



October 26, 2010

Mr. Usman Saadat,  
Chief Executive Officer,  
Utilities Regulation & Competition Authority,  
UBS Annex Building,  
East Bay Street,  
Nassau.

Dear Mr. Saadat,

**Re: Public Consultation on the Draft Reference Access and Interconnection Offer (“RAIO”) of the Bahamas Telecommunications Company (“BTC”), hereinafter referred to as (the “Consultation”)**

Please find below the comments of Systems Resource Group Limited (“SRG”), d.b.a. IndiGO Networks<sup>®</sup> (“IndiGO”), with respect to the above Consultation.

### **BTC’s Development of its draft RAIO**

SRG has significant concerns with the manner in which BTC has drafted the terms of its RAIO.

As URCA is aware, BTC has had an interconnection agreement with SRG in place since 2004 (the “IA”). The IA was freely negotiated between the parties in a similar regulatory environment to that which exists today, particularly with respect to the establishment of services, and rates based upon cost orientation. UCA will have noted that in drafting the terms of its draft RAIO, BTC has done so with no regard to the contractual terms that are currently in place between it and SRG. BTC’s strategy would appear to be as follows:

1. Ignore the longstanding terms, practices, services and rates that exist between SRG and BTC in the IA.
2. Publish a draft RAIO with altered service terms and higher rates for existing services, all to the benefit of BTC.
3. Adopt the position that because BTC is required to treat all operators equally, then the terms in the IA with SRG must be changed to reflect those that are contained in the RAIO.

With respect, it would appear that BTC is simply trying to game the system. By publishing terms and rates in the draft RAIO that are not in accordance with those that were previously agreed and in place with SRG, then BTC is already discriminating against other operators by refusing to honour those pre-existing service terms and rates in publishing its RAIO and reaching interconnection agreements based on that RAIO.

BTC's action is an anti-competitive attempt to marginalise Other Licensed Operators ("OLOs") by the back door, and in the process damage SRG by an unwarranted change to the practices and rates that were freely negotiated in a commercial contract between the parties, and reinforced by separate agreement dated March 2009 to continue under the terms that were agreed in the IA.

For reasons articulated in more detail below, SRG is of the view that were URCA to allow BTC to remove some of the longstanding service and billing practices that have been in place since 2004, the effect on sustainable competition would be severe.

### **Omissions in BTC's Offered Interconnection Services**

In addition to service omissions identified by URCA in the Consultation, on which SRG has commented in subsequent sections, SRG considers that there are other omissions from the list of interconnection services that are available under BTC's RAIO:

1. *1-800-389 services*: In its public consultation with respect to the Bahamas National Numbering Plan ("BNNP"), URCA made the point that 1-800-389 codes would be available to all operators and assigned by URCA on a line number basis. Since such calls are international inbound toll free calls, they will need to be routed by BTC in a manner similar to domestic 242-300 toll free calls.
2. *1-800 Termination service*: SRG believes that BTC should be required to provide a service to terminate calls to toll free 1-800 numbers, as articulated in SRG's response to question 9.
3. *Short Message Service ("SMS")*: Other operators, whether fixed or mobile, should be able to send SMS messages to BTC monopoly mobile subscribers; in particular, either fixed voice to SMS or web client to SMS. In consideration of BTC's dominant position with respect to mobile services, SRG considers that BTC should be required to provide SMS interconnection to OLOs in its RAIO on cost orientated terms.
4. *Backhaul Service*: To be competitive, other operators require connectivity between their network core and both the edges of their own network and the networks of third party operators. Such backhaul can typically only be provided by the SMP operator, and SRG considers that BTC should be obliged to offer such connectivity under its RAIO at cost orientated prices.
5. *VoIP service*: Following implementation by BTC of its Next Generation Network, SRG is of the view that BTC should be obliged to offer a VoIP interconnect service that would allow separate rates for origination and termination of calls between VoIP services on each party's network. Not only would this comply with common industry practice, but it would be reflective of the fact that termination of calls on BTC's VoIP network incurs significantly lower cost to BTC than termination of calls on its traditional TDM network. Moreover, such a practice has become necessary in order to address BTC's practice of using its dominant position to unfairly benefit its own VoIP service offerings. In particular:

- a. BTC openly advertises that inter-island calls from its fixed line customers in the Family Islands are free of charge when being placed to a subscriber of its VoIP service. BTC is therefore abusing its fixed line dominance in the Family Islands to unfairly compete with other VoIP service offerings and discriminate against the VoIP customers of its competitors. BTC should therefore be compelled to provide free of charge calling from its Family Island fixed line customers to the VoIP customers of OLOs that compete with it.
- b. In its VoIP service packages BTC bundles inter-island calling from its VoIP customers to its Family Island fixed line customers, to all intents and purposes making those calls free of charge. At the same time, BTC charges OLOs an interconnection rate for terminating a similar call from a competing VoIP service, thereby discriminating against the OLO's customers. A VoIP interconnect service with termination rates for inter-island traffic that are reflective of the rates BTC charges between its own divisions would provide a suitable mechanism to address the situation.

## **Anomalies in BTC's Offered Interconnection Services**

### ***Call Termination to Non-Geographic Numbers***

SRG notes that BTC has defined Call Termination to Non-Geographic Numbers (NGN). NGN are domestic numbers which give no indication of the geographic location of the line being called, and in other jurisdictions are often charged at a premium rate. Since toll free numbers are not generally considered to be NGNs, and have been separately offered as a service by BTC, SRG is not aware of any numbers in The Bahamas, particularly under URCA's draft BNNP 2010 that could be described as being NGN. SRG requests clarification with respect to BTC's NGN termination service.

### ***National Transit Call Conveyance***

SRG strongly objects to BTC's proposal to charge a transit fee to OLOs when a call is to terminate on BTC's mobile network. SRG notes URCA's comment in Table 5 of the Consultation that mobile transit service in Annex A.11 conflicts with the service to terminate on BTC's mobile network in Annex A.3, but SRG would respectfully go further.

From a practical perspective, the cost to an OLO to terminate a call on BTC's mobile network must be looked at in its totality. If BTC is permitted to duplicate charges as contained in the draft RAIIO, the total sum for mobile termination would be the addition of, a) the rate for call termination to mobile numbers, and b) the rate for national call transit. In such as case, SRG submits that URCA's comments in section 3.3 of the Consultation with respect to mobile termination charges are therefore equally relevant to charges related to transit between BTC's fixed and mobile networks. URCA stated that "fixed network operators should not pay a mobile termination rate at the same time as the retail mobile airtime charge is paid by mobile customers. If both the retail and the termination rate charge were levied, BTC would likely over-recover the costs of mobile termination." SRG considers that URCA's analysis applies equally to BTC's proposal to charge a mobile network transit fee.

Further, it should be noted that calls from BTC's fixed subscribers to BTC's mobile subscribers attract no charge, and OLOs would therefore be unable to compete with BTC when faced with transit charges that they would have to subsidise to be able to similarly offer free calls to their fixed subscribers when

placing calls to a BTC mobile subscriber. SRG's objections in this regard should be read in conjunction with its comments on fixed and mobile termination rates in answer to questions 16 and 19, below.

SRG respectfully submits that, as specifically provided for in the existing IA, as far as the OLO is concerned they are interconnecting with BTC's entire network, whether fixed or mobile. BTC should not be permitted to charge an additional transit fee to terminate calls on its mobile network.

As a secondary point, SRG notes that BTC has not offered a separate interconnect to OLOs to terminate directly on its mobile network and avoid the transit fee. At the very least, if BTC is to be allowed to separate its fixed and mobile networks for interconnection purposes and charge a mobile transit fee to OLOs, then SRG respectfully submits that the existence of Significant Market Power ("SMP") in both markets must dictate that BTC be mandated to offer to those OLOs who wish to take advantage of it separate joining circuits to interconnect with its monopoly mobile network in addition to its fixed network.

#### **Consultation Question 1:**

Do you agree that BTC should be required to provide a clearer separation between its draft interconnection contract and the draft reference access and interconnection offer?

SRG agrees that contractual terms need to be separated from service terms. In addition, SRG would make the following further points with respect to the structure of the RAIO.

