



STATEMENT OF RESULTS
Consultation on Access &
Interconnection Framework For The
Electronic Communications Sector

ECS 17/2009

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UTILITIES REGULATION & COMPETITION AUTHORITY

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A. INTRODUCTION

The Government of the Commonwealth of The Bahamas opened a public consultation on 26 May, 2009 on the proposed new access and interconnection framework for the electronic communications sector ("the A&I Consultation"). The overarching objectives of the A&I Consultation were to:

- i) create industry awareness of the range of standard access and interconnection remedies applied by regulators across the world; and
- ii) invite comments from respondents on whether they consider that the proposed remedies could be applied by the Utilities Regulation and Competition Authority (URCA).

The Utilities Regulation and Competition Authority (URCA) Act came into force on 1 August 2009 and the Communications Act, 2009 ("Comms Act") came into force on 1 September 2009.

Under section 9 of the URCA Act, URCA is required to "allow persons with a sufficient interest a reasonable opportunity to comment" on proposed regulatory measures. To ensure that interested parties would have a sufficient opportunity to comment on the access and interconnection regulation, the Consultation was published by the Bahamas Telecommunications Company Ltd. Privatisation Committee on behalf of the Government of The Bahamas in the interim period after the Comms Act and the URCA Act had been passed by Parliament but before they came into force.

The A&I Consultation sets out the Government's preliminary views and reasoning on the proposed access and interconnection framework for the electronic communications sector and provided the formal mechanism for stakeholders and the general public to consider and comment on the principles and objectives consequential to the establishment of the proposed new access and interconnection regime for the sector.

It is worth noting that some remedies that were identified will require greater economic and technical assessments to ascertain whether they are practical and suitable to be implemented in The Bahamas.

The period for submission of responses closed on 26 June, 2009. The full text of the submissions received to the Consultation can be found at www.urbahamas.bs.

The access and interconnection remedies consulted on will apply only to SMP operators. The exact obligations to be imposed on SMP operators will be specified in the obligations that URCA must issue to SMP operators within one month after the Comms Act comes into force.

B. OVERVIEW

The participation from the respondents was invaluable in this consultation process. The responses were insightful and answers to the specific questions posed in the consultation document were well reasoned. None of the respondents requested additional time to respond to the consultation.

URCA wishes to thank all respondents for their participation in the consultation process. Responses were received from five companies namely:

- The Bahamas Telecommunications Company Limited (“BTC”);
- Cable Bahamas Ltd. (CBL) and Caribbean Crossings Ltd. (joint response and collectively referred to hereinafter as “CBL” as a matter of convenience)¹;
- Systems Resource Group Limited (“SRG”)²;
- Digicel³; and
- SawTel⁴.

The responses were mixed in their agreement or otherwise with the proposed access and interconnection remedies discussed in the A&I Consultation. A high level summary of the views is presented as follows:

- Respondents generally agree with the call based remedies proposed, with the exception of BTC in relation to the inclusion of “Calls to Directory Information Services” in a Reference Access and Interconnection Offer (RAIO) for The Bahamas.
- Most respondents generally do not favour implementation of Indirect Access, with the exception of CBL.

¹ CBL and BTC are the SMP designees under section 116(3) and Schedule 4 of the Comms Act.

² SRG trades as “IndiGo”.

³ Digicel is a mobile phone network provider with approximately six million customers covering parts of the Caribbean, Oceania and Latin America. The company is incorporated in Bermuda and headquartered in Jamaica.

⁴ Obtained a licence from the PUC (predecessor to URCA) to operate last mile internet connection to the Bahamian public.

- There was mixed response from the respondents over wholesale broadband remedies, with support from BTC and SRG, and opposition from CBL and Digicel.
- Respondents generally do not favour Local Loop Unbundling (LLU).
- There was mixed response from the respondents regarding Cable TV (CATV) remedies, with support from BTC and SRG, and opposition from CBL and Digicel.
- Most respondents were in favour of backhaul remedies.
- There was support for the co-location services listed in the A&I Consultation.
- There were mixed responses over sharing of towers and masts.
- Most respondents were in favour of Data Management Amendment, except for BTC.
- Most respondents generally accept that the ancillary products listed in the A&I Consultation is still relevant.
- Most respondents generally support the charging framework.
- Respondents generally favour cost-oriented charges for access and interconnection products.

C. GENERAL COMMENTS

BTC

- (1) BTC states that section 40 the Comms Act does not include the “...requirement that URCA conduct the relevant market analysis to determine in an objective and transparent way whether BTC does indeed have SMP in a particular market”. BTC further quotes section 116(9) of the Comms Act which requires URCA to determine whether licensees including existing licensees have SMP in accordance with section 39.
- (2) BTC has raised concerns that SMP should only be determined after market analysis is undertaken and urges URCA not to impose an SMP designation on BTC as the incumbent operator in the absence of the appropriate market analysis .
- (3) Hence BTC urges fairness be applied to itself and that it understands the basis for the designation. In particular BTC quotes sources from the European Union (EU), for the framework to be technologically neutral and that regulators should apply the following when determining SMP⁵:

“Clearly identify a set of relevant markets that could be of interest;

Determine, using tools borrowed from competition law and economics, whether any firm or group of firms has Significant Market Power (SMP) on such a market;

Applies a minimally adequate set of ex ante (in advance) remedies only to the firm or firms that possess SMP; and

Removes any corresponding obligations that might have previously existed from firms that do not possess SMP.”

- (4) BTC urges the regulator not to impose an SMP designation on BTC in the absence of the appropriate market analysis.
- (5) BTC has also set out its existing and proposed investment in Next Generation Networks (NGN) which is due for completion by the first quarter of 2011. It has further recognised that whilst technology changes, the core principles for access and interconnection do not change.

⁵ See page 4 of BTC’s submission to A&I Consultation at www.urcabahamas.bs.

CBL

- (6) CBL generally supports the commitment to improving the sector, but considers that some of the proposals may undermine objectives and jeopardise future investment.

SRG

- (7) SRG did not make any general comments on the A&I Consultation.

Digicel

- (8) Digicel argues that because of limited resources the regulator should focus on wholesale rather than retail remedies. Digicel notes that an adequate policy of wholesale markets should ensure retail competition.
- (9) Digicel expresses supports for the EU definition of access and interconnection, but noted that approaches copied from the EU may be risky as they fail to adequately reflect the differences between countries, especially in terms of availability of financial and human resources.
- (10) It made a number of comments in relation to timely publication of a RAIO, the appropriate charging principles and Points of Interconnection (POIs). In particular: (i) Timeliness principles should be specific to include that the RAIO should be published and approved by URCA as soon as possible and that new entrants can comment on the draft RAIO in advance of its finalisation; (ii) charging for up-front costs of interconnection should be clear in the framework; (iii) Digicel has submitted specific views on who should pay for the costs of interconnection.

SawTel

- (11) SawTel has argued that access and interconnection is a transport issue, rather than a resale issue. They further argue that A&I policy should be aimed at enabling connection between networks, not to facilitate resale, and that the latter be subject to separate resale agreements.

Proposed Further Action/Comment

- (12) The Comms Act, in section 116(1) and Schedule 4, defines four high level markets in which BTC and CBL are presumed to have SMP and URCA has the regulatory responsibility of defining the appropriate obligations to be applied to prevent abuse of dominance in those high level markets. The wholesale products in the high level markets are the underlying services that use existing networks in order to deliver the retail services in the high level market. For example, an on-island fixed-to-fixed call is the retail service to the customer. This retail service consists of underlying network services (i.e., call origination on fixed network, call conveyance on the backbone or core network, and call termination on the line called).

- (13) URCA wishes to emphasize that the proposed remedies in the A&I Consultation are remedies that could be applied to SMP operators in wholesale markets. It is worth noting that the A&I Consultation does not address issues of SMP in retail markets nor the remedies that could be applied in those markets.
- (14) URCA believes that, in the short term, the treatment of SMP operators under section 116 of the Comms Act does not require URCA to carry out full market analyses, whereas under section 39, full market analysis is required to determine SMP and transparency and objectivity parameters apply across all URCA's duties as set out in sections 4 and 5 of the Comms Act.
- (15) While URCA notes the arguments advanced by BTC requesting URCA not to impose an SMP designation on BTC, BTC is presumed by section 116(1) and Schedule 4 of the Comms Act to have SMP in the provision of fixed voice⁶, and mobile voice and mobile data services. For this reason, URCA is required by section 116(3) of the Act to indicate to BTC within one month of the Comms Act coming into force the types of remedies or obligations, that in URCA's preliminary view would satisfy the objective of encouraging, promoting and enforcing sustainable competition. This is consistent with the need to ensure that the transition to the new regulatory regime happens in an orderly manner and that existing operators presumed to have SMP do not have an ability to foreclose markets to prevent new entry.
- (16) URCA notes that the remedies considered in the A&I Consultation are technology-neutral, to the extent possible, i.e., they are relevant regardless of the technology employed by any individual SMP operator, whether NGN, hybrid fibre co-ax or wireless or any other technology.
- (17) URCA notes the concerns expressed by SawTel regarding clarification of access and interconnection principles in the context of resale of an SMP operator's services. However, the Comms Act allows for the licensing of network owners, who own their network infrastructure, to provide services to the public, as well as service providers who use but do not own an electronic communications network to provide services to the public. Therefore, it is quite likely that service providers may use wholesale access and interconnection remedies for the purposes of reselling an SMP operator's retail services and this possibility is within the contemplation of the A&I Consultation. For example, paragraph 47 of the Consultation refers to Wholesale Broadband Services and lists Broadband Resale service as a potential wholesale remedy.

⁶ The draft

Sector Policy states that the market for fixed voice "*...is intended to include the full product set delivered over BTC's network including both voice and data services.*"

D. SUMMARY OF RESPONSES RECEIVED

INTERCONNECTION FRAMEWORK IN THE NEW REGULATORY REGIME

Question 1: Do you agree that the legislation and license conditions being introduced provides URCA with sufficient powers to ensure SMP operators provide a RAIO in accordance with URCA's specification? If you do not agree then please state your reasons.

BTC

- (1) BTC has stated that URCA should carry out market analysis to determine SMP, as is the case in Europe. It believes that only then can obligations be placed. BTC argues that the A&I Consultation does not refer to such market analysis and this may remove the obligation on the regulator to carry out such market analyses.

CBL

- (2) CBL has put forward the position that generally access, interconnection and interoperability are imposed upon all operators and URCA is obliged to enforce such obligations in a transparent, non-discriminatory manner, including on those operators without SMP.
- (3) In addition, CBL argues that URCA must be prepared to adjudicate in instances where operators fail to offer interconnection or negotiate in good faith in a timely manner as delays in interconnection can have significant impact on emerging carriers.

