October 21, 2019

Mr. Carlton Smith
Director of Electronic Communications
Utilities Regulation and Competition Authority
Frederick House
Frederick Street
Nassau, The Bahamas

Dear Mr. Smith,

***Re*: Wholesale Fixed and Mobile Termination Rates for SMP Licensees Preliminary Determination ECS 49/2019 Issued September 12, 2019**

The Bahamas Telecommunications Company Limited (BTC) has provided by way of the attached document, the company's initial response to the Utilities Regulation and Competition Authority's (URCA) Preliminary Determination on the Wholesale Fixed and Mobile Termination Rates for SMP Licensees (ECS 49/2019), issued September 12, 2019.

Should the need arise, please feel free to contact the undersigned.

Sincerely yours,
The Bahamas Telecommunications Company Limited (BTC)

(for) Nicole M. Watkins
Director - Legal and Regulatory & Company Secretary

P.O. Box N-3048
Nassau, The Bahamas
Tel: (242) 302-7000
Fax: (242) 326-0880
https://www.btcbahamas.com/

The Bahamas Telecommunications Company Limited

Initial Response to:

Wholesale Fixed and Mobile Termination Rates for SMP Licensees

Preliminary Determination

ECS 49/2019

Issued 12 September 2019

Submitted to:

Utilities Regulation & Competition Authority ("URCA")

Legal, Regulatory and
Carrier Services Division
October 21, 2019

Table of Contents

1 Introduction and General Comments

The Bahamas Telecommunications Company Limited ("BTC") is herein providing its Initial Response to the Utilities Regulation and Competition Authority's ("URCA") Preliminary Determination on "Wholesale Fixed and Mobile Termination Rates for SMP Licensees" (ECS 49/2019) issued 12 September 2019 (the "PD").

BTC provides its general comments on the PD below and specific responses to the questions included in the PD in Sections 2 and 3. More specifically, Section 2 deals with questions relating to the proposed costing framework and approach for setting wholesale termination rates and Section 3 addresses the preliminary benchmarking exercise included in the PD that is used to set proposed interim wholesale termination rates. BTC notes that failure to address any specific statement, claim or conclusion in the PD does not imply BTC's agreement in any such case.

1.1 General Comments

In the PD, URCA proposes that wholesale interconnection rates – e.g., fixed and mobile call and SMS termination rates ("FTR", MTR" and "SMSTR") – should be set out on forward-looking, cost-oriented basis. In this respect, the PD provides high-level discussion of costing options and, ultimately, proposes that a Bahamas-specific long-run incremental cost ("LRIC") approach be adopted. However, no discussion is provided as to how URCA intends to conduct this proposed costing exercise, nor when it would start or be completed. Instead, the PD sets out a preliminary benchmarking exercise through which URCA proposes to set the FTR, MTR and SMSTR on an "interim" basis for the coming three years.

BTC supports URCA's proposal to set these rates using a Bahamas-specific LRIC-based approach. That said, BTC considers that the proposed LRIC costing exercise should begin immediately, not at some indefinite point in time in the future – which based on the proposed benchmarking-based interim rates included in the PD could be more than three years from now. The current MTR was set on an "interim" basis over three years ago. Modifying the MTR and other termination rates on a further "interim" basis for an additional three or more years is unreasonable and unnecessary. BTC submits that URCA should begin developing a LRIC model now so that termination rates could be set on a "final" rather than "interim" basis as soon as possible.

In addition, in BTC's view the preliminary benchmarking exercise included in the PD is flawed and, if implemented without adjustment, would result in a very significant risk that termination rates would be set below cost. Doing so would be inappropriate and would be in violation of the Comms Act. If URCA decides not to conduct a Bahamas-specific LRIC-based costing exercise as a result of this proceeding and, instead, rely on benchmarking to set interim termination rates going forward, then BTC submits that the benchmarking exercise included in the PD should be substantially revised. BTC's proposed revisions in this regard, including proposed revised benchmark-based interim termination rates, are provided in Section 3.

2 Proposed Approach for Setting Termination Rates

2.1 Proposals set out in the PD

Section 3 of the PD provides a brief overview of the economic principles relating to the regulation of wholesale termination rates and regulatory best practice in this area. Based on this overview, URCA presents what it considers to be an appropriate framework for setting forward-looking, cost-oriented wholesale termination rates in The Bahamas.

The PD states that economic theory supports the use of a LRIC-based approach for setting wholesale termination rates. At the same, however, the PD also notes that there are various LRIC approaches that can used for this purpose and that differences in approach can impact cost estimates and, therefore, rate levels. Two alternative LRIC approaches are noted in the PD: (i) long-run average incremental cost or "LRAIC+" and (ii) Pure LRIC. The PD notes the LRAIC+ approach includes not only the incremental cost of providing termination services, but also accounts for some fixed costs of the network and mark-up for common costs. In contrast, the PD notes the Pure LRIC excludes consideration of fixed and common costs. The PD also notes that the Pure LRIC approach is increasingly being used for setting wholesale termination rates in many countries, especially so in Europe. Consequently, URCA indicated that it is of the preliminary view that a Pure LRIC approach should be adopted in The Bahamas.