- Pages 6 & 7 appear to form no useful purpose and the content of those pages conflicts with clauses in the body of the agreement. To avoid confusion, SRG believes that these pages should be deleted in their entirety.
- SRG agrees with BTC that "interconnection entails reciprocal rights and obligations". However, as discussed further below, the services available from the OLO, together with costs charged to BTC, are likely to be very different from those offered and charged by BTC. Whilst URCA has commented on the subject of reciprocity, with which SRG agrees, it is not clear how it is envisaged that services and terms offered by the OLO to BTC will be incorporated, whether as separate schedules to a final agreement based upon the RAIO, or in an entirely separate commercial agreement that is executed contemporaneously. SRG requests clarification on how it is proposed that this be accommodated, but notes that the former would be the simpler solution. In either event, however, the wording of terms in the main body of the RAIO will have to be reflective of the ultimate structural outcome.

#### **Consultation Question 2:**

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

SRG would add that in addition to the sections identified by URCA, page 6 of the RAIO also introduces the notion that BTC is only offering services on the basis that it can obtain those same services from the OLO on similar terms and conditions.

SRG agrees with URCA's analysis that counterparties to agreements that are based on BTC's RAIO who do not enjoy the same dominant position as BTC are not subject to the same Significant Market Power (SMP) obligations. It is not for BTC to stipulate in its RAIO the services and prices that the other operator must offer to BTC. Such references in the RAIO should be removed.

SRG reiterates the point made in its response to question 1, above, with respect to the structure of the agreement as it pertains to services and terms offered by the OLO to BTC.

**Consultation Question 3:**

Do you agree that BTC should fully justify any reciprocal clauses that remain in the RAIO?

SRG agrees, with reference to its response to question 2, above.

In a similar vein, SRG is of the view that for BTC to place a requirement on the OLO that their switches or billing systems provide reporting in an identical manner to those of BTC is inappropriate. In particular:

- Schedule 2, Annex C-2.2 and Annex E.2.2 place format requirements on the OLO's Call Detail Records, and
- Schedules 1 & 2 to Annex E place a format requirement on the OLO's billing system reports.

Each party will have different switches and different billing systems that output and report data in ways that are inevitably unique to those systems. BTC cannot stipulate that the format of its own systems be adopted by the OLO; something that would either require extensive and costly modification of the OLO's billing systems, or installation by the OLO of the same billing systems that are in use by BTC. It is sufficient that the OLO has appropriate source data available from its own switches and systems, in any reasonably reconcilable format, for the purposes of settlement billing, verification and dispute resolution.

**Consultation Question 4:**

Do you agree that BTC should remove from its RAIO any reciprocal charging obligations on other operators?

SRG agrees, with reference to its response to question 2, above.

**Consultation Question 5:**

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?

SRG is of the view that it is unacceptable that BTC has sought to exclude termination of international inbound calls from its RAIO.

- URCA has stated that BTC has SMP in the provision of fixed voice and mobile voice.
- URCA has designated that wholesale domestic and mobile call termination services form part of the high level SMP market, and must be provided at cost orientated prices.

- Inbound international represents a component part of call termination.
- To the terminating party, inbound international termination is indistinguishable from domestic call termination. From both a technical perspective and a cost perspective, there is no difference between intra-island domestic and inbound international. The only difference in the two types of calls is that in the call setup parameters of the former the Calling Line Identifier (“CLI”) indicates that the call originated in The Bahamas, and in the latter the CLI indicates that the call originated outside The Bahamas. To the terminating party the origination is irrelevant. The cost of termination is the same because the originating party has borne the cost of bearing the call to the point of interconnection with the other party.
- From a competitive perspective, it is unthinkable that the parties to an interconnection agreement are unable to terminate inbound international calls on the network of the other party:
  - The OLO will be unable to negotiate fair and reasonable interconnection rates with its international partners in the absence of the ability to terminate inbound minutes on any network but their own. In bi-lateral agreements, international partners require the ability to terminate calls in country regardless of the terminating NXX, thus preventing their need to have separate agreements with multiple operators. Blended inbound and outbound rates are set between the parties on such a basis. In the absence of such an arrangement OLOs will find it difficult, if not impossible, to negotiate agreements with tier one international carriers.
  - From a practical perspective, the OLO’s subscribers will not be able to receive inbound international calls. As drafted, the RAIO obligates the same terms on each party, so the OLO cannot terminate inbound international calls received from BTC any more than BTC is prepared to terminate inbound international calls from the OLO.
  - 1-800-389-XXXX calls could not be routed to the terminating destination.

SRG notes that termination of international inbound calls is specifically provided for in the existing IA, and submits that BTC must be required to include inbound international in its RAIO at cost orientated rates to both its fixed and mobile customers.

**Consultation Question 6:**

Do you agree that the international 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?

URCA’s discussion in the Consultation with respect to international transit suggests that were BTC not to provide a call termination service for international calls, OLOs would then need to negotiate bilateral call termination arrangements with operators in all countries to which they wish to offer service. SRG would respectfully point out that in fact the OLO would only be required to negotiate an arrangement with one of BTC’s international partners, who would themselves handle the transit of calls to all onward international destinations. The establishment of such a relationship is not onerous, and SRG does not believe that it would provide a barrier to competition for OLOs to engage independently with an international partner.

For the most part, neither does SRG believe that it would be fair to BTC to require that they pass on the benefit of their international settlement relationships to OLOs. If BTC has been able to negotiate favourable rates under commercial agreements with third party international partners, then it would seem unjust that BTC would be forced to pass on the benefit of those commercial negotiations to its competitors. Further, BTC would also be carrying the financial risk and cash flow burden of cross settlement with the international partner on behalf of its competitor, not to mention the administration in rate setting, rating and cross billing.

With the caveat below, SRG therefore believes that it would only be appropriate for BTC to offer a commercial resale service to OLOs for international termination, inclusive of international transit. In such circumstances, the free market would prevail with respect to settlement rates. BTC would be free to establish its own wholesale international rates, but were an OLO to believe that it would be financially better served by alternatively paying BTC's international transit rate and separately obtaining its own settlement agreement with an international partner, then it would always remain free to do so.

However, an exception to the above might arise in circumstances where BTC were able to leverage internal strategic relationships in a way that distorted the competitive market. For example, in a case where a majority of shares in BTC were acquired by a strategic partner with other regional subsidiaries, that might bring about settlement rates with those subsidiaries that were unattainable by other operators in any circumstances. In SRG's view, BTC would then be abusing its SMP and anti-competitively distorting the market. In these limited circumstances, SRG would then propose that BTC be required to offer cost orientated settlement rates to those specific destinations as a service in its RAIO.

**Consultation Question 7:**

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?

In nearly all cases, SRG believes that such a process would be unnecessary, in line with its answer to question 7. Indeed the difficulty of overseeing a process of this type lends credence to SRG's argument that it represents a path that should not be embarked upon. Every major international carrier's data table of worldwide international rates will change on a monthly basis. That is not to say that all rates will change, but a subset of rates will inevitably do so. That is the nature of the market. It would therefore be highly impractical and time consuming for URCA to engage in a manual audit process of all settlement rates.

In the limited case that relates to unnaturally favourable settlement rates, as outlined by SRG above, an audit would be appropriate, but in those circumstances it would be a straightforward matter to administer.

**Consultation Question 8:**

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?

SRG agrees that BTC should not be permitted to “double dip” with respect to origination of calls to freephone numbers by, a) enforcing airtime charges on its mobile subscribers, and b) imposing higher mobile termination rates on OLOs.

With respect to call termination, as SRG understands URCA's proposals in the BNNP, BTC is to act as a central clearing house for the distribution of 242-300 calls to all operators. This would mean that BTC must also act as a terminating party for 242-300 numbers in cases where two OLOs may not have a direct interconnection between each other. BTC must therefore offer termination services for freephone numbers.

A difficulty will arise in charging. It cannot be right that the originating OLO does not bill BTC but instead incurs a transit fee from BTC that it has to offset by a separate charge to the terminating OLO, independent of the interconnection agreement arising from the RAIO. In such circumstances the originating OLO incurs a liability to BTC when all it was doing was providing a consumer service to accommodate the use of 242-300 in The Bahamas. The originating OLO has no relationship with the subscriber who will ultimately be billed by, and settle with, the terminating OLO.