SRG

- (4) SRG has presented details of criteria used in the UK and the EU to determine single and collective dominance⁷. Based on the extensive list presented, SRG believes that the Comms Act does not adequately address all the criteria that should be used by URCA.
- (5) However, SRG believes strongly that when a licensee is determined to have SMP, the regulator, rather than imposing remedies at its discretion, must impose appropriate remedies.

⁷ The term dominance refers to the ability of a firm to raise prices above competitive levels, without promptly losing a substantial portion of its business to existing rivals or firms that become rivals as a result of the price increase.

Digicel

- (6) Digicel has proposed using additional *ex ante* rules to reduce the need for accounting separation, such as rules preventing dominant operators from offering bundled discounts for “originating calls from more than one of its own networks to one or more of its multiple networks”⁸ and preventing discounts for “originating communications from one of its own networks to terminate on more than one of its own networks”. Operators with market power who have bespoke offers for larger customers should be required to submit business contracts to the regulator to enforce the above. Digicel believes that without such enforcement and review, these rules will be difficult to enforce.
- (7) Digicel further proposes that URCA should have the powers to make interim orders, to make retrospective orders and to use benchmarks to deal with disputes on rates.

Proposed Further Action/Comment

- (8) In response to BTC’s comments, URCA agrees that market analysis is necessary to determine SMP. However, at the time the Comms Act comes into effect, URCA does not have to carry out full market analyses as section 116 of the Act already provides for interim presumptions of SMP, and these presumptions are to be used for the initial minimum *ex ante* regulatory obligations that will be placed on those operators initially presumed to have SMP in Schedule 4 of the Act.
- (9) On a similar point, URCA appreciates the detailed research presented by SRG in relation to the various criteria that must be considered in determining single and collective SMP. Although the Comms Act does not list all of the possible criteria identified by SRG, it should be noted that the Act gives URCA the powers to establish and publish criteria. The factors listed in section 39(3) are a minimum set that URCA must include, but this is not meant to be an exhaustive list. The Comms Act gives a high level framework to be followed by URCA and provides URCA the flexibility to develop the framework criteria best suited to The Bahamas. More specifically, in fulfilling its obligations under section 39(2), URCA shall be publishing guidelines on how it intends to carry out full Market Reviews and these guidelines will include the full criteria to be used for market definition and identifying operators with dominance or SMP. URCA’s guidelines for identifying operators with SMP will be informed by international experience (such as the examples cited by SRG from the UK and the EU).

⁸ See page 3 of Digicel’s submission to the A&I Consultation at www.urcabahamas.gov.bs.

- (10) URCA duly notes CBL's comments that general access, interconnection and interoperability requirements be imposed upon all operators and URCA be obliged to enforce such obligations in a transparent, non-discriminatory manner, including on those operators without SMP. URCA wishes it to be noted that there are general access and interconnection obligations for all operators with an individual operating licence. This was specifically noted in the A&I Consultation in paragraph 28 under the bullet point "Obligation to Interconnect". For the avoidance of doubt this does not necessarily mean 'direct interconnection' but could be interconnection via a transit operator. It is recognised that non-SMP operators depend more on access and interconnection than do SMP operators, especially during the early stages of liberalization. Therefore, it is a well-established regulatory practice that non-SMP operators will choose in their own interest to interconnect with other operators. However, specific access and interconnection obligations are placed on operators with SMP in order to ensure they offer interconnection in a transparent, non-discriminatory manner and at cost-oriented rates, so as to prevent possible abuse since it is only operators with SMP that can maintain a viable business whilst refusing interconnection. As a result, it would be contrary to international practice to place the same access and interconnection obligations on operators without SMP as on those operators with SMP.
- (11) Recognising the importance of timely access and interconnection for emerging carriers, URCA will be publishing new access and interconnection guidelines and establishing one or more mechanisms for resolving inter-operator disputes or approve a scheme or schemes for Alternative Dispute Resolution proposed by licensees under section 15(4) of the Comms Act.
- (12) URCA appreciates some of the proposals put forward by Digicel whereby *ex ante* rules could help reduce the need for formal regulatory obligations, but as Digicel itself has recognised, the monitoring of such rules can also be difficult.
- (13) In response to Digicel's comments that URCA should have the powers to make interim orders, to make retrospective orders and to use benchmarks to deal with disputes on rates, it is URCA's position that the Comms Act does not preclude URCA from making such orders, or adopting regulatory methods such as the use of benchmarks to settle rate disputes in the absence of reliable and verifiable costing information.

CORE INTERCONNECTION PRINCIPLES

Question 2: Do you agree that the above list should form the core access and interconnection principles in the new regulatory framework? If you disagree please provide your reasoning.

BTC

- (14) BTC supports the list of access and interconnection principles in the new regulatory regime.

CBL

- (15) CBL generally agrees with the access and interconnection principles in the new regulatory regime. However, CBL points out that the framework should recognise the differences between conventional telecommunications networks and Cable TV networks.

- (16) CBL also states that irrelevant obligations should not be imposed on cable network operators that would represent an unfair regulatory burden.

- (17) CBL states that the Consultation recognises “it is not feasible to apply the same form of physical unbundling to cable networks as applied to conventional telecoms networks”⁹. CBL contends that Cable TV networks are not designed to provide any-to-any connectivity and therefore the core access and interconnection principles should recognise these differences.

SRG

- (18) The main thrust of SRG’s comments related to the question of which party/licensee should bear the costs of interconnection – should the interconnection seeker pay for all the costs or the interconnection provider, or should the costs be shared equally?

- (19) SRG states that the initial set-up costs of joining networks between the incumbent and new entrant are imposed solely on the new interconnection seeker (i.e. new entrant), despite the fact that the Interconnection Guidelines published by URCA’s predecessor¹⁰ in 2007 stipulated that the costs should be shared. As a result, SRG proposes that the PUC’s prior policy on this matter should be reflected in URCA’s list of core interconnection principles.

⁹ See page 2 of CBL’s submission to the A&I Consultation at www.urbahamas.bs.

¹⁰ Public Utilities Commission

Digicel

- (20) Digicel agrees that all operators should have an obligation to interconnect. However, it urges URCA to clarify and stipulate firm dates for responses (to requests for interconnection) to be received. Digicel proposes that the principle of timeliness needs to be a hard cut-off point with a stipulated date for responses.
- (21) Digicel proposes that all correspondence between an SMP operator and its suppliers of interconnection equipment should be provided to URCA to ensure monitoring of timely delivery.
- (22) Digicel further proposes that an SMP operator should be required to keep records of switch settings as Digicel has been subjected to call blocking activities by incumbents in some countries.

Proposed Further Action/Comment

- (23) It is encouraging to note that all respondents to Question 2 generally supported the proposed list of access and interconnection principles.
- (24) URCA supports the view that it should recognise differences between telecommunications and Cable TV networks as suggested by CBL. However, URCA believes that in an era where communications are provided over converged multi-play networks, such differences are increasingly blurred. In addition, URCA must ensure that its decisions are non-discriminatory and proportionate to the size of the regulatory problem. Whilst it notes CBL's concerns, and also that the principle of any-to-any connectivity is typically applied to those operators with SMP in the voice market, it does share CBL's view that Cable TV networks are not designed to provide any-to-any connectivity when only used to provide Cable TV services. In the future, if CBL is providing voice services to its customers, it is likely to need interconnection with BTC and will be facilitating the principle of any-to-any connectivity. By virtue of being able to provide triple-play services over a converged network, CBL's Cable TV (CATV) network appears to have the full *potential* to provide any-to-any connectivity, even if it does not do so today.
- (25) URCA notes that a number of the concerns raised by Digicel and SRG relate to the day-to-day practical realities of access and interconnection – such as, which party/licensee should bear the costs of joining circuits/services, timelines for concluding agreements

and establishing physical links between networks. URCA considers that these are key components of a RAIO and intends to provide clarity on such matters within its access and interconnection guidelines.

CONTENTS OF THE REFERENCE ACCESS & INTERCONNECTION OFFER

Question 3: Do you agree that the above list should form the minimum structure of an SMP operator's RAIO? If you disagree please provide your reasoning.

BTC

(26) BTC supports the minimum structure of an SMP operator's RAIO and notes that the A&I Consultation has included the Joint Working Manual, Operations and Maintenance Manual and Service Level Agreement as additional requirements to the Interconnection Guidelines published by the PUC in 2007.

CBL

(27) CBL points out that the minimum structure of the RAIO should be expanded to include standard terms and conditions governing, *inter alia*, confidentiality, indemnification, limitation of liability, termination and dispute resolution.

(28) It also states that metrics, tracking and reporting requirements for service level agreements to be included in RAIO should be based on thorough analysis of the respective networks.

SRG

(29) SRG believes that the minimum structure should also include the mechanism for handling disputes.

(30) In addition, SRG believes that the RAIO's technical standards should include details of how joining services will be provided and at what cost.

(31) SRG suggests that such standards must encompass the principle that other operators may be able to provide joining services more cost effectively than the SMP operator.

(32) SRG also believes that access to the SMP operator's exchange and facilities for co-location of equipment may be required.

Digicel

- (33) Digicel has provided a full-page list of the table of contents for what it contends should be included in a Joint Working Manual and Operations and Maintenance Manual.

Proposed Further Action/Comment

- (34) It can be seen from CBL's and SRG's comments that operators need further clarity on the main legal document of the RAIO. By way of background, the RAIO is a set of documents, including the legal contract, and multiple others documents which in totality are termed as the RAIO. For examples, URCA's international survey of RAIOs (such as Jamaica, Jersey, Bahrain, Malta, Trinidad and Tobago, Jersey, Guernsey, and Barbados) suggests that typically the term Reference Offer for Access and Interconnection (RAIO) refers to the total set of inter-related documents covering:

- Legal framework (which covers many of the legal issues highlighted by SRG and CBL) such as standard terms and conditions governing, *inter alia*, confidentiality, indemnification, limitation of liability, termination of agreement mechanisms for resolving disputes,
- Service Descriptions,
- Service Schedules,
- Service Level Agreements (SLAs),
- Tariff Schedules,
- Dispute Resolution,
- Definitions,
- Joint Working Manual,
- Operation and Maintenance Manual, and
- Technical Manual.

In recognition of the need for the industry to have greater clarity through more detail of the RAIO structure, URCA will be mindful of this when publishing its access and interconnection guidelines.

- (35) URCA notes CBL's comments that the metrics, tracking and reporting requirements for service level agreements to be included in the RAIO should be based on thorough analysis of the respective networks. For the avoidance of doubt, the development of the RAIO is the responsibility of an operator with SMP and it shall be well placed to ensure that such requirements reflect its respective network.