On this basis, the PD goes on to discuss two options for developing LRIC-based wholesale termination rates: (i) a Bahamas-specific Bottom-up LRIC ("BU-LRIC") model and (ii) a targeted termination service cost exercise. The PD provides a "high-level overview" of each of these two approaches. It suggests that the former approach would potentially provide a more versatile and useful costing tool going forward (i.e., useful for a range of wholesale services, not just termination services), and would also be in line with international precedent. On the other hand, the latter approach is described as being more narrowly focussed (dealing solely with termination services). The PD also notes that the latter approach would likely require less time and resources to develop. Based on its brief consideration of pros and cons of each option, URCA indicated that it is of the preliminary that a Pure BU-LRIC approach should be adopted for wholesale termination rates in The Bahamas.

The PD includes two questions on the discussion of and preliminary conclusions on costing matters relating to wholesale termination services.

> **<u>Question 1:</u>** Do you agree with URCA's preliminary view that forward-looking, incremental cost is the appropriate basis for setting termination charges?
>
> **<u>Question 2:</u>** Do you agree with URCA's preliminary view that developing Bahamas-specific BU LRIC models should be used as a base for setting forward-looking LRIC-based termination rates in The Bahamas?

2.2 BTC Response

BTC supports the adoption of forward-looking, incremental cost approach for setting wholesale termination rates. As well, BTC specifically supports the use of a LRIC approach for this purpose. Moreover, BTC is of the view that once implemented, a LRIC approach would have the added benefit of eliminating further reliance the existing historical accounting cost separations ("A/S") approach for setting wholesale rates. That said, BTC has serious concerns with the PD, as discussed below.

First, there is no timeframe included in the PD for either starting or completing the proposed LRIC exercise. As URCA is aware, a LRIC approach for setting termination rates was discussed in 2016 in the context of the review of BTC's Reference Access and Interconnection Offer ("RAIO"), which was conducted in advance of Be Aliv Ltd.'s ("Aliv") market entry.[1] At that time, URCA as well as BTC, Cable Bahamas Ltd. ("CBL") and Aliv all supported a LRIC approach for setting termination rates; however, URCA recognized that there was insufficient time to complete a LRIC exercise within the timeframe allocated for review of BTC's RAIO in 2016. Consequently, URCA set the BTC's MTR on an "interim" basis using BTC A/S results.[2] This interim MTR remains in effect today, three years later. At the time, URCA also indicated that following its review of BTC's RAIO it would conduct a "comprehensive review of termination rates" covering fixed and mobile termination services for all SMP licensees and, in that review, would seek to determine the appropriate approach for and means of implementing Bahamas-specific cost-oriented termination rates.[3] It appears that the present PD constitutes this promised review, however, it does not include the promised LRIC exercise nor a discussion of the majority of the key methodological issues related to the implementation of a LRIC model. Instead it includes a benchmarking exercise that URCA proposes be used to modify and extend terminations rates on an "interim" basis for a period of at least three more years.

In BTC's submission, a timeframe for setting "final" LRIC-based termination rates should be established in URCA's decision on this consultation. There is no reason why a preliminary LRIC model could not be developed by URCA in the coming months and provided to parties for comment. Such an exercise would of course take time and effort, but could potentially be finalized and implemented within 12 months. Focussing efforts on developing a LRIC model to set "final" termination rates would eliminate the need to rely on a benchmarking exercise to set further "interim" termination rates, which is little more than a second-best alternative to the proposed LRIC approach. Moreover, as explained in the following section, BTC considers that the preliminary benchmarking exercise included in the PD suffers numerous flaws and, as it stands, poses a high risk that the proposed interim termination rates could be set below cost. Clearly, the superior course of action is to set termination rates going forward on a LRIC rather than benchmarking basis.

---

1 URCA, Consultation on Proposed Changes to The Reference Access and Interconnection Offer Published by The Bahamas Telecommunications Company Ltd., Response to Public Consultation and Final Determination, ECS 19/2016, Issue Date: 8 August 2016.

2 Ibid, page 17.

3 Ibid. page 17.

Second, the PD only includes a discussion of two – the adoption of Pure LRIC vs. LRIC+ and a BU-LRIC model vs. a targeted costing exercise – of the many key methodological issues related to the implementation of a LRIC model. In contrast, the final methodological determination in the recently-concluded LRIC exercise in the ECTEL MS included a discussion and decision on over a dozen methodological issues.[4] As noted, BTC supports the adoption of a LRIC approach and, based on their past comments on the subject, BTC believes that CBL/Aliv are equally supportive. Therefore, BTC proposes that URCA move forward immediately with the development of a preliminary Bahamas-specific LRIC model for discussion purposes with interested parties.

On the narrow question of BU-LRIC vs. targeted costing, BTC agrees with URCA that the targeted costing exercise described in the PD would not be worth pursing at this time. Adopting this alternative ad-hoc approach would do little more than delay implementation of a LRIC approach. However, in the context of the dearth of methodological specificity included in the PD, BTC is not in a position to provide definitive views on the Pure LRIC vs. LRIC+ question. BTC considers that this methodological issue should not be considered in isolation of the many other methodological decisions that would have to be taken into account in the design and implementation of a LRIC model. BTC considers it to be more appropriate to provide its definitive input of this and other matters when URCA provides a full methodological overview of its proposed LRIC model.