In SRG's view, the billing principle to be employed must be that the benefiting party, who has the relationship with the subscriber who will be billed, should pay for BTC's services. In such a case, the following should occur:

- The originating OLO charges its freephone origination fee to BTC (resulting in a reverse charge to BTC under the RAIO), regardless of whether the call is to terminate on BTC's network or the network of a separate OLO.
- BTC transmits the call to the terminating OLO with no charge to the originating OLO.
- BTC charges both the transit fee and the 242-300 originating fee to the terminating OLO.

In principle, the above is an implementation of cascade accounting that is no different to the proposed mechanism for international transit, where BTC will have the relationship with the international carrier and bill the OLO for the international call. The difference is that in the case of freephone numbers, it is the terminating OLO that would settle with BTC.

**Consultation Question 9:**

Do you agree that BTC must include a service for terminating calls from OLOs to premium rate numbers in its RAIO?

SRG agrees that BTC must include a service for terminating calls to 1-900 numbers by an OLO's customers. However, SRG would go further in stating that BTC must also provide the same service for termination of calls by the customers of an OLO to 1-800 numbers.

In its responses to the public consultations with respect to the BNNP, SRG made the point that there are a select few 800 toll free numbers that route internationally, without use of 880, 881 or 882. By way of example, SRG identified American Airlines, 1-800-433-7300, and made the point that such arrangements need to be regularised so that calls from all OLOs can be routed accordingly, and that appropriate inter-carrier billing can be carried out where applicable.

An organisation that has a 1-800 number that terminates in the United States for toll free international calling from another country, does so because it wants to provide a service to customers in the originating country to be able to call unhindered and without charge. That was fine when BTC was the only provider of voice services, but that is no longer the case. For all other operators than BTC, calls will not route to the 1-800 number in question without incurring a charge against the originating customer, frustrating both the Bahamian consumer and the company that thought it had paid for its customers to have a toll free service.

Whilst SRG appreciates that provision of a 1-800 termination service will result in a reverse charge to BTC who will have to pay the OLO for origination, SRG is of the view that BTC must be required to provide such a service in its RAIO in addition to 1-900.

**Consultation Question 10:**

Do you agree that BTC should offer both direct accounting arrangements and cascading account arrangements for its call transit service?

SRG is of the view that BTC should be required to provide cascade accounting, with an option for direct accounting in the event that the two OLOs concerned develop a separate relationship.

**Consultation Question 11:**

Do you agree that BTC should remove any call handover requirements from the RAIO and that BTC should amend the RAIO to the wording proposed by URCA?

BTC's proposed handover requirements were ambiguous at best. Reference to the "closest" Point of Interconnection ("PoI") might be resolved differently dependant upon the reference point used. For example, some points in Abaco are closer to Nassau than Eight Mile Rock. SRG agrees with URCA's proposal that call handover should be at the discretion of the OLO.

However, SRG would add two additional points for accommodation in URCA's wording:

1. Re-routing to an alternative PoI must be permissible in the event of congestion or unplanned Joining Circuit outages, see Annex D.3.1.
2. For the avoidance of doubt, calls handed at a non-local PoI must be rated as an intra-island call for billing purposes in all cases where the origination and termination NXX are on the same island.

**Consultation Question 12:**

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 Route Traffic, 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?

It would appear from URCA's discussion that the distinction in terms adopted is designed to help more accurately identify the costs that will be attributed to establishment of the physical interconnect between the two parties. This is helpful and will avoid ambiguity.

It should be noted that with respect to equipment, past practice has been for SRG and BTC to each pay their own costs as it relates to equipment on their end of the Joining Circuit. Section 3.4 of the IA between BTC & SRG reads as follows:

“Each party shall be responsible for its own costs for its respective network and for its own costs to accommodate, provide for and maintain Interconnection at each and every POI.”

SRG believes this approach to be the correct one.

A question remains however with respect to charges for any construction for termination of circuits from the party providing the circuits, for example a fibre lead-in from the street or a wireless antenna. SRG believes that such costs should be borne equally by the interconnection parties.

**Consultation Question 13:**

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?

SRG agrees that the draft RAIO contains insufficient information on how BTC would provision the interconnection, and that Annex G should contain a complete schedule of costs.

**Consultation Question 14:**

Do you agree that the current number of PoIs provided by BTC and its proposed approach to review interconnection requests at new PoIs are feasible?

SRG notes that under the existing IA between BTC & SRG, the exchange of BTC in Marsh Harbour, Abaco is also listed as a PoI. Indeed, SRG and BTC have interconnected and passed traffic at that location for the past three years.

Marsh Harbour is therefore clearly a technically feasible point with respect to interconnection, although it is possible that BTC considers that it is no longer economically feasible or that it conflicts with its current network configuration. SRG would simply comment that on approaching BTC to

initiate routing changes with a view to ending use of Marsh Harbour in line with BTC's draft RAIO, BTC refused by letter dated September 7, 2010. SRG is therefore somewhat perplexed with respect to BTC's conflicting positions.

Nonetheless, SRG considers that the use of Grand Bahama and New Providence as PoI in the locations shown in BTC's draft RAIO are acceptable, with the following two provisos:

1. An OLO should not be financially penalised to accommodate BTC's restricted PoIs. Particularly, the OLO should not suffer inflated costs to provision inter-island Joining Circuits from an island on which BTC does not provide a PoI.
2. For the avoidance of doubt, calls handed at a non-local PoI must be rated as an intra-island call for billing purposes in all cases where the origination and termination NXX are on the same island. SRG believes that it would be quite wrong for BTC to restrict the location of PoIs, and then use geographic location of the PoI as the basis for establishing whether a call is intra-island or inter-island. Based upon BTC's limited choice of PoI, the billing criteria for intra-island and inter-island must therefore be based upon the origination and termination NXX rather than the island on which the PoI is located.

**Consultation Question 15:**

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.

SRG is of the view that the type of forecasting system outlined by URCA in the Consultation, with quarterly updates and Advanced Capacity Ordering is likely to prove too onerous on new operators in the fixed voice market, but is likely to become necessary as the mobile market is open to competition.

In the meantime, SRG agrees that a forecasting and planning system that is appropriate to the local competitive market should be detailed by BTC and included in its RAIO.

**Consultation Question 16:**

Do you agree that BTC should continue to offer free local calls given the non-zero RAIO charge for intra-island interconnection?

The question of charges for local calls and intra-island interconnection raises important and complex issues. In the first place, it should be remembered that BTC's publicly stated position is that the historical basis for intra-island calls that are free to the consumer has been based on unbalanced tariffs, and that free local calling has been subsidised by high charges made with respect to long distance calls. Faced with substantially lower priced competition from IndiGO over the course of the past 5 years, BTC was forced, with the support of the Public Utilities Commission ("PUC"), to reduce its long distance charges on October 7, 2004 and July 1, 2006, and recoup its lost profits through an increase in local access charges on January 1, 2006.

Notwithstanding the above, the comments made by URCA in the Consultation are instructive, because they present an argument that an intra-island interconnection charge might be justified because the communications act 2009 (the “Act”) requires cost orientation of charges. It is therefore axiomatic that if introduction of an intra-island interconnection rate is justified based upon cost orientation, then BTC’s tariffs must remain unbalanced because unless BTC can show that all its costs of providing fixed service are met by its local access charge, then BTC is therefore pricing its retail intra-island service to the consumer at less than its cost, i.e. free versus the cost orientated charge in the draft RAIO.

In such a case the provision of free intra-island calls could only happen through cross subsidy from another line of business within BTC, and when priced at below cost falls under the classic definition of predatory pricing in a competitive market. In such circumstances, BTC would have distorted the market in intra-island fixed voice such that sustainable competition is unachievable. After all, no competitor will invest in infrastructure or offer competing services whilst the market rate to the consumer has been set by the dominant operator at below cost. This would be contrary to numerous sections of the Act, for example:

- Section 4(iii) requires URCA to “encourage, promote and enforce sustainable competition”.
- Section 40(1)(a) which provides for URCA to impose “obligations for cost orientation of prices” on SMP Operators.
- Section 69(2)(a) which prohibits abuse of a dominant position via “unfair purchase or selling prices”.

With respect, BTC can’t have its cake and eat it too. SRG submits that if BTC is pricing service at less than its cost, then BTC is indisputably abusing its dominant position and URCA is obliged to act to bring the abuse to an end. In answer to the question posed by URCA, that can only mean that BTC would be obliged to introduce a retail metered tariff to the consumer for local calls.