- (36) URCA notes SRG's comments that the RAIO's technical standard should include how joining services will be provided and at what cost. It is worthy of note that the exact list of

services to be included in a RAIO will be established by URCA when imposing the minimum set of ex-ante remedies on operators with SMP, together with the appropriate charging methods.

- (37) SRG has further stated that the framework should allow for other operators (other than the SMP operator) to provide joining services if the non-SMP operator can provide the joining services more cost effectively than the SMP operator. It is the understanding of URCA that in some other countries operators, other than the SMP operator, can provide interconnection links (or joining circuits) and therefore URCA would expect to see this option included in the scope of the RAIO.
- (38) Digicel has proposed a more detailed structure for the Joint Working Manual and the Operations and Maintenance Manual. URCA will take these additional comments into consideration when publishing guidelines on access and interconnection.

CALL BASED ACCESS & INTERCONNECTION REMEDIES

Question 4: Do you agree with the proposal that the call based remedies listed are still relevant and may form part of any new RAIO? If you disagree, please provide your reasons.

BTC

- (39) BTC agrees with the listed call based remedies and supports the need for them for any-to-any connectivity.

CBL

- (40) CBL agrees with the listed call based remedies but points out that the list is based on legacy networks and is not appropriate for an NGN environment¹¹.

SRG

- (41) SRG points out that the call based remedies described in paragraphs 32 of the A&I Consultation do not agree with Section 33 of the PUC's 2007 Interconnection Guidelines. The former, it states, assume that the SMP licensee is always the interconnection provider.
- (42) SRG believes that the PUC's Guidelines recognised that interconnection can be a symbiotic relationship where an operator's status as seeker or provider can change on a

¹¹ Next Generation Networking is the term given to describe a telecommunications packet-based network that handles multiple types of traffic (such as voice, data, and multimedia).

per call basis dependent on the service. As such, call termination works in two directions.

- (43) Furthermore, SRG states that the definition of call origination ignores the fact that the other operator will have geographic numbers assigned under The Bahamas numbering plan.

Digicel

- (44) Digicel agrees that call based remedies are still relevant and may form part of any new RAIO. It has proposed additional call based services that should be included in a RAIO for The Bahamas. The additional remedies proposed by Digicel are: (a) access to national and international freephone (i.e. toll-free) numbers, and (b) call origination service to premium rate numbers on the networks of other operators – the SMP operator would charge a cost based fee for origination plus the premium rate cost levied by the terminating operator.

Proposed Further Action/Comment

- (45) All operators agreed in principle with the listed call based remedies and support the need for them for any-to-any connectivity.
- (46) In response to CBL's view that the call based remedies listed are based on legacy networks and may not be appropriate for an NGN environment, URCA notes that call based services can be provided over a number of competing technologies and platforms. As such, whether call based interconnection services go over an NGN network, a hybrid co-ax fibre network, or a wireless network the services in principle would still apply but the detailed service description may vary depending on the technology used.
- (47) SRG has made an interesting point that the SMP operator is not always the interconnection provider and that call termination works in two directions. URCA agrees with SRG that the SMP operator is not always the interconnection provider. For example, SRG currently provides call termination to BTC and may provide a similar service to emerging competitors. URCA considers that the call termination obligation would be applied to any operator found to have SMP in the provision of that product. Furthermore, although most access and interconnection services and products can be provided by non-SMP operators this consultation is only concerned with the supply of the services and products by SMP operators.

- (48) SRG has stated that the definition of call origination ignores the fact that the other operator will have geographic numbers assigned under The Bahamas numbering plan. In considering remedies URCA will take SRG's position into account.
- (49) URCA agrees with Digicel's comments that additional call based services should be added to the RAIO scope.

Question 5: Do you agree that a 'Calls to Directory Information Service' obligation should be included in the RAIO? If you disagree then please explain your reasons.

BTC

- (50) BTC strongly disagrees with the inclusion of this service in the RAIO and does not accept that this obligation should be placed in an interconnection agreement, citing the lack of any international precedent (except in the UK, where according to BTC, Ofcom placed such an obligation on British Telecoms (BT) but later removed it). BTC recognises that it presently offers directory assistance to another operator.
- (51) BTC also seems to take issue with the fact that the service in question is not available to BTC (i.e., not reciprocal).
- (52) Furthermore, BTC cites the need to take into account data protection, privacy and security issues, when considering this service.

CBL/SRG/Digicel

- (53) CBL, SRG, and Digicel all agree with the inclusion of this service in the RAIO.

Proposed Further Action/Comment

- (54) URCA is unclear as to why BTC has taken issue with the proposal to include Directory Information Service in the RAIO. Firstly, this service is effectively a 'Calls to Directory Enquiries' service and, as BTC itself recognises, is a service that it currently provides to an existing operator. Therefore, since BTC is already providing this service, it is URCA's expectation that it is currently taking into account the data protection, privacy and security issues – as such, these are not new issues that arise from new obligations that could be placed on BTC.
- (55) Secondly, it is wholly inaccurate for BTC to state that it cannot find any international precedence for the inclusion of such a service in a RAIO. Typically the norm is to have

directory information service in RAIOS rather than the exception. URCA's research reveals international precedents exist in Reference Offers from Bahrain (where it is termed as Directory Assistance Service) and Jamaica, Barbados, Trinidad and Tobago (where a National DQ service is included in RIOS).

- (56) Furthermore, the comment from BTC that such a service should not be included in the RAIO because Ofcom no longer imposes such an obligation on BT in the UK fails to recognise that BT had this obligation for a number of years and the obligation was only removed at the time of liberalisation of directory enquiries in the UK.
- (57) Finally, URCA notes that in relatively less mature communications markets, where the numbers that collectively constitute the directory assistance database belong to the incumbent operator (in this case BTC), and therefore the obligations to provide directory assistance is typically placed on an operator with SMP and is not reciprocal. However, consideration is being given by URCA to the inclusion of customer data of another operator (as part of the responses sought in Question 32) and this should negate the need for reciprocal requirements for BTC to access directory information for customers belonging to other operators.

INDIRECT ACCESS

- (58) Given the inter-dependencies between the various questions on the topic of Indirect Access, which was also reflected in the responses, the topic of Indirect Access and the questions contained in the A&I Consultation are being treated collectively.

Question 6: Do you agree that indirect access should be within the scope of the RAIO? If you do not agree, please explain your reasoning.

Question 7: What market conditions do you consider should prevail in order for URCA to mandate an SMP operator to implement indirect access?

Question 8: If the market conditions exist, do you have a preference as to which form of indirect access you would wish to see imposed in The Bahamas? Please explain your reasons.

Question 9: If indirect access is imposed on an SMP operator how long do you think the SMP operator should have to implement it?

Question 10: Do you agree that, in the future, the specified 'Call Origination' remedies could be included in the RAIO? If you disagree then please explain your reasons.

BTC

- (59) In response to Question 6, BTC does not agree that indirect access should be within the scope of the RAIO, citing as its reason that "...due to technical limitation, BTC will not be able to offer this service"¹². BTC argues that its present switches will require upgrade to facilitate indirect access and therefore it is not prepared to invest any further funds or man-hours in the present switches, as these will be turned down and taken out of service in the coming months. BTC argues that it will require a considerable period of time if carrier pre-selection is to be introduced on its network. It also considers that NGN should be completed before indirect access is considered. An unacceptable disruption to subscribers may otherwise occur.
- (60) In response to Question 7, BTC is of the view that the conditions should be assessed by carrying out market analysis and regulatory impact analysis to determine if there is sufficient demand to make indirect access commercially viable.

¹² See page 7 of BTC's submission to the A&I Consultation at www.urbahamas.bs.

- (61) In response to Question 8, BTC did not given any preference for the form of indirect access, instead referring to its general position on indirect access as reflected in its response to Question 6.
- (62) Although BTC does not agree that indirect access should be within the scope of the RAIO at this time, in its response to Question 9, it expects that it will take as long as 3.5 – 4 years to implement.
- (63) Finally, although BTC does not agree that indirect access should be within the scope of the RAIO, in its response to Question 10, it puts forward a confusing statement that indirect access should not be part of a RAIO but could be included in a RIO.

CBL

- (64) In response to Question 6, CBL believes that indirect access should be included in the RAIO.
- (65) In response to Question 7, CBL is of the opinion that a cost benefit analysis should be carried out to demonstrate the net benefit of indirect access. This is because, in CBL's view, decisions should consider choices available to consumers, likelihood of price reduction and greater utilisation of networks. Finally, it believes that indirect access might be best suited to Family Island residents who do not have access to broadband and thus will make inter-island and international calls using the Public Switched Telephone Network (PSTN).
- (66) In response to Question 8, CBL has put forward a preference for carrier pre-selection with call-by-call over-ride. CBL believes that carrier pre-selection with call-by-call over-ride offers maximum flexibility to the consumer.
- (67) In response to Question 9, CBL suggests that a 3 month timeframe is appropriate for implementing indirect access.
- (68) In response to Question 10, CBL agrees that specified call origination remedies be included in the RAIO in the future.

SRG

- (69) In response to Question 6, SRG disagrees with the view that indirect access should be included in the RAIO. Its position is supported by the following arguments:

- a) Without detailed costing information, SRG takes the view that costs would not justify potential advantage to the customer, especially due to the migration of services towards VoIP in The Bahamas.
 - b) That The Bahamas is a small market and the types of service envisaged through indirect access are declining worldwide.
 - c) Due to the existence of free on-island calls, and bill-and-keep arrangements at the wholesale level for intra-islands calls, a new operator providing only indirect access for ILD¹³ and DLD¹⁴ services would be operational fairly quickly and therefore compete away the sources of subsidy that keep intra-island calls free.
 - d) There is a competitive long distance toll market well developed in line with consumer preferences to control spending through prepaid services. Little further benefit would be gained through indirect access.
- (70) In response to Question 7, SRG believes that if the SMP operator was able to charge for intra-island calls or eliminate the practice of bill-and-keep for wholesale/interconnection charges for intra-island calls, and by virtue of this cross-subsidy between outgoing international, domestic long distance and intra-island calls, it is in these conditions that it would be appropriate to mandate indirect access.
- (71) In response to Question 8, SRG has put forward a preference for carrier selection¹⁵.
- (72) In response to Question 9, SRG has not suggested a timeframe for implementing remedies in this category but proposed that the introduction of indirect access be conditional on the introduction of charging for intra-island calls and movement away from current bill-and-keep arrangements for wholesale intra-island calls.
- (73) In response to Question 10, SRG agrees that specified call origination remedies be included in the RAIO in the future.

