation, it is URCA's preliminary position that BTC should be allowed to levy a per minute cost oriented charge for intra-island call termination service.

In its extensive responses to this question, SRG commented that the question of "free" on-island calls in combination with a non-zero RAIO charge for intra-island interconnection raises important and complex issues. After outlining what it considers to be the benefits of the current bill-and-keep arrangement between itself and BTC, SRG opined that a non-zero RAIO charge in combination with "free" on-island calls would be detrimental for competition in the fixed voice market. In commenting further on URCA's proposition, SRG noted that in a 2009 consultation URCA endorsed SRG's position that "*bill-and-keep will remain in place until charges are introduced for local calls.*"¹⁵ SRG urges URCA to affirm its prior "ruling" by requiring BTC to retain this arrangement within its RAIO.

BTC agrees with URCA's proposition. CBL stated that it agreed in principle with URCA, but added a number of further points for URCA's consideration. Specifically, CBL stated that for a reasonably efficient operator to replicate BTC's retail offer:

- BTC's interconnection rates must be cost oriented; and
- the cost of "free" local calls should be covered by the monthly access fee.

¹⁵ Statement of Results – Consultation on Access & Interconnection For The Electronic Communications Sector – ECS17/2009", 24 September 2009

Following on from those comments, CBL urges URCA to confirm that BTC's:

- retail pricing is not predatory or below cost; and
- retail offers can be replicated by OLOs on the basis of the proposed wholesale offer.

CBL further stated that in the event that BTC's monthly access charge is not compensatory, URCA must require BTC to rebalance its tariffs, as this is necessary for sustainable competition. In the absence of URCA's confirmation that BTC's local rates are compensatory, local termination charge should be "zero-rated". CBL believes that the introduction of a capacity based interconnection offer would enable OLOs to replicate BTC's unlimited offer of free local calls.

URCA's final decision

URCA denies SRG's claim that URCA has made a prior "ruling" on bill-and-keep. In responding to this particular comment from SRG, URCA notes that the 2009 document to which SRG referred was not a regulatory measure issued by URCA. Instead, the document was issued as part of a wider consultation on access and interconnection in a converged regulatory framework and was never intended to impose binding commitments or obligations on either BTC or OLOs. In this regard the Introduction section (p.1) of the document is instructive, as it made clear and unambiguous that the 2009 document did not constitute a regulatory measure and should not be construed as such:

The exact obligations to be imposed on SMP operators will be specified in the obligations that URCA must issue to SMP operators ...after the Comms Act comes into force.

As stated throughout this and other documents issued by URCA, cost orientation is a requirement of BTC's licence, the Comms Act and URCA's Final Guidelines on Access and Interconnection. URCA has issued its Final Decision on BTC's A/S obligation and must now await BTC's revised 2009 accounting separation results before it is in a position to comment on whether BTC has complied, where possible, with the requirement to provide cost oriented interconnection services.

URCA agrees in principle that the monthly access fee should also cover the economic cost of providing "free" local calls. However, for historic and social policy reasons, this might not be the current case in The Bahamas.

URCA's responses to CBL's requests for confirmation regarding BTC's retail charges are as follows:

- BTC has recognised, in correspondence with URCA, that there is a requirement for its retail charges to be rebalanced. URCA is also aware that there is likely to be a need for tariff rebalancing. The extent to which

individual services are priced below cost therefore needs to continue to be assessed as tariff rebalancing develops.

- Because URCA holds no information on an OLO's cost, it is currently not in a position to determine whether BTC's retail pricing can be replicated by OLOs using the underlying RAIO service.

Notwithstanding the legitimate competition concerns identified above, URCA considers that an efficient OLO could still compete with BTC in the fixed access market by, for example, bundling fixed access services with local and long distance calls. URCA understands that there is an emerging trend in many jurisdictions for Cable TV service providers to offer double or triple play packages in order to actively compete in the fixed telephony market (even if the incumbent's monthly access fee may not be fully cost reflective).

URCA wishes to reiterate that it takes seriously any potential competition concerns identified by respondents, namely the ability of OLOs to profitably replicate BTC's retail offers given the non-zero RAIO charge for local calls. At the same time, URCA would further like to assure all stakeholders that it will continue to closely monitor the market following the introduction of any charge, and will apply, where necessary, its *ex post* competition powers to prevent anti-competitive conduct in the market and safeguard the interests of customers.

Given its commitment to a sustainable competitive electronic communications sector, URCA will review BTC's retail prices either as part of URCA's review of any tariff rebalancing proposals or as part of any *ex post* investigations. Elsewhere in its response to the consultation, BTC has requested URCA to consider rebalancing proposals, and URCA will duly consider such proposals from BTC when BTC is ready to submit the same.

Finally, BTC has not proposed a capacity based interconnection offer within the current RAIO, and URCA is not requiring BTC to do so at this time. However, URCA believes that OLOs can negotiate a capacity based interconnection offer pursuant to the new service provisions of the RAIO, and in the event of a dispute, the OLO or BTC may request URCA to arbitrate the dispute.

3.2 RAIO charges for other “free” retail services

Question 17

Consultation Question:

Do you agree that BTC should be able to charge a cost oriented tariff in the RAIO for terminating calls to emergency services, and that each licensed operator should recover the cost of providing free emergency call services to their retail customers from their general revenues? Please detail your response in full.

URCA’s response to comments received

In the consultation document URCA expressed the preliminary view that BTC should be allowed to charge a cost oriented tariff in the RAIO for terminating calls to emergency numbers in The Bahamas, and that each licensee should recoup the cost of providing free emergency services to their retail customers from their general revenues.

BTC and CBL both agree with the position taken by URCA in the consultation. SRG disagrees with URCA’s proposal and outlined a number of reasons why URCA’s stated position should not be adopted. In particular, SRG believes that BTC should not be allowed to include a non-zero charge for terminating calls to emergency numbers, given its status as the universal service provider and in the event BTC feels that funding is justified it should make an application to URCA for compensation through the universal service fund.

URCA accepts that BTC has universal service obligations, but notes that this does not mean BTC has an obligation to provide free wholesale services to OLOs or to subsidize the competition. The obligation to provide free calls to emergency services to retail customers is applicable to all operators, including BTC.

URCA also notes the requirements of the interconnection framework allowing BTC to recover the cost incurred in providing the equivalent wholesale service. Further, as noted by other respondents to Question 17, URCA’s proposal is in line with international best practice. URCA is not aware of any regional precedent to support SRG’s proposal for retaining a zero charge for terminating calls to emergency numbers in BTC’s RAIO.

URCA’s final decision

Following a review of the submissions received on the consultation, URCA requires BTC to include a cost oriented charge within its current RAIO for terminating calls to emergency services in The Bahamas. All licensees should recover the cost oriented charge in BTC’s RAIO from their general revenues.

Question 18

Consultation Question:

Do you agree with URCA's requirement for BTC to submit retail proposals for calls to DQ enquiries and automated ancillary services given BTC's non-zero RAIO charges for equivalent wholesale inputs? Please detail your response in full.

URCA's response to comments received

Given the non-zero wholesale charge proposed in the draft RAIO, URCA has required BTC to submit retail proposals for calls to DQ and automated ancillary services. URCA's proposal was designed to ensure that alternative operators have the ability to offer competing or substitute services using the cost oriented wholesale inputs in the RAIO.

BTC and SRG both agree with URCA's proposal. CBL is concerned about the ability of an OLO to replicate BTC's service offerings, in particular the ability of an OLO to replicate BTC's service bundle consisting of access, DQ and automated services. URCA believes that the concerns raised by CBL regarding replicability are relevant and important. For those reasons, and as a first step, URCA will ensure that BTC only recovers the incurred cost of providing the equivalent wholesale inputs. URCA has no information on BTC's retail proposals at this time and is therefore unable to comment further on CBL's concerns. However, in reviewing BTC's proposals, URCA will consider the requirements and principles specified in the Retail Pricing Rules for SMP operators.

URCA's final decision

Taking into account all the consultation submissions, URCA requires BTC to submit to URCA, within thirty (30) business days from the date of the publication of this Final Decision document, retail proposals for calls to DQ enquiries and automated ancillary services. URCA will review such proposals within the context of key regulatory principles and any other relevant regulatory measures issued by URCA.

For the avoidance of doubt, in the absence of realistic and appropriate proposals from BTC, URCA will review the situation and, if appropriate, URCA could mandate BTC to remove the non-zero charges for terminating calls to DQ and automated ancillary services originating from other operators, or require such retail pricing changes as may be appropriate to ensure fair competition between all operators.

3.3 Mobile termination charges

Question 19

Consultation Question:

Do you agree that mobile termination charges should not be included in the final RAIO except for incoming international calls to mobiles (delivered via an OLO)? Please detail your response in full.

URCA's response to comments received

Three of the four respondents to the consultation (LIME, CBL and SRG) agreed, at least to some extent, with URCA's proposal that, so long as calls to mobiles are operated on a MPP basis, no mobile termination rate should be applied, except for incoming international calls to mobiles (where MPP does not operate). CBL states that URCA and BTC should promptly decide the appropriate retail pricing structure for calls to mobiles, whilst SRG states that mobile termination should be provided on a zero-rated (bill and keep) basis until:

- BTC discontinues its policy of MPP; and
- BTC introduces charges on its own fixed line customers for making calls to mobiles.

LIME states that where BTC is able to set its mobile retail rates (on a MPP basis) at a rate that is above cost, charging for mobile call termination would not be essential. It further states that URCA should conduct an additional consultation on this matter when competition in the mobile sector is introduced.

In contrast, BTC disagrees with URCA's initial proposal. BTC argues that it should charge a cost oriented mobile termination rate, regardless of the retail pricing structure for calls to mobiles. BTC states that this will provide the correct signals to OLOs to promote efficient market entry and hence sustainable competition. By not charging a cost oriented termination rate, BTC argues that OLOs would benefit from a cross-subsidy from BTC. BTC also argues that not allowing it to set a cost based mobile termination charge would be contrary to URCA's Access and Interconnection Guidelines.

Finally, BTC rejects URCA's argument about the possible over-recovery of costs of mobile call termination, stating that any such 'over-recoveries' should be considered as part of a comprehensive review of BTC's retail pricing practices.

URCA notes the comments of all the respondents. It also notes that BTC's position differs from that set out in its draft RAIO, which stated explicitly that, "*BTC will introduce a cost-based mobile termination rate in the event that inbound retail call*

charges to mobile users (MPP) are discontinued or in the case these tariffs are lowered below the cost of providing the mobile termination service.”¹⁶ That is, BTC’s draft RAIO appeared not to envisage charging a cost-oriented mobile termination charge at this point in time.

URCA continues to believe that charging a cost-oriented mobile termination charge at this point in time is not appropriate for domestically originating calls. It is not aware of other jurisdictions where a cost oriented mobile termination charge is applied alongside a MPP retail pricing regime. Furthermore, URCA does not agree that a zero-rated MTR alongside a MPP retail pricing regime would mean that OLOs benefit from a cross-subsidy from BTC. BTC will receive the same revenues for a fixed to mobile call regardless of which licensee originates the call (i.e., BTC or any OLO). All OLOs are able to set a retail charge to cover the costs of originating the call.¹⁷ Although BTC will be the only operator to incur the costs of terminating the call on its mobile network, its retail charge to its customers will support the recovery of these costs, regardless of the licensee originating the call.

In contrast, if BTC were to charge OLOs for terminating calls on its mobile network and its customers for receiving calls, it would receive income associated with providing the same service twice. Regardless of the cost oriented nature of the retail charge, URCA does not believe this would be appropriate and indeed, that this could affect the development of competition in The Bahamas. This is because BTC would effectively have two revenue streams from providing a mobile termination service. As such, URCA is of the view that under BTC’s current MPP retail pricing regime, the principle of cost recovery occurs on the retail level and thus, extends beyond the interconnection level.

URCA agrees with respondents that there should be a link between the retail and the wholesale pricing structure for calls to mobiles. URCA further agrees that BTC should be able to recover the (efficiently incurred) costs of mobile termination services. It is also for BTC, through the Retail Pricing Rules, to determine its retail charging structure for calls to mobiles, and the level of any retail charges. URCA prepared its consultation on BTC’s draft RAIO on the basis of the current retail pricing structure and believes the RAIO should also reflect this.

URCA’s final decision

Taking into account all the consultation submissions, URCA requires BTC to set a zero-rated mobile termination charge for all traffic terminating on BTC’s mobile network that originates in The Bahamas. This is consistent with the text of BTC’s draft RAIO and will ensure that BTC does not recover costs from OLOs that it already reflects in its retail charges. For the avoidance of doubt, incoming international calls

¹⁶ BTC draft RAIO, Annexe G.3

¹⁷ BTC is subject to the Retail Pricing Rules.

to mobiles on BTC's network will nonetheless attract a cost oriented mobile termination charge.

3.4 Time of day adjustments to call service charges

Question 20

Consultation Question:

Do you agree that it is appropriate for BTC to set a single rate in the RAIO across all times of the day / week for its fixed voice products? Please detail your response in full.

URCA's response to comments received

BTC agreed with URCA's proposal. BTC further stated that it believed the concept of setting peak and off-peak rates to optimise network utilisation was "*an outmoded concept*" in an IP / NGN environment.

SRG agreed that RAIO charges should be structured in line with BTC's retail offer and that, therefore, currently no differentiation between peak and off-peak charges should apply.

In contrast, CBL stated that a peak / off-peak differentiation should be applied. It argued that differentiated rates would enhance the ability of OLOs to develop innovative offers in the retail market whilst also being more cost reflective.

URCA accepts that BTC's costs are likely to be driven by peak hour demand on its network. Differentiating between peak and off-peak charges may, therefore, provide appropriate signals to OLOs regarding the costs of the network. However, the demand for interconnection services is derived from the demand for retail services. Without differentiation of retail charges, the impact of differentiating interconnection charges by time of day on network utilisation is likely to be limited.

Furthermore, in the absence of an existing retail tariff gradient (i.e., a difference between peak and off-peak retail prices), URCA believes it may be impractical to determine an appropriate interconnection tariff gradient. This is because interconnection tariff gradients are typically based on the retail tariff gradient.

URCA's final decision

Following its review of the consultation submissions, URCA requires BTC to set a single charge for each call conveyance service in the RAIO (i.e., applicable across all times of the day and week). URCA will, however, review this requirement further should BTC amend its retail pricing structure.

3.5 Treatment of joining services

Question 21

Consultation Question:

Do you agree that BTC should publish charges for joining services for all available links in its RAIO? Please detail your response in full.

URCA's response to comments received

There was a general acknowledgement that BTC needed to publish its charges for joining services. As part of its initial response, BTC submitted its proposed pricing schedule for Joining Paths. This is summarised in the table below.

Table 1. BTC's proposed RAIO charges for Joining Paths

Service element	One off charge (\$)	Monthly charges (\$)
Joining Path charges - In Span and Customer Sited Interconnection Joining Circuits		
New Fibre termination per route	2,511.84	
Existing Fibre - Lighting per route	850.00	
Distance dependent charge per mile with new duct	177,236.51	1,646.44*
Distance dependent charge per mile sharing existing duct	16,844.36	54.686*
Joint Box (juc 11) – per box	6,806.91	19.78*
Early Termination Charge per remaining months - In Span Interconnection Joining Circuits only		
Distance dependent charge per mile with new duct		493.927*
Distance dependent charge per mile sharing existing duct		163.402*
Early Termination Charge per remaining months - Customer Sited Interconnection Joining Circuits only		
Distance dependent charge per mile with new duct		509.398*
Distance dependent charge per mile sharing existing duct		168.528*

Source: BTC initial consultation response

**sourced from Cable & Wireless Jamaica's reference and interconnect offer (RIO-5)*

BTC further stated that its Joining Circuits will be based on IP Technology and that, in the short term, cost based prices will be derived for each Joining Circuit, reflecting the exact specification of the relevant Joining Circuit.