That said, BTC does have some preliminary views on the question of Pure LRIC vs. LRIC+. BTC notes that URCA indicated that it considers that a Pure LRIC approach should be adopted, seemingly because a growing number of other jurisdictions have adopted such an approach. BTC is not necessarily in agreement with this conclusion, because there is a case to be made for the inclusion of fixed and common costs when setting wholesale termination rates. The mere fact that some jurisdictions have adopted a Pure LRIC approach, including many in Europe that BTC does consider to be comparable to The Bahamas, does not provide justification for doing the same in The Bahamas. In fact, as discussed below, the vast majority of Caribbean jurisdictions (7 of 9) included in the PD benchmarking exercise are based on LRIC+, rather than Pure LRIC. As well, in BTC's view, excluding any consideration of such costs could be considered contrary to sections 5(b)(ii) and 40(1)(a, b) of the Comms Act, which include provisions for the recovery of licensees' "costs", not a subset of their costs.[5] While BTC is not in a position to provide a

---

4 See *Recommendations on new interconnection rates for ECTEL member states: Final guidelines report*, 27 December 2016 at https://www.ectel.int/wp-content/uploads/2017/01/Axon-Consulting-final-principles-methodologies-guidelines-20161227.pdf.

5 I.e., s5(b)(ii) states that: *regulatory and other measures shall be introduced – having* ***due regard to the costs*** *and implications of those regulatory and other measures on affected parties* and section s40(1)(a, b) state that: *Notwithstanding the special responsibility of every dominant licensee under section 69, URCA may impose specific conditions on licensees determined to have SMP in the relevant market or relevant markets, including obligations relating to – (a)* ***cost recovery*** *and price controls, including* ***obligations for cost orientation*** *of prices and obligations concerning cost accounting systems and (b) the publication of a reference offer or offers ensuring equivalence of access and/or interconnection to any of those services and/or facilities in which the licensee has SMP at* ***tariffs based on the licensee's costs***. [emphasis added]

definitive position on this question matter at this this time, on preliminary basis, BTC leans towards the LRIC+ approach as preferable for The Bahamas.[6]

Lastly, on a terminology matter, BTC notes that while the PD defined "LRAIC+" and used the term 12 times in the document. The term LRAIC+ was also interchangeably used the term LRIC+, but no definition of this latter term was included in the PD . BTC assumes that this was an unintended oversight, and that there was no intended definitional difference between the two terms. In this response BTC has exclusively used the term "LRIC+" because it considers it the more appropriate term. While of course BTC is familiar with the term LRAIC, it is not familiar with the term "LRAIC+".

2.3 Conclusion

Given all the above:

i) BTC agrees with URCA's preliminary view that forward-looking, incremental cost is the appropriate basis for setting termination charges.

ii) BTC agrees that a Bahamas-specific BU-LRIC model should be used for setting termination rates in The Bahamas and encourages URCA to move quickly to implement such a model, including based on comprehensive methodological review, during which BTC will provide its definitive views on the proposed approach, including on the question of Pure LRIC vs. LRIC+.

3 Benchmarking for setting Interim Termination Rates

3.1 Proposals set out in the PD

Section 4 of the PD provides the results of a preliminary termination rate benchmarking exercise that URCA proposes be used to set interim wholesale terminations rates. URCA included two specific questions on its benchmarking exercise and proposed rates in this respect:

> **Question 3:** Do you agree with URCA's view that interim rates for intra-island fixed termination and mobile termination services should be set?
>
> **Question 4:** Do you agree with URCA's proposed approach for interim fixed and mobile termination rates (including the proposed used of a glide path)?

3.2 BTC's Response

As stated above, BTC considers that a LRIC-based costing approach should be developed for the purpose of setting termination rates as proposed in the PD. BTC sees no reason why such an exercise should be delayed any further. No reason for further delay was provided in the PD. However, if further delay is required in URCA's view, then BTC agrees that benchmarking

---

6 In addition, it is worth noting, as discussed in Section 3, that the difference in results between Pure LRIC vs. LRIC+, holding everything else equal, should in principle be modest relative to the difference in results driven by some other methodological choices.

provides an alternative means to set termination rates on an interim basis until the LRIC costing exercise is undertaken. That said, BTC has serious misgivings with the benchmarking exercise included in the PD, as well as the resulting proposed termination rates. These concerns are discussed below.

3.2.1 Benchmarking Sample

BTC's first concern with the PD benchmarking exercise relates to the choice of jurisdictions included in the benchmarking sample. BTC agrees that one of the main criteria for the inclusion of jurisdictions should be comparability. BTC is of the view that factors such as size of network, physical geography and regional environment are some of the most important drivers of termination costs and are hence some of the key criteria that should be considered to determine the inclusion of comparable jurisdictions:

- **size of network** will impact economies of scale, amount of traffic and other aspects that are likely to affect overall network costs as well as relevant unit costs;

- **physical geography** will determine the network topology, the relative size of core and access networks and other aspects that are likely to affect overall network costs as well as the relevant unit costs; and

- **environmental/regional** factors can be expected to affect overall network costs and relevant unit costs both from "hard" factors such as differences in aerial vs. underground infrastructure to protect against environmental factors, etc. as well as "soft" factors, including i) regional spectrum allocation and use and how these factors may affect costs, ii) access to finance and country risk associated with the calculation of WACC in cost models, iii) how and to what extent historical regional market structure and regulatory developments have impacted network development, costs, market shares, etc.

As well, given the preferred approach to set termination rates is LRIC-based, then any selected jurisdiction should have LRIC-based termination rates in place.