¹³ International Long Distance Calling

¹⁴ Domestic Long Distance Calling

¹⁵ Carrier selection allows subscribers to choose their operator on a call by call basis. A carrier Identification Code is dialed before the number. This code ensures the call is directed via the relevant operator.

Digicel

- (74) In response to Question 6, Digicel disagrees that indirect access should be within the scope of the RAIO. It argues that indirect access is inappropriate at the current stage of regulatory development in The Bahamas, and if it should be included, it should only be applied to the fixed (network) incumbent, as imposing it on new fixed line operators or mobile operators could deter market entry.
- (75) In response to Question 7, Digicel is of the opinion that indirect access should only be applied to incumbent fixed line and new entrants should not be considered dominant until appropriate market analysis has been conducted to determine dominance and even then only applied if the remedy is proportionate in relation to the size of the problem.
- (76) In response to Question 8, Digicel has expressed no preference for the form of indirect access.
- (77) In response to Question 9, Digicel has not expressed any timeframe for implementing indirect access.
- (78) In response to Question 10, Digicel disagrees that specified call origination remedies be included in the RAIO in the future.

Proposed Further Action/Comment

- (79) The respondents generally strongly disagree with the inclusion of indirect access in the RAIO at this time, citing a number of technical and pricing factors that need to be considered as well as the need to carry out a cost-benefit analysis before indirect access is introduced. Even CBL, which supports the inclusion of indirect access in the RAIO, has qualified its position by introducing the need for a cost-benefit analysis.
- (80) Whilst the reasons why indirect access should not be included in the RAIO today are relevant and need further consideration by URCA, as a point of principle, it should be noted that if and when indirect access is introduced, it would be wholly appropriate to include it as a service in the RAIO and appropriate modifications be made to the various documents and annexes that make up the RAIO document. This is the norm in regulatory proceedings elsewhere such as the EU.

- (81) URCA further notes that existing operators and prospective new entrants in the voice market, who stand to gain most from the mandating of indirect access on an existing SMP operator, have argued against its inclusion in the RAIO. URCA cannot rule out the possibility that indirect access may be an appropriate remedy and therefore it should be in the scope of a RAIO.

CONNECTIVITY BASED ACCESS & INTERCONNECTION REMEDIES

Question 11: Do you agree with the proposal that the connectivity based services listed are still relevant and should form part of any new RAIO? If you disagree, please provide your reasons.

BTC

- (82) BTC agrees that the listed connectivity based services are still relevant and should form part of any new RAIO. In response to the proposal that the RAIO should stipulate the POI sites offered by the interconnection provider, BTC posits that it cannot determine in advance where each POI will be until a request has been received for the service. BTC contends that POI facilities will vary with respect to location and local conditions amongst other things. In addition, BTC anticipates that more operators will be requesting interconnection at different parts of the country. Accordingly, BTC recommends that the second bullet in the table on page 25 of the A&I Consultation should be removed, whilst the first bullet should be amended as follows:

“Stipulate all physical and technical requirements of the POI facilities offered by the supplier, for co-located, customer sited or in-span facilities. (Detailed specifications for POIs should be included in the interconnection provider’s Technical Standards and Specifications).”

- (83) Further, as BTC moves towards an IP/NGN network the POI locations will change and the number of POIs will decrease as it moves towards centralised switching infrastructure. As a consequence, access will have to be addressed differently as these changes unfold.

CBL

- (84) CBL agrees that the listed connectivity based services are still relevant and should form part of any new RAIO.

SRG

- (85) SRG also agrees that the listed connectivity based services are still relevant and should form part of any new RAIO. However, SRG opines that an operator with SMP must not be allowed to reject joining circuits that may be provided by the interconnection seeker, or third party at the seeker's request. SRG argues that where an interconnection seeker is able to more cost effectively provide joining circuits than the SMP operator has offered in the RAIO (e.g. by wireless network), then SMP operators must provide cost oriented terms on which relevant equipment can be hosted at its POI.

Digicel

- (86) Meanwhile, Digicel recommends a list of services that should form part of any new RAIO for The Bahamas¹⁶.

Proposed Further Action/Comment

- (87) URCA has taken careful account of the responses to Question 11. URCA considers that the physical link with an SMP operator's networks should be accommodated at any point of the network which is technically feasible. This means locations where traffic is switched such as local switches, tandem switches, and international switches. In addition, the RAIO should stipulate the types and location of switching equipment, specification of interfaces and so forth, because without this information existing or emerging operators would not be able to plan their own network development and operations effectively.
- (88) URCA wishes to remind the industry that the obligation is on the SMP operator to develop a RAIO and specify the minimum set of POIs irrespective of technology. As such, URCA disagrees with BTC's proposals in relation to the two bullets in the Table on page 25 of the A&I Consultation. For the avoidance of doubt, the first bullet requires the interconnection provider to specify in advance a minimum set of POIs in the RAIO and to indicate whether the three options of co-located, customer sited, or in-span interconnection should apply to each POI unless not technically feasible, whilst the second bullet merely requires the SMP licensee to specify the process by which another operator may request interconnection at POIs not specified in the RAIO. These are valid

¹⁶ See pages 7 and 8 of Digicel's submission to A&I Consultation at www.urcabahamas.bs.

components of RAIOS in other jurisdictions and URCA considers that they could be included in a RAIO for SMP operators in The Bahamas.

- (89) URCA recognizes that the introduction of IP/NGN could impact on network configurations and interfaces between an SMP operator and other licensees. However, URCA considers that the RAIO is a dynamic document which can and will evolve over time. As such, URCA believes that if and when IP/NGN is introduced, the RAIO can be modified or amended to include IP/NGN interfaces. It is URCA's considered opinion that changes in POIs need to be done with a reasonable amount of notice, so the SMP provider cannot simply change the list and expect interconnecting operators to rearrange interconnection accordingly. If reasonable notice is not provided it is likely that the SMP provider would have to compensate the other operators.
- (90) The points raised by SRG in relation to charging methods for joining circuits have been duly noted. URCA recognises that access and interconnection arrangements greatly affect all providers of electronic communication services, and some of the issues are complex and quite different approaches could be adopted. For this and other reasons, URCA proposes to develop and make available guidelines to facilitate the timely preparation of RAIOS that are reasonable, and to provide for the progressive improvement of RAIOS as new information becomes available and additional regulatory measures are put in place. These guidelines will also indicate URCA's expectation with respect to the RAIO to be published by one or more SMP licensees, and/or clarify URCA's approach to various issues, including charging methods for joining circuits and other products. Ultimately, if an agreement cannot be reached between a major supplier and a non-SMP operator, either of the parties will be able to refer the matter to URCA or another body for resolution.
- (91) URCA has reviewed the list of services proposed by Digicel against proposals set out in the A&I Consultation, and reference offers from other markets. URCA considers that the list of services proposed by Digicel may be valid components of a RAIO for SMP operators in The Bahamas. In keeping with the Comms Act, URCA will ensure that access and interconnection remedies are reasonable and proportionate to their purpose and further the objective of promoting sustainable competition in electronic communications.

Question 12: Do you agree that wholesale broadband remedies should be within the scope of the RAIO? If you do not agree, please explain your reasoning.

BTC

(92) BTC supports the inclusion of wholesale broadband remedies within the scope of the RAIO. BTC considers resale of broadband DSL, and wholesale DSL or Bitstream broadly acceptable, provided market and regulatory impact analysis identifies market requirement and demand. BTC states that the regulatory obligation for an operator to offer and provide Resale and/or Bitstream Access should be maintained until network and market conditions in The Bahamas change to the extent that other operators have established their customer base and/or invested in their own network infrastructure and levels of competition are such that regulation is no longer required¹⁷.

CBL

(93) CBL claims that the market for broadband services is already highly competitive with adequate choice of alternate providers of replicable products.

SRG

(94) SRG considers it imperative that wholesale broadband remedies fall within the scope of the RAIO. SRG opines that competitive and innovative broadband services are key to economic growth.

Digicel

(95) Digicel does not agree that wholesale broadband remedies are necessary. It argues that 'alternate network infrastructure' is available – which should negate the need for wholesale broadband remedies. Digicel considers that should there be a need for such a service, it should be offered in a separate agreement after assessment that there is demand and need in the market and the requirement should be imposed on the incumbent fixed line operator only.

¹⁷ See page 14 of BTC's submission to the A&I Consultation at www.urcabahama.bs.

Proposed Further Action/Comment

- (96) Responses to the proposed broadband remedies were mixed, with support from BTC and SRG, and opposition from CBL and Digicel.
- (97) As noted in the A&I Consultation, resale of the fixed-line SMP operator's DSL services enables other operators to gain access to customers for their own services. With resale it is not possible to differentiate between the resold DSL services and that offered by the SMP licensee. URCA understands that "... resale may be attractive to a new entrant because it is rapid to implement and requires minimal investment. A new entrant can compete with the incumbent in internet access through pricing or by offering alternative bundles of services that includes internet access as well as the new entrant's own services"¹⁸. However, resale does not increase the variety of services in the market or enable alternative levels of quality of service to be offered in the market but may exert downward pressure on prices.
- (98) In contrast, wholesale Bitstream Access allows for some differentiation between the DSL service provided by other operators and the DSL service offered by the SMP operator. It also enables other operators to compete with the SMP operator in terms of service quality and to some extent in the range of DSL services offered. Whilst the SMP operator still controls the types of DSL service available, the entrant may choose to have a different service configuration from the SMP operator. Also, the entrant may choose to build its own transmission (backhaul) network, in full or in part.
- (99) URCA duly notes BTC's position that the regulatory obligation for an operator to offer and provide Resale and/or Bitstream Access should be maintained until network and market conditions in The Bahamas change to the extent that other operators have established their customer base and/or invested in their own network infrastructure and levels of competition are such that regulation is no longer required. URCA understands that this has happened in Hong Kong and, in the UK on an exchange by exchange basis where four or more principal operators offer broadband services and the exchange is considered to be deregulated.
- (100) URCA agrees with SRG that competitive and innovative broadband services are key enablers of economic growth. URCA understands that the proposed remedies have proven to be important services for introducing competition. As such, URCA considers that the broadband remedies listed may be valid components of a RAIO. However, in considering specific remedies URCA will take account of market conditions, including the

¹⁸ "Local Loop and Related Facilities and Services" A Consultation Issued by the Telecommunications Regulatory Authority (Bahrain), 1 June 2004.

availability of alternate network infrastructure or alternate providers of replicable products as suggested by CBL and Digicel.

Question 13: What market conditions do you consider should prevail in order for URCA to mandate that an SMP operator implement wholesale broadband remedies?