Upon review of BTC's proposal, both SRG and CBL strongly objected to the proposed pricing schedule. Key concerns raised by respondents include:

- **Missing service charges.** SRG expressed concern that BTC had, despite labelling its information as Joining Circuit charges, actually only provided proposed charges for Joining Paths. It therefore requested BTC to also provide RAIO charges for Joining Circuits.
- **Use of benchmarking.** CBL and SRG criticised BTC's decision to develop some of its charges based on international benchmarking. Both parties considered this approach to be unnecessary in this instance, as these services mainly related to maintenance and construction related tasks, for which BTC should be able to develop cost based charges. CBL further criticised BTC's choice to develop its charges solely on the Jamaican RIO-5, as it stated this reference offer was out of date and more up-to-date reference offers would lead to lower charges. In this context, CBL made specific reference to Jersey Telecom's RAIO, which contains charges for new and shared duct that are significantly lower than BTC's proposed charges (i.e., 70% and 98%, respectively).
- **Lack of evidence on cost estimates.** BTC has failed to provide any evidence on the underlying costs for those charges that are not based on the Jamaican RIO (i.e., the one-off charges set out in the table above). SRG noted that these charges are higher than commercial quotes provided by BTC for fibre installation and termination service. As SRG has failed to further elaborate on this reference, including the actual quotes it received from BTC, it is not possible for URCA to ascertain SRG's claim.
- **Pricing structure and service specifications.** SRG further commented on the service specification and pricing structure underlying BTC's pricing proposal for Joining Paths. In particular:
 - a 'per mile' charge was unreasonable, given the limited Pols offered by BTC;
 - there was no explanation on how costs are being shared between the parties, or who bears the cost of termination equipment on each network;
 - BTC failed to present separate charges for Grand Bahama and New Providence, despite underlying cost differences for these two locations;
 - there is no information on the potential migration of existing Joining Paths and Circuits; and
 - the use of IP technology was not in line with the specification of SS7 in the draft RAIO.

URCA's final decision

As noted in the Final Decision on Question 13, URCA is of the view that there should be no payments between operators for Joining Paths. That is, 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 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.

Given the above, BTC is required, within thirty (30) business days of the date of the publication of this Final Decision document, to develop a revised pricing schedule for its joining services, based on the principles set out above. As part of its revised submission, BTC needs to provide URCA with supporting evidence on the underlying costs and assumptions used to develop the proposed charges.

Upon receipt of BTC's revised pricing schedule for its joining service, URCA will review BTC's proposal to ensure that it meets URCA's specifications set out above. Should BTC not provide this information, or not provide satisfactory supporting evidence for the basis of its charges, URCA will proceed instead to determine the appropriate level for charges.

4. Detailed Review of BTC's Proposed RAIO Charges

4.1 Tariffs based on BTC's AS results

Question 22

Consultation Question:

Do you agree that for its final RAIO, BTC should develop revised charges based on the amendments to its Accounting Separation model?

Please detail your response in full.

URCA's response to comments received

Whereas SRG and CBL agreed with URCA's proposal that BTC's final RAIO charges should reflect any amendments to its separated accounts, LIME and BTC disagreed with URCA's proposition.¹⁸ Both operators commented on the two main issues URCA identified with BTC's current accounting separation (A/S) results and which underlie some of BTC's proposed RAIO charges: (i) PoI network component costs, and (ii) its volume conversion approach.

Below, URCA briefly comments on the arguments put forward by both respondents, before setting out its final decision.

Pol network component costs

Both BTC and LIME argued that BTC's current approach is fully in line with the principle of cost causation. The interconnection-related legal and regulatory operating costs should be fully allocated to interconnection services only, as BTC had correctly done under its current A/S approach.

However, as already deliberated in Section 4.1.2 of the consultation document, URCA considers the principle of cost causality is only one of several principles and objectives of relevance in this context.

Specifically, as set out in the table below, URCA is of the view that there are six principles which can usefully guide a regulatory authority when determining cost recovery schemes. Having reviewed these principles, URCA believes that in the case of PoI, the majority of principles point to recovering these costs across all services.

¹⁸ URCA notes SRG further comments with respect to intra-island fixed call termination, mobile call termination, termination to emergency services, and call transit services. URCA's position on each of these issues is presented in its final decisions to the other consultation questions.

Table 2. Review of regulatory principles in context of PoI network component costs

Regulatory principle	Relevance to PoI network component cost
Cost causation	To ensure cost causation, PoI specific costs should only be recovered from those services that utilise this network component.
Distribution of benefits	As all end-users, including those from BTC, ultimately benefit from enhanced competition, the cost of establishing any interconnection regimes should be recovered across all call traffic that is conveyed or transited on BTC's network.
Effective competition	To ensure that there is a level playing field across the entire sector (and to avoid discriminatory practices by BTC), the relevant costs should be recovered across all call traffic that is conveyed or transited on BTC's network. ¹⁹
Cost minimisation	Under BTC's proposed scheme, it would not incur any of the underlying costs (as these would be fully recovered from OLOs). This would result in BTC having no incentives to minimise these costs. As such, recovering these costs across all services would be in line with the principle of cost minimisation.
Practicality	This principle provides little guidance on whether BTC's costs of establishing the current interconnection regimes should be recovered across all services or only those that use the PoI.
Reciprocity	This principle provides little guidance on whether BTC's costs of establishing the current interconnection

¹⁹ It could be argued that, under its current approach, BTC is discriminating between its own business and other operators. For example, under a calling party pays regime with cost oriented interconnection charges, BTC would charge an OLO more for mobile call termination than it implicitly charges its own fixed business. Similarly, BTC's fixed business would charge an OLO more than it charges its own mobile business for terminating calls on BTC's fixed network. Ensuring non-discrimination would require BTC to only recover the PoI specific costs from services using this network component, with all remaining interconnection-related operating expenditures being recovered across all products using the fixed network (i.e., as proposed by URCA).

regimes should be recovered across all services or only those that use the Pol.

URCA has a responsibility to encourage, promote, and enforce sustainable competition and promote overall consumer interest.²⁰ It has no desire to harm BTC or any other licensed operator. Instead, URCA wishes to ensure that there is a level playing field across the entire sector and is of the view that this cannot be achieved under BTC's current approach (due to the potential of discriminatory practices by BTC, highlighted in the table above).

URCA further remains of the view that its references to the regulatory decisions in the UK and Ireland are relevant to the case of BTC.

- The **UK reference** relates to Ofcom's decision on the recovery of BT's 'product management, policy and planning' (PPP) charges.²¹ These charges relate to the administrative costs of providing narrowband interconnection service (i.e., specific marketing activities; product management; sales and customer management; billing and finance; and other activities in support of these previously listed costs). Ofcom defines the 'sales and customer management' cost item within the PPP costs as costs relating to "*commercial management (such as negotiating interconnect agreements, ongoing maintenance of contracts, dispute resolution and business planning to establish operator revenues) and technical account management [...]*."²² These activities appear to correspond closely to the cost items BTC has currently allocated to its Pol. As such, URCA considers this reference to be relevant to BTC's case. As stated previously, after reviewing its six principles of cost recovery²³, Ofcom concluded that, in order to ensure effective competition, cost minimisation and distribution of benefits, BT should recover its PPP costs from all operators – including from itself.
- The **Irish reference** relates to a decision by ODTR (now ComReg) on the recovery of eircom's 'billing and carrier administrative charges' (i.e., the cost related to the administrative activities involved in setting up, maintaining and

²⁰ See Section 4(a) of the URCA Act

²¹ Ofcom, "Review of BT's product management, policy and planning (PPP) charge", published 30 July 2004.

²² See page 12 of Ofcom (2004).

²³ I.e., cost causation, distribution of benefits, effective competition, cost minimisation, practicality and reciprocity.

billing for interconnection).²⁴ Similar to Ofcom, ODTR decided that these costs should be recovered across all relevant traffic (i.e., including that from the incumbent).

URCA's final decision

URCA has considered the comments made on its proposals on the PoI network component. However, after careful deliberation, URCA does not consider the further arguments made by BTC sufficient to alter its proposals. BTC is therefore required to reallocate its PoI costs so that non-PoI specific operating expenditure is recovered across all traffic terminating on BTC's fixed network.

BTC is therefore required to develop revised RAIO charges for all conveyance services for which tariffs are derived from its accounting separation results and to include these as part of its amended RAIO document to be submitted to URCA.

Volume conversion approach

BTC strongly disagreed with URCA's preliminary view, arguing that a traffic equivalent conversion methodology has been used (in top-down costing models) in a number of other jurisdictions (such as South Africa, Saudi Arabia, United Arab Emirates, Jersey and Sweden). In addition, BTC claims that URCA's approach is based on information that is generally not available (i.e., detailed traffic routing information on a route-by-route basis) and/or onerous to collect. As such, BTC suggested that URCA should accept BTC's current approach for the 2009 set of accounts (and hence BTC's RAIO charges) and allow for further discussions on this issue between BTC and its regulatory auditors next year.

Within its consultation document, URCA argued that BTC's volume conversion approach may not be consistent with the principle of cost causation.²⁵ In its response, BTC fails to address this issue. Hence, URCA remains of the view that BTC's volume conversion could result in a significant and unwarranted departure from the principle of cost causation. For example, URCA understands that within its A/S modelling, BTC has assumed that leased lines are used for two hours a day. This assumption, amongst other assumptions, impacts on BTC's A/S results. However, although URCA has no evidence to disagree with BTC's assumption, it does not

²⁴ For further details, see ODTR, "eircom's Reference Interconnect Offer - Decision Notice D7/00 & Report on the Consultation", published April, 2000.

²⁵ URCA notes that the additional five principles commonly used for assessing appropriate cost recovery (i.e., distribution of benefits, effective competition, cost minimisation, practicality and reciprocity) could, in principle, be considered here as well to justify a shift from cost causation. However, unlike the PoI network component issues above, URCA does not believe any of these remaining principles are applicable here. It therefore believes a move from cost causation cannot be justified.

believe that it is necessary as capacity has to be dedicated (i.e., available all the time) for leased lines. A capacity-based volume conversion would not require any utilisation assumption for the leased lines.

BTC's case therefore rests on its argument that: (i) the volume conversion approach would be too complicated to implement; (ii) the split between voice traffic is not monitored on a route by route basis; and (iii) a lack of international precedent for URCA's approach. Each of these three issues is discussed below.

- **Implementation of the volume conversion approach.** While ideally the methodology should be conducted on a route by route basis, URCA accepts that a more aggregated approach focusing on the capacity required by different services at the network element would be an advance on the existing methodology.

URCA would further like to point out that the precise methodology implemented would depend on BTC's information systems. BTC is in a better position than URCA to determine the extent to which capacity measures can be disaggregated – for example, it may be possible to disaggregate each network element by different transmission systems even if it is not possible to disaggregate on a route by route basis.

- **Available voice traffic.** BTC also argues that the split between voice products is not monitored on a route by route basis. URCA does not dispute this point. On the presumption that BTC was not able to differentiate between voice and non-voice capacity on a route by route basis, URCA would accept a split between different sources of voice traffic at the network element level.
- **International precedent.** BTC argues at some length that the approach it has adopted is in line with the approach used in other models. URCA recognises that this may be the case but has the following comments:
 - The fact that BTC's approach may have been used in other models does not necessarily make it correct. As previously noted, URCA argued in the consultation document that traffic equivalent conversion factors were unlikely to be consistent with cost causality, in part because no account is taken of the fact that leased lines are dedicated circuits. BTC has failed to respond to this argument.
 - It is also important to consider the context in which the quoted models are used. To take a single example, interconnection charges and local loop unbundled (LLU) charges in Sweden are set using a hybrid model and, indeed, have been set using such a model over the course of a number of years. It can be noted that this model, a version of which is publicly

available, converts minutes into a capacity measure. Hence, the Swedish example is of more limited relevance than might at first appear²⁶.

In general, top-down models are not publicly available and, as a result, it is not generally possible to comment on the methodologies used. However, URCA has been able to find publicly available documentation referring to two top-down accounting systems:

- **BT (UK).** In discussing the allocation methodology for transmission, the Detailed Attribution Methodology (DAM) document refers to an allocation methodology based on factored hits, which take account of **capacity**. The 2008 version of BT's DAM discusses the application of this methodology to Megastream (2Mbits) and shows that the number of factored hits is examined separately for transmission equipment of different capacities.²⁷ This discussion is not consistent with a traffic based conversion approach.
- **EPT (Luxemburg).** EPT's, the incumbent in Luxembourg, 'Summary Description of its Regulatory Costing Model for Wholesale Products' document refers to allocation keys based on the number of circuits, a capacity measure, and to a traffic equivalent measure.²⁸

LIME stated that URCA's proposed capacity-based approach would lead to increases in the cost of data related services, relative to voice services. URCA is aware that its preferred approach would lead to a change in the costs allocated to data services, relative to voice services. As clearly stated in its consultation document, URCA is of the view that BTC's current approach does not adequately allocate the costs between the two types of services, with costs being currently over-allocated to voice services. This is not in line with the principle of cost causality and BTC is therefore required to adopt a capacity based approach for its accounting separation analysis, as this approach ensures consistency of the A/S result with the principle of cost causation. As pointed out in Section 4.2.1 of the consultation document, network costs are driven by capacity requirements and not by traffic volumes. Hence, a methodology under which volumes are converted into capacity equivalent

²⁶ It can be noted that a similar approach to setting interconnection and LLU charges is used in Denmark. Again a capacity equivalent conversion approach is used. The Danish model, a version of which is publicly available, contains an extremely detailed breakdown of traffic flows in the transmission network.

²⁷ <http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2008/DAM2008.pdf>

²⁸ http://www.pt.lu/webdav/site/portailEPT/groups/DT_operators_redacteurs/public/Regulatory/Accounting&cost%20model/DESCRIPTION%20OF%20THE%20%20REGULATORY%20COSTING%20MODEL%20FOR%20WHOLESALE%20PRODUCTS.pdf

conversion factors is likely to be more closely consistent with cost causality than a methodology under which traffic equivalent conversion factors are used.

However, in recognition of the time required to implement this revised approach, BTC is only required to apply the volume conversion approach within its 2010 accounts and onwards (i.e., not to include this adjustment in its initial set of RAIO charges).

URCA's final decision

URCA notes BTC's and LIME's comments on BTC's volume conversion approach. However, after careful deliberation, URCA does not consider the further arguments presented are sufficient to alter its proposals on this issue. As such, URCA is requiring BTC to amend its volume conversion approach from one based on traffic-equivalent conversion factors to one based on capacity-equivalent conversion factors. However, in recognition of the time required to implement URCA's approach, URCA has required BTC to apply the revised approach to BTC's 2010 accounts and onwards.

4.2 Appropriateness of the A/S based RAIO charges

Question 23

Consultation question:

Do you agree with URCA's approach that where BTC has used the AS model for developing interconnection tariffs, these tariffs be used for 2010 (with appropriate adjustments for the cost allocation issues highlighted by URCA) and adjustments for efficiency be incorporated, in parallel with production of the AS model based on 2010 financials, from Summer 2011 onwards? Please detail your response in full.

URCA's response to comments received

Stakeholders expressed different opinions on URCA's proposition above. CBL agreed with URCA's proposed approach, however suggested a retrospective application of any revised RAIO charges (based on the outcome of the efficiency study). SRG proposed prolonging existing interconnection and access arrangements (including any 'Bill and Keep' arrangements) until the final RAIO charges become available. Both BTC and LIME consider there to be no need for an efficiency study as BTC's A/S results form a reasonable basis for cost oriented RAIO charges. BTC further expressed concern that CBL's suggestion of retrospective rate adjustments would undermine the predictability of the regulatory regime in The Bahamas.

URCA would like to remind all parties that Section 4.2 of the Final Access and Interconnection Guidelines explicitly state that BTC's RAIO charges must be cost oriented and reflective of efficiently incurred costs only. Within Section 4 of the

RAIO consultation document, URCA clearly states that, at this stage, it was only able to review whether the proposed RAIO charges were cost oriented and it would require further analysis to assess the need for any efficiency adjustments. As such, URCA has not, within this final decision document, made any statement on whether BTC's A/S cost results are reflective of an efficient level of costs. Instead, URCA has set out the motivation for undertaking an efficiency study and a proposition on how to reflect the outcome of such a study in BTC's RAIO charges.