Taking these factors into account, BTC agrees with the inclusion of the following 9 jurisdictions that are included in the PD benchmark sample:

i.) Dominica
ii.) Grenada
iii.) Saint Lucia
iv.) St. Kitts & Nevis
v.) St. Vincent & the Grenadines
vi.) French Caribbean
vii.) Cayman Islands
viii.) Barbados
ix.) Jamaica

BTC considers that these nine jurisdictions are reasonably comparable to The Bahamas because they all reasonably meet the three comparability criteria set out above – they have relatively small networks (comparable in size to The Bahamas), they are island states and share environmental/regional similarities with The Bahamas because they are situated in the Caribbean. In addition, all nine have implemented some form of LRIC-based termination rates. Further, BTC considers that these nine jurisdictions make up a reasonable sample size for benchmarking purposes, meaning there is no overwhelming need to include more jurisdictions in the benchmarking exercise for sample size purposes.

In contrast, BTC strongly disagrees with the inclusion of the following five jurisdictions or groups of countries that are included in the PD benchmark sample, for the reasons set out below:

- **Bahrain, Malta, Cyprus and UK Channel Islands.** These jurisdictions are not reasonably comparable to The Bahamas. While they meet two of the three comparability criteria with The Bahamas, they are all geographically very distant from The Bahamas and more broadly the Caribbean region. As such, they share none of the "hard" or "soft" environmental/regional factor similarities that The Bahamas shares with other Caribbean jurisdictions. For example, none of these jurisdictions would have to design networks or carry the additional insurance costs or rebuild networks associated with being in a region that is subject to hurricanes.

- **European Union (BEREC sample).** The group of European Union ("EU") countries is not comparable to The Bahamas. The EU shares none of the three comparability criteria with The Bahamas: 1) it includes very populous countries such as the Germany and the United Kingdom (83 and 66 million inhabitants, respectively) with very large networks; 2) it includes countries that are very large and continental (such as Spain and Poland); 3) being in Europe and mostly subject to EU rules, this observations none of the "hard" or "soft" environmental/regional similarities that The Bahamas shares with other Caribbean jurisdictions, as discussed above.

Further, the PD makes reference to a recent benchmarking study conducted by the regulatory agency Trinidad and Tobago, and BTC notes that similar benchmarking studies have been conducted the regulatory agency in Turks and Caicos Islands[7] for the purpose of setting termination rates. In both cases, those regulatory agencies included only Caribbean jurisdictions in their benchmarking studies. Consequently, BTC is of the view that any benchmarking sample relied on by URCA to set interim termination rates should be limited to the nine Caribbean jurisdictions noted above.

3.2.2 Benchmarking Costing Standard

BTC's second concern with the PD benchmarking exercise relates to the proposed reliance solely on jurisdictions with Pure LRIC-based termination rates for benchmark sample purposes. As discussed above, while BTC does not a definitive view on question of adopting a Pure LRIC vs. LRIC approach at this time, but leans towards the LRIC+ as being the preferable choice for The Bahamas. Consequently, BTC is opposed to the URCA proposal to only include Pure LRIC benchmark sample observations. BTC considers that all variations of LRIC, including Pure LRIC

---

[7] See *Telecommunications Decision 2014-4: Decision on the Review of Interconnection Rates*, June 20, 2104 at http://www.telecommission.tc/content/root/files/20140620101740-TCI-ICR-Review-Decision-final-June-18-2014.pdf

and LRIC+ should be considered for benchmarking purposes. Hence, BTC is of the view that, subject to the availability of a reasonable benchmarking sample, the average of all LRIC rates should be used for benchmarking purposes.

Further, relying predominately or exclusively on Pure LRIC jurisdictions for benchmarking poses a real and very significant risk that the resulting termination rates would be below cost in The Bahamas. This risk is especially high in the case of The Bahamas because of its unique geography consisting of an extensive archipelago of islands, many of which are sparsely populated and which are likely to result in relatively higher overall network costs and relevant unit costs than other single or dual island Caribbean states. Relying on a broader benchmarking sample of jurisdictions including all forms of LRIC-based termination rates is more likely to reduce the risk of setting below-cost termination rates through a benchmarking approach in The Bahamas.

Consequently, BTC submits that any benchmarking sample relied on by URCA to set interim termination rates should include Caribbean jurisdictions with all forms of LRIC-based terminations rates in place.

3.2.3 Benchmarking Rates

Although not a critical aspect, BTC also notes that it was not able to reproduce some of URCA's benchmark sample termination rates. BTC believes that URCA may have included at least three errors in its analysis.[8] Table 1 only includes the nine Caribbean jurisdictions that BTC considers are comparable to The Bahamas and thus should be considered for benchmarking purposes.

Table 1 highlights these errors by showing URCA's rates side-by-side to BTC's calculations for FTR, MTR and SMSTR. BTC is unsure whether the error is due to the original rate in local currency units ("LCU") or in the exchange rate calculations and, hence, for greater transparency Table 1 also includes the LCU and exchange rates.[9] The first minor error relates to the French Caribbean MTR, which is 0.0074€ (from same source included in PD) and therefore BSD$$0.0084 using the exchange rate in Table 1. However, URCA includes BSD$$0.0076 for this jurisdiction.[10] The second minor error is the Cayman Islands MTR, which is KY$0.0284 and therefore BSD$$0.0341 using the exchange rate in Table 1. However, URCA includes BSD$$0.0416 for this jurisdiction.[11] A third minor error relates to the French Caribbean SMSTR, which the PD noted was "set on Pure LRIC" basis. BTC disagrees with this categorization. As set out on page 24 of the report sourced in the PD, when referring to SMS, BEREC noted that "This service is not regulated in most EU countries" but rather is the result of commercial negotiation between operators. BTC understands this to be the case in France and the French

---

8 There are other smaller differences, but these are not consequential and likely due to differences in the exchange rates used (see below).