BTC

(101) BTC contends that the decision to mandate broadband remedies should be informed by market analysis that provides evidence of a commercial requirement and demand.

CBL

(102) CBL merely repeats its response in Question 12.

SRG

(103) SRG argues that designated SMP is sufficient for URCA to mandate wholesale broadband remedies.

Digicel

(104) Digicel states that new entrants should only be subject to best practice competition law approaches which would place them in the category of dominance only after proper market and dominance assessments have been carried out. Remedies would then be imposed only if there was shown to have been an abuse of dominance and only in proportion to the abuse that takes place.

Proposed Further Action/Comment

(105) URCA notes the responses to Question 13. URCA is mindful of the need for it to consider remedies that are efficient and proportionate as to their purpose. For this reason, URCA will have taken all comments received into account when considering specific remedies and will ensure that such remedies are introduced in a manner that is transparent, fair and non-discriminatory. Further, URCA will also ensure that remedies are consistent

with best practice competition and regulatory principles and informed by proper assessment of market conditions in The Bahamas.

Question 14: If market conditions exist, do you have a preference as to which form of wholesale broadband you would wish to see mandated on an SMP operator? Please explain your reasons.

BTC

- (106) BTC expressed support for either the Wholesale DSL or Bitstream Access. As noted by BTC, the service appears to be an attractive proposition for entrants as it requires little investment and if managed properly could result in lower broadband prices to the end user, amongst other things.

CBL

- (107) CBL merely repeats its response in Question 12 (i.e., “the market is already highly competitive with adequate choice of alternate providers of replicable products). As such, no form of wholesale broadband should be mandated.”)

SRG

- (108) SRG, for its part, noted that BTC in the past implemented DSL resale that did not prove popular or commercially efficacious. For this reason, SRG is of the view that the only viable solution would be Wholesale DSL or Bitstream Access.

Digicel

- (109) As stated in its response to Question 12, Digicel does not agree that any of the proposed wholesale remedies are necessary. It contends that ‘alternate network infrastructure’ is available – which should negate the need for wholesale broadband remedies. Digicel considers that should there be a need to offer such services, it should be offered in a separate document after assessment that there is demand and need in the market and the requirement should only be imposed on the incumbent fixed line operator only.

Proposed Further Action/Comment

(110) The pros and cons of each of the remedies in this category were previously identified and discussed in the A&I Consultation Document and expanded upon at paragraphs 97 to 98 above. In considering remedies URCA shall have regard to what is most appropriate for the market, having regard to the market failure identified, and the objective of encouraging, promoting and enforcing sustainable competition in electronic communications in The Bahamas.

(111) In the meantime, URCA considers it appropriate to keep all the broadband access services within the scope of the RAIO.

Question 15: How long do you think an SMP operator should be allowed to implement each of the remedies in this category?

BTC

(112) BTC believed that the SMP operator should be given enough time to prepare for additional customer and infrastructure upgrade if necessary. BTC suggested that it may be feasible to assume 9 months to 1 year to implement remedies in this category

CBL

(113) Again, CBL merely repeats its response in Question 12.

SRG

(114) SRG suggests a target of 180 days would be appropriate and the SMP operator should not be allowed to enter other markets until such time as the remedies are fully implemented and proven. Moreover, given the potential for an SMP operator to delay implementation to its competitive advantage, SRG considers that a reasonable time period, perhaps a further 180 days, should be required to elapse between satisfactory demonstration of implementation and the SMP operator being permitted to enter any new market. Such a mechanism would accommodate circumstances where a new entrant might need time to install equipment and make ready to compete in the SMP operator's market, whilst readying itself for competition by the SMP operator in its own market.

Digicel

(115) As stated in its response to Question 12, Digicel does not agree that wholesale broadband remedies are necessary.

Proposed Further Action/Comment

- (116) URCA notes the proposed timelines for the implementation of one or more remedies in this category. It is URCA's intention to give due consideration to these proposals when considering remedies and will also take account of international experience.

Question 16: Do you agree that the specified 'Wholesale Broadband' remedies could be included in the RAIO? If you disagree then please explain your reasons.

BTC

- (117) BTC agrees that the specified 'Wholesale Broadband' remedies could be included in the RAIO. BTC concludes that the specified remedies would stimulate competition, thereby improving broadband penetration in the country and bring about cheaper prices to the public.

CBL

- (118) CBL is not in agreement with the proposal. CBL believes that the market is already highly competitive with adequate choice of alternate providers of replicable products.

SRG

- (119) SRG is in favour of the proposal.

Digicel

- (120) In their response, Digicel notes that Question 16 is virtually the same as Question 12 and refers to its answer in Question 12.

Proposed Further Action/Comment

- (121) URCA agrees with Digicel that Question 16 is virtually the same as Question 12. As such, URCA will not repeat its response to Question 12 here.
- (122) Given the inter-dependencies between the various questions on the topic of Local Loop Unbundling (LLU), which was also reflected in the responses, the topic of LLU and the questions contained in the A&I Consultation are being treated collectively.

Question 17: Do you agree that local loop unbundling remedies should be within the scope of the RAIO? If you do not agree, please explain your reasoning.

Question 18: What market conditions do you consider should prevail in order for URCA to mandate that an SMP operator implement local loop unbundling remedies?

Question 19: If market conditions exist, do you have a preference as to which form of local loop unbundling you would wish to see obliged on an SMP operator? Please explain your reasons.

Question 20: How long do you think an SMP operator should be allowed to implement each of the remedies in this category?

Question 21: Do you agree that the specified 'Unbundled Access to the Local Loop' remedies could be included in the RAIO? If you disagree then please explain your reasons.

BTC

- (123) BTC does not agree that Local Loop Unbundling should be within the scope of the RAIO and states that the market or demand for access to the local loop using Local Loop Unbundling has not been established in The Bahamas.
- (124) BTC states that the low density of copper lines is not likely to offer new entrant operators an opportunity to secure revenues that will provide sufficient returns on the capital investment required to implement local loop unbundling. Therefore the consequence of low or even no demand for local loop unbundling are potentially significant due to the necessity for BTC to carry out a number of time consuming and expensive activities before it is possible to offer LLU services. These activities will need to be carried out in order to enable BTC to offer LLU services and will incur considerable time and expense that cannot be recovered by BTC if the demand for these services proves to be low or non-existent.
- (125) BTC states that the introduction of LLU would require a considerable amount of investment because BTC presently has more than 192 fiber nodes deployed throughout the country and in addition BTC considers that it is important to note that the copper plant is more than 20 years old and may require upgrading to support LLU.

- (126) BTC supports URCA's views when it states that LLU could be technically difficult and costly to be introduced and may not be sustainable in The Bahamas.
- (127) BTC states that markets need to be defined and sufficient demand must be clearly identified.
- (128) BTC states that the only form of unbundling that would be practical and manageable would be Resale and/or Bitstream Access. Both of these services offer access to services delivered over the copper network using end-to-end solutions that are provided, operated and managed by the network operator. This arrangement greatly simplifies the commercial and operational processes associated with the provision of these services and allows new operators to enter the market with a minimal outlay of capital investment which will, in turn, encourage the introduction of sustainable competition. BTC concludes that Local Loop remedies should be limited to the provision of Resale and/or Bitstream Access which could be included in the RAIO.

CBL

- (129) CBL does not agree that local loop unbundling remedies should be within the scope of the RAIO. CBL says that the size of The Bahamas market for telecommunications services does not support the investment requirements by new entrants in an unbundled local loop environment.
- (130) CBL considers that under no market conditions should it be appropriate for URCA to mandate that the SMP operator implement LLU remedies and in addition the size of The Bahamas market for telecommunications services does not support the investment requirements by new entrants in an unbundled local loop environment. CBL states that if the necessary market conditions exist then it would prefer the approach proposed in Trinidad and Tobago for a phased introduction approach, beginning with full and line-sharing LLU and the possibility of sub-loop LLU and Bitstream to be reviewed at a later date.
- (131) CBL states that in the event that such remedies are mandated, an SMP operator should be allowed six (6) months in which to implement them.

SRG

- (132) SRG is of the view that such remedies should be within the scope of the RAIO and that it is recognised that local loop unbundling ("LLU") has suffered some challenges in implementation in other jurisdictions and that it will require significant regulatory

oversight if it is to be successful in The Bahamas. Nonetheless, SRG believes LLU offers the only means by which competitive conventional voice services can ever practically be offered.

- (133) SRG states that an operator being designated as having SMP would be sufficient market conditions.
- (134) SRG states that in the absence of detailed knowledge of the SMP Operator's network, any analysis is subjective at best, however bearing in mind that LLU would be desirable to ensure the availability of conventional competitive traditional voice services, then full LLU would seem to be the most appropriate form.
- (135) SRG states that it believes that a target of 180 days would be appropriate, however the SMP operator should not be permitted to enter any other markets until such time as the remedies are fully implemented and proven. Moreover, given the potential for an SMP Operator to delay implementation to its competitive advantage, SRG considers that a reasonable time period, perhaps a further 180 days, should be required to elapse between satisfactory demonstration of implementation and the SMP Operator being permitted to enter any new market. Such a mechanism would accommodate circumstances where a new entrant might need time to implement equipment and make ready to compete in the SMP Operator's market, whilst readying itself for competition by the SMP Operator in its own market.

Digicel

- (136) Digicel states that LLU is an example of time intensive regulated access competition and is very much a second best approach which should be avoided if at all possible. Technology has moved on. It is no longer appropriate to mandate resource intensive LLU because of the alternate infrastructure now available such as WiMAX which emulates classic enterprise services such as PSTN, Frame Relay and DIA as well as residential ADSL and Cable Broadband.
- (137) Digicel also stated that should there be a need to offer such services it ought to be offered in a separate agreement and only after a separate assessment that there is such a demand and need in the market. It should also only be required from the fixed incumbent operator.
- (138) Digicel states (in its response to Question 13) that new entrants should be subject to best practice competition law approaches which would place them in the category of dominance only after proper market and dominance assessments have been carried out.

Remedies would then be imposed only if there was shown to have been an abuse of dominance and only in proportion to the abuse that takes place.