URCA is of the view that retrospective rate adjustments should only be applied in cases of significant errors in the calculation of interconnection rates, proven evidence of anti-competitive practices, or an interconnection dispute concerning the appropriate level of charges over a certain period. As such, URCA does not consider it appropriate to apply retrospective adjustments in this final decision document. This is to ensure all licensees have a reasonable degree of certainty over interconnection payments. However, if BTC fails to cooperate in the efficiency study and this were to result in significant delays to the approval of new rates, URCA reserves the right to review its decision. URCA understands that this position is in line with common practice within the region. URCA considers that SRG's proposal to keep existing interconnection rates (including 'Bill and Keep' arrangements) is not feasible, as these would not apply to all OLOs.

Use of benchmarking analysis

URCA welcomes the feedback from stakeholders on the use of benchmarking analysis. It recognises the potential shortcomings of such analysis and the need to take these into account when making any regulatory decisions on that basis. However, URCA would like to reiterate that it has not, as part of this consultation process, stated any intention of using benchmarking techniques as a basis to assess BTC's efficiency or to determine its RAIO charges. As stated above, URCA has, at this stage, not undertaken a full review of BTC's efficiency but intends to do so in the near future. The exact approach for this efficiency study is yet to be determined.

There is a wide range of possible approaches to undertaking efficiency studies. For example, an efficiency study can either seek to estimate the relative or absolute efficiency of the operator concerned. Estimating absolute efficiency would require preparing a detailed bottom-up cost model of BTC's network in order to compare this to the results of the top-down model. In contrast, a relative efficiency approach would compare the efficiency of BTC with comparable operators, using existing and operational costing information on both BTC and the comparators.

Furthermore, it could be possible to review BTC's efficiency on a cross-sectional basis (i.e., compared to other operators, using the latest available data) or on a time-series basis. A time-series approach would analyse how BTC's efficiency has changed over time. Both of these approaches could be undertaken by measuring total factor productivity (i.e., taking into account the full range of inputs used by the

operators and the full suite of outputs) or by measuring partial factor productivity (i.e., relationships between key inputs and key outputs, such as lines per employee).

URCA believes that a relative efficiency study is likely to be most appropriate. This is because developing a detailed bottom-up cost model is a resource-intensive exercise and subject to a number of uncertainties. There is a range of methodologies that are used to determine the relative efficiency of electronic communications operators. These fall into the two main categories:

- **Parametric analysis.** A parametric (or econometric) approach aims to test and measure the relationship between a dependent variable (i.e., the operator's costs) and several independent variables (i.e., its outputs and other likely cost drivers, such as operational, geographic and demographic variables and regulatory obligations).²⁹ There are several econometric techniques available for carrying out parametric analysis, varying in the degree of complexity and resulting efficiency estimates.³⁰ Econometric analysis can be subject to hypothesis testing to determine the robustness of results. However, in the electronic communications industry, parametric techniques are severely limited by the lack of granular data.
- **Non-parametric approaches.** These approaches compare the inputs used by an operator to produce a given level of outputs with those used by other operators (in that country or across several countries). The resulting productivity figures for each operator can then be used to assess the efficiency of that operator compared to others. Non-parametric analysis can either be undertaken on the basis of a single indicator (e.g., by conducting a benchmarking analysis of lines per employee or costs per line exhibited by operators) or by taking several indicators into account (i.e., by applying a Data Envelopment Analysis (DEA) technique³¹). A non-parametric based analysis is a particularly practical approach to measuring relative efficiency and is a widely used tool in the context of telecommunications/electronic communications regulation, especially in less mature regulatory environments. It can be

²⁹ These independent variables commonly comprise both, factors that are under the control of the operator (such as, number of staff and coverage level) as well as exogenous factors (such as, demographic characteristics or economic variables).

³⁰ Common techniques include, for example: (i) Ordinary Least Squares (OLS), Corrected Ordinary Least Squares (COLS), and Stochastic Frontier Analysis (SFA).

³¹ The Data Envelopment Analysis (DEA) is a generalisation of the partial data analysis. The DEA program identifies efficient companies for each partial output-input dimension. A linear combination is then used to determine an efficiency frontier from these 'best-practice' companies. Finally, each company is compared to a virtual company on the efficiency frontier which has similar structural conditions (i.e., a point on the frontier that is closest to the company). The inefficiency of that company is then defined by the distance to the efficiency frontier.

undertaken on a national or international basis. Despite its practical benefits, undertaking such an analysis also has a number of limitations.³² To overcome some of the limitations of a standard benchmarking approach outlined above, more advanced approaches, such as DEA and adjusted benchmarking analysis, have been developed. These more advanced approaches attempt to control for the exogenously driven differences between operators included in the sample by adjusting the actual incurred costs of each comparator operator and, thus, it is likely to provide more informative results.

URCA will review the advantages and disadvantages associated with each approach and determine the most suitable approach to assessing BTC's efficiency over the course of the next year, based on an assessment of available data and resource implications.

Given the above, URCA wishes to reiterate that the performance and tariff benchmarking results presented in the consultation document aimed to provide: (i) an indication of how BTC's level of costs compare to other telecommunications/electronic communications operators, and (ii) a cross-check of BTC's proposed RAIO charges, relative to those experienced in other jurisdictions. Throughout the document, URCA clearly stated the potential limitations of benchmarking analysis.³³ URCA would like to reassure all parties that if benchmarking analysis forms the basis of any future regulatory decision, URCA will exert great care in developing an appropriate approach and it would take into account any potential limitations of such a study when formulating its regulatory decisions.

URCA's final decision

Taking the above into account, BTC is required to include in its RAIO the charges based on its revised A/S results.

URCA will then undertake a separate study on BTC's level of efficiency. Any required adjustments for efficiency resulting from this study will then feed into BTC's revised tariff schedule reflecting A/S results for the financial year 2010 (expected in mid to late 2011).

³² For example, a commonly recognised limitation of benchmarking is that it requires a homogeneous sample in order to be able to attribute any observed performance differences within the sample to the operators (rather than being externally driven). In heterogeneous samples, it is difficult to interpret any observed performances differences within the sample as these may be driven by exogenous factors.

³³ See, for example, footnote 39 of the consultation document.

4.3 Tariffs based on regional benchmarks

Question 24

Consultation question:

Do you agree with URCA's proposal:

- (i) not to require BTC to change its draft RAIO charge for its calls to Directory Services for this year's RAIO; but
- (ii) to develop revised charges for this service, based on its AS unit cost results, in subsequent years.

Please detail your response in full.

URCA's response to comments received

All stakeholders agreed with URCA's proposal.

URCA's final decision

As such, URCA will allow BTC to apply its current draft RAIO charges for calls to Directory Services in its current RAIO. However, for 2010 and onwards, BTC must develop revised charges for this service based on its relevant A/S unit cost results.

Question 25

Consultation question:

Do you agree with the revised approach and resulting RAIO charges for BTC's Automated Ancillary charges (as set out in Table 2 of the RAIO consultation document)? Please detail your response in full.

URCA's response to comments received

Whereas SRG and CBL agreed with URCA's proposal, BTC provided an alternative approach. In recognition of the limited and inconclusive benchmarking information available³⁴, BTC suggested for URCA and BTC to agree a retail price for the Automated Ancillary service and to then develop the RAIO charge based on a 'retail minus' approach.

³⁴ The only available, relevant information is sourced from Jamaica. However, the last approved reference offer for Cable % Wireless Jamaica (RIO 5) is from 2007, with a revised offer (RIO 6) still awaiting approval. The charges for the weather and time automated ancillary service varies significantly across RIO 5 and RIO 6 (see BTC's response to Question 25 for further details).

URCA appreciates BTC's alternative proposal. However, after careful deliberation, it has several concerns with the proposed approach. As BTC pointed out, there is currently no retail tariff available for these services, as BTC does not charge its customers for using these services. Also, URCA is not aware of any available evidence on an appropriate retail margin for these services (and BTC has not provided any evidence on this within its submission)³⁵. URCA therefore struggles to understand on what basis BTC and URCA should agree a reasonable retail charge for automated ancillary services, only to then derive a RAIO charge based on a 'retail minus' approach. Furthermore, it is not for URCA to develop retail pricing proposals. BTC further raised the concern that URCA's currently proposed approach may result in an upward adjustment of the RAIO charges in the near future (i.e., as soon as the Jamaican RIO 6 was approved). Although URCA appreciates BTC's concerns, it does not consider this risk to be relevant in this context, as it expects BTC to develop revised, cost oriented RAIO charges for these services (based on its A/S results) for 2010 and onwards.³⁶

URCA's final decision

Given the above, BTC is required to include in its final RAIO for this year, the following charges for its automated ancillary services:

- 1.10 cents per call for its weather automated ancillary service (915); and
- 0.62 cents per call for its time of day automated ancillary service (917).

In subsequent years, BTC must develop cost oriented RAIO charges for these services, based on the relevant A/S results.

Question 26

Consultation question:

Do you agree with the revised approach and resulting RAIO charges for BTC's international transit charges (as set out in Table 3 of the RAIO consultation document)? Please detail your response in full.

URCA's response to comments received

Whereas SRG and CBL agreed with URCA's proposal, BTC stated two concerns with URCA's proposed approach: (i) the two rates contained in URCA's preferred

³⁵ URCA understands that, for example, LIME in Jamaica also does not charge its retail customers for its automated ancillary services.

³⁶ Although BTC's current AS model does not provide cost estimates for automated ancillary services, BTC has agreed to develop these cost estimates in future separated accounts (in line with URCA's A/S guidelines for BTC).

benchmarking sample varied significantly, and (ii) TSTT in Trinidad would not represent a suitable comparator for BTC (based on geographic distance to The Bahamas). However, BTC recognised an inconsistency in its assumed exchange rates and presented a revised charge of 1.03 cents per minute.

URCA disagrees with BTC's concern on TSTT not representing a suitable comparator in this context. Although TSTT may require a more extensive submarine cable network than Cable & Wireless Jamaica to reach, for example, a POP in Florida, this is not reflected in the relative international transit charges for both operators (i.e., once exchange rates are taken into account, TSTT exhibits a lower charge than Cable & Wireless Jamaica). As such, URCA considers it reasonable to include TSTT in its benchmarking sample.

URCA recognises the variation within the resulting benchmarking sample. However, given the above, it has no justifiable reason to exclude either of the two operators from its sample. Furthermore, as for Automated Ancillary services discussed above, URCA expects BTC to develop cost oriented RAIO charges (reflecting an efficient cost level) for its international transit services in future years.

URCA's final decision

In consideration of the above, BTC is required to include a charge of 0.75 cents per minute for international call transit services in this year's RAIO. In subsequent years, BTC is expected to develop a cost oriented RAIO charge (reflecting an efficient cost level) for this service.

4.4 RAIO charges based on retail minus approach

Question 27

Consultation question:

Do you agree with URCA's proposition

- (i) not to require any changes to BTC's draft RAIO charges for its Operator Assistance service, but
- (ii) to require BTC to remove minimum call duration (of three minutes) from this service?

Please detail your response in full.

URCA's response to comments received

Whereas SRG and BTC agreed with URCA's proposition to accept BTC's draft RAIO charge for this RAIO, CBL suggested applying a retail margin of 20%, instead of the 15% proposed by BTC. However, CBL failed to provide any evidence in support of its revised margin.

CBL agreed with URCA's proposition to require BTC to remove the minimum call duration from this service without providing any reasoning for its position. In its defence for imposing the minimum call duration, BTC only referred to this being common practice elsewhere. Again, URCA considers this insufficient justification for introducing the minimum call duration (to ensure cost causation of the overall charge).

URCA's final decision

Given the above, it is URCA's final decision not to require any changes to BTC's draft RAIO charges for its Operator Assistance service, but to require BTC to remove minimum call duration (of three minutes) from this service.

4.5 RAIO charges based on internal costing analysis

Question 28

Consultation question:

Do you agree that, in absence of further evidence on cost-reflectivity of its current charge, BTC should reduce the RAIO charge to \$1.91 per data entry? Please detail your response in full.

URCA's response to comments received

Of all the responses received on this Question, only CBL objected to URCA's proposition on the revised RAIO charges for BTC's directory number inclusion service.³⁷ Within its response, CBL provided a revised calculation for this service, resulting in a charge of \$1.02 per data entry. In its second round responses, BTC commented on CBL's calculation, pointing out a methodological error as well as what BTC considered as an unrealistic assumption contained in CBL's approach. Although URCA appreciates CBL's alternative calculation, it does not consider it to result in more cost reflective RAIO charges for these services. This is due to the errors identified by BTC (with which URCA agrees) and CBL applying an (unsourced) average annual wage assumption. In contrast, URCA's approach relies on BTC's actual wage cost data.

URCA's final decision

Given the above, URCA requires BTC to include a charge of \$1.91 per data entry in its final RAIO.

³⁷ URCA notes however that, within its response, SRG posed some non-charge related clarification questions on this service to which BTC replied in its second round responses. URCA assumes that SRG's clarification needs are therefore resolved.

Question 29

Consultation question:

Do you agree that BTC should:

- (i) prepare, and publish, separate charges for its two PoI facilities in New Providence and Grand Bahama; and
- (ii) that these charges should contain location-specific accommodation cost estimates, which are reflective of the current utilisation of the relevant facilities (i.e., an average cost per square foot charge, weighted by the share of commercial and office space)?

Please detail your response in full.

URCA's response to comments received

All respondents to the consultation agreed to the need for BTC to develop separate charges for each of its PoI facilities. CBL stated in its response to Question 29 that BTC should provide separate charges for all of its PoI facilities (i.e., in case further PoI facilities were to be added to BTC's current two locations in New Providence and Grand Bahama, location-specific charges would have to be developed for those as well). URCA agrees with this principle.

Whereas SRG and CBL also agreed with URCA's proposed requirements for BTC to develop location-specific accommodation cost estimates, taking into account the current utilisation of the facilities, BTC objected to this requirement as this had no impact on the value of the co-location facilities offered to OLOs. URCA disagrees with BTC's statement. As mentioned in the consultation document, rental cost will vary by utilisation of the actual space. Setting the accommodation rental charge equivalent to that of office space may result in BTC being overcompensated by OLOs for the co-location space rental, in case BTC's actual co-location facility hosts both office space and commercial space. URCA therefore remains of the view that, to ensure that accommodation rental charges are cost oriented, BTC must develop rental charges that are reflective of the actual utilisation of the co-location facility.

In its response, SRG further requested that BTC should be required to provide: (i) cost based physical co-location space at its towers (i.e., mounting of one or more antenna with cable lead-in to the equipment co-location facility), and (ii) a standard charge for cable cross connects between operators' interconnection equipment. BTC objected to both these requests, stating that both issues exceeded its regulatory obligations. BTC would, however, provide interconnection between itself and other operators. URCA agrees with BTC's response on both issues and in particular, URCA will consult separately on the issue of infrastructure sharing (including tower sharing) in 2011.

URCA's final decision

Given the above, URCA requires BTC to develop separate charges for all its POI facilities and to provide these to URCA for its approval. BTC is also required to include location-specific accommodation cost estimates in these charges, which estimates are reflective of the current utilization of the relevant facilities (i.e., an average cost per square foot charge, weighted by the share of commercial and office space).

5. General Comments

In addition to comments on the specific questions in the consultation, respondents also made general comments on a number of issues surrounding the consultation. In the remainder of this Section, URCA identifies and responds to these general comments.

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 is made in its responses to that question. These include comments on:

- the structure of the draft RAIO³⁸;
- the number of Points of Interconnection³⁹;
- the planning and forecasting system⁴⁰;
- the use of benchmarking in the consultation document⁴¹;
- replicability; and
- the importance of deciding who pays for mobile calls prior to approval of the RAIO⁴².

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.

Cable Bahamas Ltd.

CBL continued to argue in favour of an interim solution for number portability and urges URCA to recognise the importance of number portability as a complement to the implementation of the RAIO.

CBL noted that BTC is not offering, within its current RAIO, a direct PoI to BTC's mobile network. Instead, an OLO wishing to terminate calls on BTC's mobile network must make use of the fixed transit service in BTC's RAIO. CBL argued that this arrangement would result in BTC behaving anti-competitively. Therefore, CBL urges URCA to require BTC to offer a direct POI to BTC's mobile network.

CBL believes that there should be a requirement for BTC to provide specifications and plans for Internet Protocol (IP) interconnection to BTC's Next Generation

³⁸ See Section 2.1 above.

³⁹ See Section 2.4 above.