9 Exchange rates were calculated using the average LCU/USD exchange rate for the last there years available from the World Bank at https://data.worldbank.org/indicator/PA.NUS.FCRF BTC considers that such an average exchange rate is likely to be more representative for benchmarking purposes that a single day or similar short-term "snapshot".

10 The error could be due to including the LCU (€) amount without converting it to BSD.

11 The error could be due to using $0.0341 amount from the TATT Study source included in the PD, except that this number is already in USD equivalent (note the top of the relevant column)

Caribbean. BTC notes for example that in the ARCEP document referenced in the PD for the French Caribbean MTR and FTR there is no mention of SMSTR whatsoever. BTC has therefore excluding this observation from its calculation in Table 1 and does not include a "Pure LRIC" average for SMSTR.

Table 1: Summary of URCA Proposal and BTC-calculated Termination Rates

	URCA (BSD)			BTC (BSD)			BTC (LCU)			BTC
	FTR	MTR	SMS	FTR	MTR	SMS	FTR	MTR	SMS	FX
Dominica	0.39	0.71	0.05	0.39	0.71	0.05	1.04	1.93	0.13	0.370
Grenada	0.22	0.68	0.03	0.22	0.68	0.03	0.60	1.83	0.07	0.370
St. Kitts & Nevis	0.28	0.56	0.02	0.29	0.56	0.02	0.77	1.51	0.06	0.370
St. Lucia	0.20	0.56	0.02	0.20	0.52	0.02	0.53	1.40	0.06	0.370
St. Vincent	0.31	0.87	0.04	0.31	0.87	0.04	0.83	2.36	0.10	0.370
French Caribbean	0.09	0.76	1.12	0.09	0.84		0.08	0.74		1.137
Cayman Islands	1.05	4.16		1.03	3.41		0.86	2.84		1.200
Barbados	0.55	2.75		0.55	2.75		1.10	5.50		0.500
Jamaica	0.07	0.81		0.07	0.86		0.09	1.10		0.785
Average (LRIC+)	**0.43**	**1.47**	**0.03**	**0.43**	**1.36**	**0.03**				
Average (All)	**0.35**	**1.32**	**0.21**	**0.35**	**1.25**	**0.03**				
Average (Pure LRIC)	**0.08**	**0.79**	**1.12**	**0.08**	**0.85**					

Table 1 also provides three sample averages: 1) the "LRIC+" average which includes seven observations (Dominica, Grenada, St. Lucia, St. Kitts, St. Vincent, Cayman Islands and Barbados); 2) the "All" average that includes all nine observations and 3) the "Pure LRIC" average that includes 2 observations (French Caribbean and Jamaica). As noted above, BTC considers that, subject to the availability of a reasonable benchmarking sample, the average of all LRIC rates – i.e., the "All" average – should be used for benchmarking purposes.

Further, in terms of the implementation of new interim terminations rates, BTC is in agreement with URCA that a three-year equal-step glidepath should be applied in this instance. Such a transition period is common in the Caribbean[12] region and provides an appropriate balance, including by allowing the operators to adjust their commercial operations to avoid any sudden financial shocks from regulatory-driven price changes.

The remainder of this section provides BTC's Alternative proposals for the setting of termination rates, including with a glide-path, and compares each proposal to URCA's Proposal.

3.2.4 BTC Alternative Benchmarking Proposals

3.2.4.1 BTC Alternative FTR Proposal

Figure 1 presents the FTRs for the sample of nine jurisdictions that BTC considers should be included in the benchmarking exercise, along with the respective "LRIC+", "All" and "Pure

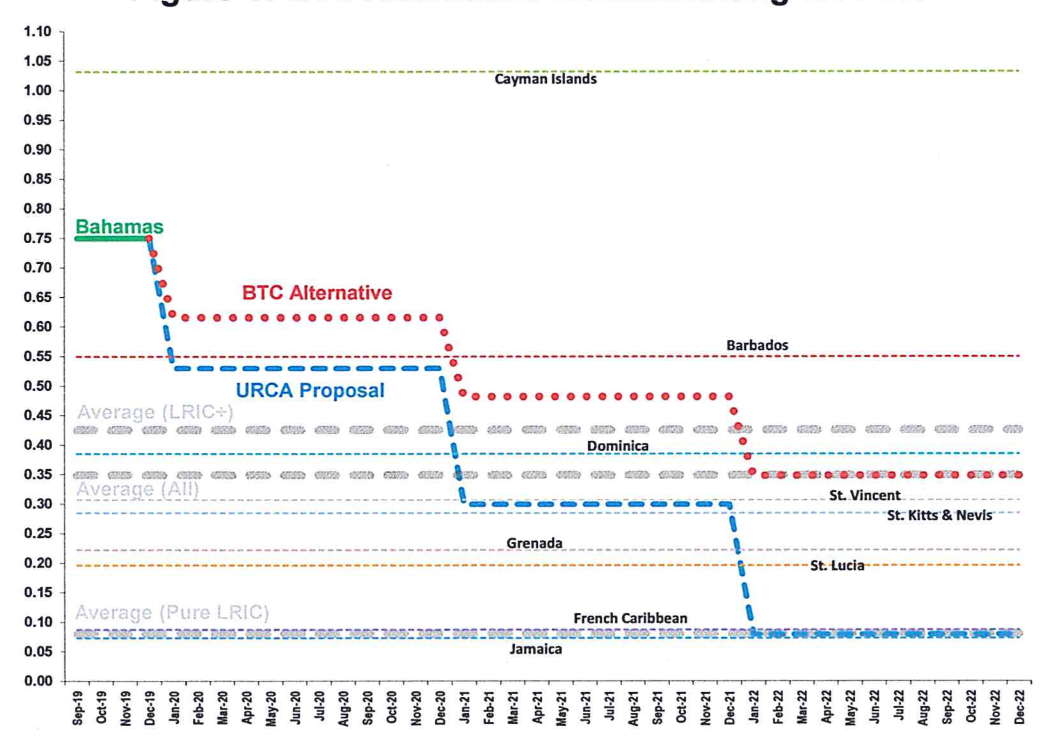
[12] Other regulatory agencies followed such an approach when it comes to termination rate changes including the Turks and Caicos Islands Telecommunications Commission, the Eastern Caribbean Telecommunications Authority and the Telecommunications Authority of Trinidad and Tobago.