Quite aside from the above, URCA has attempted to analyse the competitive situation that would evolve on the ground in the event that BTC was permitted to introduce an intra-island interconnection rate to OLOs whilst it continued to offer free local calls to the consumer. With respect, SRG does not believe that URCA has captured the anti-competitive realities. It is SRG’s view that were BTC to be permitted to engage in the above, the effect would be fatal to competition.

The interconnection charging mechanism for intra-island calls that has been in place since the IA was executed in 2004 is a mutually advantageous Bill and Keep arrangement. Under Bill and Keep, each party provides a like service to the other, but without a charge being levied by either party. This does not mean calls are being terminated by either operator on its network for “free”. A Bill and Keep arrangement recognises that the parties are each providing a valuable service to the other and, rather than expend the administrative effort to raise invoices to each other and collect cash, they each deem the service provided to the other party to be equal to the service which they receive from that party. In other words, payment for the service is made in kind, rather than in cash, and Bill and Keep is implicitly cost orientated.

The practical effect of the Bill and Keep arrangement of the past 6 years has been that both parties have been treated equitably, and that the status quo with respect to free local calls to the consumer has

survived. A simple example serves to show how the situation would change in the event that BTC were permitted to impose a charge on an OLO for terminating calls on BTC's network.

At the current time, SRG originates over 1 million intra-island minutes per month from its customers that are destined for termination on the network of BTC. SRG could not afford to absorb a per minute intra-island charge imposed by BTC for interconnection. SRG would have three choices:

1. Raise access charges to the consumer.
2. Introduce a local metered tariff to the consumer.
3. Introduce an intra-island interconnection rate to be charged to BTC for the more than 1 million intra-island minutes per month received from them for termination on SRG's network.

Since BTC has already set the local call rate to zero, introduction of a charge via either of option 1 or 2, above, would be catastrophic for SRG. The long standing practice of free local calls has created a consumer culture that embraces frequent and drawn out usage of local calling. Any business on which a charge were imposed in the absence of a similar charge by BTC would simply install lines from BTC to ensure that its costs did not increase. In such circumstances, it would not be in BTC's competitive interest to itself introduce such a charge, and it would become impossible for the OLO to compete.

The situation would be no better were SRG to introduce a charge under option 3. BTC would then happily pass on the charge to its own customers creating a two-tier retail charging structure on its network that would stack the competitive deck in its own favour. Local calls from BTC to BTC customers would remain free, but local calls from BTC to SRG's customers would attract a charge. The effect of option 3 would therefore be as catastrophic as options 1 & 2, and the impact would be the same; SRG's customer would be forced to take lines from BTC to ensure that BTC subscribers were not deterred from calling.

Common sense dictates that such distortion of the market in favour of the SMP Operator cannot be right, and cannot be the intent of the Act or of interconnection policy.

In its submissions to the public consultation on an Access and Interconnection Framework, SRG advanced the above argument and opined that in such circumstances, Bill and Keep should remain as the mechanism adopted between operators for intra-island calls. In its Statement of Results dated 24 September 2009, paragraph 230, URCA agreed with SRG's position and stated as follows:

"URCA agrees with SRG that bill-and-keep will remain in place until charges are introduced for local calls".

SRG notes that in the Consultation URCA made no further comment with respect to Bill and Keep for intra-island calls, and in light of the fact that circumstances in the retail market are unchanged SRG can see no reason that URCA's position would have changed. SRG proposes therefore that URCA stand by its prior ruling on this matter and mandate that BTC's interconnection charge for intra-island calls remain on a Bill and Keep basis.

SRG recognises however that Bill and Keep contains a reciprocal element with respect to the OLO, and that such reciprocity cannot be imposed on the OLO by BTC in its RAIO. Furthermore, a circumstance may arise where a niche operator may not use numbers of its own and would not

therefore be in a position to provide intra-island termination services to BTC. SRG therefore proposes as follows:

1. BTC will retain finally agreed cost orientated rates for intra-island call termination in its RAIO.
2. The RAIO will state that in the event that the OLO provides call termination on its own network to BTC, the OLO may elect in its discretion that Bill and Keep be adopted as the billing mechanism for intra-island calls.

With respect to inbound international calls, SRG accepts URCA's argument that the potential exists for arbitrage in the event that termination of inbound international calls were treated on the same basis as intra-island calls. However, SRG believes that this can be readily avoided by applying Bill and Keep only to calls that originate on the domestic network of the other party. International calls would therefore attract the metered charge in the final RAIO. This would be consistent with the approach recommended by URCA with respect to termination of calls to mobile numbers in section 3.3 of the Consultation.

**Consultation Question 17:**

Do you agree that BTC should be able to charge a cost orientated tariff in the RAIO for terminating calls to emergency services, and that each licensed operator should recover the costs of providing free emergency services to their retail customers from their general revenues?

SRG does not believe that there should be any charge levied by BTC for transiting calls to the emergency services:

1. The OLO is compelled to transit calls through BTC because the equipment at the emergency services does not support physical connection by more than one operator.
2. Access to the emergency services is a requirement of BTC's universal service obligations.
3. There is no additional cost to BTC in transiting calls from OLOs:
  - a. The parties to an interconnection agreement based upon the RAIO will already be sharing the cost of Joining Circuits.
  - b. BTC has a historical sunk cost of any necessary equipment or circuits to interconnect with the emergency services.
  - c. The number of calls to emergency services is finite. The call volume will not change simply because BTC is transiting calls from an OLO. All that may happen is that a call that might once have originated on BTC's network might now originate on the network of an OLO, but there is no greater burden on BTC.

SRG believes that by charging for transiting calls BTC will find itself in the extraordinary position of profiting from those calls that originate outside its network. SRG considers that calls should be at no charge to OLOs, and that in the event BTC feels that funding is justified it is free to make an application to URCA for compensation through the universal service fund under section 43 of the Act.

**Consultation Question 18:**

Do you agree with URCA's requirement for BTC to submit retail proposals for calls to DQ and automated ancillary services given BTC's non-zero RAIO charges for equivalent wholesale inputs?

SRG agrees with URCA's requirement.

**Consultation Question 19:**

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)?

SRG agrees with URCA that mobile termination rates should not be included in BTC's RAIO except for incoming international calls to mobiles.

Whilst SRG concurs with URCA's position that BTC's mobile charging practice of mobile party pays would result in BTC double dipping in the event of imposition of an interconnection termination rate, SRG would go further. Even were that not the case, URCA must remember that calls from BTC's fixed subscribers to BTC's mobile subscribers also incur no charge. Unless BTC were to introduce a retail charge to its own fixed customers for placing calls to its monopoly mobile customers, it should not be able to impose a fixed to mobile termination charge on OLOs. The same arguments apply here that were articulated by SRG in its response to question 16 with respect to free calls between BTC's fixed customers.

As is the case with termination of fixed calls between SRG and BTC, the longstanding practice for charging for termination of calls on BTC's mobile network has been under a Bill and Keep arrangement. Indeed, under the existing IA there is no separation of fixed and mobile calls. This is reflective of the fact that BTC makes no distinction in its charging practices to its own subscribers between fixed and mobile. Whilst the status quo remains with respect to BTC's own retail charging practices to its fixed line customers, the wholesale charges imposed on OLOs for termination to both BTC's fixed and mobile networks must be the same.

SRG would again remind URCA of its above referenced comments in the Statement of Results on the public consultation for an Access and Interconnection Framework. In paragraph 230 URCA made no distinction between fixed and mobile termination in deciding that bill-and-keep will remain in place until charges are introduced for local calls. With respect, this must equally apply to fixed calls of any operator (including BTC's fixed network) terminating on BTC's mobile network. The alternative would lead to the same catastrophic impact on competition as outlined in the response to question 16.

SRG therefore respectfully submits that Bill and Keep must apply as the interconnection mechanism for calls between BTC's mobile network and the fixed networks of OLOs until such time as BTC a) discontinues retail receiving party pays on its mobile network, **and** b) introduces charges on its own fixed line customers for placing calls for termination on its mobile network. In a similar manner as that proposed by SRG in its answer to question 16 on the subject of intra-island call termination on BTC's fixed network, adoption of Bill and Keep would be at the discretion of the OLO in the event that the OLO offered call termination to its own fixed network from calls originating on BTC's mobile network.