Proposed Further Action/Comment

- (139) From the responses received only SRG considers that the local loop unbundling remedies should be included in the RAIO. Both BTC and CBL identify that the investment required will be high for small benefits. Digicel considers that there are alternative technologies available that over time have reduced the requirement for the incumbent operator to unbundle the local loop. SRG favors full LLU rather than line sharing as line sharing does not allow competition in voice services as well as broadband. It considers that the implementation of this remedy would require a high degree of regulatory oversight and therefore could be considered burdensome to URCA.
- (140) BTC emphasises that the introduction of a Resale or Bitstream Access solution could be a pragmatic solution considering the operational and economic issues facing the introduction of a full local loop product. URCA does not consider Bitstream Access and Resale as LLU remedies but as wholesale broadband services.
- (141) In the responses received only SRG believed that a finding of SMP on an operator would be sufficient market conditions in order to mandate the SMP operator to provide LLU.
- (142) URCA considers that there is limited support from the industry at this current time for BTC to provide unbundled access to its local loop. Digicel, which has experience of other similar jurisdictions does not see the lack of LLU as an issue. Only SRG is supportive for the introduction of LLU but agrees that it could be a problem to implement.
- (143) URCA notes the comments submitted by BTC to Question 20 but respectfully suggests that BTC might have mis-interpreted the question. BTC suggests that the regulatory obligation for an operator to offer and provide Resale and/or Bitstream Access as LLU remedies should be maintained until network and market conditions in The Bahamas change to the extent that other operators have established their customer base and/or invested in their own network infrastructure and levels of competition are such that regulation is no longer required as happened in Hong Kong, and in the UK on an exchange by exchange basis. URCA does not consider Bitstream Access and Resale as LLU remedies but wholesale broadband services.
- (144) URCA notes BTC's comment as stated at paragraph 125 above but understands that where ADSL is available it can provide LLU. URCA understands that LLU has proved to be a suitable remedy in many markets to provide competing operators access to the local

loop of the SMP operator. It should therefore be considered that LLU could be a suitable solution for The Bahamas and URCA may therefore retain local loop unbundling within the scope of the RAIO.

- (145) Given the inter-dependencies between the various questions on the topic of Cable TV networks remedies, which was also reflected in the responses, the topic of Cable TV networks remedies and the questions contained in the A&I Consultation are being treated collectively.

Question 22: Do you agree that access to Cable TV networks remedies should be within the scope of the RAIO? If you do not agree, please explain your reasons.

Question 23: What market conditions do you consider should prevail in order for URCA to mandate an SMP operator to implement access to the Cable TV network.

Question 24: Subject to the results of the market reviews, do you have a preference as to which form of unbundled access to a Cable TV network you would wish to see imposed on the SMP operator? Please explain your reasons.

Question 25: Do you agree that the specified 'Cable TV network access' remedies could be included in the RAIO? If you disagree then please explain your reasons.

BTC

- (146) BTC states that it strongly agrees with the proposal in Question 22. Regulation should ensure equivalence in the designation of operators being required to offer interconnection access to their networks and there are no significant reasons why cable networks should not be included.
- (147) BTC states, in answer to Question 23, that in cases where an operator has been designated as having SMP it must be assumed that the SMP operator enjoys a monopoly in access to customers connected to their network. The SMP operator would also potentially have the ability to use its dominant position to the disadvantage of competitors, such as preventing competing operators from accessing their network connections and customers. Where these market conditions apply there should be regulation to ensure access to that network.

- (148) BTC states that its preferred option under Question 24 would be wholesale Bitstream Access as this would provide the best commercial and operational solution for operators wishing to provide their services on a Cable TV network.
- (149) BTC states that it strongly agrees that the specified 'Cable TV network access' remedies could be included in the RAIO in answer to Question 25. The only difference to the provision of Bitstream Access on a legacy copper access network and a Cable TV network is the technology used to connect to the network and deliver customer services. Interconnection should be allowed at any technically feasible point in the network.

CBL

- (150) CBL states, in answer to Question 22, that it does not agree that access to Cable TV network remedies should be within the scope of the RAIO.
- (151) CBL states that the imposition of RAIO requirements on Cable TV and other non-telecommunications networks, in answer to Question 23, is also unprecedented. While the Committee cites "case studies" for both Denmark and The Netherlands, by its own admission, there, "as in the rest of the EU, access regulation only applies to wholesale access to broadband *over the telecoms networks.*"
- (152) CBL states that in Denmark, access regulation has only been proposed – to date, not adopted – for the country's incumbent telecommunications operator, which also controls large parts of Denmark's cable network. In the Netherlands, the EU has correctly noted that "the Dutch broadcasting market structure diverges from most other EU Member States as cable networks in the Netherlands are the most concentrated grid systems...". The relevance of these examples to The Bahamas, whose market is considerably smaller, is not clear.
- (153) CBL states, in answer to Question 24, that under no market conditions should the requirement to propose such remedies exist. The market for broadband services in The Bahamas is already highly competitive, with an ample choice of alternative providers of replicable products (cable modem, DSL, satellite and wireless 3G). Under these circumstances, the imposition of an access requirement would be both burdensome and unnecessary.
- (154) CBL states, in answer to Question 25, that it does not agree with the specified 'Cable TV network access' remedies should be included in the RAIO.

SRG

- (155) SRG considers that CBL "...was able to leverage its monopoly into an entirely new market in 2000 with the introduction of internet services. With further liberalization of the fixed market it would seem that CBL will at some point be able to leverage its infrastructure into a third market." SRG therefore submits that these circumstances are sufficient enough for CBL as the SMP operator in Cable TV network to be mandated to implement access to its network.
- (156) SRG states, in answer to these questions, that it has long taken the consistent view that other operators should have the ability to access the unbundled Cable TV network of CBL.
- (157) SRG raises the question of "In cases where an other operator offers a functionally competing service that is based upon session initiation protocol ("SIP"), such as those offered by existing operators, how will CBL be required to ensure that their installation does not discriminate or interfere with those services, for example via an eMTA that disrupts voice traffic to a downstream SIP device?"

Digicel

- (158) Digicel states, in answer to these questions, that again, this is very much a second best approach which should be avoided if at all possible.
- (159) Digicel goes on to suggest that URCA should be concerned with the following questions for TV networks:
- Will the Government adopt the ITU policy on Digital Spectrum?
 - What steps are being taken by Government/URCA to make spectrum available for Digital Broadcasting?

Proposed Further Action/Comment

- (160) URCA, in considering CBL's comments, considers the fact that there is limited experience of imposing such a remedy in other countries should not be a reason why careful consideration and analysis of this remedy should not be carried out to identify a suitable solution for The Bahamas. In the consultation document examples were provided of how remedies were being considered in other jurisdictions. URCA is not claiming that market conditions in the example jurisdictions are the same as in The Bahamas.
- (161) URCA, in considering the responses received proposes that if one or more operators are found to have SMP in this market then in order to "encourage, promote and enforce

sustainable competition”, an appropriate and proportional method of allowing other operators to have access to the SMP operator’s network for the provision of broadband services should be found.

- (162) In responding to this question both BTC and SRG considers that being deemed to have SMP in this market should be the market condition that prevails in order for URCA to mandate an SMP operator to implement access to the cable network.
- (163) CBL’s response to this question identified alternative products that could provide some degree of replication of the services offered by CBL in the market. URCA duly notes CBL’s response.
- (164) In response to SRG’s comment regarding installation processes, URCA will ensure that transparent and non-discriminatory processes form part of any RAIO that it approves.
- (165) URCA considers that this remedy should remain within the scope of a RAIO and applied to SMP providers if URCA considers this a proportionate remedy given the market conditions.
- (166) Given the inter-dependencies between the various questions on the topic of backhaul services, which was also reflected in the responses, the topic of backhaul services and the questions contained in the A&I Consultation are being treated collectively.

Question 26: Do you agree that the specified ‘Backhaul’ remedy should be included in the RAIO? If you disagree then please explain your reasons.

Question 27: What market conditions do you consider should prevail in order for URCA to mandate an SMP operator to provide backhaul services?

BTC

- (167) In response to Question 26, BTC disagrees that the specified ‘Backhaul remedy’ should be included in the RAIO. BTC suggests that the Backhaul should be provided on a commercial basis negotiated between operators. BTC notes that the market for backhaul has not been formally designated and, in any case, BTC does not enjoy a position of economic strength in the relevant market. BTC opines that other operators may choose a competitor or self provide backhaul facilities wirelessly.
- (168) In response to Question 27, BTC considers that URCA should mandate an SMP operator to provide backhaul where specific markets have been defined, sufficient demand identified and an operator formally designated as having SMP.

CBL

- (169) In response to Question 26, CBL is in favour of the proposal.
- (170) In response to Question 27, CBL urges URCA to mandate SMP operators to provide backhaul services immediately.

SRG

- (171) In response to Question 26, SRG considers the proposed remedy to be essential to the provision of services for a new entrant. In SRG's view failure to require such services would be detrimental to sustainable competition.
- (172) In defense of its position, SRG relied on a previous statement by CBL that ownership of sub-sea fibre network is important to competitive success. However SRG is uncertain which market backhaul would fall in (i.e., could be either fixed voice, high speed connectivity and data, or both).
- (173) In response to Question 27, SRG argues that the existence of any other operator other than those deemed to have SMP would be sufficient in order for URCA to mandate an SMP operator to provide backhaul services.

Digicel

- (174) In response to Question 26, Digicel is in agreement with the proposal that the specified 'Backhaul remedy' should be included in the RAIO. In addition, Digicel considers that the RAIO should include the requirement to enable connectivity to and from an entrant's network and the international carriage networks of operators not registered in The Bahamas.
- (175) In response to Question 27, Digicel recommends that dominance in the market for backhaul services should be presumed at the start of liberalisation.

Proposed Further Action/Comment

- (176) The responses to Question 26 indicate that most respondents favour the inclusion of the specified backhaul remedy within the scope of the RAIO. URCA understands that backhaul is an access service that enables the physical and or logical linking of transmission systems for the purpose of conveying signals between defined termination

points. It was pointed out in the A&I Consultation that “An operator entering the market in The Bahamas and developing equipment at the edge of its network would require connectivity between its edge network equipment and its core network equipment, or the core network equipment of another operator, possibly the SMP operator.”¹⁹ Backhaul has been proven to be a key enabler of competition in broadband applications and services, such as internet access. Thus, URCA believes that one or more backhaul remedies may be valid components of the RAIO and should remain within the scope of the RAIO.

- (177) In response to BTC’s comment that a relevant market for backhaul has not been designated, and SRG’s query as to which market backhaul would fall in (i.e. either fixed voice, high speed connectivity and data, or both), URCA wishes it to be noted that backhaul is part of the underlying infrastructure operated by one or more existing licensees that are presumed to have SMP in one or more of the high level markets specified in Schedule 4 of the Comms Act. It remains URCA’s preliminary position that the specified ‘Backhaul remedy’ could be included in the scope of a RAIO for The Bahamas.
- (178) Finally, URCA acknowledges Digicel’s request that the ‘Backhaul remedy’ should support connectivity to and from entrant’s network as well as international carriage networks of operators not registered in The Bahamas.