⁴⁰ See Section 2.5 above.

⁴¹ See Section 4.2 above.

⁴² See Section 3.3 above.

Network (NGN), and that those plans should include a timetable and specific milestones for the deployment of IP interconnection. In addition to such plans, CBL urges URCA to impose an obligation on BTC to provide IP interconnection on any of the islands where it deploys a NGN.

Systems Resource Group Ltd.

SRG commented that some essential wholesale inputs have been excluded from the list of RAIO services, namely (i) a call termination service for inbound international toll free calls (1-800-393) and 1-800 toll free calls, (ii) a backhaul service, and (iii) a SMS termination service.

In commenting further on the BTC RAIO, SRG noted that in drafting the terms of its RAIO, BTC:

- *Ignores the longstanding terms, practices, services and rates that exist between SRG and BTC in their Interconnection Agreement (IA).*
- *Published a draft RAIO with altered service terms and higher rates for existing services, all to the benefit of BTC.*
- *Adopts the position that because BTC is required to treat all operators equally, the terms in the IA with SRG must be changed to reflect those that are contained in the RAIO.*

Bahamas Telecommunications Company Ltd.

BTC has proposed and strongly supports the inclusion of reciprocal clauses in the RAIO and draft Interconnection Agreement and believes that such clauses should remain unless there are good reasons for using unilateral clauses.

Within its first round responses, BTC levied criticisms at the RAIO consultation process and in particular the approach adopted by URCA in reviewing the BTC draft RAIO. BTC commented that in many of URCA's comments in the consultation document, URCA has exceeded its remit, and urged the regulator to moderate some of its preliminary proposals and withdraw from some of the more "*...detailed interference proposed in the Consultation Document.*" BTC believes that some of URCA's proposals are contrary to "light touch" regulation envisaged by Government in its Sector Policy, and the Comms Act. BTC has taken particular issue with URCA's proposed changes in respect of:⁴³

- (i) the process of updating contact details;
- (ii) the duration of confidentiality clauses;
- (iii) the financial security arrangements;

⁴³ Section 1.6, BTC's "Response to URCA's Consultation Document ECS 22/2010 on BTC's Reference Access and Interconnection Offer", 23 October 2010.

- (iv) the temporary unpacking facilities; and
- (v) the planning and forecasting systems.

In commenting further on URCA's RAIO consultation document, BTC has argued that the RAIO "... is not URCA's document, and URCA is not responsible for its detailed implementation."

(i) Number Portability

In its second round responses,⁴⁴ BTC expressed surprise at CBL's comment on number portability in the consultation on the draft RAIO. BTC further noted that URCA has not yet mandated number portability as an appropriate remedy for the access market. BTC suggests that URCA should undertake a market review prior to determining whether number portability is an appropriate remedy for the access market, and advises that any deliberation on number portability must consider the costs and benefits of implementing the service, and how its cost should be shared between operators and between operators and their customers.

URCA's response to comments received

URCA agrees that the RAIO consultation is not the appropriate forum to address the issue of number portability. URCA also acknowledges that number portability can be a key enabler of competition and can be beneficial to customers.

URCA has a statutory responsibility under relevant Bahamian law to invite comments from licences and other interested parties before adopting any regulatory measure that is of public significance. URCA is satisfied that number portability is a matter of public significance that requires consultation and engagement with the industry and the wider Bahamian public.

URCA recognizes that any proposal to implement number portability in The Bahamas must be informed by relevant regulatory considerations. It must be emphasised that even an interim solution would require inputs from major licensees and public participation. As such, URCA proposes to conduct a separate public consultation on number portability in 2011⁴⁵ and looks forward to the active involvement of licensees and members of the public in that consultation process.

⁴⁴ BTC Comments on Submissions received by URCA to BTC's Draft RAIO Public Consultation – November 10, 2010.

⁴⁵ "Three Year Strategy and Annual Plan for 2011 – Draft for comment, Consultation Document (ECS26/2010, Issued 10 December 2010).

(ii) Implementation of a Direct PoI to BTC's mobile network

Within its second round responses, BTC noted that URCA has not mandated the company to establish a direct PoI to its mobile network, but expressed a willingness to review the matter, subject to market maturity and economic feasibility.

URCA's response to comments received

A direct PoI to BTC's mobile network would require OLOs to pay charges that reflect the cost of construction of any additional facilities necessary for such interconnection. Because URCA currently has no information on the economic feasibility of a direct PoI link to BTC's mobile network, it has not required BTC to include the service within its current RAIO. At the same time, URCA proposes to review the issue of a direct PoI to BTC's mobile network if economic feasibility is demonstrated.

URCA considers that the use of BTC's fixed transit service to deliver calls to BTC's mobile customers need not result in an anticompetitive effect. Experience from the region and elsewhere suggest that OLOs can make use of such a service and compete successfully with a dominant operator. Given this experience, along with URCA's responses and final decision on pricing for the service, URCA is satisfied that, at this stage, the current fixed transit service in the draft RAIO will provide a reasonable basis for OLOs to access BTC's mobile customers.

In keeping with its mandate to encourage, promote and enforce sustainable competition, URCA will continue to monitor market developments to ensure that OLOs are not disadvantaged by the absence of a direct PoI to BTC's mobile network and in this regard, URCA reserves the right to require BTC to offer a direct PoI to its mobile network should this become necessary. URCA also wishes to assure interested third parties that it will vigorously enforce the competition provisions of the Comms Act against any anti-competitive conduct arising from dominance.

(iii) Specification of plans for NGN Interconnect

CBL's suggestion that BTC should be required to provide relevant and timely information on its NGN deployment is not an unreasonable request. In its second round responses, BTC indicated a willingness to discuss its roll-out plans with OLOs during interconnection negotiations and in the regular network planning meetings. However, BTC has indicated that because it has no plans to provide TDM interconnection, CBL's comments about timescales for cut over of service are not relevant.

URCA's response to comments received

For the avoidance of doubt, BTC must continue to offer TDM interconnection to other operators.

URCA notes BTC's responses to the suggestion that it provides specification of plans for NGN interconnection. URCA believes that the process identified by BTC could be a workable approach. At the same time, URCA will continue to monitor the situation with a view to ensuring that the process outlined by BTC remains relevant and meets the legitimate information needs of OLOs. URCA also proposes to work closely with BTC to ensure that OLOs have timely and relevant information for budgeting and planning purposes.

(iv) List of RAIO services

As mentioned above, SRG has argued that the list of RAIO services is inadequate and should be expanded to include call termination services to 1-800-393 and 1-800 calls to BTC's network, a backhaul service, and a SMS termination service.

In its second round responses, BTC indicated that it intends to offer a call termination service to freephone numbers within its RAIO but proposes to withdraw the equivalent call origination service.

URCA's response to comments received

Within the consultation document, URCA has proposed to require BTC to add a RAIO call termination service for calls to freephone numbers on BTC's networks. BTC's proposal has been duly noted by URCA and in Section 2.2 (Question 8) above, URCA sets out its responses and final RAIO requirements for freephone services.

In responding to the comment that BTC should include a backhaul service and a SMS termination within its current RAIO, BTC noted that:

- URCA has not identified either service as a RAIO service in its 22 April Final Decision on SMP; and
- the company proposes to make both services available to OLOs on a commercial basis.

URCA agrees with the first bullet, namely that it has not identified either service as a RAIO service within its 22 April Final decision. For this reason, URCA will not require BTC to include either of the services in question within its current RAIO. In relation to the second bullet, URCA reminds the industry that even if commercial offerings are not regulated on an *ex ante* basis, they must be in conformity with the standard obligations applicable to SMP operators, the competition provisions of the Comms Act and any other relevant regulatory measures issued by URCA.

URCA will continue to monitor market developments to ensure that the list of RAIO services remains fit for purpose and provides a reasonable basis for competition. In keeping with its mandate, URCA reserves the right to require an SMP operator to make further adjustments or changes to the list of RAIO services should this become

necessary. This includes the requirement to include in any future RAIO a backhaul service and a SMS termination services.

(v) Draft RAIO and the BTC/SRG Agreement

URCA's response to comments received

URCA notes the points made by SRG on the current BTC/SRG Interconnection Agreement and BTC's draft RAIO and responds as follows:

- (i) In June 2004, BTC and SRG executed an Interconnection Agreement that specified their respective rights and obligations to interconnect their respective telecommunications systems or equipment and the charges that each party would incur for passing various types of telecommunications traffic between their respective systems. The agreement expired in July 2009 but due to the intervention of the legacy regulator (i.e., the Public Utilities Commission) in light of the possible disruption of service to the public and to safeguard competition in the absence of an agreement between the parties, the imminent coming into force of a new regulatory framework through the Comms Act 2009 and other legislation, both BTC and SRG executed an Interim Memorandum of Understanding which extends the terms of the 2004 Agreement **until such time as a new agreement is in place.**
- (ii) With the coming into force of the Comms Act, which designated BTC as an operator with SMP, BTC was legally obliged to develop and publish a RAIO, setting out the terms and conditions upon which it will offer access and/or interconnection to OLOs in The Bahamas. Although the RAIO is a BTC document, its conditions are subject to URCA's review and final approval.
- (iii) Non-discrimination is one of the key regulatory principles of the new access and interconnection regime and BTC, as an SMP operator, is obliged to comply with the principle of non-discrimination under the terms of Condition 34 of its licence. To ensure non-discrimination, the new interconnection framework requires that all existing and new agreements for access and/or interconnection be consistent with the published, approved RAIO.

The publication of a draft RAIO by BTC marked a significant step in the development of a new interconnection arrangement that is transparent, non-discriminatory, minimizes the scope for inter-operator disputes, and ensures timely negotiation of agreements. Through a process of publication and consultation, third parties such as

SRG have been given a reasonable opportunity to make written submissions on the BTC draft RAIO.

As stated elsewhere in this document, in making a final decision on the BTC RAIO, URCA must ensure that its conditions are in conformity with s.40(1) of the Comms Act, condition 40 of the BTC licence, and URCA's Final Guidelines on Access and Interconnection and any other relevant document. Where RAIO terms are not in conformity with any of the previously cited documents, URCA will require BTC to make adjustments or changes to its RAIO.

Once it is approved by URCA, the RAIO will then provide a framework through which existing and new operators can negotiate agreements for access and/or interconnection with BTC. Thus, the comment that the RAIO provides only benefits to BTC is unfounded and without merit, as it provides a solid basis for competition to flourish and adequate safeguards to existing and new licensees seeking interconnection with BTC pursuant to its final RAIO. Ultimately, the existing BTC/SRG interconnection agreement will be superseded by a new agreement which must be based on a RAIO approved by URCA.

(vi) URCA's approach to the RAIO consultation/review

URCA welcomes the opportunity to respond to the comments made by BTC regarding URCA's approach to the RAIO consultation/review process.

URCA's response to comments received

URCA agrees that the RAIO *"... is not URCA's document, and URCA is not responsible for its detailed implementation."* Notwithstanding this, URCA has clear and unambiguous obligations to ensure that the RAIO does not serve as an impediment to competition and that its conditions are fit for purpose. This requires a thorough and in-depth review by URCA of each clause in the draft RAIO. Where URCA identifies that changes are necessary to ensure compliance by BTC with its RAIO obligation, URCA considers that regulatory best practice would require it to make proposals as to how the relevant clauses should be amended by BTC. URCA rejects BTC's claim that this approach is contrary, in any way, to Government Policy or URCA's statutory remit. Neither does URCA believe its approach is "heavy handed" or unprecedented.

URCA has been pragmatic in its consultation and approach to the BTC RAIO. URCA has departed from many of its previous proposals and positions outlined in the consultation document on the basis of representations received from BTC and third parties. For example, it has accepted BTC's revised forecasting and ordering process rather than the more detailed proposals outlined in the consultation document. In

the same vein, where necessary and appropriate, URCA has retained many of its detailed proposals in the consultation document because it believes these are necessary for the effective implementation and management of the interconnection process.

6 URCA’s Final Decision on Draft RAIO Clauses

In this Section, URCA presents its Final Decision on individual clauses identified in the draft RAIO as requiring amendment by BTC to better reflect BTC’s Licence, the Comms Act, and the Final Access and Interconnection Guidelines. This takes into account the comments made to URCA by respondents to the consultation. Where necessary, this might include URCA’s detailed comments on the drafting of individual clauses.

Table 2. A detailed review of URCA’s Final Decision on BTC’s Draft RAIO

Cross-reference to draft RAIO	BTC’s original proposal	Issue(s) in draft RAIO identified by URCA	URCA’s Final Decision
Introduction to Interconnection Agreement			
Pages 6 to 7 of Introduction to Interconnection Agreement	BTC has included information in the Introduction that is not binding or required.	It should be noted that although these pages do not form part of the reference offer, they could influence the way that other operators read the text.	BTC must ensure that the text in these pages is accurate and includes information that is both necessary and binding.
Paragraph 3 of Introduction	“The [RAIO] and attached pro forma agreement ... continue in effect until superseded by a revised [RAIO]”	Refers to the agreement attached as being in force until superseded by a revised Reference Access and Interconnection Offer.	BTC must amend the text to the following: “The [RAIO] and attached pro forma agreement ... continue in effect until superseded by a [RAIO] that has been approved by URCA.”
Paragraph 4 of	“Operators ... must first enter into a Non-	Refers to the Non-Disclosure	(1) BTC must make the NDA publicly available

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Introduction	Disclosure Agreement with BTC".	Agreement (NDA) that BTC enters into with other operators. A copy has been supplied to URCA following a request.	on BTC's website as an attachment or appendix to the RAIO so that other operators know in advance what they will be asked to sign. (2) BTC shall include provisions in the NDA making it clear that any party may, if necessary, seek URCA's intervention so that there can be no doubt to OLOs that signing the NDA does not affect their right to approach URCA and, if necessary, file a dispute resolution application, etc.
Paragraph 5 of Introduction	"Interconnection entails reciprocal rights and obligations"	Refers to reciprocal rights and obligations.	BTC must modify or remove this reference to reciprocal rights and obligations in line with URCA's comments in Section 2.1 of the Final Decision that the reciprocity of obligations between BTC and other operators is necessary in a limited number of situations in the RAIO (e.g., fraud prevention, dispute resolution, etc.) and only where there is an objective and legitimate justification for such obligations.
Penultimate paragraph of Introduction	"Immediately following an amendment to the RAIO, the same change shall be made to an existing Interconnection	Refers to changes being made automatically to any existing agreements if the RAIO is amended,	BTC must amend the text to the following: "Immediately following an amendment to the RAIO, the same change shall be made to an

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	Agreement”	subject to the specific decisions of URCA. However, the approval of a new RAIO could stipulate a later date for the introduction of certain provisions.	existing Interconnection Agreement unless URCA stipulates otherwise”.
Final paragraph of Introduction	“This [RAIO] shall be withdrawn ... if URCA formally determines that BTC no longer has [SMP] in that market ... [A]ny obligation to provide such services under the Interconnection Agreement shall cease”	Refers to the fact that should the RAIO obligation to provide services be removed the provision under the agreement shall also cease.	BTC must amend this clause to expressly state that the obligation to provide such services shall cease when the agreement between the parties comes to an end (e.g., through the fluctuation of time, etc.) and not upon the date of URCA's decision that the service no longer has to be offered as part of BTC's RAIO.
Main Terms and Conditions			
Heading of agreement	of Interconnection Agreement	The current agreement is headed 'Interconnection Agreement'.	<p>(1) The document must be headed as 'Access and Interconnection Agreement' to reflect the obligations of BTC.</p> <p>(2) BTC must also note that this issue arises across the document where BTC only refers to an interconnection agreement and not to an access and interconnection agreement. BTC must therefore review the offer to remove such</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			inconsistencies or ensure that the definitions make it clear that the term 'interconnection agreement' includes interconnection and access services, unless otherwise specified.
The parties	This Agreement is made between [BTC] and [Operator of (address)] ... sometimes collectively referred to as "Parties" or Operators" and individually as "Party" or "Operator"	As the draft agreement currently stands there is no defined term for either BTC or the other operator.	BTC must improve the definitions of "Access Provider" and "Access Seeker", but, in any event, must define the other operator by, for example, providing an abbreviation of the full operator's name. This is to ensure the appropriate clarity in the agreement.
3.2	Available interconnection services	URCA provided its comments in Section 2 of the consultation document on the scope and reasonableness of the services included in the draft RAIO.	BTC must amend the available interconnection services in the draft RAIO in line with URCA's Final Decision in Section 2.2 above.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
6.1	The prices shall apply to the Interconnection Services irrespective of which Party is requesting access or interconnection services.	This provision would require non-SMP operators to offer BTC the same interconnection rates as BTC offers to non-SMP OLOs.	BTC must review and amend the document to ensure that requirements for reciprocal charging within the RAIO and any other similar references are removed.
8.2	Each Party shall use its best endeavours to adhere to the Quality of Service standards set out in Annex H – Quality of Service Standards.	URCA is of the view that 'best endeavours' is not appropriate. Each party should comply with the relevant standards. Occasional non-compliance would not be a cause for concern or compliance action, but continuing non-compliance (even with best endeavours) would be.	BTC must amend the text to state: "Each Party shall comply with the Quality of Service standards set out in Annex H – Quality of Service Standards."
11	New Services: This clause suggests that the Access Seeker can request a new service already included in the RAIO (11.1) or where BTC is dominant (11.2).	There is no scope to request other services which BTC might wish to offer on commercial terms.	BTC must ensure that all RAIO services are listed in Clause 11. In addition, BTC must specify, in Clause 11 or such other clause, as it may consider more appropriate (and subject to URCA's approval), the procedures and relevant timescales within which it will consider requests for new services not included in the RAIO. The Clause shall provide the procedures and specific timescales within which BTC, following such consideration, shall respond to