However, SRG would point out that it would be appropriate for BTC to charge for the inter-island component of a domestic long distance call that is to terminate on its mobile network. This charge would be the same as that provided for inter-island calls under Annex G.1, as amended by URCA in the Consultation, since it would only apply to fixed inter-island infrastructure and not any component of the mobile network.

With respect to BTC's position were retail tariffs to be lowered below the cost of providing mobile termination, SRG notes URCA's comments, but would respectfully remind URCA of the provisions of section 69 of the Act. By any measure, retail pricing by BTC below the cost of provision would represent abuse of its dominant position and be an infringement of section 69(2)(a) of the Act as it relates to the unfair selling prices and trading conditions.

**Consultation Question 20:**

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?

SRG agrees that the structure of BTC's interconnection charges should be reflective of the current retail charging practice of BTC.

SRG notes that in past years BTC has adopted peak and off-peak retail charges to the consumer, and in the event such a practice were reinstated, SRG agrees that URCA should review whether the interconnection methodology for peak and off-peak should likewise be amended.

**Consultation Question 21:**

Do you agree that BTC should publish charges for joining services for all available links in its RAIO?

SRG strongly agrees with URCA that the absence of a schedule with charges for joining circuits is inappropriate. A standard table of charges should apply.

In addition, SRG would raise the following:

- SRG does not believe it appropriate that BTC should restrict a Joining Circuit solely to a T1, utilising SS7. SRG is of the view that alternative interconnection methodology should be available, such as Session Initiation Protocol ("SIP"). SIP is a standard from the Internet Engineering Task Force and is the signalling protocol used for establishing sessions in an Internet Protocol ("IP") network. The use of SIP is foreshadowed by BTC through the inclusion of SIP protocol language in Annex C, but not provided for elsewhere in the RAIO. In today's IP driven networks, it is unthinkable for a serious operator not to provide SIP interconnect capability.
- There should be the possibility of utilising higher capacity circuits, such as DS3, even if those circuits are split into T1 channels.
- There should be separate pricing for cross connects in cases where the OLO has co-located in BTC's facility and the Joining Circuit becomes nothing more that a simple connection via local wiring to BTC equipment.

**Consultation Question 22:**

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

It is difficult for any OLO to comment on URCA's analysis since only URCA has the advantage of having seen and reviewed BTC's separated accounts. However, as SRG has commented in past consultations, the process of allocating costs is a complex one that is rife with both the potential, and the motivation, for a dominant operator to manipulate the allocation in its favour. It would be strange if that tendency had not found its way into BTC's accounting submissions to URCA.

URCA's discussion would appear to suggest that in the areas it has identified some adjustment is required. SRG supports that approach. However, SRG would point out that it does not believe that URCA's revised rates are applicable with regard to the services SRG has identified in its response to other consultation questions. In particular, it is SRG's view that:

1. An option must exist for intra-island fixed call termination to be on a Bill and Keep basis in line with past URCA rulings.
2. With the exception of inter-island charges, an option must exist for call termination to mobile numbers to be on a Bill and Keep basis in line with past URCA rulings.
3. Call termination to emergency services should be at no charge.
4. There should be no transit charge for termination on BTC's mobile network, or at the very least other operators must have the option to be able to separately interconnect directly with BTC's mobile network to avoid the transit charge.

**Consultation Question 23:**

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 and adjustments for efficiency be incorporated, in parallel with production of the AS model based on 2010 financials, from 2011 onwards?

As outlined in the general comments on the first page of this response, SRG has significant concerns with the manner in which BTC has been allowed to develop its RAIO and associated charges without reference to the charges and practices that have reasonably prevailed for the past 5 years.

URCA's comments would appear to introduce the conflicting positions of on the one hand taking the necessary time to conduct an efficiency study, whilst on the other hand suffering a delay in the introduction of an approved RAIO. Respectfully, SRG suggests that competition will not be served by introduction of a RAIO, even on a temporary basis, that disadvantages other operators on the grounds that speed should trump correctness.

SRG takes the view that the dilemma outlined by URCA can best be addressed by enforcement of past practices from the existing IA, particularly as they relate to the widespread practice of Bill and Keep for local fixed and mobile calls, and adoption of services such as international inbound termination. By adopting SRG's above recommendations in this regard, the status quo can be maintained and competition protected for the ultimate benefit of the consumer.

**Consultation Question 24:**

Do you agree with the 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.

SRG agrees.

**Consultation Question 25:**

Do you agree with the revised approach and resulting RAIO charges for BTC's Automated Ancillary charges (as set out in Table 2)?

SRG agrees.

**Consultation Question 26:**

Do you agree with the revised approach and resulting RAIO changes for BTC's Automated Ancillary charges (as set out in Table 3)?

SRG agrees.

**Consultation Question 27:**

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 the minimum call duration (of three minutes) from this service.

SRG agrees.

**Consultation Question 28:**

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

SRG has insufficient information to be able to comment on either BTC's proposed charges or URCA's amendment. It is not clear whether the proposed charge is of a recurring nature, i.e. monthly, quarterly or yearly, or represents a one time initial setup fee for data entry in perpetuity.

Neither does SRG understand how the charge relates to the inclusion of listed information in the published electronic and hard copy directories of BTC, as outlined in Annex A.6.2 of the draft RAIO which states that the publication of such information will be "subject to the same rules of listing and

inclusion of rules as apply to other listings and inclusions”. There is no reference to charges, which presumably means that the above referenced data entry charge includes the listings as described.

Quite aside from charges however, SRG submits that the mechanism for inclusion of an OLO’s subscribers in the white pages directory of BTC requires further thought, particularly with respect to business customers.

- There is an existing process employed by BTC when their subscribers also have numbers with an OLO, with both sets of numbers being displayed in the printed directory under the same business heading. Today, this is handled directly between BTC and their subscriber. It is difficult to picture how BTC’s proposal that the OLO handle the relationship with BTC for its subscribers would work in practice, since it would require coordination between the entry that BTC handles directly for its number, with the entry that the OLO hands to BTC with respect to the OLO’s number, both being with the same consumer. SRG suspects that this is a process that would be rife with error.
- There is only a single charging structure for directory inclusion in the RAIO, yet BTC offers different listing options for entry in the white pages, such as blue, yellow highlight, web site, etc. There is no accommodation for such options in BTC’s RAIO.

SRG requests clarification with respect to the above.

**Consultation Question 29:**

Do you agree that 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).

SRG agrees with URCA’s recommendations, however SRG would also make the following additional comments:

- In cases where the OLO is a fixed wireless service provider, that OLO may be in a position to provide Joining Circuits at a lesser cost than BTC, however access to tower space at BTC’s PoI would be a prerequisite. Physical co-location must therefore also include the provision of tower co-location at cost orientated prices at each of BTC’s PoI, such co-location to include mounting of one or more antenna with cable lead in to the equipment co-location facility.
- BTC should provide a standard charge for cable cross connects between racks of equipment from different operators, including BTC.

**Consultation Question 30:**

Do you agree/disagree with URCA’s identification of the issues and URCA’s recommendations on the individual clauses in the draft RAIO?

SRG agrees with each of the recommendations of URCA in Table 5 of the Consultation, except where separately outlined in the following table of comments and/or the above text. To avoid repetition, SRG

has therefore not made further comment with respect to matters or clauses itemised by URCA, except to raise or highlight differences.

## Introduction to Interconnection Agreement

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Pages 6 to 7

SRG believes that these pages conflict with the body of the document, serve no useful purpose, and should therefore be removed in their entirety (see SRG's answer to question 1).

### **Non Disclosure Agreement (“NDA”)**

If the OLO is to be required to execute an NDA, its contents should have been circulated with the draft RAIO for public comment.

In any event, SRG notes the inclusion of confidentiality terms in section 23 of the draft RAIO, and questions the necessity of a separate NDA.

### **Changes to the Agreement**

With specific reference to changes to the agreement, OLOs will be relying on the RAIO to be able to offer services to their customers and attempt to establish competition with BTC as the dominant incumbent. It is not acceptable for BTC to be in a position to change agreed terms on a whim, a power which could be manipulated to the detriment of competition. In particular:

- BTC must not be allowed to vaguely “reserve the right to review and amend the RAIO as required by changing circumstances”.
- BTC must not be permitted to withdraw services from an interconnection agreement in the event that it no longer has SMP. Even were that to be the case, BTC, like all licensed operators, would still have an obligation to interconnect. BTC must be obliged to continue interconnection on the agreed terms until an alternative agreement is reached.