CO-LOCATION BASED ACCESS & INTERCONNECTION REMEDIES

Question 28: Do you agree with the proposal that the co-location based services listed are still relevant and could form part of any new RAIO? If you disagree, please provide your reasons.

BTC

- (179) While BTC agrees that co-location based services were still relevant, they argued that they should be subject to the availability of suitable facilities in those locations where the access and interconnection seeker desires the service. BTC also stated that a POI should be accommodated in accordance with forecasting, capacity planning and ordering, specifically for equipment to interconnect the BTC network with the seeker’s network.

¹⁹ See paragraph 67 of the A&I Consultation Paper at www.urcabahamas.bs

Digicel

- (180) Digicel considers that in-span interconnection rather than physical or virtual co-location was the most practical option for co-location based services. Digicel believes that in-span interconnection would eliminate security concerns that may be raised when an operator contracts to locate its equipment or circuits within the other operator's network or premises. They also proposed that this would promote unbundling and reduce any need for URCA to monitor and enforce physical and virtual co-locations.
- (181) Digicel believes that tower sharing should be limited to a one-for-one sharing, since competitors compete on coverage. Co-location forced on any number of multiple towers was felt to be inappropriate as it could reduce a competitive advantage. The argument continued that forced co-location on towers, configured in a critical SDH backbone transmission ring, has the potential to cause major outages in an operator's network.
- (182) Duct sharing could expose a network to security and network resilience concerns and therefore needed strict access regulations. Digicel therefore argued that operators should instead be required to lease capacity on the fibres in the ducts, rather than sharing the ducts themselves.

CBL and SRG

- (183) Both CBL and SRG agreed with the proposal that the services were still relevant.

Proposed Further Action/Comment

- (184) It is important that URCA is able to independently verify whether or not the facilities are suitable for co-location. An operator should not be allowed to deny a co-location request simply to eliminate competition.
- (185) Similarly, an operator should not be able to simply designate a tower as critical to a backbone transmission ring, so as to prevent another operator from obtaining competitive coverage. However, URCA agrees that requests for tower sharing should be considered based on space and load on each individual tower.
- (186) Duct sharing should be encouraged but it is agreed that there needs to be strict access regulations to reduce any security or network resilience to a minimum. When there is insufficient duct space available for sharing, spare capacity on installed URCA considers that fibres should be made available for lease.

(187) URCA therefore considers that the use of co-location based services is still relevant and should be promoted provided the facilities have sufficient capacity or could be expanded. This would promote the introduction of competition by reducing the barriers to entry and reducing the need for an operator to duplicate tower and duct facilities.

Question 29: Do you agree that whilst access for the sharing of masts or towers for wireless telecommunications equipment and the sharing of ducts should be made available by operators with SMP it should not form part of a RAIO under standard terms and conditions? If you disagree then please explain your reasons.

BTC

(188) BTC strongly disagrees with the proposal stating that it may not be practical to produce a standard set of regulations and associated prices that could address requests for infrastructure sharing. BTC argues that operators with SMP should not be made to share its masts or towers for wireless telecommunications equipment or to share its duct space. BTC further states that the sharing of such infrastructure should not form a part of a RAIO, under standard terms and conditions, as those systems carry critical commercial and important operational traffic.

(189) BTC cited security concerns particularly with duct sharing, fearing that critical traffic on the provider's network could be compromised. There was the general thought that operators seeking a sharing arrangement should be made to build their own network, or at least build out to that portion of the provider's duct route where there are physical constraints to place other ducts. In any event a sharing was only to be considered when there was no other alternative for the other operator.

(190) There was the strong opinion by BTC that at best, the other operator should only be able to use an empty duct in a limited location, to address a specific and identifiable pinch-point in the network that could not be solved using any other method.

(191) BTC further stated that each request for infrastructure sharing was different, with differing costs associated with the unique solution. It argues that charges should be based on the market value, not on a wholesale basis.

(192) BTC emphasizes that the regulator should only be an arbiter to resolve disputes between operators regarding infrastructure sharing.

(193) BTC further argued that section 40.2 (b) of the Comms Act places a regulatory burden on SMP operators.

CBL

- (194) CBL disagrees with the proposal citing that the sharing of masts or towers for wireless telecommunications equipment and the sharing of ducts should form part of the RAIO with applicable cost-based pricing. It felt that incumbents and new entrants should have the same terms and conditions.

SRG

- (195) SRG cited its failure to obtain mast or tower sharing with BTC since negotiations started in 2004. It noted that the new licensing regime provides for URCA to instruct an SMP operator to share facilities. This it feels makes it unimportant whether or not the offer is part of the RAIO, but felt that URCA must ensure that requests are satisfied promptly, in good faith and on a cost basis.

Proposed Further Action/Comment

- (196) URCA considers that where possible, infrastructure such as mast, towers and ducts should be shared by operators to allow public land and roadways to be used most efficiently in the provision of electronic communications services. It is necessary that infrastructure placed underground in roadways be shared so as to reduce the inconvenience to the public and the economy by minimizing the need for each operator to disrupt vehicular and pedestrian traffic flows, while civil works are being done to build new duct routes.
- (197) In keeping with this view, URCA considers that masts or towers and ducts should be shared whenever there is sufficient suitable capacity in one operator's infrastructure, for another operator to lease space on a cost oriented basis.
- (198) While sharing is important and should be encouraged and promoted, URCA considers that infrastructure sharing should not form part of the RAIO under standard terms and conditions. The terms and conditions for each solution may have its own cost and this would have to be individually considered on a case-by-case basis. The Comms Act has provisions for URCA to instruct an SMP operator to share its infrastructure and gives URCA the authority to act as an arbiter to resolve inter-operator disputes. URCA therefore will be vigilant to ensure that there is efficient use of mast or towers and ducts through co-location and the sharing of infrastructure.

Question 30: Do you agree that a co-location remedy to support LLU and access to Cable TV networks should be within the scope of the RAIO? If you do not agree, please explain your reasoning.

BTC

(199) BTC argues that URCA would have to consider the practicality and cost of providing co-location facilities for both LLU and access to Cable TV networks. BTC further argued that the incumbent operator would have to bear the full cost to provide co-location services while the actual cost incurred to provide the service to other operators can only be estimated on a case-by-case basis. They emphasized that the requirements for access to Cable TV networks and LLU needed to be determined and specified with conditions based on practical and financial feasibility and cost.

CBL

(200) CBL is not in agreement with the proposal citing that the market for broadband services in The Bahamas was already highly competitive, providing ample alternative choices to providers. CBL contends that co-location should not be a remedy to support LLU and access to Cable TV networks.

SRG

(201) SRG simply agreed with the proposal stating that co-location was essential.

Digicel

(202) Digicel states that the regulatory burden on URCA would be a time consuming process and argues that competition should be promoted through alternative networks rather than through the unbundling of local loops. It refers to earlier discussions related to security issues that may arise when an operator has physical or contractual rights with respect to the location of equipment or circuits within another operator's network.

Proposed Further Action/Comment

(203) URCA considers that failure to provide a co-location remedy to support LLU and access to Cable TV networks could make those remedies partially or wholly ineffective. However, URCA acknowledges that there is a range of practical considerations that have to be taken into account when the solutions are to be implemented.

(204) URCA therefore considers that a co-location remedy to support LLU and access to Cable TV networks should be within the scope of the RAIO.

Question 31: Do you agree that URCA should have the power to oblige SMP operators to expand co-location services in the RAIO to provide co-location services for LLU and access to Cable TV networks? If you disagree then please explain your reasons.

BTC

(205) BTC argues that the provision of new facilities or the expansion of existing facilities for co-location should not be mandated through regulations, particularly without respect to cost. It repeats the notion that the full cost (which could be substantial) to establish co-location facilities must be initially borne by the providing operator, who must then estimate costs to each co-location seeker.

(206) BTC generally felt that URCA should not have the power to mandate regulations for the provision of new facilities or the expansion of existing facilities for co-location services for LLU and access to Cable TV networks.

CBL

(207) CBL repeats its earlier assertion that broadband services in The Bahamas were already highly competitive, giving providers ample alternative choices. It felt that there was no need to oblige SMP operators through the RAIO, to expand co-location services for LLU and access to Cable TV networks. It did not agree that URCA should have such powers.

SRG

(208) SRG agrees that URCA should have the power to oblige SMP operators to expand co-location services in the RAIO to provide co-location services for LLU and access to Cable TV networks.

Digicel

(209) Digicel restated its previous position. Of particular note is their position that URCA would be faced with a time consuming task to police physical and virtual co-location facilities and services.

Proposed Further Action/Comment

- (210) URCA notes that BTC and CBL disagreed with the notion and that Digicel proposed another means to promote competition. It also notes that SRG agreed that URCA should have the power to oblige SMP operators to expand co-location services in the RAIO to provide co-location services for LLU and access to Cable TV networks.
- (211) In considering the views presented, URCA is of the opinion that it should have the power to oblige SMP operators to expand co-location services in the RAIO to provide co-location services should URCA mandate such remedies. URCA considers that one or more of the remedies might be necessary to promote competition by removing barriers to entry for new operators and allow for the efficient use of infrastructure through co-location of services for LLU and access to Cable TV networks.

ANCILLARY ACCESS AND INTERCONNECTION REMEDIES

Question 32: Do you agree with the proposal that the ancillary product listed is still relevant and could form part of any new RAIO? If you disagree, please provide your reasons.

BTC

- (212) BTC agrees that the ancillary service listed remains relevant and could form part of any new RAIO. However, BTC posits that any obligation to provide the service on a wholesale basis should be limited to Directory database only and there should be reciprocity between licensees. BTC then asserts that the obligation to provide access to Directory database is not required in international interconnect agreements. BTC accepts only that it will be required to provide this service to the extent other operators have complied with the requirements of the interconnection agreement. Furthermore, unlisted numbers would not be listed in the database and would be kept confidential.

CBL/SRG

- (213) CBL and SRG are in agreement with the proposal as is that the ancillary service described in the A&I Consultation remains relevant and could be part of any new RAIO.

Digicel

- (214) Digicel is in agreement with the proposal, but suggests that the range of directory related services be expanded to include access to international Directory Assistance database.