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			the applicants where: (a) it proposes to offer the requested service and the relevant terms and conditions under which it may be offered (which shall be subject to URCA's approval if BTC has SMP within that market); (b) it proposes to offer the requested service and the relevant terms and conditions under which it may be offered on a commercial basis, where BTC considers that it does not have SMP in the relevant market; and (c) it does not propose to offer the requested service and the reasons therefor.
12	Network Planning is based on the 3 year Network Plan, defined as "a diagram of the layout and structure of the Networks of the Parties, including the Points of Interconnection and Joining Circuits. It shall also show major changes proposed by a Party for its Network over the next three years".	There is no adequate structure for the exchange of forecasts and ordering processes based on these, as typically found in RIOs.	BTC must amend the forecasting and planning system described in the draft RAIO in line with the proposed amendments set out in its comments to URCA on the consultation document.
13.2	Neither party can knowingly connect equipment or apparatus to its network that has not been approved by "the	Reference is made to connecting equipment (including terminal equipment) not approved.	BTC must amend the text as follows: "Neither Party shall knowingly connect or

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	relevant approvals authority”	Clarification needs to be provided as to the identity of the approval authority.	permit the connection to its Network of any equipment or apparatus, including any terminal equipment, which is not approved by URCA or in compliance with any regulatory or other measures issued by URCA.”
16.2	Neither party can expressly or by omission or implication misrepresent their relationship or the services provided.	This clause prohibits each party making certain statements in relation to services offered in the retail market. It is not clear why clause 16.2.3 is included in that there should be no restriction on the operator making it clear to its customers, if it so wishes, that certain services are provided to it by another operator. It is also not clear what is the effect or result of a breach of this provision.	BTC must remove Clause 16.2.3. BTC must review the agreement and specify either on a clause by clause basis the implications of breaches, or ensure that these are covered by the generic provisions of Clause 18.1 of the agreement.
16.4	Cooperation and notification by one party to the other to detect and prevent fraud, theft or misuse of each other's services or equipment.	Clause does not say what is the effect or result of a breach of this provision	BTC must define in the RAIO what is to happen should one of the parties become aware of these situations and fails to cooperate with or notify the other party. BTC must review the agreement and specify

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			either on a clause by clause basis the implications of breaches, or ensure that these are covered by the generic provisions of Clause 18.1 of the agreement.
18.2.4 18.4.5 19.1.4	Interconnection services cease if the Other Party is bankrupt.	The current wording simply provides that a five days' notice is given to URCA. In practice, URCA may require interconnection to continue to allow the customers of the failed network to continue to use essential and emergency services.	BTC must amend the RAIO to provide that the services may be suspended in such cases where URCA has been notified of the proposed termination, five working days ahead of the proposed action, and URCA has not objected.
18.3.4	One party to an interconnection service shall not be liable to the other party for any damages or losses suffered by the second party arising from the suspension of service.	The clause provides for the effects of suspension and seeks to limit the liability resulting from the suspension of the service.	BTC must amend this provision so that it does not apply in cases where it subsequently transpires that the suspension was wrongful.
18.4.3 19.1.3 21.1.2 27.1	A party may suspend the agreement where the other party has ceased to operate as a provider of "telecommunications services" to customers.	The use of the term "telecommunications services" and its consistency with the law.	BTC must replace the term "telecommunications" with "electronic communications". BTC must also review the RAIO and where appropriate it must amend the term "telecommunications" with "electronic

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			communications" wherever it occurs.
18.4.4	A party may suspend the agreement where the other party has failed to provide or renew financial security under "Clause 26".	Reference is made to Clause 26 of the Main Terms and Conditions, which clause does not seem to relate to this sub-clause.	BTC must replace "Clause 26" with "Clause 24".
19.1.1	Termination of interconnection services and the interconnection agreement.	<p>This clause provides that:</p> <p><i>19.1.1 Where termination is warranted by the continuing failure of the other Party to take action to rectify a fault condition that threatens the safety of the <u>first</u> Party's Network in accordance with Clause 13.</i></p>	BTC must amend the clause to ensure it is clear that the word "first" describes either BTC or the other operator, depending on who is attempting to terminate the service or the agreement.
19.2.4	One party to an interconnection service shall not be liable to the other party for any losses suffered by the second party arising from termination of the service.	The clause provides for the effects of termination and seeks to limit the liability resulting from the termination of the service.	BTC must amend this clause so that the limitation of liability does not apply in cases where it subsequently transpires that the termination was wrongful.
19.3.1	Provisions for terminating the agreement.	"Has been declared" appears twice.	BTC must delete the second occurrence of "Has been declared".

Cross-reference to draft RAI0	BTC's original proposal	Issue(s) in draft RAI0 identified by URCA	URCA's Final Decision
19.4.3	On termination of the agreement under clause 19.3, the party whose agreement is being terminated is responsible for paying all direct costs incurred by both parties in removing equipment and cabling at all relevant Poles, switches, shared sites and shared facilities.	This clause implies that the Access Seeker will always be responsible for both parties' direct costs of removing equipment and cabling.	BTC must amend this clause to ensure that each party is responsible for its own costs.
20	Force Majeure includes labour disputes	Labour disputes, unlike most Force Majeure events, are not wholly outside of BTC's control and it may not be appropriate to allow such disputes to be so classified.	BTC must amend this clause to exclude cases that are within the sphere of influence of the party that fails to complete its obligations by including the statement " <i>labour disputes falling outside its sphere of influence</i> ".
20.5	Force majeure for 6 months or less	Contextual or word omission from clause regarding reference to "20.2"	BTC must insert "Clause" before "20.2"
21.1	Review of the agreement on the material modification of either party's licence	Clause 21 seeks to provide for those cases where a party may seek to amend the agreement between them. The clause as it currently stands does not provide scope for negotiations arising from a change in the needs of the other operator or new services or circumstances as	BTC must modify this clause to allow other operators to be able to seek to review the agreement where there is a change in the needs of the other operator, or where there is a need for new services, or where the circumstances of the other operator change.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
		being grounds whereupon the other operator may seek a review.	
21.3	Initiation of a general review of the agreement on its anniversary date	This clause provides that a notice may be served for review on the anniversary of the day in clause 1. Clause 1 does not specify a date (URCA assumes that this means the date of the agreement but this should be clarified). In addition setting the date for serving a review notice as the date of the contract could mean that the negotiations may only start after the agreement ends (assuming the agreement runs for a number of years).	BTC must amend Clause 21.3 to clarify what it means when it refers to a notice being served for review on the anniversary of the day in Clause 1 when no date exists in Clause 1. BTC must also amend the clause so as to allow for a notice to be served for review at any point in time that is no more than four months in advance of the date that any agreement between the parties will expire.
21.4	BTC may review the terms in Annexes C, D, E and G and may issue a review notice at any time if it concludes that any of the terms in those Annexes should be varied.	The current text provides for unilateral changes to be made by BTC to an agreement between parties that has received the prior approval of URCA. The clause does not specify the amount of prior notice for giving a	BTC must delete the clause.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
		Review Notice or under what circumstances BTC might issue such a notice.	
21.7	If after 3 months the parties have failed to reach agreement on the subject matter of a review notice, either party may pursue the dispute procedure in Annex F.	The 3 month period before invoking the dispute procedure might not be required in all circumstances.	BTC must amend Clause 21.7: (i) so as to qualify the stipulated minimum period to four months after which disputes procedures may be commenced; and (ii) to allow the parties to seek approval from URCA for a reduction of the relevant period for cases where it is made clear to URCA that no agreement can be reached between the parties.
21.8	Subject to the procedures approved by URCA, if any amendment is made to the [RAIO], the Parties shall be deemed to have agreed an equivalent amendment to the terms of this Agreement with effect from the date on which the amendment to the [RAIO] takes effect and no further formality shall be required to give effect to such an amendment ...	There may be cases of interconnection disputes where only the two parties involved are aware of the case and make representations to URCA. It would thus be unfair to others to be bound by such a decision if they have not been given the opportunity to put their views forward.	BTC must amend this clause as follows: "Subject to the procedures approved by URCA, if any amendment is made to the [RAIO], the Parties shall be deemed to have agreed an equivalent amendment to the terms of this Agreement with effect from the date on which the amendment to the [RAIO] takes effect and no further formality shall be required to give effect to such an amendment, unless otherwise

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision specified by URCA ..."
21.9	Amendments to contact details may be effected by informing the other party at any time.	The potential informality of amending contact details information.	BTC must amend the clause so that changes to contact details/information must be provided at least 24 hours before they become effective.
22.3	Disclosure of information to another party	Contextual or grammatical error as clause says "the first Party the other Party".	BTC must delete the words "the first Party".
23.5	Preservation of confidentiality of customer information passed between the interconnecting parties.	Clause does not say what is the effect or result of a breach of this provision.	This issue arises in a number of areas – BTC must review the agreement and specify either on a clause by clause basis the implications of breaches, or ensure that these are covered by the generic provisions of Clause 18.1 of the agreement.
23.7	Retains effect of Clause 23 for 60 months after termination or expiration of the agreement.	The period of 60 months provided as the time by which confidentiality provisions expire is inappropriate if information continues to be confidential after the end of the relevant period.	BTC must amend this clause so that the provisions shall remain in force either in perpetuity or for so long as the information remains confidential. If BTC wishes, it can stipulate expressly the instances where the information ceases to be confidential/is not confidential (e.g.: where the information: - has become public domain through no fault

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			<p>of the Receiving Party;</p> <ul style="list-style-type: none"> - was already in the prior knowledge of the party, as evidenced by its records; - was lawfully received by a third party having the right to disseminate the information; - was independently developed by the Receiving Party; - was compelled by law to be disclosed pursuant to the requirement of a Government Agency or a Court Order; - ceases to be confidential due to other reasons objectively demonstrated).
24	Bank Guarantee.	The Bank Guarantee can be for an amount up to 3 months of forward-looking revenues associated with the RAIO services.	<p>BTC must amend the clause as follows:</p> <p>24.1 - The clause should expressly state that the bank guarantee cannot be worth more than three months of forward looking revenues and must take into account amounts that will be payable to the other licensee, unless BTC provides a similar guarantee to the other licensee.</p> <p>24.1 - The clause should be amended so that</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			<p>BTC in setting the Bank Guarantee must take into account the financial standing of the other company or previous dealings with the company as factors in setting the security level.</p> <p>24.1 - The clause should be amended so that the other operator can select the form of security to be provided, subject to it being in line with standard commercial practice in The Bahamas.</p> <p>24.2 - The clause should be amended so that the review period shall be a six-month one.</p> <p>24.2 – The clause should be amended so as to clarify the basis upon which the quarterly review will be carried out and the process by which the result, if not satisfactory to one of the parties, can be challenged.</p> <p>24.3 - This clause appears to be missing; renumber “24. ” as “24.3” and renumber sub-clauses as “24.3.1”, etc.</p> <p>24.3 – BTC should make clear by the inclusion of the word “and” after sub-clause 24.3.1 that all the conditions must be met for the guarantee to be presented to the Bank for</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			payment. 24.5 – Renumber as “24.4”.
26	Delivery and acknowledgment of receipt of written notices by paper-based and electronic means.	Mandatory requirement for the party receiving a notice to confirm receipt in the same manner as it was received, whether paper-based or electronic. Further, there is no stipulation as to what is to happen if the receiving party fails to confirm receipt within the specified period or what is to happen if the receiving party confirms receipt outside of the specified 24-hour period.	BTC must review and revise this clause to take into account URCA's concerns regarding the presumed receipt of a letter or fax (i.e., what is to happen if the receiving party fails to confirm receipt within the specified period or what is to happen if the receiving party confirms receipt outside of the specified 24-hour period).
27	Limitation of liability.	The current text concerning limitation of liability seeks to provide, wherever possible, elimination of the liability of BTC, since de facto BTC will be the main supplier of services.	BTC must amend this clause so that: a) A party may not limit its liability where the damage caused arises as a result of the wilful acts of the party responsible and, in particular, in cases of wilful misconduct, gross negligence, criminal activity, fraud, deliberate acts of sabotage by the Access Provider's employees, etc. b) A clear stipulation should be provided that

Cross-reference to draft RAI0	BTC's original proposal	Issue(s) in draft RAI0 identified by URCA	URCA's Final Decision
			<p>no party may exclude or limit its liability for anything which is not permitted by law.</p> <p>c) Clause 27.4 should be deleted from the reference offer.</p>
28	Severability.	The current text concerning severability is limited to such findings by "any court having jurisdiction".	BTC must amend the clause so that in addition to any court deciding that a provision is unenforceable, this would also include decisions by URCA, the Utilities Appeal Tribunal, or other relevant bodies.
29.2	Assignment of rights, benefits and obligations under the agreement to any successor to one of the parties to the agreement that is granted a licence "to run the Network of the assigning Party".	URCA does not grant licences to "run" specific networks.	BTC must amend this clause.
30	The agreement constitutes the entire agreement between the parties and, unless agreed in writing between them, supersedes all previous agreements, whether oral or written.	The current text omits to mention the possible inclusion of regulatory or other measures issued by URCA.	BTC must add a provision to stipulate that, in addition to anything agreed in writing between the parties, elements binding both parties may also be found in regulatory or other measures issued by URCA and which specify this expressly.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Annex A – Service Schedules			
A.1.1 A.2.1 A.3.1	Calls include facsimile transmission.	Low speed data transmission should also be included (modems and DTMF keying)	BTC must update all schedules to include low speed data transmissions.
A.1.1	Termination of calls from international origins is specifically excluded from this Agreement.	This is both discriminatory and acts as a barrier to competition in international calls.	BTC must provide call termination to OLOs on a non-discriminatory basis irrespective of call origin.
A.1.2 A.2.2 A.3.2 A.4.2 A.5.2 A.8.2 A.7.2 A.9.2 A.10.2 A.11.2	The paragraphs on Call Handover mandate near-end or far-end handover.	Many RIOs no longer include such requirements. As long as Access Seekers pay for termination according to costs incurred, it should be reasonable for handover at any point – though in practice the price signals will promote the usual far-end/near-end handover as described.	BTC must remove all call handover requirements from the paragraphs on call handover in the RAIO in line with Section 2.2 of the Final Decision. BTC must further clarify in the RAIO how calls to emergency services (i.e., Clause A.8.2) will be treated when the Pol (at which near-end handover takes place) is not on the same island where the call originated.
A.1.3 A.2.3 A.3.3	Supply conditions.	Contextual or grammatical error concerning description of parties	BTC must review the document and replace “The Parties” with “The Access Provider” and must, where appropriate, make the same change to the said terms.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A.4.3			
A.5.3			
A.7.3			
A.8.3			
A.10.3			
A.11.3			
A.1.5	Fault rectification and service restoration.	The fault rectification should be non-discriminatory.	BTC must amend the clause so that faults shall be corrected at the same speed and priority as if they related to BTC's own network. This should be applied across all services offered (i.e., service provided at least of the same quality as for the party's own network).
A.1.9	Charging.	Contextual or grammatical error concerning who is responsible for billings.	BTC shall replace "The Parties shall bill the other Party" with "The Access Provider shall bill the Access Seeker" and must review the document and where appropriate make the same change to the said terms.
A.2.9			
A.3.9			
A.4.9			
A.5.9			