Cross-reference to draft RAIO	BTC proposal	Discussion
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**Main Terms and Conditions**

3.2	Interconnection Services	The table should be amended to reflect the additions to services outlined by SRG in page 2 of its submissions.
4.3	Minimum Interconnection Period	SRG proposes that there be no minimum period. The parties would not benefit from continuance of an agreement when interconnection was no longer required.
11	New Services	The reference to Access Provider should refer to BTC.
13.2	Network Safety	SRG is concerned by URCA’s suggested wording. SRG cannot picture how URCA can in practice approve every piece of equipment that is connected to an operator’s network.
14.2	Calling Line Identifier (“CLI”)	Wording should be included to make clear that CLI will be passed by each operator to the other except in cases where it is technically unfeasible or where a call is received from a third party that does not contain CLI.
16.1	Public Criticism	SRG believes that the clause is rife with the potential for dispute and should be removed. Recent history would suggest numerous situations where comment of an operator on interconnection matters in URCA public consultations or on issues of public interest could have been deemed “public criticism”. BTC should not be seeking contractual protection from free speech in areas of legitimate public interest.
18	Breach and Suspension	SRG is of the view that section 18 requires extensive modification. Section 17 provides for dispute resolution, but section 18 introduces

Cross-reference to draft RAIO	BTC proposal	Discussion
		<p>a separate and conflicting mechanism of a Breach Notice. It should be removed.</p> <p>SRG believes that there should only be provision for suspension of service in two limited cases:</p> <ol style="list-style-type: none"> <li>1. If a party fails to pay undisputed charges 45 days after the due date.</li> <li>2. Grounds of safety, privacy or network interference.</li> </ol>
19	Termination	<p>SRG is of the view that section 19 requires extensive modification. SRG believes that there should only be provision for termination of the agreement in four limited cases:</p> <ol style="list-style-type: none"> <li>1. Where a party becomes bankrupt or goes into liquidation, or a receiver is appointed.</li> <li>2. On order of the courts or of URCA.</li> <li>3. Where a party ceases to be a licensed operator.</li> <li>4. Where a service or the agreement is terminated by request.</li> </ol>
20.6	Force Majeure Termination	Termination should require the approval of URCA.
21.4	BTC Review of Terms	<p>Should be deleted. It is unreasonable that BTC can initiate a Review Notice at any time with respect to major sections of the agreement. BTC must be bound by the same terms of initiation of a Review Notice as the OLO.</p>
21.7	Time period for Dispute	<p>SRG believes that the time period should be amended to 4 months to make it consistent with the period established by URCA in its Final Access and Interconnection Guidelines section 10.5.</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
23	Confidentiality	In the absence of the Non-Disclosure Agreement referred to on page 6 of the draft RAIO, it is unclear whether the terms of Clause 23 are either a) necessary, or b) in conflict.
24	Bank Guarantee	<p>Bank guarantees can be difficult and expensive to facilitate. SRG is of the view that except in extreme circumstances the bank guarantee is unnecessary and would act as a weapon that BTC could use to the detriment of competition by new entrants. SRG notes the following:</p> <ul style="list-style-type: none"> <li>• In all of SRG’s relationships with foreign carriers, no carrier has a requirement for a bank guarantee.</li> <li>• BTC’s requirement is entirely at their discretion and takes no account of past history.</li> <li>• Under the RAIO, BTC already has the right of suspension for non payment, a sufficient measure that would threaten the business of the OLO.</li> </ul> <p>SRG proposes the following:</p> <ol style="list-style-type: none"> <li>1. Establishment of a credit limit, with immediate settlement between the parties in the event that the limit is reached.</li> <li>2. Credit limit subject to review based on past history.</li> <li>3. Imposition of a bank guarantee only in the event of poor payment history resulting in lack of payment and suspension.</li> <li>4. The right to demand a bank guarantee must be reciprocal, and thereby available for implementation as a remedy by either party to the agreement.</li> </ol>
27	Limitation of Liability	The clauses on limitation of liability and indemnification are

<b>Cross-reference to draft RAIO</b>	<b>BTC proposal</b>	<b>Discussion</b>
		inadequate and very poorly drafted. SRG puts forward section 13 of the existing IA as alternative drafting.

Cross-reference to draft RAIO	BTC proposal	Discussion
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**Annex A – Service Schedules**

Annex A	Service Definitions	New service schedules should be inserted to reflect the additional services outlined by SRG on page 2 of its submissions.
Annexes A.1.1, A.2.1, A.3.1	International Termination	International inbound termination must be included.
Annexes: A.1.2, A.2.2, A.3.2, A.4.2, A.5.2, A.7.2, A.8.2, A.9.2, A.10.2 & A.11.2	Call Handover	Call handover should be at the discretion of the OLO.  For the avoidance of doubt, regardless of the PoI used for call handover, calls handed at a non-local PoI must be rated as an intra-island call for billing purposes in all cases where the origination and termination NXX are on the same island (see answer to question 11).
Annexes: A.1.7, A.2.7, A.3.7, A.4.7, A.5.7, A.7.7, A.8.7, A.9.7, A.10.7 & A.11.8	Calling Line Identifier (“CLI”)	It cannot be said that CLI “shall be made available for all Terminating Calls”. The originating party can only pass to the terminating party what it receives, and there are sound technical and operating circumstances that may exist that would mean that CLI is unavailable.  SRG notes that the referenced clause in Annex A causes conflict with the wording of Annex C.5 which acknowledges that CLI is not always “technically feasible” and may not be “presented to it”. The appropriate clauses in Annex A should reflect this view, and SRG proposes adoption of similar wording to that in section 6.3 of the existing IA between SRG & BTC , as follows:  “Each party’s obligation to provide CLI on originating calls is not required if the party is delivering a call it received from another party who did not provide the CLI code”

<b>Cross-reference to draft RAIO</b>	<b>BTC proposal</b>	<b>Discussion</b>
A.2	Call Termination to Non-geographic Numbers	SRG requests clarification with respect to numbers under the BNNP to which BTC's NGN service applies (see page 3 of SRG's submissions).
A.6	Directory Number Inclusion Service	The process for inclusion of details in BTC's published electronic and hard copy directories must be clarified (see SRG's answer to question 28).
A.8.10	Charging for Emergency Call Services	SRG is of the view that calls to the Emergency Services should be free of charge (see SRG's answer to question 17).
A.9	Domestic Freephone Origination Service	To be amended in line with SRG's answer to question 8.
A.10	International Call Transit	BTC should provide international call termination for OLOs through its own international arrangements on a free market commercial basis (see SRG's answers to questions 6 & 7).
A.11	National Call Transit	SRG agrees with URCA that BTC's proposed transit fee for termination of calls on its mobile network is inconsistent with its mobile termination service in Annex A.3.  SRG submits that call transit should not apply between the fixed and mobile networks of BTC (see page 3 of SRG's submissions).
A.11.7	Fault Rectification	Should be removed, it being a repeat of clause A.11.5
A.11.10	National Call Transit Charges	Charges for call transit should be on a cascade accounting basis, with an option for direct accounting (see SRG's answer to question 10).