Proposed Further Action/Comment

- (215) Most respondents expressed support for the proposal. URCA notes Digicel's point of having access to international DQ database. URCA understands that international DQ service falls within the scope of RAIOS in other countries²⁰.
- (216) URCA considers that it is a standard requirement of most regulatory regimes that the SMP operator provides access to directory database to other operators and to offer such services on terms and conditions specified in their RAIOS. As such, URCA rejects BTC's claim that access to Directory database is not required in international interconnect agreements.
- (217) URCA notes that none of the respondents expressed objection to or offer comment on the proposal to include directory number inclusion within the scope of a RAIOS for The Bahamas. Directory number inclusion is a standard access service that enables another operator's subscriber information to be entered into the national DQ database operated by the SMP operator to facilitate the provision of directory enquiry services. URCA concludes that Directory number inclusion is another DQ service that could fall within the scope of a RAIOS for The Bahamas.
- (218) With respect to the suggestion by BTC that there should be reciprocity between licensees for national DQ services, URCA notes that the inclusion of subscriber data of another operator in the national DQ database operated by BTC should negate the need for reciprocal requirements for BTC to access directory information for customers belonging to other operators.
- (219) URCA considers it appropriate to point out that the interconnection provider would be under no obligation to provide access to a directory information service where it does not offer the service on a retail basis to end-users. Also, URCA agrees with BTC that access to the national directory information database is only for listed telephone numbers, as unlisted or ex-directory listings must remain confidential and must not be shared with a third party for reasons of data protection purposes. Finally, URCA's

²⁰ International DQ is included in RAIOS from Trinidad and Tobago, Barbados, Bahrain and Jamaica.

expectation is that the interconnection provider would make no use of the ex-directory data in its own directory service, thus maintaining a level playing field with its competitors. URCA therefore concludes that the following ancillary services could fall within the scope of a RAIO for SMP operators in The Bahamas:

- Directory assistance information,
- Directory number inclusion, and
- International DQ where the SMP licensee operates the service to its retail customers.

Question 33: Do you agree that the specified reciprocal ‘Data Management Amendment’ service should be included in the RAIO? If you disagree then please explain your reasons.

BTC

(220) BTC disagrees that the specified reciprocal ‘Data Management Amendments’ service should form part of the RAIO. This position contradicts a subsequent comment by BTC that “Data management can be included and addressed with Network Alteration and can be included in the Primary document of the RAIO.” BTC refers to the position taken by BT where they agreed to the specific amount of the charges and the conditions under which they would offer the service to other operators.

CBL/SRG/Digicel

(221) CBL and SRG expressed support for the proposal that the specified reciprocal ‘Data Management Amendment’ service should form part of any new RAIO for SMP operators in The Bahamas.

Proposed Further Action/Comment

(222) CBL/SRG/Digicel are all in agreement with the proposal in Question 33 whilst BTC offers conflicting views on the same matter. It was stated in the A&I Consultation at paragraph 76 that “Data Management Amendments is an essential service for the successful operation of interconnected services in a competitive market.” URCA considers that this service enables interoperability between networks and has been proved to be a key enabler of any-to-any communications. The service is mandatory and is not linked to SMP. URCA’s research reveals international precedents exist in RIOs from Jersey, Ireland and the UK where Data Management Amendment is included in RIOs. As such URCA

strongly favours the inclusion of reciprocal Data Management Amendments service within the scope of a RAIO for SMP operators in The Bahamas. URCA also considers that it would be wholly appropriate for the interconnection provider's RAIO to contain proposed terms and conditions (including charges) under which it would offer the service to other operators.

CHARGING PRINCIPLES FOR ACCESS & INTERCONNECTION SERVICES

Question 34: Do you agree that the proposed charging framework is suitable and practicable for The Bahamas? If not then please substantiate your answer.

BTC

(223) BTC considers the proposed charging framework to be suitable and practical where charges are cost oriented. Given the Calling Party Pays (CPP) regime for mobile network, BTC suggests it is practical to continue cost based charging for CPP services.

CBL

(224) CBL agrees that the proposed charging framework is suitable and practicable for The Bahamas.

SRG

(225) SRG provides a lengthy discussion on the current charging regime for intra-island or local calls. SRG opines that, as intra-island calls are free to customer, tariffs are either balanced, in which case access charges represent a mix of CPP and RPP, or they are unbalanced, and local calls are subsidised by another product. If balanced then no additional charge should be placed on other operators for terminating these calls, as they are already paid for. If unbalanced then the zero charge may represent predatory pricing. SRG concluded that BTC should not be able to impose charges for terminating calls from other networks, as this would have to be passed on to customers, who would therefore avoid new entrants.

(226) SRG also opines that establishing cost is difficult and the outcome can be manipulated. SRG notes that the A&I Consultation is silent on who should present cost information, how it will be audited by the regulator, and what would be the timeframe for it.

Digicel

(227) Digicel is not in favour of receiving/mobile party pays. Digicel believes that receiving party pays acts as a disincentive to the growth of the mobile sector as people avoid giving out their number to avoid charges. For this reason, Digicel considers CPP is the best pricing model for The Bahamas. Digicel further asserts that differences in termination between fixed and mobile networks reflect differences in architecture, performance and costs, which is why mobile terminating rates are significantly higher.

Proposed Further Action/Comment

(228) In response to SRG's comment on "...who should present cost information, how it will be audited by the regulator, and timeframe" URCA wishes it to be noted that it is very much international practice that the requirement to present cost information is imposed on operators with SMP. The principal reasons for this are that regulators must be confident that charges are appropriately derived, and charges are non-discriminatory.

(229) With respect to SRG's comment that establishing cost is difficult and the outcome can be manipulated, URCA wishes it be noted that the Comms Act obliges URCA to specify regulatory financial reporting obligations on SMP operators. As such, URCA proposes to issue guidelines on accounting separation and cost accounting for operators with SMP in one or more relevant markets. For the elimination of any doubt, these guidelines are intended to guide SMP operators on:

- the high level cost accounting principles to be applied when preparing regulatory financial statements;
- timeframes for publishing regulatory financial statements;
- the network and service breakdown for each operator and the reporting format of the separated accounts; and
- the standard of auditing.

(230) URCA duly notes SRG's comments on the current charging regime for intra-island calls. URCA agrees with SRG that bill-and-keep will remain in place until charges are introduced for Intra-Island calls.

(231) URCA notes that the adoption of CPP has coincided with record rates of growth in mobile penetration and usage²¹. URCA believes that the adoption of CPP could bring similar benefits to users of electronic communications services in The Bahamas. However, URCA wishes it to be noted that any decision relating to RPP and CPP relate to the consultation on Retail Pricing and not the A&I Consultation process.

(232) URCA notes Digicel's comment that differences in termination between fixed and mobile reflect differences in architecture, performance and costs. However, it is URCA's understanding that the higher termination charges on mobile networks reflect the absence of competitive pressure for termination on mobile networks. URCA recognises that in a CPP environment, call termination has low elasticity of demand as there is no incentive for mobile operators to keep termination rates low. Hence, termination charges on mobile networks are usually higher than termination on fixed networks.

Question 35: Do you agree with the proposed approach to the application of cost-orientation? If not then please substantiate your answer.

BTC

(233) BTC contends that it is not appropriate to predetermine whether a particular A&I service would fall into a given cost category in the absence of market analysis, especially in the context of a technology neutral framework. BTC expresses support for cost orientation pricing where this allows for a reasonable rate of return, and A&I markets are not contestable.

CBL

(234) CBL agrees with the proposed approach to the application of cost-orientation.

SRG

(235) SRG opines that it is difficult to imagine a situation warranting charges based on anything other than cost orientation. Broadband networks of CBL and BTC are not replicable and were not built with underlying risk. CBL had enjoyed a 15 year TV monopoly and BTC after market for broadband had been established. Whilst URCA

²¹ Working Party on Telecommunications and Information Services Policies: "Cellular Mobile Pricing Structures and Trends" by the Organisation for Economic Co-operation and Development, DSTI/ICCP/TISP(99)11/Final.

might have discretion to utilise retail minus in future situations where significant justification exists, SRG believes there must be a strong predisposition towards cost plus.

Digicel

(236) Digicel strongly favors the use of international benchmarks to derive basic interconnection. Digicel considers that any form of costing methodology and accounting systems will take time to develop and it is very costly for regulators to adopt cost model approach. Thus, Digicel posits that benchmarking is straightforward, decisive, transparent and cost effect and reflects the principle of cost-orientation.

Proposed Further Action/Comment

(237) URCA duly notes the points raised by BTC and SRG on the application of cost oriented A&I remedies. Cost oriented rates are considered the best method for promoting a competitive environment. Cost oriented charges should reflect the economic costs of A&I and is the method most compatible with competitive markets. Cost oriented charges allow economically efficient pricing, which can be fair to both the interconnection provider and the interconnection seeker, and encourage competitive entry. Notwithstanding this, URCA notes that under certain situations it might be appropriate for a regulator to implement other charging methods such as retail minus. In determining the choice of the appropriate charging principle to adopt URCA shall have regard to a myriad of factors, including whether the service is replicable/contestable, and the level of risk that the licensee has incurred in investing in the service.

(238) URCA notes Digicel's strong support for the use of benchmarks to set charges. As explained in paragraph 13 of Part D4 above, URCA considers that the Comms Act does not preclude the regulator from using international benchmarks to set charges.

(239) URCA recognises that if cost information specific to The Bahamas is to be used to set A&I charges, it needs to be robust and the regulator needs to have confidence that this is the case. It is recognised internationally that cost oriented rates are the dominant method for setting access and interconnection charges. Calculating cost-oriented charges requires reliable information on the costs of the network (however "cost" is defined). However, in emerging markets, such as The Bahamas, sufficiently reliable information might not be readily available. For this reason, it has become common place for regulators to set A&I charges using other information. As noted by the ICT Regulation Toolkit on best practice regulation:

In some markets the detailed information required may not be available. Regulators in many jurisdictions have used benchmarking to set initial interconnection rates (for example Botswana, New Zealand)²².

- (240) The ITU²³ which is the global standard setting body for the electronic communications industry also favors the use of benchmarks to set charges when country specific information is either unavailable or unreliable.
- (241) URCA considers that it might be called upon to set charges or to resolve a dispute about charges, before SMP operators are able to supply robust and verifiable information to URCA. In this regard, URCA believes it would be wholly appropriate and reasonable to rely on adjusted benchmarks²⁴ as the basis for establishing A&I charges.

²² <http://www.ictregulationtoolkit.org/en/Section.2130.html>.

²³ International Telecommunication Union with headquarters in Geneva, Switzerland.

²⁴ This is where charges from other markets are adjusted to reflect local conditions such as exchange rates, cost of capital, traffic patterns, or the cost of shipping network equipment.

E. CONCLUSION

(242) URCA would like to once again thank all of the respondents for their considered comments. The comments received were useful and important in determining the Framework for Access and Interconnection for electronic communications in The Bahamas. Where appropriate, further consultation on specific areas will be addressed by URCA in the future. URCA looks forward to working with the industry and the public in developing an efficient access and interconnection regime for The Bahamas.