LRIC" averages, the URCA Proposal and BTC Alternative. As discussed above, BTC considers that all variations of LRIC, including Pure LRIC and LRIC+, should be considered for benchmarking purposes.

Under BTC's proposed benchmarking sample and methodology revisions, BTC proposes that the FTR to be set equal to the "All" Average benchmark sample. As shown in Figure 1 as the BTC Alternative, the FTR would be reduced to **0.35 BSD cents/minute** in three steps over the course of three years (following the glidepath proposal in the PD).

BTC considers that the BTC Alternative is preferable to the URCA Proposal. The BTC Alternative would result in an FTR reduction of 53%, which is significant. The BTC Alternative is based on the average of all nine BTC-proposed Caribbean benchmark sample observations, including jurisdictions with FTRs based on Pure LRIC and LRIC+ approaches. In contrast, the URCA Proposal at 0.08 BSD cents/minute would result in an FTR for The Bahamas that would be lower than 8 of the 9 observations in the BTC-proposed benchmarking sample (i.e., Dominica, Grenada, St. Lucia, St. Kitts, St. Vincent, Cayman Islands, Barbados and French Caribbean) and, in BTC's view, would almost certainly be below the corresponding cost in The Bahamas, given The Bahamas' likely higher cost characteristics discussed above.

Figure 1: BTC Alternative Benchmarking for FTR

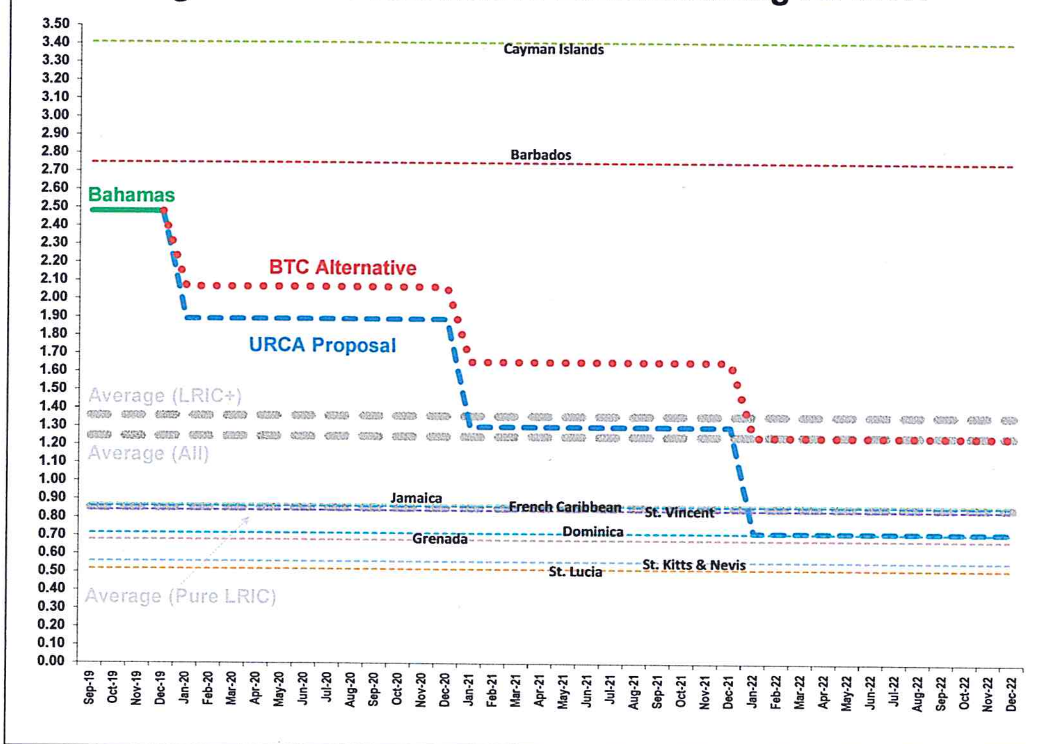


3.2.4.2 BTC Alternative MTR Proposal

Figure 2 presents similar data as in Figure 1, except for MTR. In this case, BTC's proposed benchmarking approach suggest that the MTR should be reduced to **1.25 BSD cents/minute**, as shown in Figure 2 as the BTC Alternative.