Cross-reference to draft RAIO	BTC proposal	Discussion
A12.2	Joining Circuit	<p>SRG believes that Joining Circuits should not be restricted to individual T1. Additional options should be available for higher capacity, i.e. DS3, and also Ethernet circuits over which interconnection based upon SIP could be utilized (see SRG’s answer to question 21).</p> <p>BTC implies that the above types of interconnect are supported by reference to standards in Annex C-2.2.1 and Schedule 1 to Annex C.</p>
A.13.4	Physical Co-Location	<p>In cases where the OLO is a fixed wireless service provider, that OLO may be in a position to provide Joining Circuits at a lesser cost than BTC, however access to tower space at the PoI would be a prerequisite.</p> <p>Physical co-location must also include the provision of tower co-location at cost orientated prices at each of the BTC’s PoI (see SRG’s answer to question 29).</p>
Schedule 1	List of Services taken	<p>Should be amended to reflect the additional services outlined by SRG on page 2 of its submissions.</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
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### Annex B – Ordering Process

B.1	Request for Services	The RAIO should provide a process for the grandfathering of existing interconnection services and circuits, in addition to the Annex B procedure for new and additional services.
B.5.1	Provisioning of Services	Additional services specified by SRG in page 2 of its submission to be included.  The RAIO should also provide for the grandfathering of existing call termination, directory and emergency services.
B.6.1	Facilities Services	The RAIO should provide for the grandfathering of existing PoI with OLOs, with specific reference to migration away from BTC's existing PoI in Marsh Harbour, Abaco.
B.6.7	Service Requests for Joining Circuits	Mistakenly refers to clause B.9 instead of B.7, but this is in any event superfluous since Joining Circuits are not listed as relevant facilities in B.6.1.
B.6.15	Payment of Advance Rental	The reference to rental charges is confusing, not only because it does not set a time period, i.e. monthly, quarterly or yearly, but provides no justifiable grounds on which BTC would invoice the OLO 25% of the advance rental. By definition, rental is payable at time of delivery of the underlying service. The only sums payable in advance should be infrastructure related, i.e. installation or equipment charges.
B.7.1	Joining Circuits	Should provide for the grandfathering of existing Joining Circuits with specific reference to how the following will be accommodated:

Cross-reference to draft RAIO	BTC proposal	Discussion
		<ul style="list-style-type: none"> <li>• Relocation of existing circuits in Marsh Harbour, Abaco.</li> <li>• Migration from the existing practice of BTC requiring separate PRI trunks for toll calls, and migrating those trunks to SS7 service.</li> <li>• Migration from the practice of OLOs paying 100% of the discounted retail price of Joining Circuits to sharing of costs calculated on a cost orientated basis.</li> </ul>
B.7.3	Charges for Joining Circuits	<p>In the Final Guidelines for Access &amp; Interconnection clause 5.13, URCA has stipulated that “Charges for joining circuits must be shared equally between the parties. As well as providing the charges for joining circuits in a tariff schedule, the RAIO should explain how the parties will implement this cost sharing”. There is no such tariff schedule of explanation.</p>
B.7.4	Access Seeker to Provide Joining Circuits	<p>In cases where a fixed wireless provider can provide the joining circuits at a lower cost, BTC must provide access to its tower at the PoI in question (see SRG’s answer to question 29 and comments on Annex A.13.4).</p>
B.7.6	Connection Charge	<p>Refers to a connection charge as set out in Annex G. There is no such connection charge listed. Neither is there a reference to the raising of an invoice in table H.3.</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
<b>Annex C – Technical Specifications</b>		
C.1.1	General	The term Recommendations is not defined.
C.1.3	Safety	For the avoidance of misunderstanding, what constitutes dangerous or excessive voltages should be defined.
C.3.4	Joining Circuits	Calling Party Number and Redirecting Number are not defined terms.
C.5.1	Calling Line Identifier (CLI)	There should be no requirement to provide CLI if a Party is delivering a Call it received from another party who did not provide CLI (see SRG’s comments to Annex A.1.7, et al).
C.5.4	Calling Line Identifier	<p>Nature of Address is not a defined term, and is not referenced elsewhere in the RAIO. If BTC have technical standards in this regard that go beyond the SS7 standards then they should be specified.</p> <p>Neither Party should be able to block calls from the other. The remedy of the concerned Party should be to initiate the dispute resolution process in Annex F.</p>
Schedule 2 C-2.2	Transmission	<p>Notwithstanding URCA’s comments regarding movement of the reference to CDRs to the Annex on Billing, it is inappropriate for BTC to specify the format of CDRs that are internal to the OLOs network. In the event of a billing dispute that requires analysis of CDRs then it is sufficient that the Parties are in a position to cross reference CDRs from their separate records if necessary (see SRG’s answer to question 3).</p> <p>The reference to Local Number Portability (LNP) should be</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
		<p>removed until such time as URCA specifies the requirements for number portability.</p> <p>Inter-operability should be based on standards, not individual products, such as BTC's reference to a TANDEM switch.</p> <p>DS-3 and STS-1 interfaces are referenced but not accommodated for interconnection purposes elsewhere in the RAIO.</p> <p>RFC 2475 is unrelated to CCS7.</p>
Schedule 3 C-3.3.6	Confidence Testing	The resilience criteria should be specified.
Schedule 4	Points of Interconnection	<p>OLOs should not have to incur additional charge for inter-island Joining Circuits when connecting to BTC's limited list of PoIs.</p> <p>For the avoidance of doubt, calls handed at a non-local PoI must be charged as intra-island in cases where the origination and termination are on the same island (see SRG's answer to question 14).</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
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**Annex D – Operations and Maintenance**

D.1.1	Meeting of Interconnection Managers	It is unrealistic to expect that the respective Interconnection Managers will always be able to meet within 5 days, given the potential for vacation and/or sickness. This should be on a “best efforts” basis.
D.1.2	Joint Working Group	SRG is of the view that the size of the Joint Working Group is unnecessarily large. A committee of 8 people will find it hard to get anything achieved. SRG suggests 2 representatives from each party.
D.2.3(b)	Call Handover	Should be amended to include the additional services outlined by SRG on page 2 of its submissions.
D.2.4	Abnormal Conditions	Agreement to route traffic to an alternative PoI under abnormal conditions should not be unreasonably withheld.
D.3.1	Re-routing	In the event of congestion or unplanned Joining Circuit outages, it should be permissible for traffic to be re-routed to an alternative PoI.  For the avoidance of doubt, in all cases where traffic is routed to an alternative PoI, calls handed at a non-local PoI should still be treated as intra-island for billing purposes where the origination and termination are on the same island.
D.5.1	Malicious Call Tracing	Malicious call tracing must be initiated by the Royal Bahamas Police Force in accordance with applicable laws and the terms of licenses issued to the Parties.
D.7.7	Fault priority	Priority should also be given to outages that disrupt access by the consumer to the emergency services.

Cross-reference to draft RAIO	BTC proposal	Discussion
D.9.1	Maintenance Procedures	In the last sentence, “cataleptic or partial outage” should be replaced with the defined term “Interconnection Outage”, which cross references to “cataleptic and partial failures”.
D.14	Decommissioning	Should accommodate the decommissioning of BTC’s existing PoI in Marsh Harbour, Abaco, including how the OLO will be reimbursed its decommissioning costs.
Schedule 1 D-1.2.2	Emergency Maintenance	The procedure for 24-hour emergency access to co-locations facilities should be detailed.

Cross-reference to draft RAIO	BTC proposal	Discussion
<b>Annex E – Billing</b>		
E.2	Services	Additional services specified by SRG in page 2 of its submission to be included.
E.2.2	Call Detail Record (“CDR”)	It is inappropriate for the format and structural storage characteristics of billing records to be specified by BTC. The switch and billing system of each party will have its own internal formats (see SRG’s answer to question 3 and comments on Schedule 2 Annex C-2.2).
E.2.9	Billing Time Limit	A time limit of 12 Calendar Months is too long a period for which back services may be billed, and could lead to either an unwarranted delay in closing of year end accounts, or a propensity for prior year adjustments. The existing IA provides for a 6 month period after which no charges may be levied. SRG believes this to be an ample period, that will ensure consistency with clause E.6.3.
E.2.10	Clock Synchronisation	SRG notes that there is no provision in the draft RAIO for peak and off-peak billing. Nonetheless, SRG proposes that in any event the parties mutually agree to use a National Time Protocol server under the standards RFC 5905-8, see <a href="http://www.ntp.org">http://www.ntp.org</a> .
E.4.1	Payment Process	For consistency with other clauses in Annex E, i.e. clause E.6.4, SRG proposes that payment be made within 30 calendar days.
E.4.2	Action taken on unpaid invoice	SRG believes that 7 days is too short, and that 30 Calendar Days days would be reasonable.
E.7.1	Notice of Dispute	The time period to dispute an invoice is inconsistent and too short. Clause E.6.3 provides for the Invoicing Party to amend its charges at

<b>Cross-reference to draft RAIO</b>	<b>BTC proposal</b>	<b>Discussion</b>
		any time for up to 6 months after the issue of the invoice. The Disputing Party must have the same 6 month time period to be able to dispute an invoice.
E.7.7	Meeting of CEOs	It is impractical to expect that the CEOs of the parties can always meet within 5 working days of a Dispute. There must be scope for the meeting to be held on a mutually available date.
E.7.11	Expert's Report	The Third Party Expert should also deliver their report via email.
E.7.14	Payment after decision of Third Party Expert	The clause makes no provision for the Dispute to have been found in favour of the Disputing Party.
E.7.16	Payment of Third Party Expert fees	In the event that the Dispute is found in favour of the Disputing Party, the clause makes no provision for the Invoicing Party to refund any initial payment of the Third Party Expert's fees made by the Disputing Party.
Schedules 1 & 2	Billing report format	Should not dictate the format in which the OLO's billing system outputs reports (see SRG's answer to question 3).