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A.7.9			
A.8.10			
A.10.9			
A.11.10			
A.12.11			
A.13.22			
A.13.29			
A.3.9	The Access Seeker is to pay the Access Provider for conveying call termination traffic to mobile numbers.	As set out in Section 2 above, a mobile termination rate should not be charged where BTC also applies a receiving party pays regime for retail services.	BTC must remove the charging obligations for the termination of traffic on the Access Seeker's network, except where the call has originated outside The Bahamas (and hence where RPP does not apply).
A.4.8	Routing principles.	Contextual or grammatical error regarding terminating calls.	BTC must replace "Termination Calls" with "Terminating Calls", consistent with what is in A.1.8, A.2.8, and A.3.8.
A.5.1	Service definitions for directory enquiries service to the 916 "prefix".	URCA questions whether the service description is complete and the use of the word "prefix" in relation to directory enquiries services.	BTC must also include in the services described in A.5.1 any other numbers specified by URCA in the Numbering Plan for use for Directory Enquiries.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			BTC must replace the word "prefix" with "short code".
A.5.2	Call handover.	Grammatical error.	BTC must remove the second full-stop at the end of the clause.
A.6.2	Access provider will include access seeker's subscriber information in its directories subject to "the same rules of listing and inclusion rules as apply to other listings and inclusions".	The "rules of listing and inclusion" are not included in the draft RAIO.	BTC must specifically incorporate the "rules of listing and inclusion" into the RAIO.
A.6.4	The Access Seeker is to provide the Access Provider with directory inclusion information, as specified by the Access Provider's database administrator in electronic form and free of charge.	Whether the Access Seeker will charge for providing the information is a matter for the access seeker.	BTC must amend the clause so that the data and format to be supplied is agreed between the two parties as the Access Seeker may charge for the service provided. The supply conditions for directory number inclusion must be specified in the RAIO.
A.7	Operator assistance services including as service definition to the 0 "prefix".	URCA questions whether the service description is complete and the use of the word "prefix" in this context.	BTC must clarify this clause by describing the service provided, not the number used for the service. Further, the word "prefix" is incorrect as '0' (i.e., zero) is not a short code. BTC must also include in the services described

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			here any other numbers specified by URCA in the Numbering Plan for use for Operator Services.
A8.10	Charging: For the conveyance of Emergency Calls by the Access Provider is a public service, the Access Seeker shall pay the Access Provider a charge calculated in accordance with the rates as specified in Annex G - Price List. The Parties shall bill the other Party for this service in accordance with Annex F – Billing Processes.	There appears to be a grammatical error in this sentence.	BTC must clarify the construction of this clause. If appropriate, replace “For” at the beginning of the clause with “As”.
A.9.1	Service definition for Call Origination Service to Domestic Freephone Numbers.	BTC omits to include a service definition and other specifications for a “Call Termination to Domestic Freephone Numbers” whereby calls originating on an Other Licensed Operator’s network terminate at domestic freephone numbers on BTC’s network.	BTC must include in the RAIO a service description enabling OLOs to terminate calls to freephone numbers on BTC’s network. However, it is not for BTC to charge the OLO for this call termination service, as BTC receives retail revenue from the called party.
Diagram A9	Call direction of International Call Transit Service.	This diagram omits to include call origination from the Access Seeker.	BTC must revise the diagram to include call origination from the Access Seeker.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A10.9	BTC requires direct accounting for international transit calls.	This is unreasonable, and is likely to impose a significant cost on OLOs.	BTC can require direct accounting arrangements for international transit calls in the RAIO at this time.
A.11.1	Service definition of National Call Transit service.	It is unclear how the service definition of national call transit services applies to calls handed over to "the mobile network of the Access Provider" in light of the service definition in A.3.1.	BTC must clarify how the service definition of national call transit services applies to calls handed over to "the mobile network of the Access Provider" in light of the service definition in A.3.1. BTC must define what it means by "MSC" in Annex I.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A11.10	BTC requires direct accounting for national transit traffic.	This may be reasonable when the number of OLOs is low, but direct accounting can become a barrier as the number of operators increase.	BTC can require direct accounting arrangements for national transit traffic in the RAIO at this time.
A12	Joining Circuit Service is defined as being a T1 circuit.	At various places in the RAIO, the term 'Joining Circuit(s)' is used when the higher level transmission bearer is implied (e.g. a fibre or radio link working at DS3 or STM1/OC-3). Elsewhere the term is used when the interconnect traffic route is implied.	BTC must amend the draft RAIO to incorporate the following terms where appropriate: "Joining Circuit, meaning the T1 capacity provided over a PoI; Joining Path, meaning the higher level transmission bearer; and Interconnect Traffic Route, meaning the group of 64kbit/s channels over which a given type of interconnect traffic is directed. A Traffic Route will usually be carried over two diverse Joining Paths for security and may even have an overflow via another PoI to cope with unusual traffic flows."
A.12.3	Responsibility of the operators.	Contextual or grammatical error regarding the identity or designation of each contracting parties.	BTC must replace "The operator" with "The Access Seeker" and replace "the other Party" with "the Access Provider".

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A12.4	Each operator is responsible for providing and maintaining the Joining Circuit from its Network to the mid-point of the Joining Circuit or as otherwise agreed between the Parties.	This is incorrect. The concept of mid-point is not appropriate to domestic interconnection circuits. The responsibility of each party is always up to the Point of Interconnection (PoI).	BTC must amend this clause as follows: "Each operator is responsible for providing and maintaining the Joining Circuit from its Network to the Point of Interconnection."
A12.7	Unless otherwise agreed between the Parties, a minimum of two T1 interconnection circuits and two signalling circuits shall be provided on each Joining Circuit.	Another example of the incorrect usage of the term 'Joining Circuit'. If a JC is a T1 circuit, it cannot comprise two T1s.	BTC must amend this clause in line with URCA's Final Decision on Clause A.12 above. [See Section 2.3 in the Final Decision headed "Joining Circuit Service"].
A.12.11	The Access Seeker and the Access Provider shall share the costs of providing the Joining Circuit as specified in Annex B, Clause B.7.3. The Parties shall bill the other party for this service in accordance with Annex F.	The text as currently drafted does not appear to comply with Section 5.13 of the Final Access and Interconnection Guidelines. Contextual or grammatical error regarding who is responsible for billings.	BTC must amend this clause to ensure it is consistent with URCA's Final Decision as set out above on Questions 13 and 21.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A.12.12	'Dimensioning' of Joining Circuits.	Clause 12.12 partly duplicates what has already been stated in Clause 12.3. The clauses referenced in Annex H are mostly about provision and repair and not 'dimensioning' which is dealt with only in H3. In any event, it is not Joining Circuits that are dimensioned, but the Interconnect traffic routes carried over the collection of Joining Circuits.	BTC must clarify and amend this clause, considering Section 2.3 in the Final Decision headed "Joining Circuit Service".
A.12.14	Decommissioning of Joining Circuits.	Clause D.14 suggests that Joining Circuits may be requested to be removed within 25 days. It is more common for any such reduction on network capacity to be subject to 3 months' notice as part of the forecasting process. However, 25 days is appropriate if the Joining Circuit is being re-established elsewhere, as it may fall within the provisions for Network Alterations.	BTC must amend this clause in line with Section 2.5 in the Final Decision headed "Forecasting and Planning".
A.13.2	Unavailability of co-location space leads	In-span interconnection (ISI) should	BTC must amend clause A.13.2 to include In-

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	to offer of customer sited interconnection.	also be considered.	span Interconnection.
A.13.3 A.13.5 A.13.25		Grammatical errors regarding capitalisation at the beginning of each sentence.	BTC must capitalise the word "the" at the beginning of each clause.
A.13.12	On site works are described	Facilities should be provided for a 'dirty area' where crated equipment can be unpacked prior to installation in the designated co-location area.	BTC must amend clause A.13.2 to provide for temporary unpacking facilities.
A.13.13	The Access Provider shall rectify any damage in any way it deems fit, the cost and expense in connection with the damage including for the repair thereof shall be borne by the Access Seeker.	This clause fails to require the Access Provider to contain or reasonably manage the costs of repairing damage caused by the Access Seeker.	BTC must amend this clause as follows: "The Access Provider shall rectify any damage in the most appropriate way and the reasonably incurred costs in connection with the damage, including for the repair thereof, shall be borne by the Access Seeker."

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A13.16	The Access Seeker shall comply with the Access Provider's standards for equipment installation.	No standards are quoted in the RAIO	BTC must either amend clause A.13.16 to include a reference to any standards for equipment installation specified and approved by URCA, or remove the clause.
A13.24	"The Access Provider's equipment is placed in premises other than the premises in which the Point of Interconnection is located, and a Joining Circuit is provided between this equipment and the Point of Interconnection."	This statement is not correct in cases where the Joining Circuit is provided over a higher capacity transmission bearer. In such cases, the Access Provider's multiplex equipment is sited in a co-location area in the Access Seeker's building.	BTC must amend clause A.13.24 to clarify the location of any multiplex equipment.
A.13.25	[T]he Access Seeker is responsible for the sourcing and ordering of Customer Sited Interconnection space and services, for the maintenance of the equipment it places in this space.	This clause omits a charging clause similar to A.13.22 to specify who is responsible for what charges and should specify that the Access Provider will be billing the Access Seeker.	BTC must add a charging clause which states that the Access Provider will pay the Access Seeker (a negative charge).

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
A13.26	Physical arrangements for In-span interconnection.	In practice, ISI rarely requires a fibre splice, as the POI is a footway box close to one of the two buildings and a single fibre is drawn into the building concerned. If an optical distribution frame owned by the Access Seeker is employed, as suggested, then this would be a form of CSI, not ISI as ODFs are very rarely employed in footway boxes.	BTC must amend Clause 13.26 to reflect practical ISI solutions.
A13.29	"Each Party shall bear half of the costs of providing the In Span Interconnection Service".	This division of costs is not reasonable in the very common case that the footway box POI is close to one of the two buildings (usually the Access Provider's).	BTC must amend Clause A.13.29 to state that each party pays the costs up to the agreed POI.
A.13.29	"The Parties shall bill the other Party for this service in accordance with Annex F".	Contextual or grammatical error regarding the responsibility for billings. This clause needs to clarify what is the billing reference, what service it covers and when it is applicable.	BTC must clarify what the billing reference refers to, what service it covers and when it is applicable. BTC must replace "Annex F" with "Annex E". BTC must replace "The Parties shall bill the other Party" with "BTC shall bill the Other

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			Party".
Schedule 1 to Annex A	List of Services taken.	Omits to include "Call Termination to Freephone Numbers" as a possible service.	BTC must include call termination to freephone numbers as a service in the RAIO. [See Clause A.9.1 above and Section 2.2 of the Final Decision].
Annex B – Ordering Process			
B.3.1	On receipt of a Service Request for an Interconnection Service the Access Provider shall examine the request and provide a Preliminary Response and a Considered Response to the Access Seeker.	This clause does not specify any timeframes for responding.	BTC must amend the clause so that the Access Provider should confirm receipt of the Request within 24 hours. BTC must also amend Clause B.3.2 accordingly.
B.3.2	"The Access Provider shall provide a preliminary Response within 5 Working Days containing at least the following information ... Additional information, if any, that is required by the Access Provider in order to finalise its assessment of the Service Request".	Ensuring that requests for additional information are proper and are not used for delay purposes.	BTC must amend the clause so that where additional information is required, the Access Provider should justify this by explaining why the additional information is required.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
B.3.3	Additional information	Contextual or grammatical error regarding what additional information is being requested.	BTC to confirm whether a request for "nominated additional information" is correct in this context.
B.3.6(b)	Initiation of the dispute resolution procedures by the Access Seeker where there is full rejection of a Service Request after 10 working days from the date of a Considered Response.	It is not clear why there is a provision that 10 days must elapse from the date of the response to initiate the dispute procedure.	BTC must add a provision that the dispute resolution procedure can be initiated by the date after a Considered Response is due and where one is not provided in order to cover failures to respond.
B.3.7	Initiation of the dispute resolution procedures by the Access Seeker where there is joint consideration of a part acceptance of a Service Request after 15 working days from the date of a Considered Response.	It is not clear why there is a provision that 15 days must elapse from the date of the response to initiate the dispute procedure.	BTC must add a provision that the dispute resolution procedure can be initiated by the date after a Considered Response is due and where one is not provided in order to cover failures to respond.
B.3.8(b)	Initiation of the dispute resolution procedures by the Access Seeker where the Access Provider advises that more time is required to assess a Service Request after 10 working days from the date of a Considered Response.	It is not clear why there is a provision that 10 days must elapse from the date of the response to initiate the dispute procedure.	BTC must add a provision that the dispute resolution procedure can be initiated by the date after a Considered Response is due and where one is not provided in order to cover failures to respond.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
B.5.1	Scope of provisioning processes for traffic services.	Omits to include "Call Termination to Freephone Numbers" as a possible service.	BTC must include "Call Termination to Freephone Numbers" as a possible service.
B.5.3	Planning and Forecasting.	The details of how planning and forecasting are to be performed are not included.	BTC must amend the forecasting and planning system described in the draft RAIO in line with the proposed amendments set out in its comments to URCA on the consultation document.
B.6.11	"The Access Provider will acknowledge the receipt of the Advanced Facility Order within two Working days and indicate the deadline for the submission of the Firm Estimate."	Omits to specify a reasonable time period for the deadline for submitting a firm estimate.	BTC must amend this clause to include a specified period for submitting a firm estimate to the Access Seeker to avoid the potential for delays.
B.6.12	"The Access Provider will then provide the Access Seeker with a Firm Estimate for the cost of providing the services requested and a firm delivery date. ... The Firm Estimate will be provided in the timescales set out in the Advanced Facility Order Acknowledgment."	Omits to specify a reasonable time period for the deadline for providing a firm estimate or a firm delivery date	BTC must amend this clause to include a specified period for providing a firm estimate or a firm delivery date to the Access Seeker to avoid the potential for delays.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
B.7.2	<p>“There is no need for a Service Request for additional circuits on an existing Joining Circuit Service. Where the Access Seeker requires additional capacity on an existing Joining Circuit Service, it will request confirmation that spare capacity exists on the link with a business letter to the Access Provider before submitting a Firm Capacity Order.”</p>	<p>Usually, traffic circuits are ordered and used in blocks of 24, corresponding to each 24 channel T1 circuit used for the Joining Circuit. Should the current text in B.7.2 be interpreted as describing a situation where less than the full complement of 24 channels is activated, or is it describing the situation where an additional Joining Circuit is added to an existing higher level transmission bearer?</p>	<p>Clause B.7.2 must be amended so as to clarify whether it is describing a situation where less than the full complement of 24 channels is activated, or whether it is describing the situation where an additional Joining Circuit is added to an existing higher level transmission bearer. [See also Section 2.3 of the Final Decision on “Joining Circuit Service”].</p>
B.7.3	<p>“On bi-directional Joining Circuits the costs set out in the Firm Estimate will be shared 50/50 between the Access Provider and the Access Seeker. On uni-directional Joining Circuits, all of the costs set out in the Firm Estimate will be borne by the Access Seeker.”</p>	<p>This clause does not comply with Section 5.13 of the Final Access and Interconnection Guidelines.</p>	<p>BTC must amend this clause to reflect that Joining Paths should be mutually planned and constructed, with each party paying for the whole or part which it constructs and no charges will be rendered to the other party, except in relation to the use of Joining Circuit capacity for an operator's ‘owned’ traffic provided on the facilities owned and constructed by the other party.</p>
B.7.3	<p>“The Access Provider will be responsible</p>	<p>The decision to use uni-directional or</p>	<p>BTC must amend Clause B.7.3 to make the</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	for deciding whether the Joining Circuit should be bi-directional or uni-directional.”	bi-directional working should be made by mutual agreement and the Access Provider should not have the right to dictate. Note again that uni- or bi-directional working refers to the interconnect traffic route, not a single Joining Circuit. In some countries, bi-directional working is welcomed on smaller routes, whereas in others, its use is not allowed, in case mis-forecasting leads to one direction of traffic freezing out the other.	decision on route working to be mutual.
B.7.11	“If Access Seeker or Access Provider requires the removal of Joining Circuits, an order identifying the Capacity and the date from which it should be removed may be placed by that Party on the other Party.”	This clause should apply only for requests addressed to BTC. The RAIO only relates to BTC's Obligations. Contextual or grammatical error regarding the identity of a party.	BTC must amend Clause B.7.11 to remove any references to reciprocity or symmetry of obligations on the Access Seeker. BTC must amend “If accepted, The Party” to “If accepted, the Party” in the second sentence.
B.8.3	Non-discrimination.	Contextual or grammatical error.	BTC must capitalise the word “following” at the beginning of the clause.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
B.8.4	“Reciprocity: unless otherwise agreed by the Parties, a New Interconnection Service will be provided on a reciprocal basis”.	It is not appropriate for the RAIO to include such direct obligations on the other party. The other operator may not have any regulatory obligation to so provide.	BTC must remove Clause B.8.4.
B.8.5	Form and Content of a New Interconnection Service Request.	Contextual or grammatical error.	BTC must capitalise the word “the” at the beginning of the clause.
B.8.6	Preliminary Response.	Contextual or grammatical error.	BTC must capitalise the word “on” at the beginning of the clause.
B.8.8	Additional Information.	Contextual or grammatical error.	BTC must capitalise the word “where” at the beginning of the clause.
B.8.10	[W]ithin forty five (45) Working Days of the receipt of the New Interconnection Service Request or of the date on which a reply is received to a request for additional information, whichever is the later, Access Provider shall give the Access Seeker the Considered Response.	45 working days (i.e., 9 weeks) may not be reasonable for giving an Access Seeker a considered response on a new interconnection service request. Contextual or grammatical error.	BTC should refer to URCA’s comments above on Clause 11 of the Main Terms and Conditions of the RAIO [i.e., ensure that all services obligated to be offered are listed; specify (subject to URCA’s approval) the procedures and relevant timescales within which requests for new services not included in the RAIO will be considered; provide the procedures and specific timescales within which BTC will respond to applicants where BTC: (a) proposes