BTC considers that the BTC Alternative is preferable to the URCA Proposal. The BTC Alternative would result in an MTR reduction of 50%, which is significant. Again, the BTC Alternative is based on the average of all nine BTC-proposed Caribbean benchmark sample observations, including jurisdictions with MTRs based on Pure LRIC and LRIC+ approaches. In contrast, the URCA Proposal at 0.72 BSD cents/minute would result in an MTR for The Bahamas that would be lower than 5 of the 9 observations in the benchmarking sample (i.e., St. Vincent, Cayman Islands, Barbados, French Caribbean and Jamaica) and, in BTC's view, would very likely be below the corresponding cost in The Bahamas, given The Bahamas' likely higher cost characteristics discussed above.

Figure 2: BTC Alternative Benchmarking for MTR

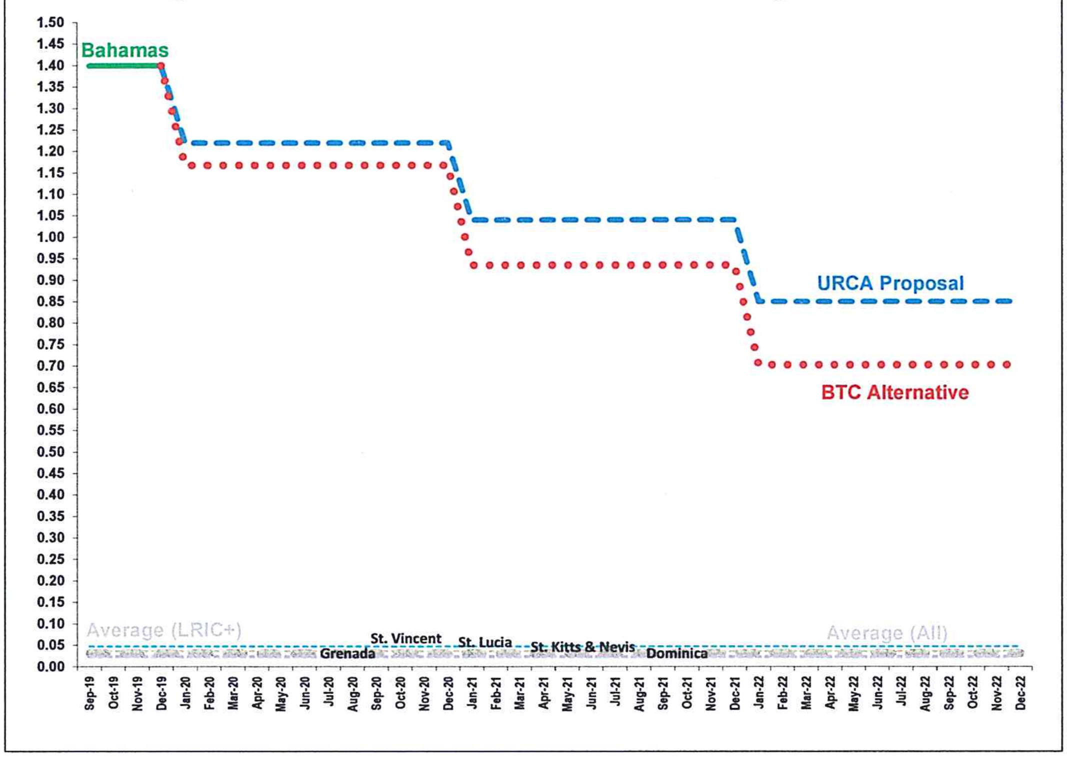


3.2.4.3 BTC Alternative SMSTR Proposal

Figure 3 presents the available Caribbean benchmarking sample for SMSTR, along with the corresponding averages for the URCA Proposal and BTC Alternative. The PD noted that there appeared to be an anomalous benchmarking result because the LRIC+ average SMSTR appeared to be lower than the Pure LRIC average SMSTR. This anomaly led URCA to propose using the "All" SMSTR average as the SMSTR benchmark rather than "Pure LRIC" average. BTC notes that this is an inconsistent application of URCA's proposed benchmarking cost standard. However, this anomalous result is likely a result of URCA's classification of the BEREC average as "Pure LRIC" when in fact, as noted above, it is not likely regulated at all and is the result of commercial negotiations.

Consequently, the only LRIC-based SMSTR observations in the Caribbean are the LRIC+ rates from the ECTEL MS. The French Caribbean is not LRIC-based and URCA did not provide information in the PD on Barbados, Jamaica or Cayman Islands (possibly because SMSTR is not regulated in those countries as well). BTC does not consider this to be an adequate sample for benchmarking purposes and, instead, proposes that the results for the MTR benchmarking could be used as a proxy for the SMSTR. In principle, the MTR is likely the service that is most similar to the SMSTR and, therefore, it may be reasonable to expect that the corresponding costs are related. Using the MTR benchmarking results as a proxy, BTC considers that SMSTR could be reduced to the same relative degree as the MTR – i.e., reflecting similar relative cost reductions. As shown in Figure 3 as the BTC Alternative, this approach results in a SMSTR reduction of 50% (i.e., the same as the MTR) to **0.70 BSD cents/minute.**

Figure 3: BTC Alternative Benchmarking for SMS



3.2.4.4 BTC Alternative for International MTR

URCA did not include a benchmarking analysis for the inbound international ("II") MTR. Rather, it proposes to set the II-MTR equal to the proposed MTR plus the current "Differential" between the current II-MTR and MTR. BTC is in general agreement with this approach in principle, because it essentially "flows through" the MTR reductions while maintaining the quantum of the differential intact. This is appropriate because URCA has not benchmarked the differential.