Cross-reference to draft RAIO	BTC proposal	Discussion
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## Annex F – Dispute Resolution

F.2.1	Escalation Procedure	<p>SRG believes that BTC should provide a detailed fault reporting and escalation process to include:</p> <ul style="list-style-type: none"> <li>• How trouble tickets should be logged, with contact details.</li> <li>• After what time period and in what manner trouble tickets should be progressively escalated higher in BTC, with contact details, in the event that resolution does not follow the restoration times in Table H.7.</li> <li>• At what point and in what manner the consumer will be kept informed through media announcements in the event that restoration times are not met.</li> </ul>
F4	Continued Performance of Obligations	The dispute language should make clear that the Parties shall continue the performance of their respective obligations during the resolution process of any dispute, including during arbitration, mediation or litigation through the courts.
F.4.1	Time Period for CEO meeting	Should be two Working Days, not Calendar Days.
F.4.2	Mediator	<p>In the last line, insert after the word “arbitrators” the words “or the mediator”.</p> <p>With respect to URCA’s comments, SRG notes, for the avoidance of doubt, that seeking relief from either URCA or the UAT should be in addition to the ability to seek interim relief from the courts.</p>
F.4.3	Number of Arbitrators	Under the Arbitration Act, the appointment of two arbitrators is deemed to include the appointment of a third arbitrator to act as

Cross-reference to draft RAIO	BTC proposal	Discussion
		chairman/umpire. The two arbitrators are appointed one each by the parties and the two arbitrators then appoint the third.
F.4.4	Appointment of Mediator	There will only be a sole mediator. The provision should set out who will choose the mediator if URCA is not to act in that role.
F.5.1	Referral to URCA	Delete the words “After the expiry of 30 Calendar Days” and insert instead "If the Parties fail to reach agreement in writing to refer the dispute to arbitration or mediation under Clause F.4.1 above, then..."  In the second line, delete the words "step 3" and insert instead "Clause F.3".
F.5.2	URCA Decision	Delete in its entirety. The RAIO should not seek to establish timelines with respect to implementation of URCA’s decision.

<b>Cross-reference to draft RAIO</b>	<b>BTC proposal</b>	<b>Discussion</b>
<b>Annex G – Price List</b>		
Annex G	Service Definitions	New service price schedules should be inserted to reflect the additional services outlined by SRG on page 2 of its submissions.
G.1	Geographic Numbers	<p>Intra-island call termination should be on a Bill and Keep basis at the discretion of the OLO (see answer to question 16).</p> <p>For the avoidance of doubt, calls handed at a non-local PoI must be charged as intra-island in cases where the origination and termination are on the same island.</p> <p>International inbound should be included at rated cost orientated tariff.</p>
G.2	Non-Geographic Numbers (“NGN”)	SRG requests clarification with respect to which numbers under the BNNP are considered to be NGN (see page 3 of SRG’s submissions).
G.3	Mobile Numbers	<p>Calls to mobile numbers should be on a Bill and Keep basis at the discretion of the OLO (see SRG’s answers to questions 16 &amp; 19). However, BTC’s costs for inter-island transit should be recoverable under the inter-island rating in Annex G.1.</p> <p>International inbound should be included at rated cost orientated tariff.</p>
G.6	Directory Number Inclusion Service	<p>The billing period should be specified, i.e. once only or recurring.</p> <p>Clarification is required with respect to the process and charging for number inclusion in BTC’s white page directory (see SRG’s answer to question 28).</p>

<b>Cross-reference to draft RAIO</b>	<b>BTC proposal</b>	<b>Discussion</b>
G.8	Emergency Services	SRG believes that calls to Emergency Services should be at no charge (see SRG's answer to question 17).
G.9	Freephone Numbers	To be amended in line with SRG's answer to question 8.
G.10	International Call Transit	BTC should provide international call termination for OLOs through its own international arrangements on a free market commercial basis (see SRG's answers to questions 6 & 7).
G.11	National Call Transit	<p>A separate fee should not be charged to transit to BTC's monopoly mobile network (see page 3 of SRG's submissions).</p> <p>Alternatively, if BTC is to be permitted to charge a transit fee to its mobile network, then BTC must be required to offer OLOs separate cost orientated interconnection with each of its fixed and mobile networks.</p> <p>Charges for call transit should be on a cascade accounting basis, with an option for direct accounting (see SRG's answer to question 10).</p>
G.12	Joining Circuits	To be amended in line with SRG's answers to questions 12, 13 & 21.
G.13	Points of Interconnection	To be amended in line with SRG's answer to question 29.

Cross-reference to draft RAIO	BTC proposal	Discussion
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### Annex H – Quality of Service Standards

H.2.2 Table H.2	Timescales for Delivery of Facilities	<p>The timescale for Advanced Facilities Order Acknowledgement (At least 29 days before D) does not agree with the time shown in Annex B.6.11 (two Working Days).</p> <p>The issue of the first invoice should be after the Firm Facilities Order acknowledgement as described in Annex B.6.15.</p>
H.3.1	Joining Circuit Congestion	<p>SRG agrees with URCA that Grade of Service should be at least 1%.</p> <p>Provision should be made for OLOs to have redundant PoIs, for example in disaster recovery centres. In such cases, Joining Circuits may carry no, or limited, traffic unless put into utilisation.</p>
H.3.2	Joining Circuit Availability	<p>SRG agrees with URCA that 99.8% is an appropriate yardstick for availability, however it should be made clear that this availability should relate to each individual Joining Circuit, and not a group of Joining Circuits treated as a whole (see also Annex H.5.3).</p>
H.4	Standards for Network Availability	<p>Network availability should include the availability of Joining Circuits.</p>
H.4.1	Availability Measurement	<p>SRG believes that the appropriate measure of network quality should be the Answer/Seizure Ratio (ASR) as defined in ITU SG2 Recommendation E.411.</p>
H.5.3	Joining Circuit Availability	<p>Should be amended in line with H.3.2.</p>
H.5.4 Table H.7	Priority Levels	<p>Due to public safety, an outage in calls to Emergency Services should be included as a Level 1 priority.</p>

Cross-reference to draft RAIO	BTC proposal	Discussion
H.6.1	Penalty Payments	The reference to “Table H.4” should refer to “Tables H.5, H.6 and H.7”.
H.6.1 Table H.9	Penalty Payments	Table H.9 only includes penalties as they relate to Facilities or Joining Circuits. Penalties with respect to interconnection outages arising from the faults listed in Table H.7 must be included, for example a switch outage.

Cross-reference to draft RAIO	BTC proposal	Discussion
<b>Annex I – Definitions</b>		
Annex I		The main body of the RAIO and Annexes need tidying up to ensure that references to definitions in Annex I are capitalised.
Breach Notice		Should be removed (see comments with respect to Clause 18).
Data Management Amendment		The structure of CDRs should not be included. The format of each party’s CDRs is a function of its own switch and billing system. It is not appropriate for BTC to specify that the OLOs CDR format matches that of BTC. It is simply sufficient that they are reconcilable in the event of a dispute (see also comments on Schedule 2 Annex C-2.2)
Joining Circuit		Should be expanded to include SIP and higher capacity circuits (see SRG’s answer to question 21).
Partial Failure		It is unclear what is meant by the “total number of ports in a PoI”. SRG believes that the definition of Partial Failure should cross reference with Annex H, particularly Table H.7.
SIP		To be included as “Session Initiation Protocol”.

Respectfully submitted.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "P. Hutton-Ashkenny". The signature is stylized with a large initial "P" and a long, sweeping underline.

Paul Hutton-Ashkenny  
President