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			<p>to offer the requested service and the relevant terms and conditions under which it may be offered (which shall be subject to URCA's approval if BTC has SMP within that market); (b) proposes to offer the requested service and the relevant terms and conditions under which it may be offered on a commercial basis where BTC considers that it does not have SMP in the relevant market; and (c) does not propose to offer the requested service and the reasons for it).</p> <p>BTC must capitalise the word "within" at the beginning of the clause.</p>
<p>B.8.11 B.8.12 B.8.13</p>	<p>Full Rejection; Unable to meet timescales; Part acceptance.</p>	<p>Contextual or grammatical error.</p>	<p>BTC must capitalise the word "where" at the beginning of the clause.</p>
<p>B.8.11 B.8.12 B.8.14</p>	<p>"[W]ithin ten (10) Working Days from the date of the Considered Response the Access Seeker may initiate the dispute resolution procedures in the Interconnection Agreement" after full rejection, inability to meet timescales or</p>	<p>The period within which an Access Seeker may initiate a dispute procedure is too short.</p>	<p>BTC must either extend the period for an Access Seeker to initiate the dispute resolution procedure, or remove the limitation periods.</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	more time is required by the Access Provider regarding a New Interconnection Services Request.		
B.8.13	“[A]fter thirty (30) Working Days from the date of the Considered Response the Access Seeker may initiate the dispute resolution procedures in the Interconnection Agreement” after part acceptance by the Access Provider regarding a New Interconnection Services Request.	No reason why 30 days must elapse from the Considered Response for a dispute to be initiated.	BTC must remove the 30-day period in B.8.13.
B.8.14	More time required.	Contextual or grammatical errors.	BTC must capitalise the word “where” at the beginning of the clause. BTC must replace the colon after “New Interconnection Service Request” with a comma.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Annex C – Technical Specifications			
C.1.1	Where these standards provide for alternatives, the alternatives will be those that are used by BTC.	While in practice, the SS7 options will be those used by BTC, this issue is only relevant for SS7 interconnect routes – other options could be used internally in another operator's network. Ideally, the technical standards options for SS7 should be specified as a national matter for all interconnect routes in Bahamas.	BTC must provide that the interconnect SS7 signalling will conform to the specification as endorsed by URCA.
C.1.8	Refers to Recommendation G.732.	G.732 is for E1 30 channel PCM systems. If T1 is normal transmission system in Bahamas, then G.733 applies.	BTC must amend this clause to clarify the correct Recommendation.
C.1.9	Refers to "Mobile 2 Specification Number 7 chapter 37".	Source for this standard is not referenced.	BTC must amend the clause to include the source for this standard.
C.1.11	Refers to Recommendation G.823.	G.823 is for E1 systems. For T1 systems, G.824 refers.	BTC must amend clause to clarify the correct Recommendation.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
C.1.12 C.1.13	Refers to Recommendation G.732.	See comments on Clause C.1.8 above.	BTC must amend this clause to clarify the correct Recommendation as in Clause C.1.8 above.
C.1.14	Refers to 2048kbit/s transmission and A law coding.	This refers to G.732 E1 transmission. T1 uses 1544kbit/s and Mu Law coding.	BTC must amend the clause to deal with the T1 environment.
C.2.2	Refers to Time Slot 16.	TS16 is only used on E1 transmission systems.	BTC must amend the clause to deal with the T1 environment.
C.4.4	The POI will forward the numbers in the form: ABC XXX XXXX	This statement is not true for calls to international destinations and calls using short codes.	BTC must amend the clause to include all possible digit formats.
C.5.4	"If a Party can demonstrate that the other Party is intentionally removing the CLI or Nature of Address from any Call originating from a domestic or international Caller and passing over a Joining Circuit, it may, after allowing the other party an opportunity to respond to its evidence, block all Calls without a CLI being sent to it by the other Party."	Omits to specify a reasonable time period for the Other Party to respond to evidence.	BTC must amend the clause to provide that: a) before blocking such traffic, BTC shall notify the Other Party of the date it proposes to do so; b) before blocking such traffic, BTC shall notify URCA of the date it proposes to do so; c) such notice to be provided no less than 10 working days in advance.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Schedule 1 to Annex C	Signalling specifications.	Annex C has only included statements about the use of SS7 for interconnection signalling. If SIP is offered, then this needs to be clarified and appropriately defined as a service alternative. Note however that 'pure' SIP may not meet all requirements for CLI and privacy.	BTC must clarify whether it is offering SIP interconnection signalling or not.
Schedule 2 to Annex C	Network specifications.	See C.1.4/C.1.5 above	BTC to review and revise Schedule 2 to Annex C to ensure that it conforms to the specifications in Clauses C.1.4 and C.1.5 of the draft RAIO.
Schedule 2 C-2.2	Transmission.	The reference to CDR format seems anomalous in a clause describing basic transmission.	BTC must amend the clause so that CDR formats should be referenced under Billing in Annex E.
Schedule 3 to Annex C: Interconnection Testing			
Schedule 3 C-3.3.1	"All the following tests with test calls in both directions across the Parties' networks, according to the Services provided by the Parties to each other."	It is not appropriate for the RAIO to impose direct obligations on the non-SMP operator. That operator may not have any regulatory obligation similar to BTC.	BTC must amend the clause so as to provide for the appropriate tests but it must not impose or imply any reciprocity obligations on the Access Seeker.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Schedule 3 C-3.3.4	Charging Tests	Error in sentence construction.	BTC must review and revise and, if necessary, combine the text in the fourth and fifth bullets.
Schedule 5 to Annex C	BTC network configuration.	The network diagram is insufficiently detailed to read.	BTC must provide a better network diagram or, if that is not possible, then delete the diagram.
Annex D – Operations and Maintenance			
D.1.6	“The chairman of the meeting will be responsible for setting a date and location for the meeting, and for circulating an agenda five Working Days in advance of the meeting.”	It is difficult to see how a meeting can be called within 5 days of being requested (D.1.1.) and the agenda being circulated 5 workings days in advance as specified here.	URCA withdraws its objection; no change required.
D.2.3	Sets out BTC's proposed general principles for call handover at specified Points of Interconnection.	Call handover should not be specified in the draft RAIO.	<p>BTC must amend the text in this clause as follows:</p> <p>“Traffic may be handed over by the Access Seeker to the Access Provider at any PoI. The Access Provider shall provide to the Access Seeker, for each geographic number range, the closest PoI for call termination.</p> <p>For the avoidance of doubt, unless otherwise agreed between the parties, the Access Seeker</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			can hand over traffic at any Pol it chooses. The Access Seeker shall notify the Access Provider of the Pol it proposes to use for each type of traffic and shall only change such handover Pol provided that it has provided written notice to the Access Provider of no less than two (2) calendar months." [See also Clause A.2.2, etc., above].
D.2.3(b)	Sets out BTC's proposed call handover principles for certain specified call termination services.	Omits to include "Call Termination to Freephone Numbers" as a possible service.	BTC must amend the clause to include Call Termination to Freephone Numbers as a service within BTC's call handover processes as detailed in the revised text for Clause D.2.3 above.
D.3.4	Handling congestion and unplanned network outages.	Contextual or grammatical error regarding the identity of a party.	BTC must replace "Originating Operator" with "Access Seeker".
D.4.2	"Both Parties will work with each other and with URCA to have a special access code or number range that may be made available to Customers for the use of Mass Call Events."	Short codes should only be made available in accordance with the National Numbering Plan.	BTC must amend this clause so that it is clear that the allocation of numbering ranges and/or short codes will be compliant with the URCA-approved National Numbering Plan.
D.5.1	"Any malicious call tracing must be	This clause implies that only the	BTC must amend the clause for initiation to be

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	initiated by Royal Bahamas Police Force ..."	Royal Bahamas Police Force can initiate malicious call tracings.	made by any authority empowered to do so by the laws of The Bahamas.
D.7.7	"Fault Priority: Each Party shall give priority to faults that: involve critical alarm in an exchange."	Apparent error in the numbering of paragraph sub-clauses.	Revise paragraph numbering to include text on critical alarm as a sub-clause.
D.7.11	"If a Party notifies the other Party of a fault in the other Party's Network (including the Joining Circuits for which it is responsible), and the fault notice is subsequently found to be erroneous, the first Party shall be liable for any costs incurred by the other Party as a result of the erroneous information."	Omits to specify how the dispute resolution procedures apply to this clause. The clause also fails to recognise that a fault notification might be reasonably justified at the time it was given.	BTC must amend the clause so as to make it clear whether the dispute resolution process applies in the event of a dispute over erroneous notification or costs. The clause must also be qualified so that the provision only applies where the report was not reasonable. The penalty should apply to cases where the notification was not reasonably justified (e.g., no reasonable steps were taken to establish if the fault was on the notifying party's own network).
D.8.2	Unplanned outages: "During the planned outage, the responsible Party must keep the other NOCs informed at regular intervals with the progress until full restoration of service whereupon the NOCs will note the outage duration. If the	Clause omits any stipulation by the responsible party to provide notification of full rectification of the outage.	BTC must insert an addition at the end of the clause for the responsible Party to notify the other party of the full rectification of the outage.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	items are not restored to full service within the expected duration, the outage will be regarded as an unplanned outage occasioned by a planned outage and the procedure above for dealing with unplanned outages will be followed."		
D.8.3	Planned outages: "If the items are not restored to full service within the expected duration, the outage will be regarded as an unplanned outage occasioned by a planned outage and the procedure above for dealing with unplanned outages will be followed."	Omits mention of where, specifically, in the draft RAIO parties may find the procedures for dealing with unplanned outages.	BTC must amend the clause as follows: "If the items are not restored to full service within the expected duration, the outage will be regarded as an unplanned outage occasioned by a planned outage and the procedure in Clause 8.2 above for dealing with unplanned outages will be followed."
D.8.5	Escalation process: "The Parties will agree an escalation process for faults that are not cleared within the timescales given in Annex H, Quality of Service, so that the problem can be drawn to the attention of more senior management."	Omits to specify whether, or under what circumstances, the escalation process in Clause F.2.1 applies to uncleared faults.	BTC must amend the clause so as to specify that the escalation process in Clause F.2.1 will apply, or specify the procedure if different than that in Clause F.2.1.
D.9.1	"In the case of scheduled maintenance, the schedule of critical activities must be	Omits to specify a reasonable time period for notifying the NOC of the	BTC must amend the clause to include a time period for notifying the NOC of the schedule of

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	made available to NOCs in advance.”	schedule of critical activities.	critical activities.
D.9.1	Refers to cataleptic outage	‘Cataleptic’ is not a commonly used word in telecommunications/ electronic communications. However, since it is defined in the Annex I definitions, it should be capitalised so readers know it is a defined term.	BTC must capitalise the phrase ‘Cataleptic or Partial Failure’ in Clause D.9.1.1 in accordance with Annex I.
D.11.1	“Neither Party must do anything, or knowingly permit any third person to do anything, in relation to Network facilities, Network services or equipment which: ...”	Omits to include anything not done, whether by act or omission.	BTC must amend the clause as follows: “Neither Party must do anything, by act or omission, or knowingly permit any third person to do anything, in relation to Network facilities, Network services or equipment which: ...”
D.12.2 (D.11.2)	Notice of interference and rectification.	Apparent error in numbering of paragraph sub-clause.	BTC must renumber the clause from “D.12.2: Notification of interference and rectification” to “D.11.2 ...”.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
D.13.5	8 weeks' notice for Network Alterations.	Network Alterations come in many forms, including those described in D.13.1. Some changes can be effected by 'network grooming' (reconfiguring what is already there) and data management amendments; and this type of change can be achieved in about 1 month. But other changes like closures of Poles, and relocating switches require much more substantial changes, which should have been highlighted in the Network Plan well in advance and may require around 7 months to achieve. Indeed, despite the wording of Clause D.13.5, Clause D.14.3 specifies 6 months' notice for such major events. Experience suggests that even longer notice periods are appropriate when NGN related changes are concerned.	BTC must review the clauses relating to Network Alteration notice periods for consistency and appropriateness to NGN-related network changes.
D.14.4	"Each Party shall bear its own costs associated with the decommissioning	Clause fails to recognise that the party responsible for	BTC must amend the clause so as to reflect that the party responsible for decommissioning is

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	together with the direct costs incurred by that Party in respect of the establishment of alternative arrangements necessary to support the provision of interconnection services provided at the time of the decommissioning.”	decommissioning should be responsible for the costs incurred by the other party for decommissioning the existing site in addition to the costs of commissioning a new site.	responsible for the costs incurred by the Other Party for decommissioning the existing site in addition to the costs of commissioning a new site.
D.16	Data amendments.	Contextual or grammatical error requiring the title of the clause to conform to its subject matter.	Amend title to read “Data management amendments”.
D.16.1	“The format of the [data management amendments] notice shall be agreed between the Parties.”	Avoidance of the potential for delays arising from having to agree the format of such a notice.	BTC must append a standard form letter to the RAIO to avoid the potential for delays.
D.16.4	“In all other cases, the fees for Data Management Amendment requests will be agreed between the Parties, based on the hourly wage rate of the staff carrying out the amendments and the time taken to complete the task.”	This clause has overtones of reciprocity, which URCA deems unacceptable. Additionally, the appropriate staff rates are not specified in the RAIO.	BTC must review and revise this clause to remove any elements of reciprocity/symmetry of obligations. BTC should specify in the final RAIO the wage rate for its staff carrying out Data Management Amendment requests.
Schedule 1 to Annex D: Access to co-location sites			
Schedule 1 to	Access process: Emergency access to co-	Omits to specify a reasonable time	BTC must amend the clause to reflect that BTC