However, it appears that in its implementation of this approach, URCA used the "ratio" rather than the "difference" as the Differential. This is illustrated in Table 2, which shows that based on the URCA Proposal the Differential would decrease from the current 2.13 to 0.61 BSD cents/minute over the three-year course of the glidepath, a reduction of 71%. BTC strongly disagrees with this approach because in results in very significant decrease in the Differential, which URCA has not benchmarked. Therefore, there is no supporting basis for any reduction in the Differential, let alone the significant reduction proposed in the PD.

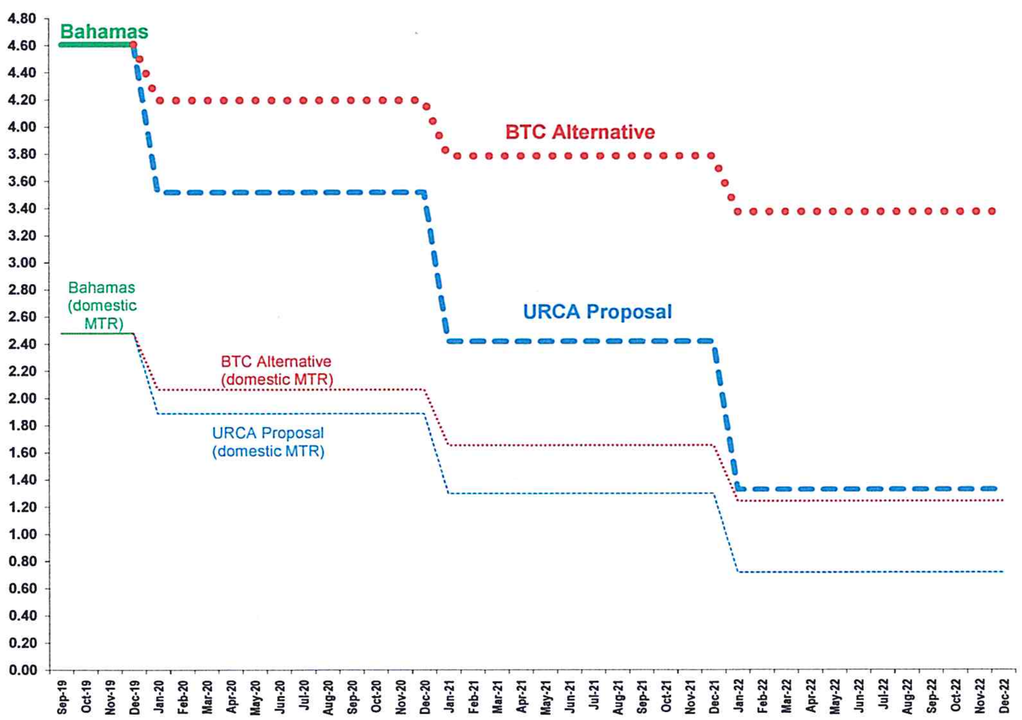
BTC considers that the current Differential should be maintained, absent any supporting evidence for changing it. BTC's proposal is included in Table 2 as the BTC Alternative, which maintains the quantum of the Differential while "flowing through" the reductions in the MTR. Under the BTC Alternative, the II-MTR would be reduced to **3.38 BSD cents/minute**, representing an overall reduction of 27%.

Table 2: Comparison of International MTR Differentials

	Rate	Current	Year 1	Year 2	Year 3
URCA Proposal	II-MTR	4.61	3.52	2.42	1.33
	Differential	2.13	1.63	1.12	0.61
	II-MTR (%)		-24%	-48%	-71%
	Differential (%)		-23%	-47%	-71%
BTC Alternative	II-MTR	4.61	4.20	3.79	3.38
	Differential	2.13	2.13	2.13	2.13
	II-MTR (%)		-9%	-18%	-27%
	Differential (%)		0%	0%	0%

Figure 4 shows the URCA Proposal and BTC Alternative II-MTR and, for comparative purposes also includes the same proposals for the domestic MTR (reproduced from Figure 2).

Figure 4: BTC Alternative for International MTR



3.2.5 Summary of BTC's Alternative Benchmarking Proposals

Table 3 summarises BTC's proposed benchmarking-based changes in the FTR, MTR, SMSTR and II-MTR, based on n BTC's alternative benchmarking sample and methodology proposed above.

Table 3: Summary of BTC Alternative Proposals

	Current	Year 1	Year 2	Year 3
FTR	0.75	0.62	0.48	0.35
(%)		-18%	-36%	-53%
MTR	2.48	2.07	1.66	1.25
(%)		-17%	-33%	-50%
SMSTR	1.40	1.17	0.94	0.70
(%)		-17%	-33%	-50%
II-MTR	4.61	4.20	3.79	3.38
(%)		-9%	-18%	-27%

BTC reiterates that it believes that URCA should develop actual LRIC-based termination rates rather than rely on benchmarking for this purpose. BTC sees no reason why LRIC approach for setting termination rates could not be completed within a year and, as a result, make reliance on benchmarking unnecessary.

3.3 Conclusion

Given all the above,

i) BTC considers that URCA should be moving forward immediately to establish LRIC-based "final" termination rates rather than proposing benchmarking-based "interim" termination rates.

ii) That said, if URCA intends to rely on a benchmarking approach to set "interim" terminations, then BTC submits that URCA should replace the benchmarking proposals included in the PD with the BTC Alternatives set out above.

Reservation of Rights

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

Legal, Regulatory and Interconnection Division
The Bahamas Telecommunications Company Limited (BTC)
October 21, 2019