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Annex D D-1.2.1	location area.	period for Access Provider to send Access Seeker a revised, updated list.	must send the Access Seeker a revised, updated list of nominated contact staff and contact details within 24 hours of such changes.
Schedule 1 to Annex D D-1.2.2	Access process: Emergency access to co-location area	24 hours' notice for emergency access is excessive. In a real emergency, a time not exceeding 4 hours is appropriate. Contextual or grammatical error regarding the identity of a party.	BTC must amend Clause D-1.2.2 to include a notice period in emergencies. BTC must amend "The Access Seeker will notify the Access Seeker" to "The Access Seeker will notify the Access Provider".
D-1.2.4	"The Access Provider may charge the Access Seeker for the cost of the supervision associated with the access visit, and the charge may be increased to reflect the increased costs associated with: access visits occurring outside the Access Provider's standard hours of business ..."	Omits to specify BTC's costs of supervising an access visit and their standard hours of business for the purposes of access visits.	BTC must specify in the RAIO the costs for supervision of an access visit and the Access Provider's standard hours of business.
D-1.2.5	"The list of nominated staff will be available to the Access Provider electronically, and the Access Seeker will send the Access Provider a revised list	Omits to specify a reasonable time period for Access Seeker to send Access Provider a revised, updated list.	BTC must amend the clause to reflect that the Access Seeker is to send a revised, updated list of its staff who will undertake shared site visits to BTC within 24 hours of such changes.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	whenever it is updated.”		
Schedule 2 to Annex D	Sample (Joining Circuit) performance report.	In line with comments in Section 2 above, the ‘traffic measures’ section of the sample report does not deal with Joining Circuit performance, but the interconnect traffic routes provided over them.	BTC must clarify the terminology used in the sample report.
Annex E – Billing			
E.2.1	List of usage based Interconnection Services.	Omits to include “Call Termination to Freephone Numbers” as a possible service	BTC must review and revise to include Call Termination to Freephone Numbers as a service.
E.2.9	“The Access Provider shall not bill for any services provided more than 12 Calendar Months prior to the date of the invoice.”	Billing for services provided up to 12 months prior to the invoice date.	BTC must amend the clause so that the Access Provider does not charge for any services outside the billing period unless there are good reasons for doing so. This clause must also cover retrospective charges as well as charges in advance.
E.2.10	“The Parties will agree arrangements to ensure that their clocks are synchronised for the purpose of billing peak and off-	It is for the party claiming that its time calibration is correct to prove that this is the case by providing	BTC must amend the clause so that once the issue of a time discrepancy is raised by one party, based on a justified request, the other

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	peak periods, if needed. Where a time discrepancy exists, the Access Provider's CDRs shall be taken as the correct source unless proved otherwise by the Access Seeker."	appropriate evidence, for example maintenance records, etc., and not the other way round.	must prove the correct working of its clocks.
E 3.4	Floor space charge for physical co-location service on a 'per meter' basis.	This is inconsistent with the draft RAIO charges presented in Annex G 13 where the site rental charge is quoted in 'per square feet' terms	BTC must revise and remove the noted inconsistency.
E.3.7	"The billing period is a calendar month unless otherwise determined by the Invoicing Party and notified to the Invoiced Party in advance."	Clause omits to say on what basis would Invoicing Party change from monthly billing period or how far in advance notice will be given of the intention to change to another billing period.	BTC must clarify in the final RAIO: (i) on what basis would the Invoicing Party change from a monthly billing period to some other billing period; and (ii) how far in advance notice will be given of the intention to change to another billing period.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
E4.2	Unsettled invoices.	<p>7 days seems to be rather a short period at which to commence debt recovery procedures.</p> <p>Also omits to specify a reasonable time period before the Invoiced Party would be notified that the Invoicing Party will be taking action.</p>	BTC must amend this clause from seven (7) to thirty (30) calendar days before commencing debt recovery procedures.
E.4.6	"The Party requesting the investigation will be liable for the cost of any test calls."	Omits to specify what will be the reasonable costs of investigating test calls.	URCA withdraws its objection; no change required.
E6.1	Errors less than 2%.	Although invoices which deviate less than 2% from expectations should be paid, parties should be able to insist that errors of whatever magnitude be investigated if requested. For example, a consistent over measurement of 2% would be of concern.	<p>BTC must amend the second sentence of this clause to clarify that "any invoice exceeding two per cent (2%)" level of error can be disputed.</p> <p>BTC must amend the last sentence of the clause to read "within the time frames specified in Clause E.7".</p>
E.6.4	"If the Invoicing Party verifies the overpayment, the Invoicing Party shall return the amount overpaid to the	Omits to specify a reasonable time period within which the Invoicing Part will reimburse the Invoiced	BTC must specify the period within which it will reimburse an Access Seeker for overpayments.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	Invoiced Party.”	Party for overpayments.	
E.7.1	Acceptance of invoice correctness after 10 working days.	The wording here would prevent an operator from challenging a small but persistent error that might only become evident after a pattern of several months.	BTC must amend the clause as acceptance of an invoice for payment should not prevent a subsequent issue being raised.
E.7.8	“In the event that the Parties cannot agree on a firm of specialists ...	Change in terminology used in the subject clause.	BTC must amend the clause as follows: “In the event that the Parties cannot agree on a firm of independent auditors ...”
E.7.14	“The Invoicing Party shall have the right to invoke Clause 14 of the General Terms and Conditions should the breach continue for another fifteen (15) Working Days.”	Misidentification of Clause 14 and of the General Terms and Conditions.	BTC must amend the clause as follows: “The Invoicing Party shall have the right to invoke Clause 18 of the Main Terms and Conditions should the breach continue for another fifteen (15) Working Days.”
E.7.16	Refund of an Invoicing Party's initial payment to the Third Party Expert by a Disputing Party who loses a billing dispute.	As currently drafted, the Disputing Party gets no refund of the Third Party Expert's fees from the Invoicing Party if it wins a billing dispute but refunds the Invoicing Party's initial payment if it loses.	BTC must amend the clause so as to be consistent in requiring the losing party to refund the initial payment to the Third Party Expert. Provision must also be made so that the Arbitrator can award or decide the issue of the cost of the dispute between the parties, as the

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			Arbitrator considers fair and reasonable in the case.
E.7.17	"[N]either Party shall be entitled to withdraw there from.	Contextual or grammatical error.	BTC must amend the clause as follows: <i>"neither Party shall be entitled to withdraw therefrom".</i>
E.7.18	"The Parties agree to keep the subject matter of their billing dispute and the evidence heard during any resolution by a Third Party Expert confidential ...	Contextual or grammatical error regarding the confidentiality of evidence before a Third Party Expert.	BTC must amend the clause as follows: <i>"The Parties agree to keep the subject matter of their billing dispute and the evidence submitted during any resolution by a Third Party Expert confidential ..."</i>
E.7.19	"[T]he Net Receiver shall have the right to raise a demand notice immediately and the Net Payer shall make payment within five (5) Working Days of the demand notice.	Contextual or grammatical error introducing terms not previously used in the draft RAIO.	BTC must amend the clause to define/explain who are "Net Receiver" and "Net Payer".

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Schedule 2 to Annex E	Detailed billing verification information (CDRs).	<p>In the first sentence, 'date' should read 'data'.</p> <p>In the sentence above Table E-2.2, there is reference to "the form in Table S.6.2" but no such table exists and probably refers to Table E-2.2.</p>	BTC must review and correct the text in the clause as necessary.
Annex F – Dispute Resolution			
F.4	Use of independent arbitration and mediation.	If the dispute concerns the regulatory obligations of a party, then resolution cannot admit the use of arbitration or mediation. Only URCA or the UAT can resolve such disputes and immediate escalation to URCA or the UAT should be provided for in such cases.	<p>BTC must amend the clause so as to include URCA's and the UAT's role in resolving regulatory disputes in this part of the RAIO.</p> <p>Also, BTC must amend the clause to specify that, unless directed otherwise, the Parties shall continue to perform their respective obligations during the resolution of any dispute, whether such dispute is pursued through arbitration, mediation, litigation or regulatory action.</p>
F.4.1	"Should the Chief Executives of the Parties fail to reach unanimous agreement in the determination of any dispute referred to them as in Clause F.4	<p>Replace "Clause F.4" with "Clause F.3".</p> <p>Omits to state what should happen if</p>	<p>BTC must amend the clause as follows:</p> <p><i>"Should the Chief Executives of the Parties fail to reach unanimous agreement in the</i></p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
	within fourteen (14) Calendar Days of such referral ...”	one or both parties conclude that the matter cannot be resolved by the CEOs, or if a CEO refuses to setup a meeting as requested.	<p><i>determination of any dispute referred to them as in Clause F.3 within fourteen (14) Calendar Days of such referral ...”</i></p> <p>Also, if the Parties agree, or one of the Parties considers, that the matter cannot be resolved by the CEOs following the first meeting, the clause must make provision for that Party to proceed to arbitration without waiting for 14 days. Also if any of the CEOs refuses to set up a meeting within 48 working hours of being requested, the stipulation that a period of 2 Working Days following a meeting must be amended to include 2 Working Days following a request and a refusal of meeting by the other CEO.</p>
F.4.2	“Notwithstanding anything to the contrary contained in this Clause F.4, neither Party shall be precluded from obtaining interim relief from a court of competent jurisdiction pending the decision of an arbitrator or mediator appointed pursuant to this Clause.”	Clause fails to consider the availability of other forums for seeking interim relief.	<p>BTC must amend the clause to allow either party to seek interim relief from a Court, from URCA or from the UAT.</p> <p>BTC must amend the last sentence of this clause to read as follows:</p> <p><i>“... reports available to the arbitrators or the mediator and each other ...”</i></p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
F.5	Escalation to URCA.	In urgent cases, it should be possible to escalate an issue to URCA before the times described.	BTC must amend the clause to allow either party in urgent cases to seek immediate escalation to URCA before the time periods described.
F.5.1	“After the expiry of 30 Calendar Days after a dispute has been referred to the Chief Executives under step 3 above, either Party may refer the dispute to URCA”.	The potentially lengthy period of time before a dispute can be referred to URCA.	<p>BTC must amend the clause as follows:</p> <p><i>“Four months after a dispute has been referred to the Chief Executives under Clause F.3 above, either Party may refer a dispute to URCA. Alternatively, either Party may apply to URCA in urgent or exceptional cases to refer a dispute to URCA”.</i></p> <p>BTC must also clarify the text so as to make it clear that referral of a dispute to URCA is without prejudice to the rights and timescales provided to licensees under the Communications Act and any regulatory measures that may be issued by URCA from time to time.</p>
F.5.2	“Any decision in a Dispute which has been referred to URCA under Clause F.5.1 may be applied retrospectively to the date on	Any decision by URCA may be applied from the date that URCA decides and not only from the date	BTC must delete this clause.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
-------------------------------	-------------------------	---	-----------------------

which the Dispute was referred to URCA.” that the Dispute is referred to URCA.

Annex G – Price List

G.7	Call Termination to Operator Assistance Service (cents per minute).	No justification exists why the minimum call duration should be three minutes.	BTC must amend the clause to remove the minimum call duration of three minutes.
G.12 Customer Sited Interconnection In-Span Interconnection	Charges for Joining Circuits, Customer Sited Interconnection and In-Span Interconnection.	URCA considers the lack of specifications and charges as unacceptable.	BTC must provide prices in the RAIO for the 2 Pols and joining services associated with those 2 Pols.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Annex H – Quality of Service Standards			
H.1.3	Both Parties will use their best endeavours to meet the quality of service standards set out in this Annex.	See URCA's comments above on similar terminology used in Clause 8.2 (main document).	BTC must amend the clause as follows: "Both Parties will comply with the quality of service standards set out in this Annex."
H.3.1	Grade of Service.	Grade of Service is a quality measure of the Interconnect traffic route, not of Joining Circuits. Because PoIs are 'pinch-points' between operators' networks, best practice would be to provide for a better GoS than 1%.	URCA agrees with BTC's proposed level of Grade of Service on interconnection routes.
H.3.2	Availability of Joining Circuits.	An availability of 99.5% implies a loss of over 43 hours each year. International benchmarking suggests that at least 99.8% should be achievable.	BTC must amend the clause on availability standards for joining circuits to 99.8 % on an annual basis.
H.3.3	Grade of Service: Exclusion of Customer Delays.	While the availability figure of Clause H.3.2 (which is <i>not</i> a Grade of Service) might be affected by Customer Delays, this is not true of Grade of Service as described in	BTC must amend the clause so that Clause H.3.3 only refers to the standard set out in Clause H.3.2.

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
		Clause H.3.1	
H4.1/4.2	Network availability.	The ANSI unsuccessful call ratio is a quality of service measure, not a grade of service. Furthermore, the use of this ratio and the target of 65% is not a measure of network availability or performance, since it can be significantly affected by customer behaviour – such as not answering the phone or by always having an answering machine to answer the call.	BTC must amend the clause so that network performance is measured by the percentage of calls that fails due to congestion or faults.
H.5.3	Availability of Joining Circuits.	Clause H.5.3 appears to duplicate Clause H.3.2.	BTC must amend the clause on availability standards for joining circuits to 99.8 % as in Clause H.3.2 above.
H.6.1/ Table H.9	“In order to allow for exceptional circumstances, a Grace Period shall be permitted before penalty payments are payable.”	The Grace Period has the effect of extending the target dates. The penalties payable after the Grace Period are too low and do not constitute an incentive to the Access Supplier to meet its targets.	BTC must amend the first sentence of the clause as follows: <i>“The Access Provider shall be liable for penalty payments if it fails to meet the targets for ordering, testing (as set out in Tables H.2, H.3 and H.4 above) and service restoration (as set</i>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
H.6.3	<p>“The Access Seeker is responsible for initiating the reclaim of any penalty payments, which if agreed by the Access Provider, will appear as a credit on the next monthly invoice ...</p>	<p>The clause should specify the procedure that will be followed in resolving the dispute if the penalty is not agreed by the Access Seeker.</p>	<p><i>out in Table H.5 above).”</i></p> <p>BTC must amend the clause to remove the Grace Period.</p> <p>BTC must also increase the penalties payable after the Grace Period in Table H.9 to act as a disincentive to delays, such increased figure to be suggested by BTC to URCA for URCA's approval.</p> <p>BTC must amend the clause to incorporate a procedure that will be followed in resolving the dispute if the penalty is not agreed by the Access Seeker.</p>

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
Annex I – Definitions			
Access Service	None.	Not defined.	URCA withdraws its objection; no amendment required.
Data Management Amendments	Inclusion of CDR structure changes.	Given the timescales referenced in the RAIO, it seems inappropriate to include changes of CDR structure within this definition. Any such structural change may require a longer notice period, as software development might be necessary.	BTC must reclassify CDR data structure changes as a Network Alteration and provide a notice period of at least 3 months.
Emergency Services	Defined as “organisations providing police, fire or ambulance services.”	Definition omits several other emergency services organisations recognised in the Comms Act.	BTC must extend this definition clause to include <i>“the Royal Bahamas Police Force, the Royal Bahamas Defence Force, and the providers of fire brigade, ambulance, coast guard and other emergency services as may be specified by the laws of The Bahamas or by URCA.”</i>
i) Licensed Operator ii) Network	Each refers to “telecommunications” service or traffic.	Licensees under the Comms Act now provide “electronic communications services”	BTC must amend the text of the RAIO and substitute “electronic communications” for “telecommunications” wherever it occurs in the

Cross-reference to draft RAIO	BTC's original proposal	Issue(s) in draft RAIO identified by URCA	URCA's Final Decision
			agreement.
Partial Failure	Failure affecting more than 15% of the total number of ports in a Pol.	Set at 15% of the Pols – with only 2 Pols, URCA is unsure how failure is measured in this situation. URCA is uncertain whether a “Partial Failure” is the same as “partial outage”.	BTC must substitute “Partial Outage” for “Partial Failure” wherever it occurs in the draft RAIO.
i) Requested Party ii) Requesting Party	Refers to who can request a “Data Amendment”	Correct reference is to a “Data Management Amendment”.	BTC must amend the text to read “Data Management Amendment”.
Review Notice	Notice under Clause 21.	Insert word “means” between “Review Notice” and “a notice served ...”.	BTC must amend the text by inserting the word “means” between “Review Notice” and “a notice served ...”.
Service Interrupting Fault	Fault resulting in degradation of service.	Capitalise “Service Affecting fault” at end of sentence.	BTC must amend the text by capitalising “Service Affecting Fault” at the end of the sentence.